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The EU Legal Framework on Green Bonds

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….to my Family

Charalambos, Eirini, Aliki, Stelios and Andreas

for their constant patience, faith and love

and to Professor Ch.V. Gortsos for his valuable

guidance.

Abstract

The present study contains a concise and concurrently a comprehensive and detailed overview of the European (EU) Legal Framework on Green Bonds. It is structured in two Sections. Section A titled "The Green Bond Market" consists of an overview of how the green bond market created and its rapid development, while it defines the concept of green bonds, and illustrates the different types of green bonds. The first section also presents the most two widely known market-based standards, the Green Bond Principle and the Climate Bond Standard. Section B focuses on the European legal framework on green bonds and respectively the legal acts that have been adopted or proposed, which aim to enhance 'green finance' and boost sustainable growth in the EU. Mostly, Section B discusses in detail the proposal Regulation on Green Bonds focusing on the most important provisions. Lastly, Section B presents the recent initiative of the European Commission to issue the first European green bond, called "NextGenerationEU".

Keywords: Green bonds, sustainable finance, sustainable development, ESG, EU Taxonomy Regulation, Sustainable Finance Disclosure Regulation, Low Carbon Benchmarks Regulation, European Commission Action Plan on Financing Sustainable Growth, European Commission Action Plan on Building a Capital Markets Union, High-Level Expert Group on Sustainable Finance (HLEG), European Green Deal, International Platform on Sustainable Finance, Technical Expert Group (TEG), Paris Agreement, Sustainable Development Goals (SDGs), European Green Bonds Proposal Regulation (EuGBR), Next Generation EU (NGEU).

The cut-off date for information contained in this study is 20 November 2021.

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ABS	Asset Backed Securities
AP4	Fourth Swedish National Pension Fund
BNPP	Banque Nationale de Paris Paribas
CapEx	Capital Expenditures
CBS	Climate Bond Standard
CRA	Credit Rating Agency
ESG	Environmental, Social, Governance
ESMA	European Securities and Markets Authority
EU	European Union
EuGB	European Green Bond
EuGBR	European Green Bond Regulation
GAR	Green Assets Ratio
GBP	Green Bond Principles
HLEG	High-Level Expert Group for Sustainable Finance
ICMA	International Capital Market Association
ILO	International Labour Organization
JRC	Joint Research Centre
KPI	Key Performance Indicator
MBS	Mortgage-Backed Securities
MIFID	Markets in Financial Instruments Directive
NGEU	Next-Generation-EU
OpEx	Operating Expenditures
PIMCO	Pacific Investment Management Company
SDGs	Sustainable Development Goals
SFDR	Sustainable Finance Disclosure Regulation
TEG	Technical Expert Group for Sustainable Finance
UN	United Nations

Introduction

"*Promoting long-term and green finance is one of the priorities of the Capital Markets Union Action Plan. Green Bonds are an important instrument to raise capital market finance for environmentally-friendly and more sustainable investments. The new High-Level Expert Group on sustainable finance will help define towards greener capital markets*."

Extract from the speech of the Vice-President Valdis Dombrovskis, responsible for the Euro and Social Dialogue, also in charge of Financial Stability, Financial Services and Capital Markets Union[1], at the Commission's press release putting forward a new strategy to make the EU's financial system more sustainable and proposing new European Green Bond Standard, 6 July 2021, Brussels.

Over the last few years, the European Union has become substantially more ambitious in dealing with climate change. The Commission has already taken revolutionary steps to structure the foundations for sustainable finance. Sustainability is also the main characteristic of the European Union's recovery from the COVID-19 pandemic and the financial sector will play an essential role in contributing to meet the targets of the European Green Deal.

The European Green Deal clarified that important investments are necessary across all sectors of the economy to transition to a climate-neutral economy and reach the European Union's environmental sustainability objectives. Specifically, the European Green Deal pointed out that it should be made easier for investors and companies to identify environmentally sustainable investments and assure that they are reliable. It was highlighted that this could be performed through clear labels for retails investment products and by developing a European green standard that make easier environmentally sustainable investment in the most appropriate way.

In the absence of a European legislative framework for green bonds, the European Green Deal Investment Plan declared in January 2020 the establishment of a green bond standard. The European Council in December 2020[2] pointed out the significance of developing

[1] Regarding the Capital Markets Union, see **European Commission (2015).**
[2] See **European Council (2020)**, p. 5 et seq.

common, global standards for 'green finance' and suggested the European Commission to submit a legislative proposal for a green bond standard by June 2021. In July 2021, the European Commission proposed a voluntary European green bond standard (EUGBS) that will set a 'gold standard' for how the private sector and public authorities may use green bonds to raise funds on capital markets in order to finance sustainable investments and protect investors from 'greenwashing'.

Nowadays, the green bond market has illustrated a remarkable expansion in Europe representing a constantly growing share in the total bond market. Green Bonds constitute a significant innovation through their focus on green use of proceeds, monitoring, and impact reporting and external reviews. Green bonds aspire to improve the ability of debt capital markets to raise capital finance environmental and sustainable economic activities as well as providing investors the opportunity to share in financial returns disposed to a transition to a sustainable, low carbon world. Moreover, green bond market benefits investors through diversification and risk management in their portfolios and through the investment in responsible and ethical economic activities. On the contrary, issuers are pushed into issuing green bonds not for financial but mainly for reputational gains[3].

The following study contains a short but comprehensive overview of the green bond market and concurrently an illustration of the European Union legal framework on green bonds.

[3] For a different thought see **Schmittmann J. and Teng C.H. (2021),** p. 10 et seq.

Section A: The Green Bond Market

1. From the creation of the green bond market to its rapid growth

It is widely believed that Green Bond Market[4] is the next big thing for investors[5].Before presenting the concept of European Green Bonds and their huge and rapid development and growth, it is worth mentioning how it all began.

The story began in 2007, when the European Investment Bank[6] issued "a climate awareness bond", which is extensively seen as the first bond with a green label[7]. The same year, a group of pension funds from Sweden were interested to invest in projects that help the environment, but they didn't know how to find these projects. Therefore, these pension funds turned to the World Bank. Less than a year later, and specifically in 2008, the World Bank issued a Green Bond and with it created the way to connect financing from investors to environmental projects. The World Bank created the blueprint for sustainable investing in the capital markets[8].

2. The concept of Green Bonds and the existing types in the Capital Markets

Green Bond is a typical bond[9], namely a type of debt issued by public or private institutions to finance themselves and, unlike other financial instruments, they commit the use of the funds obtained to specific environmental projects[10]. Otherwise, green bonds are fixed income securities designed to finance investments with environmental or climate-related

[4]For a detailed overview of the sustainable bond market, see **European Securities and Markets Authority (2021),** p. 48 et seq.
[5]Although, "the green bond market remains a dwarf" of the overall bond market, see **Deschryver and Mariz (2020)**, under 4.
[6]For a Green Bond Market Overview, see **Tang D.Y. and Zhang Y. (2018)** p. 5 et seq.
[7]See **Ehlers and Packer (2017)**, p. 90.
[8]For more details on World's Bank green bond issuance, see **The World Bank (2018): "From Evolution to Revolution: 10 Years of Green Bonds (2018)"**.
[9]"*Bonds are financial products through which the issuer borrows money with interest and which provides that at its maturity, it will pay the lender its original capital. Interest to the creditor may also be paid before maturity on regular and pre-agreed dates (6 months, annual and monthly). Bonds are divided into two categories: a) Corporate Bonds and b) Government Bonds"*. For further details see, **Athens Stock Exchange: Bonds (2021)**
[10] According to the European Commission, "Green bonds are debt instruments issued to finance investment projects that are meant to have positive environmental or climate effects", see **European Commission (2020b),** p. 1.
Similarly, as per ICMA, "*Green Bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects*", see **International Capital Markets Association (2018).**

benefits[11]. In view of G20's Green Finance Synthesis Report "G*reen bonds are an integral component of green finance more generally, which aims to internalize environmental externalities and adjust risk perceptions" for the sake of increasing environmentally friendly investments"*[12].What diversify a green bond from conventional bonds is the focus on green projects and the detailed reporting on the allocation of proceeds and the environmental impact thereof[13]. At this point, an elucidation is considered completely necessary, green bonds are not the same as social bonds or sustainability bonds. According to ICMA[14]: "*Social Bonds are any type of bond instrument where the proceeds, or an equivalent amount, will be exclusively applied to finance or re-finance in part or in full new and/or existing eligible Social Projects, namely projects aiming to address or mitigate a specific social issue and/or seek to achieve positive social outcomes"* [15] *,*while "*Sustainability Bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance a combination of both Green and Social Projects"*[16].

According to ICMA, there are four types of Green Bonds[17]. Listed below as follows:

1. **Standard Green Use of Proceeds Bond:** a standard recourse-to-the-issuer-debt obligation aligned with the Green Bond Principles (GBP).
2. **Green Revenue Bond:** a non-recourse-to the issuer debt obligation aligned with the GBP, in which the credit exposure in the bond is to the pledged cash flows of the revenue streams, fees, taxes etc., and whose use of proceeds goes to the related or unrelated Green Project.
3. **Green Project Bond:** a project bond for a single or multiple Green Project(s) for

[11] See **Ehlers T. and Packer F. (2017)** p. 89.
[12] Ibid., see p. 89 and **G20 Green Finance Study Group (2016)** p. 3.
[13]For a detailed overview of the opinion that green bonds have a different price, see **Fatica S., Panzica R. and Rancan M., (2019).** However, it is strongly argued that green bonds aren't priced differently, see **Karpf and Mandel (2017)** and **Larcker and Watts (2019).**
[14] International Capital Markets Association (ICMA) is a not-for-profit membership association, headquartered in Zurich, for financial market participants providing among other services, principal frameworks for green bonds, social bonds, sustainability bonds, and sustainability-linked bonds.
[15] See **International Capital Markets Association (2021c)** p. 3.
[16] See **International Capital Markets Association (2021d)** p. 3
[17]It is worth mentioning that Blue Bonds that exist too in the market, namely Bonds with the exclusive purpose to use the funds obtained to sustainable maritime resources and the promotion of related sustainable economic activities. Such "Blue Bonds" are also Green Bonds as long as they align with the four core components of the GBP.

which the investor has direct exposure to the risk of the project(s) with or without potential recourse to the issuer, and that is aligned with the GBP.

4. **Green Securitized Bond:** a bond collateralized by one or more specific green Project(s), including but not limited to covered bonds, ABS, MBS[18], and other structures and aligned with the Green Bond Principle (GBP). The cash flows of the assets are the first source of repayment[19].

3. Market – based green bond standards: Green Bond Principles and Climate Bond Standard

3.1. An overview of International Capital Markets Association's Green Bond Principle

In the absence[20] of a worldwide accepted classification and reference standard[21], the green bond market currently is based on private governance status[22]. There are two widely known market-based standards. Firstly, the Green Bond Principles (GBP), which is a voluntary process guideline for issuing Green Bonds. These principles describe best practices, when issuing green bonds through international guidelines and recommendations promoting transparency and disclosure. On the other hand, Climate Bonds Standard (CBS) seeks to allow investors to easily assess the climate credentials and environmental integrity of green bonds.

In particular, the most well-known standard for issuing green bond was adopted by the International Capital Market Association (ICMA) in 2014. Green Bond Principle[23], as mentioned above, constitutes voluntary process guidelines recommending transparency

[18]An asset-backed security (ABS) is a type of financial investment that is collateralized by an underlying pool of assets usually ones that generate a cash flow from debt, such as loans, credit card balances, or receivables, while mortgage-backed securities (MBS) are bonds secured by home and other real estate loans. They are created when a number of these loans, usually with similar characteristics, are pooled together.

[19]See **International Capital Markets Association (2021b)**, p. 8.

[20]Numerous market participants concern about the absence of a uniform disclosure requirements relied on standardized templates, see **Barclays (2015),** p. 6.

[21]Many financial institutions have also developed their own taxonomies for internal use, for instance the Fourth Swedish National Pension Fund (AP4), Pacific Investment Management Company (PIMCO), Banque Nationale de Paris Paribas (BNPP), Deutsche Bank and Natixis, see **G20 Sustainable Finance Study Group (2021)** p. 16.

[22]See **European Commission (2020b),** p. 1.

[23]For a detailed analysis on the International Capital Markets Association's Green Bond Principle, see **Thomson S. (2021),** p. 250 et seq.

and disclosure and at the same time promoting integrity in the development of the Green Bond market by specifying the approach for issuance of a Green Bond[24]. The establishment of the Green Bond Principles by the ICMA, was greatly facilitates the standardization of the green bond market and sparked its major development[25].

According to the edition of 2021 of the Green Bond Principles[26], "*Green Bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects and which are aligned with the four core components of the GBP"*. The four core principles for harmonizing with the GBP are the following:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

In addition to the abovementioned core principles, the GBP set out two further recommendations for increased transparency:

1. Green Bond Frameworks
2. External Reviews[27].

3.1.1. The four core principles for harmonizing with the 'Green Bond Principle' Standard

The Lydia stone of the green bonds is the use of the proceeds of the bond for specific environmental projects (i.e. the green purpose), which should be properly described in its legal documentation. The proceeds raised should be used to finance or re-finance projects that provide clear environmental benefits, which should be assessed, and where achievable, quantified by the issuer[28].The GBP explicitly recognize various broad categories of eligibility for Green Projects, which contribute to environmental objectives such

[24]See **International Capital Markets Association (2021b),** p. 4.
[25]See **EU Technical Expert Group on Sustainable Finance (2019b),** p. 16.
[26]See **International Capital Markets Association (2021b),** p. 3.
[27] For a detailed overview on the different types of external reviews see **International Capital Markets Association (2021a)**, p. 3 et seq.
[28]See **International Capital Markets Association (2021b),** p. 4.

as: climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control.

Under the project evaluation and selection process, it is envisaged that the issuers should provide investors with all the necessary information, in order to be assessed the environmental sustainability objectives of the eligible Green Projects, and the process by which the issuer determined how these projects fit within the eligible Green Projects categories. Moreover, the issuer should complementary inform the investors on processes by which the issuer identifies and manages perceived social environmental risks associated with the relevant project(s). Finally, issuers are strongly encouraged to inform investors on the alignment of projects with official or market-based taxonomies, related eligibility criteria, including if applicable, exclusion criteria. Also, issuers are encouraged to disclose any green standards or certifications referenced in project selection[29].

According to the third green bond principles' feature, investors should be informed about the management of proceeds. The net proceeds of the Green Bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, and certified by the issuer in a formal internal process linked to the issuer's lending and investment operations for eligible Green Projects.

Pending the green Bond, the balance of the tracked net proceeds should be periodically adjusted to match allocations to eligible Green Projects made during that period. The issuer should make known to investors the intended types of temporary placement for the balance of unallocated net proceeds.

The GBP encourage a high level of transparency and recommend that an issuer's management of proceeds be supplemented with the assistance of an external auditor, or other third party, to verify the internal tracking method and the allocation of funds from the Green Bond proceeds[30]. The proceeds can be managed twofold, namely either on the bond-by bond approach or an aggregated basis for multiple green bonds (portfolio approach)[31].

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[29]See **International Capital Markets Association (2021b),** p. 5.
[30]See below **Section A under 3.1.2.**
[31]See **International Capital Markets Association (2021b)** p. 6.

Lastly, regarding the reporting requirements, issuers are encouraged to keep up information fully updated and renewed on an annual basis on the use of proceeds. This annual report should include a list of projects to which Green Bonds proceeds have been allocated, as well as brief description of the projects, the amounts allocated and their expected impact. In case of confidential agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, it is recommended that information is presented in generic terms or on an aggregate portfolio basis[32]. Also, in respect of transparency, the GBP recommend the use of qualitative performance indicators and, where possible, quantitative performance measures and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination.

3.1.2. Key Recommendations: Green Bond Frameworks and External Reviews

In order to promote a high level of transparency, issuers are encouraged to explain the alignment of their Green Bond with the four abovementioned core components of the GBP (namely the use of proceeds, the process for project evaluation and selection, the management of proceeds and the Reporting, (see above Section A under 3.1.1.) in a Green Bond Framework or in their legal documentation. Issuers are, also, highly recommended to summarize in the afore-mentioned framework relevant information as part of the issuer's sustainability strategy, including a reference to the five high level environmental objectives of the GBP[33].

Secondly, it is recommended that issuers should appoint an external review[34] provider to assess, through a pre-issuance external review, the alignment of their Green Bond and/or Framework with the four core components of the GBP (see above Section A under 3.1.1.). At a post issuance level, an issuer’s management of proceeds or other third party should verify the internal tracking and the allocation of funds from the Green Bond proceeds to

[32]E.g., percentage allocated to certain project categories, see **International Capital Markets Association (2021b)** p. 6.
[33]Indicatively, a) climate change mitigation, b) climate change adaptation, c) natural resource conservation, d) biodiversity conservation e and e) pollution prevention and control. For more details, see **International Capital Markets Association (2021b)** p. 7.
[34]Issuers prefer their green bonds to be certified in order to attract the full attention of investors, see **Baker et al. (2018),** p. 20.

eligible Green Projects[35].

3.2. Climate Bonds Standard

The Climate Bond Initiative is an investor-focused not-for-profit organization, promoting large scale investments that will deliver a global low carbon resilient economy. In December 2010, this organization announced the development of the Climate Bond Standard (CBS) and a year later, in 2011, the Climate Bond Initiative publicly released the first version of the Climate Bond Standard[36].

The Climate Bonds Standard[37] defines criteria in order to help the investors to verify certain green credentials of a bond. This Standard aspires to provide a sturdy approach in order to ensure that the funds are being used to finance projects and assets that consistent with delivering a low carbon and climate resilient economy. Moreover, it sets out the requirements for issuers seeking certification of their green bond by an independent Climate Bonds Standard Board. The Independent Climate Bond Standard Board is an external reviewer, who validates that the bond conforms to the prerequisites of the CBS and the issuer has in place the proper controls and processes[38]. CBS requirements are divided into two phases: a) the pre-issuance and the b) post-issuance phase. The requirements of the pre-issuance phase need to be met by issuers, who aspire for a certification prior to issuance of the green bond unlike the requirements of the post-issuance phase that need to be met for issuers seeking constant certification of their green bond[39]. In both cases, CBS requirements is moving forward from the four components determined by the Green Bond Principle (GBS)[40] seeking to create a powerful and efficient certification system.

As previously mentioned, the CBS is separated in two phases: the pre-issuance and the post issuance phase. For issuers seeking pre-issuance Climate Bond Certification, all the following requirements shall be met and particular:

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[35]See **International Capital Markets Association (2021b)** p. 7.
[36]For a detailed analysis on Climate Bond Initiative's Climate Bonds Standard, see Thomson S. (2021) p. 256 et seq.
[37]For a further analysis see **Ehlers and Packer (2017).**
[38]See **Ehlers T. and Packer F. (2017)** p. 93.
[39]See **Climate Bonds Initiative (2019)** p. 3 et seq.
[40]See above **Section A under 3.1.**

1. Selection of Nominated Projects and Assets
2. Internal Processes and Controls
3. Reporting Prior to Issuance

On the contrary, for issuers seeking a continued Climate Bond Certification of the issued green bond, all the following requirements shall be met. The following requirements are separated into three categories:

1. General Requirements, that shall be met to be eligible for post-issuance certification
2. Eligible Projects and Assets
3. Requirements for Specific Bond Types

Regarding the Reporting, the CBS demand issuers to develop and disclose a Green Bond Framework prior to or at the time of issuance of a green bond. This document should describe how the issuer will meet the CBS requirements, including the use and management of proceeds and how the climate-related objectives of the green bond are positioned within the context of the issuer's environmental sustainability strategy. In the post-issuance phase, issuers are required to publish an annual report that should cover three areas of reporting: allocation, eligibility and impact[41]. Allocation reporting should provide information on the allocation of the bond's proceeds to eligible projects and assets. Eligibility reporting should cover the characteristics and performance of projects/assets to demonstrate their eligibility to be considered "green", while impact reporting, albeit non mandatory, is a disclosure of metrics or indicators which reflect the expected or actual impact of eligible projects and assets.

Section B: The EU Legal Framework on Green Bonds

1. The EU's strategy on promoting sustainable finance and the path for the creation of the legal framework for the issuance of Green Bonds in the Union

In principle, before the European initiatives for the development of the green bond market are presented, it is essential to mention the concept of sustainable finance, which is entirely contribute the development of the green bond market in the Union. Sustainable Finance has emerged as a response to dramatic climate change and environmental degradation.

[41]See **Climate Bonds Initiative (2019)** p. 8 et seq.

According to the European Commission, sustainable finance[42] is captured as finance, which aspires to enhance economic growth while reducing pressures on the environment and in line with social and governance aspects. Moreover, sustainable finance contains transparency when it comes to risks related to ESG factors that may have an impact on the financial system, and the reduction of such risks through the proper governance of financial and corporate actors.

i. The UN's 2030 Agenda for Sustainable Development

The countries around the world decided to jointly activate in order to set targets addressing the environmental crisis, as demonstrated by their support for the Union Nation's 2030 Agenda for Sustainable Development (hereby the "2030 Agenda"). The main and crucial reason behind this initiative was the dramatic consequences of climate change. On 25-27 September 2015 during the United Nation's Summit in New York, the Heads of State and Government and High Representatives decided to set International Sustainable Goals by adopting the 2030 Agenda. The "2030 Agenda" is setting 17 Sustainable Development Goals (SDG), and 169 targets, aiming at eradicating poverty in all forms[43]. The 2030 Agenda briefly seeks to eliminate poverty and accomplish sustainable development by 2030 around the globe.

ii. Paris Agreement on Climate Change

Subsequently, 196 countries realizing the huge crisis from climate change, decided to sign the Paris Agreement. Paris Agreement signed on 12 December 2015, in Paris, and entered into force on 4 November 2016. It is a legally binding international treaty on climate change. Its main objective is to limit global warming to well below 2%, ideally to 1, 5 % Celsius, compared to the preindustrial period[44]. The Parties aim to reach global peaking of

[42] See the official website of the **European Commission**, which includes, inter alia, the definition of sustainable finance, available at: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/overview-sustainable-finance_en
Similarly, 'Sustainable finance' can be understood as financing as well as related institutional and market arrangements that contribute to the achievement of strong, sustainable, balanced and inclusive growth, through supporting directly and indirectly the framework of the Sustainable Development Goals (SDGs), see **G20 Sustainable Finance Study Group (2018)** p. 4.

[43] For more details on the UN's 2030 Agenda for Sustainable Development, see https://www.coe.int/en/web/programmes/un-2030-agenda and https://www.un.org/sustainabledevelopment/.

[44] See **Council Decision (EU) 2016/1841** of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change.

greenhouse gas emissions as soon as possible in order to achieve a climate neutral world by mid-century. Finance needs to play a key role in order to achieve this climate neutral world as it has been reaffirmed in Article 2. (1) point (c) "*Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development"*[45]. Green bonds could be seen as one of the "green" financial products aiming at financing assets compatible with a low-carbon and climate resilient economy. Finally, according to Jyrki Katainen "t*he signature of the Paris Agreement marked a milestone for the world and the global economy*"[46].

iii. High Level Expert Group (HLEG)

Considering the abovementioned developments, the European Commission decided to set up the High-Level Expert Group on Sustainable Finance (HLEG) on 22 December 2016, as announced in its communication on Capital Markets Union-Accelerating reform on 14September 2016[47]. The HLEG consists of 20 senior experts from the financial sector, civil society, academia and observers from both European and international institutions. Group's mandate was to provide advice to the Commission on how to a)direct the flow of public and private capital towards sustainable investments, b) identify the steps that financial institutions and supervisor authorities should take to protect the stability of the financial system from environmental risks and c) expand these policies on a pan-European scale. On 31 January 2018, the HLEG adopted its final report, which determines strategic recommendations for a financial system that supports sustainable investments including 8 key recommendations and actions targeted at specific sectors of the financial system. In relation to green bonds, the 5th HLEG's recommendation stipulates that in order to **"*develop official European sustainable finance standards, starting with one on green bonds.*** *As a first step, the EU should introduce an official EU Green Bond Standard (EUGBS) and consider an EU Green Bond label or certificate to help the market to develop fully and to maximize its capacity to finance green projects that contribute to wider sustainability*

Also, for further details on the Paris Agreement, see https://unfccc.int/sites/default/files/english_paris_agreement.pdf

[45]**Paris Agreement**, Article 2 (1) point (c) p. 3.

[46]See **EU High-Level Expert Group on Sustainable Finance (2018),** p. 2 et seq.

[47] See the **Communication on Capital Markets Union-Accelerating reform (2016)**: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016DC0601&from=EN

objective.[48]"

iv. European Union's Action Plan for Financing Sustainable Growth

On 8 March 2018, the European Commission, through a communication, presented the Action Plan for Financing Sustainable Growth. By adopting the UN's 2030 Agenda for Sustainable Development in 2015 and the Paris Agreement on climate change in 2016[49], governments from around the world chose a more sustainable way of living for our planet and our economy. The abovementioned EC's Action Plan has the following three objectives:

- To reorient capital flows towards sustainable investment in order to achieve sustainable and inclusive growth;
- To manage financial risks stemming from climate change, environmental degradation, and social issues; and
- To promote transparency and long-termism in financial and economic activity[50].

The Action Plan on "Financing Sustainable Growth"[51] laid down the foundations for a sustainable finance framework comprised of the following:

- An EU Taxonomy[52], which sets out a unified classification system of economic activities fundamentally contributing to environmental objectives on science-based criteria;
- A Disclosure Regime, which applies to both financial and non-financial entities seeking to provide investors with the information necessary to make sustainable choices (i.e. Sustainable Finance Disclosure Regulation, Corporate Sustainability Reporting Directive and Sustainability Preferences[53]). This legal framework will introduce obligations on institutional investors and asset managers to disclose how they integrate ESG factors in their risk processes;

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[48] See **EU High-Level Expert Group on Sustainable Finance (2018),** p. 13 et seq.

[49] See above **Section B** under 1(i) and 1(ii) respectively.

[50] See recommendations from the final report of **EU High-Level Expert Group on Sustainable Finance (2018),** which were submitted to the Commission on 31 January 2018 and also, see **European Commission (2018)** p. 2.

[51] See **European Commission (2018).**

[52] See the **(EU) Taxonomy Regulation 2020/852** at https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32020R0852&from=EN

[53] **COM (2021) 188 final**, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52021DC0188&from=EN. Moreover, for a detailed analysis of the sustainability disclosure obligations for the EU financial sector see **Busch D. (2021).**

- An extensive toolbox for companies, market participants and financial intermediaries to develop sustainable investment solutions, including benchmarks and labels and standards, while preventing greenwashing (i.e. EU Climate Benchmarks, European Green Bond Standard[54]); and
- The Commission has solicited feedback on amendments to delegated acts under the Markets in Financial Instruments Directive (MiFID II) and the Insurance Distribution Directive to include ESG considerations into the advice that investment firms and insurance distributors offer to their clients[55].

As per the second objective of this Action Plan for Financing Sustainable Growth, standards and labels should be created for green financial products. The EC's TEG has been entrusted with the task for preparing a report on an EU green bond standard, building on current best practices and on the basis of the results of a public consultation. Furthermore, the EC will be responsible to specify, within the framework of the Prospectus Regulation, the content of the prospectus for green bond issuances, in order to provide potential investors with additional information. Lastly, the Commission will be competent to explore the use of the EU Ecolabel framework for specific financial products, to be applied once the EU taxonomy for sustainable economic activities is adopted[56].

v. Technical Expert Group on Sustainable Finance (TEG)

Moving forward, the European Commission established a Technical Expert Group on Sustainable Finance (TEG), in June 2018, synthesized of 35 members from civil society, academia, business and the financial sector, as well as additional members and observers from EU and international public bodies. This Technical Expert Group had a key role to assist the EU Commission in developing, in line with the Commission's legislative proposals of May 2018. The Commission legislative proposals were the following:

- An EU classification system – the so-called EU taxonomy - to determine whether

[54]These investments tools will offer and increased transparency to market participants. The EC aspires to work on further bond labels such as transition or sustainability-linked bonds by 2022 and by 2023 the EC will assess the positive effect of a general framework for labels for financial instruments financing the transition of the economy, by 2023. Lastly, the EC will examine labels for Environmental, Social and Governance (ESG) benchmarks and minimum sustainability criteria for financial products that promote environmental or social characteristics see **European Commission (2021b).**

[55] See **European Commission (2021b).**

[56]See **European Commission (2018)** Action 2.

an economic activity is environmentally sustainable.

- An EU Green Bond Standard.
- Methodologies for EU climate benchmarks and disclosures for benchmarks.
- Guidance to improve corporate disclosures of climate-related information.

On 6 March 2019, the TEG published its interim report on an EU Green Bond Standard for public feedback and its final report in June 2019.TEG proposed that the EC should create a voluntary, non-legislative EU Green Bond Standard, in order the green bond market to be more efficient, transparent, comparable and credible and also, to encourage both issuers and investors to respectively issue/invest in EU green bonds[57].

vi. European Green Deal

On 11 December 2019, the European Commission initiated to move towards a more challenging direction, presenting the European Green Deal, which is an ambitious EU initiative to become the first climate-neutral continent by 2050. In particular, the European Green Deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring no net emissions of greenhouse gases by 2050; economic growth will decouple from resource use and no person or no place left behind. Through the Green Deal, the European Union renews its commitment to achieving the goals of the Paris Agreement and contributes substantially to the implementation of the United Nations' 2030 Agenda and the Sustainable Development Goals (see above Section B under 1(i) and 1(ii) respectively)[58].

Among other things, European Green Deal foresees that the EU's long-term budget for the next (7) seven years will provide support for the green transition and consists of a package of proposals through which EU policies on climate, energy, land use, transport and taxation will be adapted to achieve a reduction in net greenhouse gas emissions of at least 55% by 2030 in comparison with 1990 levels[59].

[57]See **the High-Level Technical Expert Group (2019a), High-Level Technical Expert Group (2019b)** and also see at: https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-overview-green-bond-standard_en.pdf

[58] See **European Commission (2019)** available at: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

[59]See **European Commission (2020a).**

Aiming to achieve this target, the Communication on "European Green Deal" establishes that the EC is responsible to "*review and propose to revise, where necessary, all relevant climate-related policy instruments by June 2021*"[60]. In this direction, on 6 July 2021, the EC issued a Communication on "*Strategy for Financing the Transition to a Sustainable Economy*[61]", which was supplemented on 14 July 2021, by the Communication titled *Fit for 55: delivering the EU's 2030 Climate Target in the way to climate neutrality*[62]. The second communication was accompanied by the establishment of certain legislative proposals laying down how the EU intends to achieve climate neutrality by 2050, including the intermediate target of an at least 55% net reduction in greenhouse gas emission by 2030[63]. The proposed targets/measures aspire to revise certain parts of EU Climate legislation covering a wide range of policy areas including energy, climate, taxation and transport[64].

2. The Taxonomy Regulation

As previously mentioned, the European Commission published on 8 March 2018 its Action Plan for Financing Sustainable Growth[65]. According to Action 1 of this Plan, the reorient of capital flows for achieving a more sustainable economy, requires a unified classification system. Through this, the Commission will set out a legislative proposal ensuring the gradual development of EU taxonomy for climate change, environmentally and socially sustainable activities. Also, regarding Action 2 the Commission's Technical Expert Group on sustainable finance (TEG) will be responsible[66] for preparing a report on an EU green bond standard that relies on current best practices[67].

Based on the recommendations of the HLEG for the preparation of a unified classification system, the so-called EU Taxonomy, Europe needed a "*technically robust classification*

[60]See **European Commission (2019).**
[61] For further details, see **European Commission (2021c).**
[62]See **European Commission (2021d).**
[63]For a detailed overview on the EU's 2030 Climate Target Plan see **European Commission (2020a).**
[64]**Maragopoulos N. (2021)** p. 4 et seq.
[65]See above in **Section B, under 1(iv).**
[66]See above in **Section B, under 1(v).**
[67] According to the second action of the Action Plan on Financing Sustainable Growth, an EU standard accessible to market participants would facilitate channeling more investments into green projects and would constitute a basis for the development of reliable labeling of financial products, see **European Commission (2018).**

system to establish market clarity on what is 'green' or 'sustainable'[68].' The ultimate EC's goal was to introduce a common sustainable finance and clarity starting with climate change[69].In May 2018, the EC proposed a Regulation before the European Parliament and the Council *"on the establishment of a framework to facilitate sustainable investment*"[70] and in December 2019, the Council and the European Parliament reached a political agreement on the Taxonomy Regulation[71] (TR). Finally, following this political agreement, the Regulation (EU) 2020/852was published on 18 June 2020 in the Official Journal of the EU[72].

It is worth mentioning that the Taxonomy Regulation constitutes, along with Regulation 2019/2088 "on sustainability related disclosures in the financial sector" the so-called Sustainable Finance Disclosure Regulation (SFDR[73]) and Regulation 2019/2089 the so-called Low Carbon Benchmarks Regulation (LCBR[74]), the "regulatory trilogy" of the EC's 2015 Action Plan "on Building a Capital Markets Union" in relation to sustainable finance[75].

Considering the abovementioned, the EU Taxonomy Regulation is a unified classification system establishing a list of environmentally sustainable economic activities[76]. First and foremost, the TR sets out the basis by establishing four overriding conditions that an economic activity needs to meet in order to be qualified as environmentally sustainable. The TR, as envisaged in the Action Plan, serves simultaneously the following two vital objectives: initially strives for facilitating cross-border investments in sustainable activities across the Union by establishing harmonized criteria on what can be defined as

[68]See **EU High-Level Expert Group on Sustainable Finance (2018)** p. 13.
[69]Ibid., p. 13.
[70] **COM (2018) 353 final**, available at: https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A52018PC0353
[71]The **Taxonomy Regulation** (EU) 2020/852 is legally based on article 114 of TFEU.
[72] See the **Taxonomy Regulation (EU) 2020/852** available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32020R0852
[73]See the EU 2019/2088 "**Sustainable Disclosure Regulation**" available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019R2088
[74] See the EU 2019/2089 "**Low Carbon Benchmarks Regulation**" available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R2089
[75]For a detailed analysis of the TR, including its impact on the financial system, see **Gortsos Ch.V. (2021).**
[76] According to Article 26 (2) of the TR, the EC is mandated to publish a report by end of 2021 describing the provisions that would be required to extend the scope of the Taxonomy Regulation beyond environmentally sustainable economic activities and to cover, among others, other sustainability objectives, such as social objectives. For a more detailed analysis, see **Platform on Sustainable Finance (2021a).**

"sustainable"[77], while aspires to reduce concerns about "greenwashing"[78]. In the context of the Taxonomy Regulation "greenwashing *is the practice of gaining an unfair competitive advantage by marketing a financial product as environmentally friendly, when in fact basic environ"*[79]. As per the first objective, the Taxonomy Regulation aspires to prevent a situation where Member States of the Union would use their national classification systems, in order to determine their economic activities as environmentally sustainable. Consequently, investors would be discouraged from investing across borders on account of difficulties in comparing different investment opportunities. To avoid this situation and at the same to time to prevent such obstacles in the future, the Taxonomy Regulation requires "*to use a common concept of environmentally sustainable investment when introducing requirements at national and Union level regarding financial market participants or issuers for the purpose of labeling financial products or corporate bonds that are marketed as environmentally sustainable*[80] as it may be for the European Green Bonds.

Additionally, the TR establishes disclosure obligations that complement the rules on sustainability-related disclosures laid down in Regulation (EU) 2019/2088 (SFDR) of the European Parliament and of the Council. Specifically, Articles 5-7 of the TR[81] supplement the rules on transparency in pre-contractual disclosures and in periodic reports laid down in the SFDR aiming to promote transparency in the proportion of investments that fund environmentally sustainable economic activities[82]. Moreover, the TR imposes additional requirements to undertakings, which are subject to an obligation to publish a non-financial statement or a consolidated non-financial statement under Article 19a or Article 29a of Directive 2013/34/EU ("Non-Financial Reporting Directive") of the European Parliament and of the Council[83]. These undertakings should disclose how and to what extent their activities are related to economic activities determined as environmentally sustainable pursuant to the Taxonomy Regulation[84].On 6 July 2021, the European Commission adopted

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[77]**TR,** Recital (12).
[78] See in detail about "greenwashing" phenomenon, **Flammer (2021)** p. 5 et seq.
[79]Ibid., Recital (11).
[80]Ibid., Recital (14).
[81]Ibid., Articles 5-7.
[82]Ibid., Recital (19).
[83]See at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0095
[84]**TR,** Recital (18).

a Delegated Regulation on “specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities and specifying the methodology to comply with that disclosure obligation”. This Delegated Regulation will start applying from January 2022[85] and requires from credit institutions to publish several Key Performances Indicators (KPIs)[86], of which the most essential is the Green Asset Ratio (GAR).The Green Asset Ratio (GAR) measures the proportion of a credit institution’s assets invested in environmentally sustainable economic activities as a share of total relevant assets. The main GAR should cover the stock of credit institutions’ existing on-balance assets. An additional GAR is provided for the flows (e.g. new loans and advances)[87].

2.1. An overview of the Criteria for the determination of Taxonomy aligned economic activities

As previously mentioned, the TR lays down the criteria in order to be determined whether an economic activity qualifies as environmentally sustainable for the purposes of establishing the degree to which an investment is environmentally sustainable[88]. According to Valdis Dombrovskis, Commission Executive Vice-President responsible for Financial Stability, Financial Services and Capital Markets Union: "*The adoption of the Taxonomy Regulation today is a milestone in our green agenda. It creates the world's first classification system for environmentally sustainable economic activities, which will give a substantial boost to sustainable investment.*[89]*”*

For the purpose for qualifying an economic activity as environmentally sustainable the following four conditions shall be met:

1. That economic activity contributes substantially to one or more of the following environmentally objectives: a) climate change mitigation[90], b) climate change

[85]See at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=PI_COM:C(2021)4987
[86]See **European Banking Authority (2021).**
[87]The Green Asset Ratio (GAR) indicates the proportion of the credit institution’s assets financing and invested in taxonomy-aligned economic activities as a proportion of total covered assets. See at:https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021SC0183
[88]**TR,** Article 1.
[89]See at: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1112
[90]**TR**, Article 2 point (5) "*Climate change mitigation means the process of holding the increase in the global*

adaptation[91], c) sustainable use and protection of water and marine resources,[92] d) transition to a circular economy[93], e) pollution prevention and control[94], f) protection and restoration of biodiversity and ecosystems[95].

2. Furthermore, that economic activity should not significantly harm[96] any of the other environmental objectives[97].This criterion was set to avoid investments that qualify as environmentally sustainable in cases where the economic activities benefiting from these investments cause damage to the environment to an extent that compensates for their contribution to an environmental objective. This abovementioned assessment should give due account to both the environmental impact[98] of the activity itself and the environmental impact of the products and services provided by that activity throughout their life cycle, specifically by considering the production, use and end of life of those products and services[99].

3. That Activity is carried out with some minimum safeguards, namely procedures laid down by an undertaking that is carrying out an economic activity to ensure the alignment with the OECD Guidelines for Multinational Enterprises[100] and the UN' Guiding Principles on Business and Human Rights[101], including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organization on Fundamental Principles and Rights at

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average temperature to well below 2 °C and pursuing efforts to limit it to 1,5 °C above pre-industrial levels, as laid down in the Paris Agreement". Also, see Article 10 from the **TR.**

[91]Ibid., Article 2 point (6), "*Climate change adaptation"means the process of adjustment to actual and expected climate change and its impacts*". Also, see **TR**, Article 11.

[92]Ibid., Article 12.

[93] Ibid., Article 2 point (9): "c*ircular economy means an economic system whereby the value of products, materials and other resources in the economy is maintained for as long as possible, enhancing their efficient use in production and consumption, thereby reducing the environmental impact of their use, minimizing waste and the release of hazardous substances at all stages of their life cycle, including through the application of the waste hierarch.*". Also, see **TR.**, Article 13.

[94] For a further analysis according to how a pollution prevention and control is defined and how is taking place see **TR,** Article 14.

[95]Ibid., Article 15.

[96]For nuclear energy in relation to the 'do not significantly harm' criterion, see **Group of Experts on radiation, protection and waste management (2021), Scientific Committee on Health, Environmental and Emerging Risks (2021**) and **Joint Research Centre (2021).**

[97]**TR.,** Recital (34), Articles 3 and 17. Also, see **Platform on Sustainable Finance (2021a),** p. 27 et seq.

[98] On the environmental impact of Green Bonds see **Mazzacurati J., Paris W. and Tsiotras A. (2021),** p. 97 et seq.

[99]Ibid., Article 17(2).

[100]See at: https://www.oecd.org/daf/inv/mne/48004323.pdf

[101]See at: https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf

Work and the International Bill of Human Rights[102].

4. Lastly, that activity complies with the technical screening criteria established by the European Commission[103] .The technical screening criteria shall specify the minimum requirements for any economic activity. These criteria shall determine under what conditions that economic activity makes a substantial contribution to an environmental objective and does not significantly harm the other objectives. Lastly, these TSC shall ensure that the economic activity makes either a positive impact or reduces negative impact on the respective environmental objective[104].

2.2. The importance of the technical screening criteria

The Taxonomy Regulation is complemented by European Commission's Delegated Acts, which establish technical screening criteria (TSC), namely the actual list of environmentally sustainable activities. It is extremely important to mention that apart from the fact that an economic activity qualifies as contributing substantially to an environmental objective, it should also not cause significant harm to any other environmental objective[105].

On 21 April 2021, European Commission formally adopted a Delegated Act by virtue of Article 10 (3) and Article 11 (3) of the Taxonomy Regulation concerning the "*establishing of the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives*[106]". This Delegated Act is built upon the recommendations of the Technical Expert Group on the Sustainable Finance (TEG), and mainly TEG "*recommendations for technical screening criteria for 70 economic activities that contribute substantially to climate change mitigation and 68*

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[102] See at: https://www.ilo.org/global/standards/introduction-to-international-labour-standards/conventions-and-recommendations/lang--en/index.htm

[103] Through Delegated Regulations pursuant to Articles 10 (3), 11 (3), 12 (2). 13 (2), 14 (2) and 15(2) of the **TR.**

[104] For a detailed analysis of the TR, including its impact on the financial system, see **Gortsos Ch.V. (2021).**

[105] For the "Significant harm to environmental objectives" criterion see Article 17 of the **TR** and **Gortsos Ch.V. (2021)** p. 19 et seq.

[106] See https://www.mccannfitzgerald.com/knowledge/sustainable-finance/eu-taxonomy-regulation-agreed-technical-screening-criteria-published

economic activities that contribute substantially to climate change adaptation"[107].This Delegated Regulation lays down the technical screening criteria for climate change mitigation and climate change adaptation.

Moreover, this delegated act establishes technical screening criteria for "*transitional economic activities*" that have the highest capacity for significant greenhouse gas emissions, where near-zero carbon solutions are not yet viable or where near-zero carbon activities exist, although they are not yet practicable at scale[108]. Also, it establishes technical screening criteria for manufacturing activities and maritime shipping[109].In relation to the manufacturing activities, it is noted that the minimum of the technical screening criteria shall be determined at a level that will only be achievable by the best performers of each sector, in most cases based on greenhouse gas emissions per unit of output produced[110]. While concerning the latter (i.e. the maritime shipping) the technical screening criteria should be applicable until the end of 2025[111].

Additional technical screening criteria for the four following environmental objectives: a) sustainable use and protection of water and marine resources, b) transition to a circular economy, c) pollution prevention and control, d) and protection and restoration of biodiversity and ecosystems[112], will be developed by the Platform on Sustainable Finance[113].

3. The European Green Bond Proposal for a Regulation (EuGBR)

As previously mentioned, on 8 March 2018, the EC launched its Action Plan on Financing Sustainable Growth[114]. This Action Plan lays down a comprehensive strategy in order to connect finance with sustainability. According to Action 2 of the Action Plan the European Commission pledged to create standards and labels for green financial products[115]. The

[107]**C/2021/2800 final**, see at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=PI_COM:C(2021)2800
[108] See Recital (13) of this Delegated Regulation at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=PI_COM:C(2021)2800
[109]Ibid., Recital (21) et seq.
[110]Ibid., Recital (20).
[111]Ibid., Recital (34).
[112]See **EU Technical Expert Group on Sustainable Finance (2020b)** p. 3 et seq.
[113]The **Platform on Sustainable Finance** is a multi-stakeholder platform of experts convened by the European Commission as mandated by Article 15 of the EU Taxonomy Regulation 2020/850.
[114]See above **Section B under 1(iv).**
[115]See **European Commission (2018).**

plan is a response to recommendations from the High-Level Expert Group (HLEG) on Sustainable Finance, which was submitted to the Commission on 31 January 2018.

On 9 December 2019, The European Green Deal pointed out that "*it should be introduced standards and labels for sustainable financial products (e.g. green bonds) in order to protect the integrity of and trust in the sustainable financial market, as well as enable easier access for investors seeking those products*[116].Moreover, in December 2019, the European Commission's Joint Research (JRC) published a draft proposal for the EU Ecolabel criteria for retail financial products[117]. The JRC proposes that the EU Ecolabel not to be granted to an individual financial product but to the financial service being provided by the manufacturer of the green financial product. Also, the JRC suggests that the green products manufacturers shall use the EU GBS in order to illustrate alignment with the classification system of the underlying components of their financial products (e.g. green bonds included in a bond fund carrying the EU Ecolabel).

On 6 February 2020, the European Securities and Market Authority (ESMA) published its strategy on Sustainable Finance[118]. ESMA aims to support the transition of the financial system by redirecting private capital to more sustainable investments, encouraging more transparency and long-termism in the economy. In this case, ESMA clarifies "its willingness to accept new supervisory mandates if requested, such as for example in relation to the European Green Bonds"[119].

In June 2019, the TEG published its report on EU Green Bond Standard[120]. The report suggests that the EC shall establish a voluntary EU Green Bond Standard in order to strengthen the effectiveness, transparency, comparability and credibility of the green bond market and especially to enhance the market participants to issue and invest in EU Green Bonds[121]. It is noted that the proposal relied on the best market practices. This report relies on the interim report that was published on 6 March 2019. The interim report initially

[116] See **European Commission (2019).**
[117] See Draft proposal at: https://susproc.jrc.ec.europa.eu/product-bureau/sites/default/files/2020-02/20191220_EU_Ecolabel_FP_Draft_Technical_Report_2-0.pdf
[118]See at https://www.esma.europa.eu/press-news/esma-news/esma-sets-out-its-strategy-sustainable-finance
[119]Ibid., p. 8.
[120] When the TEG published its report in June 2019, the EU Taxonomy was still in negotiation.
[121]See **EU Technical Expert Group on Sustainable Finance (2019b).**

recommends the content of a EUGBS, illustrates its purpose and defines its ambition level. Furthermore, the interim report present TEG's opinion on how the creation of the proposed EU GBS will address the barriers obstructing the green bond market's further growth and will support its role in channeling essential financial flows to green projects[122].

Based on the proposals of the TEG's report that launched on June 2019[123], the TEG published on March 2020 the usability guide for the EU Green Bond Standard. This Guide includes, among other things, TEG's recommendations on the practical application of the EU GBS. Furthermore, this Guide aspires to support potential issuers, investors and verifiers of EUGBS and provide guidance as per the draft of the EU GBS[124].

Through a public consultation on the renewed sustainable finance strategy, which took place from 6 April to 15 July 2020, and the targeted consultation on the establishment of an EU green bond standard, which took place for an extended period of 16 weeks between 12 June and 2 October 2020, the EC investigate the possibility of a legislative initiative for a European Green Bond Standard.

Based on the outcome of the two abovementioned public consultations, in January 2020 the Commission announced that would establish an EU Green Bond Standard (EUGBS). Following that announcement, the European Council highlighted the importance of developing common, global standards for green finance and invited the Commission to initiate a legislative proposal for a green bond standard by mid-2021.

In accordance with the Council's mandate, on 6 July 2021, the European Commission issued a proposal for Regulation (EU) 2021/0191[125] of the European Parliament and of the Council "*On European Green Bond*" (EUGB)[126]. This proposal is part of the European Commission's broader agenda on sustainable finance.

3.1. The objectives of the proposal for a regulation and the reason for its adoption

In principle, it is essential to mention that this legislative proposal falls within the area of shared competence in accordance with the Article 4 (2) point (a) of the Treaty of the

[122]See **EU Technical Expert Group on Sustainable Finance (2019a)**
[123]See **EU Technical Expert Group on Sustainable Finance (2019b).**
[124]Ibid., p. 3.
[125]See **European Commission (2021f).**
[126]See at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0391

Functioning of the European Union (TFEU) and is based on Article 114 TFEU.

The goal of this legislative proposal[127] is threefold:

a. Improve the ability of investors to identify and trust high quality green bonds.
b. Facilitate the issuance of these high-quality green bonds by clarifying definitions of green economic activities and reducing potential reputational risks for issuers in transitional sectors.
c. Standardize the practice of external review and improve trust in external reviewers by introducing a voluntary registration and supervision regime.

It clearly seems that, EC aims to better exploit the potential of the single market and the Capital Markets Union[128] to contribute to meeting the Union's climate and environmental objectives in relation to Article 2(1) (c) of the Paris Agreement[129] on climate change and the European Green Deal[130].

In addition, the 'EUGB' proposal aspires to address the existing barriers of the green bond market. In principle, as mentioned previously, the current green bond market relies on market-based standards. Since the green bond market builds on private initiative through the creation of proprietary frameworks, it can be costly and difficult for investors to determine the positive environmental impact of bond-based investments and to compare different green bonds in the market. Also, as far as issuers are concerned, the complete lack of common definitions of environmentally sustainable economic activities creates uncertainty about economic activities that are legitimate to be considered "green". Therefore, it is obvious that under these circumstances, the issuers may face reputational risks from "greenwashing" accusations. Another obstacle in the development of the green bond market is that the existing market-based standards are not considered sufficient to ensure transparency and accountability of external evaluators and there is no constant supervision of companies acting as external evaluators. Thus, the investors are confronting

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[127]For a brief presentation of the EuGBR, see **European Securities and Markets Authority (2021)** p. 49.

[128]The Capital Markets Union (CMU) is a plan to create a single market for capital. The aim is to get money- investments and savings- flowing across the EU so that it can benefit consumers, investors and companies, regardless of where they are located. Regarding the Capital Markets Union see **Gortsos Ch.V. (2020),** p. 144 et seq.

[129]See above **Section B under 1(ii).**

[130]See above **Section B under 1(vi).**

further difficulties in identifying, trusting and comparing environmentally sustainable bonds[131].

3.2. The content of the European Green Bond proposal

This proposal for a Regulation[132] lays down a set of rules that issuers of green bonds need to strictly follow in order to call a bond a "European Green Bond" or "EuGB", namely for "*bonds that pursue environmentally sustainable objectives within the meaning of Regulation 2020/852 (Taxonomy Regulation)"*[133].It is based on the existing market best practices and sets out additional requirements based on relevant legislation[134].

As briefly mentioned before, this legislative initiative will contribute to the Capital Markets Union while at the same time will minimize the disruption to existing green bond markets and will reduce the risk of greenwashing. The "European Green Bond" will be available for every party that aspires to meet the requirements of this proposal, namely within or outside the EU.

This legislative initiative is based on the EU Taxonomy Regulation, which defines the classification of economic activities as environmentally sustainable and, inter alia, as one of the key criteria for full compliance with minimum social safeguards[135]. This legal framework could be exploited as a benchmark for classifying an economic activity and hence the related assets or projects as "green". According to the Article 4 of the Taxonomy Regulation[136], "*the Union shall apply the criteria [...] to determine whether an economic activity qualifies as environmentally sustainable for the purposes of any measure setting out requirements for financial participants or issuers in respect of corporate bonds..."*.Therefore, the Commission suggested that the Taxonomy Regulation and its Delegated Acts should determine what counts as "green" for the purposes of European Green Bonds.

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[131]See the **Explanatory memorandum** of the EC's proposal for a regulation on European Green Bonds at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0391.
[132]For a concise overview of the EU Green Bond Standard Proposal, see **Cuyper J. and Janssen Z. (2021).**
[133]See the **Explanatory memorandum** of the EC's proposal for a regulation on European Green Bonds at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0391.
[134]For a brief analysis of the draft regulation, see **International Capital Markets Association (2021e)**, p. 2 et seq.
[135]See above **Section B under 3.**
[136]**TR** Article 4.

This proposal aims to be a voluntary standard for green bond issuance. As per its voluntary character, it is perceivable that the issuers may choose to align with European Green Bond (EuGB) or they may follow other market-defined practices. Also, it constitutes a broad framework for all green bond issuers, both the public and private sector, financial and non-financial institutions, both inside and outside the Union[137].

In view of the above-mentioned, the European Green Bond (EuGB), as structured in the proposal for a regulation, varies from the market-defined standards. In principle, the allocations raised by the EuGB should be distributed completely and solely to EU Taxonomy-aligned projects, specifically to environmentally sustainable economic activities as per the Taxonomy Regulation. Additionally, issuers should strictly follow stringent disclosure requirements in order to guarantee full transparency on the allocation of proceeds and the environmental impact of the EuGB. The fact that the disclosure requirements comply with the requirements of the EuGB will be confirmed by external reviewers[138]. In line with the external reviewers, they will need to be registered with and supervised by the ESMA[139]. This requirement aims to ensure the high quality of their services and the reliability of their external reviews in order to protect investors and boost market integrity[140].

3.2.1. The fundamental features of the European Commission's proposal

Green bonds constitute, an essential financial instrument for financing investments related to low-carbon technologies, energy efficiency and resource efficiency as well as sustainable transport and research infrastructure[141]. The proceeds raised of the EuGB issuance should be exclusively and fully allocated to finance economic activities that have a constant positive impact on the environment[142]. These economic activities shall meet the taxonomy requirements[143], or they will meet the taxonomy requirement within a specified

[137]According to the Explanatory Memorandum of the proposal, this framework is also intended to be usable for issuers of covered bonds as well as securitizations, the securities of which are issued by a special purpose vehicle (SPV).
[138]See below **Section B under 3.2.1.**
[139]See below **Section B under 3.2.3.**
[140]**Maragopoulos N. (2021)** p. 16.
[141]**EuGBR**, Recital (3).
[142]Ibid., Recital (9).
[143] Namely the taxonomy requirements set out in Article 3 of Regulation (EU) 2020/852 (TR).

period as established in a taxonomy-alignment plan. This period shall not exceed 5 years from green bond issuance, unless a longer period of up to ten years is justified by the specific features of the economic activity as substantiated in the taxonomy-alignment plan[144]. This plan needs to describe the actions and expenditures that are indispensable for an economic activity to meet the taxonomy requirements within the specified period[145].

Added to the above, it is noted that the proceeds of the EuGB issuance may be used to finance such economic activities both directly through the financing of assets and expenditures concerning to environmentally sustainable activities and indirectly though financial assets financing environmentally sustainable activities. Regarding Article 4 of the EuGB proposal, the proceeds may be allocated, without deducting costs, to the following:

a. Fixed assets, including those of households, that are not financial assets;
b. Capital expenditures (Capex)[146], including those of households.
c. Operating expenditures (Opex)[147] that were incurred more recently than three years prior to the issuance of the European Green Bond.
d. Financial assets, namely 1) debt and/or 2) equity[148].
e. A combination of the abovementioned categories[149].

Regardless of European Corporate Green Bonds[150], issuers that are sovereigns can use the proceeds of European green bonds, not only for the abovementioned categories, but also to indirectly finance economic activities that are aligned with the taxonomy requirements through the following:

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[144]**EuGBR**, Article 6.
[145]Ibid., Article 6.
[146]Ibid., according to article 4 (1) second paragraph "*capital expenditures shall mean either additions to fixed tangible and fixed intangible assets during the financial year considered before depreciation, amortization and any re-measurements, including the additions resulting from revaluations and impairments for the financial year concerned, and excluding fair value or any additions to fixed tangible and fixed intangible assets resulting from business combinations.".*
[147]Ibid., article 4 (1) last paragraph refers that "o*perating expenditures shall mean direct non-capitalized costs which relate to research and development, education and training, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of fixed tangible or fixed intangible assets of property, plant and equipment that are necessary to ensure the continued and effective functioning of such assets.*".
[148]Ibid., Articles 4-5.
[149]A EuGB may be refinanced by issuing a new EuGB but there is no specific provision on how or when to determine the Taxonomy-alignment of the refinancing EuGB, see **International Capital Markets Association (2021c),** p. 3.
[150] For a detailed analysis of corporate green bonds, see **Flammer (2021)** p. 5 et seq., and **Tang Zhang (2018).**

a. Produced non-financial assets[151]
b. Non-Produced non-financial assets[152]
c. Tax credits[153]
d. Subsidies, that were transferred more recently than three (3) years prior to the issuance of the EuGB[154]
e. Capital expenditures[155]

In these cases, sovereigns need to ensure that economic activities funded by such programs comply with the terms and conditions of those programs. Moreover, the fixed assets, the CapEx and the Opex and financial assets funded by the proceeds of the EuGBs should comply with the technical screening criteria laid down by the Taxonomy Regulation. Since the technical screening criteria are constantly being examined and amended as a result of technological progress in the area of environmental sustainability, the issuers shall implement the technical screening criteria applicable at the moment of the issuance of the EuGB, when allocating the proceeds of these bonds to eligible fixed assets or expenditures, until the maturity of the bond[156]. While, when allocating bond proceeds to the debt, issuers shall apply the technical screening criteria applicable at the moment the debt was created[157]. It is worth mentioned, that the constant the technical screening criteria due to the technological progress in that area, could negatively affect the price of the EuGBs that would have already been issued. Nevertheless, this Proposal Regulation targets to moderate this risk by granting a sensible period to the issuer (5 years), in order to allocate the proceeds by complying with the amended technical screening criteria[158].

Furthermore, the proposed Regulation aims to promote transparency and market integrity. To achieve its purposes, investors should be provided with all necessary information in order to be able to assess the environmental impact of European green bonds, and to compare such bonds with each other[159]. For this reason, the proposed regulation on

[151]Ibid., see Article 4 (2) point (a) and Regulation (EU) No 549/2013 point 7.22 of Annex A thereof.
[152]Ibid., see Article 4 (2) point (b) and Regulation (EU) No 549/2013 point 7.24 of Annex A thereof.
[153]Ibid., see Article 4 (2) point (c) and Regulation (EU) No 549/2013 point 20.167 of Annex A thereof.
[154]Ibid., see Article 4 (2) point (d) and Regulation (EU) No 549/2013 point 4.30 of Annex A thereof.
[155]Ibid., see Article 4 (2) point (e) and Regulation (EU) No 549/2013 point 20.104 of Annex A thereof.
[156]Ibid., Recital (11).
[157]Ibid., Article 7 (2).
[158]Ibid., Recital (11).
[159]**EuGBR**, Recital (13).

European green bonds, intends to lay down specific and standardized disclosure requirements for issuers in order to investors be informed about how issuers plan to allocate the bond's proceeds to eligible fixed assets, expenditures and financial assets and how those proceeds have truly been allocated. This will also facilitate the comparability of green bonds.

More specifically, issuers need to publish the following:

a. Pre-issuance European Green Bond Factsheets
b. Post-issuance annual review of allocation reports
c. At least one report on the environmental impact of the use of the green bond build on standardized templates included in the Annexes of the proposed Regulation. In the event of more than one EuGB, the issuer may publish a single report for each of the abovementioned types of reports[160].

In the case of the pre-issuance EuGB factsheet and post-issuance allocation report external reviewers should assess whether the issuer ensure compliance with the EuGB Regulation. There are two different types of external reviews. On the one hand, there is a pre-issuance external review, during which an assessment taking place in order to be ensured the alignment of the Bond with the Proposed Regulation. On the other hand, there is a post-issuance external review, during which an assessment taking place in order to be ensured that the proceeds have been allocated to economic activities aligned with the Taxonomy Regulation.

Moreover, issuers should publish and certainly maintain to their websites until the maturity of the bond details about the issued bonds in order to ensure the reliability of information and investor confidence. Also, the pre-issuance reviews as well as any post-issuance reviews should also being published on their websites[161]. After all, this is a common requirement for the issuer, because that is what they do in the relevant prospectus by virtue of Prospectus Regulation[162]. Regardless of the above, external reviewers also need to

[160]Ibid., Articles 8 (2), 9 (2) and 10 (2).
[161] Ibid., Recital (20).
[162] On the **Prospectus Regulation EU** 2017/1129 see: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02017R1129-20211110

publish their reports on their own website until the maturity of the relevant EuGBs[163].

The EuGBR is quite flexible on sovereigns in accordance with disclosure requirements and the obligation to obtain pre-issuance and post-issuance external reviews from external reviewers. In this context, sovereigns may use, instead of ESMA's supervised external reviewers[164], a state auditor or any other public body that is mandated by the sovereign to assess compliance with this Proposed Regulation[165]. This State auditor or any other public entity will not be subject to ESMA's supervision, which may impede the credibility of EuGBs[166].

In comparison with the private sector, sovereign issuers are not mandated to showcase the alignment with the Taxonomy Regulation for specific public expenditures programs, for instance tax expenditures or/and subsidies programs. Hence, the external reviewers should not be obliged to evaluate the taxonomy-alignment of each, and every economic activity funded by the afore-mentioned programs, but they should assess the alignment of the terms and conditions of the funding programs in relation to the Taxonomy Regulation[167].

Prior to the publication of the EuGB, a factsheet drawn up in accordance with a standardized template[168]and published on the issuer's website alongside with a prior review by an external reviewer. The said Factsheet may be relevant to one or numerous EuGB issuances. The Factsheet shall contain general information, such as date of the publication of the EuGB factsheet, the legal name of the issuer and contact details of the external reviewer. Also, under the factsheet issuers should provide statement that voluntarily complies with the requirements of this Regulation, their environmental strategy and rationale on how the bonds align with the environmental strategy of the issuer and the objectives of the Article 9 of the TR[169]. The biggest part of this factsheet should cover the envisaged allocation of the EuGB's proceeds. In particular, the factsheet should provide

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[163]**EuGBR,** Articles 13 (1) and 30 (1) - (2).
[164]See below in **Section B, under 3.2.6.**
[165]**EuGBR**, Article 12.
[166] See **Lehmann A. (2021).**
[167]**EuGBR**, Recital (16).
[168]Ibid., Article 8 and Annex I thereof.
[169]Namely, the climate change mitigation, climate change adaption, the sustainable use and protection of the water and marine resources, the transition to a circular economy, the pollution prevention and control and the protection and restoration of biodiversity and ecosystems.

detailed information on the estimated time until full allocation of proceeds, the process for selecting green projects, including a description of the technical screening criteria considered and an assessment of the anticipated negative or positive environmentally impact [170] . Since special reasons, such as confidentiality agreements, competitive considerations or a major number of underlying qualifying projects limiting the amount of available detail, issuers should provide detail information on the intended qualifying green projects at project-level. However, if this information is excluded due to the abovementioned special reasons, then it is sufficient the information to be provided at least at aggregate level with consequential justification of why project-level information is not provided. Where a prospectus is to be published pursuant to Regulation (EU) 2017/1129, that prospectus should explicitly declare that the EuGB is issued under the EuGB Regulation[171]and shall include therein the information contained in the European green bond factsheet[172].

As long as the issuer has completed the Factsheet, the external reviewer will accomplish a pre-issuance assessment in order to validate that the provided information is reliable, and the issuer meets all the requirements of the EuGB Regulation. This external review is built upon a standardize template[173] included in this Proposal Regulation and shall include various information. Specifically, the external reviewer shall express a positive or a negative opinion where the assessed green bond meets the requirements of the EuGB Regulation and the suitability to use the EuGB designation. Also, the independent external reviewer should give further information about the sources build upon to prepare the pre-issuance review, including links to measurement data and the applicable methodology, as well as justification of the assumptions of the methodologies and taxonomy requirements used[174].

The allocation report, pursuant to the article 9 of the proposed Regulation, follows the issuance of the green bond. On an annual basis and until the full allocation of the European Green Bond' s proceeds, issuers should draw upon a report presenting how they are

[170]Ibid., Annex I.
[171]Ibid., Article 12.
[172]Ibid., Article 8(1), point (a).
[173]Ibid., Annex IV.
[174]Ibid., Annex IV.

allocating the proceeds of the EuGB[175]. The allocation report, as also the EuGB Factsheet, is based on a standardized template included in the proposal regulation[176] and their content is quite similar. Firstly, issuers should necessarily illustrate the type and sectors of projects, the amount and the percentage of proceeds allocated at a project-level, unless specific conditions[177] require the disclosure of information at aggregated level. Moreover, the allocation report shall include the progress update in the implementation of a taxonomy alignment plan for assets falling under such a plan and statement of the issuer's compliance with the minimum social safeguards laid down in Article 3(c) of the Taxonomy Regulation[178]. On financial entities, acting as issuers, that allocate proceeds from a portfolio of several EuGBs to a portfolio of financial assets[179], in that case the allocation report shall include both an overview of the outstanding EuGBs, presenting their individual and combined value, and furthermore an overview of the eligible financial assets, presenting their value, their environmental objectives, their types, their sector and their countries.

Following the allocation of proceeds, the issuer is obliged to obtain a post-issuance review of this allocation report by an external reviewer. The allocation report shall be submitted for an assessment before an external reviewer within 30 days following the end of the year to which the allocation report indicates. While the post-issuance allocation report should be published within 90 days following the receipt of the allocation report from the external reviewer. The said review should indicate a detailed assessment of whether the issuer has allocated the EuGB's proceeds according both the proposed Regulation and the intended use laid down in the EuGB factsheet.

Finally, pursuant to the EuGB Regulation in the case of financial undertakings that allocate the proceeds from a portfolio of EuGBs to a portfolio of environmentally sustainable economic activities, a review of each allocation report is compulsory[180]

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[175]Such kind of allocation report is laid down under the GPB on a voluntary basis.
[176]**EuGBR**, Annex II.
[177]On the specific condition see annex II included in the **EuGBR.**
[178]Ibid., Annex II.
[179]Ibid., Article 6.
[180]Ibid., Annex IV and Article 9.

In comparison with other market-defined practices, as mentioned previously[181], where impact reporting is not compulsory, although shall be deemed as a best practice, as it enhances market accountability”[182], impact reporting under the proposed Regulation is mandatory. In particular, the EuGB Regulation establishes an additional disclosure requirement for issuers, which concerns to the publication of report on the environmental impact of the EuGB.

Finally, it is noted that issuers shall draw up an impact report at least once until the maturity of the green bond, exposing the environmental impact of the use of proceeds based on a standardized template included in the proposal Regulation. The impact report should provide, in addition to the sectors covered by the pre-issuance factsheet and the post-issuance allocation report, detailed information of the positive and negative environmental impact in aggregated form, as well as the methodologies and the assumptions used in the evaluation of the impact. Where possible, the metrics used in the assessment of the impact, shall be included at a project-level, otherwise a justification of the absence of that information[183].It is obvious that the impact report intends to inform the investors on each project’s negative and adverse environmental impact and the relevant metrics[184]. In comparison with the pre-issuance EuGB factsheet and the post-issuance allocation report, the impact report is not required to be assessed by an external reviewer.

3.2.2. Powers of competent authorities in relation with the disclosure requirements

The EuGB Regulation provides certain supervisory and investigatory powers on national competent authorities in order to ensure issuers’ compliance with the abovementioned disclosure requirements.

As per the supervisory powers, national competent authorities may require issuers to draw up and make public pre-issuance and post-issuance reports and to include therein the information included in the respective Annexes of the EuGB Regulation. In the case of the competent authority have reasonable doubts that the disclosure requirements have been

[181]On that see above **Section A under 3.**
[182]See **Fatica S., Panzica R. and Rancan M., (2019), Fatica S. (2020)** and **European Commission (2020b).**
[183]**EuGBR**, see Annex III.
[184]Ibid., Article 10.

violated, the competent NCA shall publish this information[185] and additional the competent NCA may suspend the offer of EuGBs for a maximum of 10 contiguous working days[186] and/or forbid or suspend advertisements according to this issuance[187].

As regards the investigatory powers, firstly, the NCAs may require auditors and senior management of the issuer to provide information and documents[188], and secondly, they may also carry out on-site inspections and/or investigations at the issuer's premises in order to prove the violation of this Regulation[189]. In both cases, NCA's may exercise their powers either directly or in cooperation with other competent authorities[190], or under their responsibility by delegation to such authorities or lastly by application to the competent judicial authorities[191].

Furthermore, this proposed Regulation pursuant to Article 41 and without prejudice the right of the Member States to impose criminal penalties, Member States shall provide competent authorities, in accordance with their national law, the power to impose administrative sanctions and other effective, proportionate and dissuasive administrative measures[192], whether the issuer violates the disclosure requirements set out in the EuGB Regulation or whether an issuer fails to cooperate or comply in an investigation or an inspection[193].

It is noted that the National Competent Authorities (NCA's) have the power to impose both pecuniary and non-pecuniary administrative sanctions to legal and natural persons responsible for the respective infringements[194].When imposing these sanctions, the NCAs

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[185]Ibid., Article 37 (1) point (g).
[186]Ibid., Article 37 (1) point (e).
[187]Ibid., Article 37 (1) point (f).
[188]Ibid., Article 37 (1) point (d).
[189]Ibid., Article 37 (1) point (h).
[190]Ibid., Article 38.
[191]Ibid., Article 37 (2).
[192]Ibid., Article 41.
[193]Ibid., Article 41 (1) point (a)-(b).
[151]Ibid., Article 41 explicitly mention that: "(a) a public statement indicating the natural person or the legal entity responsible and the nature of the infringement in accordance with Article 37(1), point (g); (b)an order requiring the natural person or legal entity responsible to cease the conduct constituting the infringement; (c)maximum administrative pecuniary sanctions of at least twice the amount of the profits gained or losses avoided because of the infringement where those can be determined; (d)in the case of a legal person, maximum administrative pecuniary sanctions of at least EUR [500 000], or, in the Member States whose currency is not the euro, the corresponding value in the national currency on [please add entry into force], or 0.5 % of the total annual turnover of that legal person according to the last available financial statements

shall consider the following criteria in order to determine the type and the level of the administrative sanction or measures. In particular, a) the gravity and the duration of the infringement, b) the degree of responsibility of the person responsible, c) the financial strength of the person responsible for the infringement d) the impact of the infringement on retail investors' interests, e) the importance of the profits gained, losses avoided by the person responsible for the infringement or the losses for third parties derived from the infringement, f) the level of cooperation of the person responsible for the infringement with the competent authority, without prejudice to the need to ensure disgorgement of profits gained or losses avoided by that person g)previous infringements by the person responsible for the infringement and h) measures taken after the infringement by the person responsible for the infringement to prevent its repetition[195].

Lastly, if the Member States decide to impose criminal sanctions in their national law in relation with the infringement of this Regulation, they might decide not to lay down rules for administrative sanctions for these infringements as referred to in this proposed Regulation[196].

3.2.3. Registration and supervision of external reviewers

First and foremost, it is quite essential to mention, that the current market-defined status of green bond issuance does not provide a specific framework for the supervision of external reviewers. The consequence is that issuers and investors are not safeguarded in relation to the sustainability of the economic activity. However, the EuGB Regulation aspires to create an efficient framework for the supervision of external reviewers.

In principle, the EuGB Regulation contains detailed provisions setting out specific requirements concerning the registration process and the supervision of external reviewers and secondly the assignment to the ESMA the power of the authorization process of external reviewers and to ensure a fully harmonized supervision across all Member States[197], which is based on the TEG's proposal for a "*centralized regime for authorization*

approved by the management body. (e) in the case of a natural person, maximum administrative pecuniary sanctions of at least EUR [50 000], or, in the Member States whose currency is not the euro, the corresponding value in the national currency on [date of entry into force of this Regulation]."

[195]Ibid., Article 42.

[196]Ibid., Article 41 (1).

[197]See **EU Technical Expert Group on Sustainable Finance (2019b),** p. 36 et seq.

and supervision by ESMA[198]". The TEG also assessed three more options, namely a) "*a decentralized regime, involving national competent bodies (national regulators, national ecolabelling authorities) in EU Member States on a harmonized basis, possibly coordinated by ESMA in cooperation with other EU institutions", b)* "*a status quo and/or de-facto harmonization with ISO 14030" and c)* "*a 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*[199]", but all the above options were rejected in order to prevent a contrasted application of the EU rules in the Union giving rise to "*market distortion, uneven practices and regulatory arbitrage"*[200]. This centralized regime for registration and supervision by the ESMA[201] will multiply benefit the market, because it would avoid market fragmentation establishing a harmonized framework for external reviewers, it would facilitate cross-border reviewers and issuers and lastly it would reduce compliance costs for supervised entities[202].

As per the EuGB Regulation, the external reviewers, before taking up their activities, should register with ESMA, since they met specific conditions[203].External reviewers aspire to assess European green Bonds need to submit an application before the ESMA included specific documentation. Candidate external reviewers should provide the ESMA with information about a) personal data of the applicant, such as name, address, website, b) the name and contact details of a contact person, c) the legal status of the applicant, d) the ownership structure of the applicant, e) the identity of the members of the senior management of the applicant and their level of qualification, experience and training, f) the number of analysts, employees and other persons directly involved in the assessment activities, their level of experience and training working of the applicant and their level of

[198]Ibid., p. 39.
[199]Ibid., p. 39.
[200]See **EU Technical Expert Group on Sustainable Finance (2019b)** p. 74. Moreover, for a deepen analysis, see **Maragopoulos N. (2021),** p. 21 et seq.
[201]Accreditation of CRAs , which play a crucial role in bond markets and some of which are already active in the external review market, are already authorized and supervised by ESMA, see **EU Technical Expert Group on Sustainable Finance (2019b)** p. 74. The ESMA has also supervisory powers as concerns trade repositories.
[202]Ibid., p. 74.
[203]**EuGBR**, article 14 (1)-(2). Nevertheless, State auditors and other public entities mandated by sovereign issuer to assess compliance with this Regulation shall not be subject to the same obligations in relation the registration and supervision as the external reviewers, see also **EuGBR** Article 14 (3).

experience and training, g) a description of the procedures and methodologies applicable by the candidate to issue pre-issuance and post-issuance reviews[204], h) the policies or procedures applicable by the candidate to identify, manage and disclose any conflicts of interests[205], i) documents in relation to any existing or planned outsourcing arrangements for activities of the external reviewer covered by this proposed regulation, including information on entities assuming outsourcing functions, where applicable, and j) information about other activities carried out by the applicant[206].

The ESMA may approve the application of an external reviewer only if the following conditions are cumulatively met. First and foremost, the senior management needs to meet certain criteria concerning to reputation, skills, profession qualifications and experience[207]. Secondly, the number of analysts and employees and the level of their experience and training are sufficient to perform the required tasks[208]and thirdly, the internal arrangements are effective and appropriate to ensure compliance with the requirements set out in this proposed Regulation[209].

Lastly, the ESMA may accept or may refuse[210] the registration of the applicant in case of submission of false statements during the registration process or non-compliance with the transparency rules[211].

3.2.4. Organizational requirements, processes and documents concerning governance

Added to the above, once the ESMA deems, that the external reviewer fulfils the necessary requirements on an ongoing basis, the ESMA accepts the application and proceeds to its entry in the register[212]. The registered external reviewer may carry out its assessment activities in the Union. The proposed Regulation sets out organizational requirements and internal policies aspiring to boost investor protection and market transparency. Consequently, it is mandatory external reviewers to utilize proper systems, resources and

[204]See above in **Section B under 3.2.1.**
[205]**EuGBR,** Article 27.
[206]Ibid., Article 15 (1).
[207]Ibid., Article 15 (2) point (a).
[208]Ibid., Article 15 (2) point (b).
[209]Ibid., Article 15 (2) point (c).
[210]Ibid., Article 15(3).
[211]Ibid., Article 15 (3) and 51 (2).
[212]Ibid., Article 15 et seq.

procedures[213], which should monitor and evaluate for their adequacy and effectiveness and where required to take appropriate measures to address any deficiencies[214].

Firstly, external reviewers are required to comply with certain corporate governance requirements to guarantee that their conducted pre-issuance and post-issuance reviews are independent, objective and of good quality[215].In this context, the EuGB Regulation introduces obligations for the senior management[216], the analysts and employees of external reviewers and other persons directly involved in the assessment activities of external reviewers[217]. As per the senior management of external reviewers, it is necessary to be sufficiently expert in financial services and environmental matters[218]. Furthermore, senior management should safeguard a sound and prudent management, the independence of the assessment activities, conflicts of interest are appropriately identified, managed and disclosed including the compliance with the requirements laid down in this Regulation[219]. Likewise, analysts and employees conducting the external reviews need to have the relevant knowledge and experience in order to effectively perform their duties[220].

Furthermore, as previously mentioned, external reviewers should take any measures to identify, manage and disclose any conflict of interest related to analysts, employees or any other person directly involved in the assessment activities, as well as persons approving pre-issuance or post-issuance reviews[221]. Moreover, external reviewers need to disclose any conflict of interest, keep records[222]of potential threats to their independence, as well as measures seeking to mitigate these threats[223]. Fees charged by external reviewers should not be related on the results of the assessment activities[224], and in addition, analysts or other employees directly involved in the assessments are should not initiate or involve in

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[213]Ibid., Article 18 (1).
[214]Ibid., Article 18 (2).
[215]Ibid., Recital (23).
[216]Ibid., Article 19.
[217]Ibid., Article 20.
[218]Ibid., Article 23.
[219]Ibid., Article 19 (1) points (a)-(d). It is noted that the ESMA is required to specify though Regulatory Technical Standards the criteria pertaining to the assessment of the sound and prudent management of the external reviewer according to article 19(2) of the **EuGBR.**
[220]**EuGBR,** Article 23.
[221]Ibid., Article 27 (1).
[222]Ibid., Article 26.
[223]Ibid., Recital (24).
[224]Ibid., Article 27 (2).

negotiations concerning fees or payments with any assessed entity or any related third party[225]. Lastly, external reviewers providing services other than these assessments shall ensure that those services do not create any conflict of interest with their assessments regarding European Green Bonds[226].

Moreover, external reviewers should establish and maintain a permanent and effective compliance function ensuring to accomplish its responsibilities appropriately and independently, as well as having the necessary resources, expertise and access to all relevant information[227]. It is noteworthy that the compliance function should not monitor or assess its own activities and it should be compensated according to the business performance of the external reviewer[228]. The outcome of the compliance function should be available to either a supervisory authority or an administrative organ of the external reviewer[229].

Also, external reviewers should introduce and implement internal due diligence policies and procedures safeguarding that their business interests do not affect the independence or accuracy of the assessment activities[230]. Additionally, external reviewers should adopt sound administrative and accounting procedures, internal control mechanisms as well as effective control and safeguards arrangements for information processing systems. It is noted that reviews shall rely on an in-depth analysis of the available information, which needs to be of sufficient quality and from reliable sources[231]. Eventually, external reviewers shall make public to users of their reviews the methodologies and key assumptions they use in their assessment activities in adequate detail, while taking account of the protection of personal data and intellectual property[232].

Lastly, external reviewers may outsource their assessment activities to third party service providers having the respective ability and capacity to perform those assessments credibly

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[225]Ibid., Article 20 (2).
[226]External reviewers shall disclose in their pre-issuance and post-issuance reviews any other services provided for the assessed entity or any related third party in relation to Article 28 of the **EuGBR.**
[227]**EuGBR**, Article 21 (2) points (a) - (b).
[228]Ibid., Article 21 (2) points (c)-(d).
[229]Ibid., Article 22 (3) and recital (23).
[230]Ibid., Article 22 (1).
[231]Ibid., Article 23 (2) and (3), the ESMA needs to develop RTS to specify the criteria for the assessment of whether the information used is of sufficient quality and the information sources are reliable.
[232]Ibid., Recital (22).

and professionally[233].It should be ensured that such outsourcing does not substantially compromise the quality of the internal audit of the external reviewers and the ability of the ESMA to supervise the compliance of those external reviewers pursuant this Regulation. External reviewers remain liable for any outsourced activity, and they should establish organizational measures in order to ensure that they assess whether third party service providers are conducting assessment activities effectively and pursuant to the implemented regulatory requirements, and the European and national laws[234]. External reviewers should also be able to monitor regularly outsourced assessment activities, identify any potential risk associated with these activities and subsequently address any identified failure[235].

3.2.5. Provision of services by third-country external reviewers

The proposed Regulation sets out detailed provisions about the services provided by third-country external reviewers. Initially, an external reviewer, who aspires to provide its services pursuant to the EuGB Regulation, shall be registered in the register of third-country external reviewers kept by ESMA[236]. The ESMA shall register the third-country external reviewer only, if certain conditions laid down in the Regulation are met.

The European Commission should adopt a decision for a third country stating that both legal and supervisory arrangements are equivalent to those applicable in the Union and introduce cooperation arrangements with the respective competent authority of that country[237]. In that case, the external reviewer is being able to apply for registration before the ESMA and provide its services without any additional requirements[238].

Until the equivalence decision is adopted, a third-country external reviewer may provide its services in relation with this Regulation, since the ESMA recognizes this external reviewer. In order to be recognized, the external reviewer needs to apply for prior recognition before the ESMA, included all the necessary information indicating compliance with the requirements laid down in the EuGB Regulation, namely the

[233]Ibid., Article 25 (1).
[234]Ibid., Article 25 (6) point (a).
[235]Ibid., Article 25 (6) point (c).
[236]Ibid., Article 59.
[237]Ibid., Article 31 (1) and article 59.
[238]Ibid., Article 31 (3).

requirements, that are also applied to the external reviewers located in the Union[239].It is noted that the external reviewer located in a third country seeking to obtain prior recognition shall appoint a legal representative located in the Union[240].

Finally, external reviewers located in the Union may wish services provided by an external reviewer in a third country to be endorsed. To this end, external reviewers should submit an application to the ESMA on condition that the following conditions are cumulatively met:

a. The endorsing external reviewer has confirmed and notably is able to constantly prove to the ESMA that the provision of services according to this Regulation by the endorsed third-country external reviewer meets the requirements on a compulsory and constant basis, which are at least as strict as the requirements of the EuGB Regulation[241].
b. The endorsing external reviewer is expert to monitor efficiently the activity of the provision services in relation to this Regulation by that third-country external reviewer and to manage the associated skills[242].
c. The third-country external reviewer is used either for the specificities of the underlying markets or investments, either for the proximity of the endorsed reviewer to third country markets, issuer or investors, or for his expertise in providing the services of the external review in specific markets or in specific investments[243].

In conclusion, it is extremely essential that the external reviewer located in the Union persists completely liable for the endorsed services provided by the external reviewer located to a third country and for the compliance with the requirements set out in the proposed Regulation[244].

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[239]Ibid., Article 34 (4).
[240]Ibid., Article 34 (3) points (a)-(c).
[241]Ibid., Article 35 (1) point (a).
[242]Ibid., Article 35 (1) point (b).
[243]Ibid., Article 35 (1) point (c).
[244]Ibid., Article 35 (5).

3.2.6. Supervisory and investigatory powers conferred upon the ESMA

The proposed Regulation assigns to the ESMA specific supervisory and investigatory powers in relation to the external reviewers. In order for the ESMA to carry out effectively its conferred tasks pursuant this proposed Regulation, the ESMA may require the submission of necessary information from all persons related or connected to external reviewers, including persons, who effectively conducting the business of the external reviewers, members of the supervisory, management and administrative body or members of the senior management of the external reviewers, persons who are directly involved in assessment activities of the external reviewers, legal representatives and employees of entities to which an external reviewer has outsourced certain functions, and lastly including any person that acts or pretends to be an external reviewer without being registered as such[245].

As per the investigatory powers, the ESMA shall be empowered by virtue of Article 48 to investigate any of the abovementioned persons requiring to a) examine records, data, and procedures and receive certified copies of these, b) request written or oral explanations on records, data, procedures and d) to request records of telephone calls and data transmission[246]. In addition, the ESMA is assigned to conduct on-site inspections[247].

In the context of supervisory tasks based on Article 51 of the EuGB Regulation and in case the ESMA figures out that a person has committed any of the following infringements that set out in Article 52(2):

a. Non-compliance with the organizational and governance requirements of the EuGB Regulation,
b. The submission of false statements in the application of registration as an external reviewer before the ESMA or the use of any other irregular means to obtain such registration,
c. Failure to provide the requested information or the provision of incorrect or misleading information in response to a request for information from the ESMA.

[245]Ibid., Article 47 (1).
[246]Ibid., Article 48 (1).
[247]Ibid., Article 49.

d. Non-compliance with an investigation or on-site inspection performed by the ESMA,
e. Taking up the activity of external reviewers or pretending to be an external reviewer without having been registered as such[248],

the ESMA may decide to impose any of the broad listed supervisory actions in Article 51 of the EuGBR[249]. In particular, the ESMA may adopt any of the following measures:

a. Withdraw the registration of an external reviewer.
b. Withdraw the recognition of an external reviewer located in a third country[250].
c. Prohibit in a temporary basis the external reviewer from pursuing the assessment activities until the end of the infringement.
d. Adopt a decision requiring the end of the infringement.
e. Imposing fines and periodic penalty payments[251]
f. Issue public notices.

In relation with the breaches mentioned above, the ESMA may impose a fine starting from €20,000 to €200,000. In the case of any person has directly or indirectly benefited financially from the breach, the amount of the fine shall be at least equal to that financial

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[248]Ibid., Article 52.
[249]Ibid., Article 51 (3): "*When taking the decisions referred to in paragraph 1, ESMA shall take into account the nature and seriousness of the infringement, having regard to the following criteria: (a) the duration and frequency of the infringement; (b) whether financial crime has been occasioned, facilitated or otherwise attributable to the infringement; (c) whether the infringement has been committed intentionally or negligently; (d) the degree of responsibility of the person responsible for the infringement; (e) the financial strength of the person responsible for the infringement, as indicated by the total turnover of the responsible legal person or the annual income and net assets of the responsible natural person; (f) the impact of the infringement on retail investors' interests; (g) the importance of the profits gained, losses avoided by the person responsible for the infringement or the losses for third parties derived from the infringement, insofar as they can be determined; (h)the level of cooperation of the person responsible for the infringement with ESMA, without prejudice to the need to ensure disgorgement of profits gained or losses avoided by that person; (i) previous infringements by the person responsible for the infringement; (j) measures taken after the infringement by the person responsible for the infringement to prevent its repetition".*
[250]Ibid., article 51 (2), "*ESMA shall withdraw the registration or the recognition of an external reviewer in the following circumstances:(a)the external reviewer has expressly renounced the registration or the recognition or has not made use of the registration or the recognition within 36 months after the registration or the recognition has been granted; (b)the external reviewer has obtained the registration or the recognition by making false statements or by any other irregular means; (c)the external reviewer no longer meets the conditions under which it was registered or recognized.".*
[251]Ibid., article 54 (1), *"ESMA shall disclose to the public every fine and periodic penalty payment that has been imposed pursuant to Articles 52 and 53, unless such disclosure to the public would seriously jeopardize the financial markets or cause disproportionate damage to the parties involved. Such disclosure shall not contain personal data within the meaning of Regulation (EC) No 45/2001.".*

benefit[252]. While, an act or omission constitutes a combination of numerous breaches, only the fine for the highest fined breach shall be imposed[253]. As per the periodic penalties, these should be imposed for each day of delay and be amounted of 3% of the average daily turnover in the proceedings business year for legal entities or 2% of the average daily income in the preceding calendar year for natural persons[254].

Above all, the ESMA by virtue of Article 58 of the EuGB Regulation may charge external reviewers on emerging costs, such as their registration, recognition and supervision. While supervisory fees shall cover the administrative costs incurred by the ESMA. Fees should be proportionate to the turnover of the external reviewer concerned[255]. European Commission's Delegated Acts will specify additional issues concerning supervisory fees[256].

4. The first green bond issuance by the European Commission - "NextGenerationEU"

On 12 October 2021, the European Commission[257] issued the first green bond, which is called "NextGenerationEU[258]" green bond. The EC raised €12 billion in order to foster green and sustainable investments across the EU. It seeks to give the green bond market another push, encouraging other issuers and providing investors with more differentiation options[259]. It is noteworthy that, this contains the largest green bond issuance ever worldwide. The European Commission, with the issuance of that green bond, confirms its commitment to sustainable finance and carries a new highly rated and liquid green asset to the market providing access to green investment for a broad range of investors. Moreover, investors will be easily able to diversify their portfolios of green investments and possibly accelerating on sustainable investments. Lastly, the EC illustrated its extremely goodwill to promote the green bonds market and to become an inspiration to other issuers. Hence, the role of the European Union is strengthened; and the euro currency is being followed in

[252]Ibid., Article 52 (4).
[253]Ibid., Article 52 (5).
[254]Ibid., Article 53 (3).
[255]Ibid., Article 58 (1) - (2).
[256]Ibid., Article 58 (3).
[257]See **European Commission (2021e).**
[258]"NextGenerationEU"is a provisional recovery instrument. It is at the heart of the European Union (EU) response to the coronavirus crisis and indents to support the economic recovery and build a greener, more digital and more persistent future. See **European Commission (2021a).**
[259]**European Commission (2021g)**, p. 4.

the sustainable financial markets.

Section C. Concluding Remarks

Despite the lack of an articulate European legislative framework for green bonds, the Commission is taking a step forward in order to set a legislative framework for European green bonds, and to be the leader in the issuance of green bonds. The European Green Bond Regulation (EuGBR) aims to lay down a new 'gold standard' through the standardization of best market practices and the introduction of high standards for issuers and external reviewers.

In recent years, the European Commission has been vigorously concentrated on promoting sustainable finance in order to facilitate market participants to finance environmentally sustainable investments, and concurrently to contribute to climate change. The proposal regulation on European green bonds is expected to be adopted in 2022 following possible amendments that may take place under the ordinary legislative procedure. The EuGBR aspires to allow issuers to showcase their powerful environmental commitment in a reliable way and to provide investors with confidence that their investments are environmentally friendly and sustainable.

Furthermore, this proposal for a regulation seeks measures to remove the existing barriers to the development of the green bond market, such as the inconsistent application of disclosure and verification requirements and the lack of common definitions for green assets and projects. In order to develop the green bond market in the EU, the proposed regulation aspires to link the allocation of proceeds to the EU taxonomy, establishes challenging disclosure requirements and enforces external reviewers to be registered with and supervised by the ESMA.

The most remarkable characteristic of this proposed regulation is the establishment of a voluntary standard for green bonds at Union level rather than a mandatory one. In particular the EuGBR lays down uniform requirements for any bond issuer that wishes to call their bond a 'European green bond'. Also, it is notable that the EuGBR is related closely to other green bond standards, as mentioned above, (e.g. ICMA's Green Bond Principles, Climate Bonds Initiative's Climate Bonds Standard), since the European legislative act is builds upon the market best practices and it is designed to be compliant with existing market

standards for green bonds. Nevertheless, the EuGBR is moving forward in relation to some essential elements, such as the full alignment of funded projects with the EU Taxonomy and the establishment of a regime for the registration and supervision of external reviewers by the ESMA.

However, whether it will be established as the market standard in the European Union or not, it depends on o number of factors mainly related to market participants. Green bond issuers shall make a choice of whether to use the requirements of the EuGBR or the other green bond standards (e.g. ICMA's Green Bond Principles, Climate Bonds Initiative's Climate Bonds Standard). Key selection criteria will be the cost of the compliance with the requirements laid down in the EuGBR and mainly in the EU Taxonomy, since the cost may be burdensome for them in comparison with the existing market-based standards. Nonetheless, it is considered that it will be favorable for the green bond issued to be labeled 'EuGB' due to the enhanced disclosure requirements and strict verification arrangements laid down in the Regulation. The whole process of issuance will be transparent and reliable.

In conclusion, issuers and market participants in general it is necessary to weigh their risks and benefits[260] and follow a credible standard that ensures that they will not be accused of 'greenwashing' due to the costs incurred in complying with additional disclosure requirements that are subject to the control of external reviewers under the supervision of the ESMA.

It remains to be seen the final form of the regulation on European green bonds that will be adopted in the coming months and the balances that will be formed in the market with a new strong standard of green bonds.

[260] On the benefits from green bond issuance and also the potential costs, see **Tang D.Y. and Zhang Y. (2018),** p. 7 et seq.

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