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## UNIVERSIDADE CATÓLICA PORTUGUESA

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## GREEN BONDS: THE CURRENT STATE OF REGULATION IN EU

Master's Thesis

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#### INTRODUCTION

There has been a lot of talk about climate change and how we should take actions in order to slow down its impacts, which are already seen around the world for example with melting of the glaciers and massive rain forest fires, just to mention. The media writes much about how we should eat less meat, and at least here in Finland there has been a great conversations on how the fuel should be taxed higher and other actions made so that less people would be using private cars and the cities would be greener. There have been presented for example improvements in public transportation which helps partly to reduce emissions, but also actions which have negative impacts to the private persons in terms of taxation. While we have to take more and more into account the sustainability of the globe, we also have to take care of the sustainability of the economy. That is why we need to find new solutions, which support both environmental goals and supports the growth of the economy. Here the positive alternatives often win more popularity among society, and thus through them we can find better resolutions. Even responsible and green investing are trending, green bonds haven't been too much at frame. The first green bonds were issued only a bit more than a decade ago, and they are still finding their place among other financial instruments. The green bonds attract both investors and issuers by offering a financial instrument solution which benefits the environment, and it is thus attractive in a world where the global challenges regarding climate change and environmental issues have been understood more and more. Even so, yet there doesn't exist clear regulation considering them.

The author chose to limit the research to the Green Bonds even there exists also other responsible investment instruments, because first of all green bonds are not very well known, even they reasonably said should be, and at the same time they have been becoming more popular, which sets new need to better regulate them. Green bonds might offer us a tool which should be seriously taken into account when achieving the sustainability goals, and there is a need to study how that can be promoted. The author has chosen this topic, because the green bonds can play a huge role when we are tackling with a climate change and environmental issues. In future the sustainability has to be taken more as part of economy, and green bonds offer a great solution here. To achieve the benefits of green bonds, there is need to understand how they are regulated and what should be done that the green bonds gain more interest. The author's interest to green bonds raised due pure interest towards sustainability and particularly how sustainability could be achieved without doing it at the expense of the economy. The research is limited to the Green Bonds only, even there exists other responsible

investment instruments, because green bonds are not known well enough, but they have great potential to grow and help us to achieve the sustainability goals.

The objectives of this thesis are to understand how green bonds can both benefit the economy and support the sustainability goals. I will first focus on what green bonds are in general, and then discuss how they are regulated particularly in EU. Then I will consider how the green bonds support the sustainability goals, and why should they attract investors. In this thesis it is researched how the green bonds are regulated in general, and then seen the situation particularly in the EU. The following research questions will be answered: What are green bonds, how are green bonds regulated, what is the state of green bonds in the EU and what should be done that the green bonds better suit the needs of investors. The author chose to research the green bonds situation particularly in EU, because EU is a significant economy which has set its sustainability goals high, and thus needs tools to achieve them. The focus on EU was selected also because it is timely, since the EU commission is creating Green Bond Standard, not to mention that the first green bonds were also issued in EU. The hypothesis of this thesis is that as being relatively new investment instrument green bonds are still finding their place in market and so is the regulations regarding them. The expectation is that while more green bonds are issued, more regulation is needed, but it should be such that it allows the green bond market to grow best to its potential.

This thesis is an analysis of the current state of green bonds and how green bonds are regulated. In order to conduct the analysis, different legal material has been used, including legal documents, the publications of international and EU authorities, journal articles from reliable authors as well as the publications of different institutions. The sources were selected so that they would give comprehensive understanding of a topic. As current sources were used as possible to give the accurate information of the current state of green bonds. Reliability was a high criteria while choosing the source material. It has to be taken into account that since the green bonds are a new "phenomenon" and thus the standards are still finding their way and new ones are coming, the information available updates quickly.

The order in which the thesis is presented was chosen so that it would create the most comprehensive understanding of the topic with its limits. The first chapter covers what green bonds are, while the second chapter focuses on the green bond regulation. The third chapter discusses the current state of green bonds in EU, including the development of EU Green Bond Standard and how Green Bonds could help to achieve the EU's sustainability goals. In the last chapter it has been considered what

would attract investors to invest to Green Bonds. The chapter does also discuss what may prevent green bond markets gaining its full potential, and what should be done so that green bonds can continue to become more common. The thesis is presented so that the later chapters use the information gained from the previous chapters in its cogitation.

#### 1. WHAT ARE GREEN BONDS?

Green bonds are a form of debt financing, where the profits are used particularly to environmentally friendly projects, green assets and green business activities<sup>1</sup>. In other words, green bonds are a financial instrument created to fund projects with positive impact to environment and/or climate, so the funds are used to projects which support environment or sustainable development. The fact that target of funds is green, is the most important thing which differs the green bonds from other bonds. What is qualified as green will be discussed later. In general, bond markets are for long-term securities like government debt or corporate bonds which often obliges the issuer to take specific actions in the future at pre-determined dates<sup>2</sup>. Generally, a bond is a promise to pay a sequence of coupons and a maturity value at certain date in future, so bonds as an investment make it possible to pre-determine the proceeds and the time to hold the investment. There exists both public and private green bonds, where public green bonds are issued by states, communities and publicly owned companies and, private bonds which are issued by financial institutions like investment banks, or corporations. This division doesn't play a role while considering particularly the green bonds and its characters, and thus I won't go deeper in the matter.

There are two main differences between "a regular bond" and a green bond, which are the fact that the funds have to finance some green investment, and transparency. The legal question here is; how to define green and that how to ensure that the funds are used to actually benefit the environment and/or the climate and, how to grant that the information is sufficiently provided to the investors to fulfill the criteria of transparency. The transparency is also needed in order to avoid green washing. While issuing or investing to green bonds tend to be good for the company's reputation during the times where sustainability is valued and there is need and wish for more environmentally friendly

<sup>&</sup>lt;sup>1</sup> S. K. Park. Investors as Regulators: Green Bonds and the Governance Challenges of the Sustainable Finance Revolution. Stanford Journal of International Law, January 1, 2018, p. 1.

<sup>&</sup>lt;sup>2</sup> R. Bailey. The Economics of Financial Markets. Cambridge University Press 2005, p. 3.

solutions, the so called green washing could be a high risk to company's reputation. That's why it is important that there is transparency. These legal matters will be discussed in following chapters, where the existing regulation is examined.

While responsibility is trending in investment sector, the green bonds have also increased their market. When we are talking about responsibility in investing, we take into account also environmental impacts, social impacts and good government.<sup>3</sup> There is multiple reasons why responsible investment including green bonds have become more popular. One is that the institutional investors see investing to green bonds and other responsible instruments as a risk management tool, particularly when it comes to the reputation. Also, it is seen as a way to influence to the things the investor sees important, not to forget that investors want to gain proceeds. In its best, responsible investing can offer higher proceeds, better risk management and also maintain competitiveness. The investment to be successful, investors need to be familiar with the global phenomenon<sup>4</sup>, which sustainability indeed is. So, it can be said that even investors might tend to invest to green bonds with the wish to have an influence in the corporates' responsibility regarding sustainability, it is also sensible investment in terms of economy. When the society wants more sustainability, there will be more green investments. In other words, green bonds are (one among others) answer to the need of responsible investment.

#### 2. THE CURRENT STATE OF GREEN BOND REGULATION

Green Bonds have been existing only for couple of years, but they are already finding their place among other financial instruments quickly and the trend seems to be increasing. The first green bonds were issued in 2007 by World Bank and European Investment Bank<sup>5</sup>. In November 2013 the first corporate green bond was issued by Vasakronan<sup>6</sup>, which is a Swedish property company and the largest property company of Sweden highlighting sustainability<sup>7</sup>. Later green bonds have been

<sup>&</sup>lt;sup>3</sup> H. Sihvola & T. Landau. Vastuullisuudesta ylituottoa sijoituksiin. Alma Talent 2019.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Initiative Climate Bonds, Explainin green bonds. Available online: <a href="https://www.climatebonds.net/market/explaining-green-bonds">https://www.climatebonds.net/market/explaining-green-bonds</a> (28.3.2021).

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Vasakronan. Grön finansiering. Available online: <a href="https://vasakronan.se/om-vasakronan/finansiell-info/gron-finansiering/">https://vasakronan.se/om-vasakronan/finansiell-info/gron-finansiering/</a> (28.3.2021).

gaining endorsement and have been issued by large corporations like for example Apple, SNCF (Société Nationale des Chemins de Fer Français) and ICBC (Industrial and Commercial Bank of China).<sup>8</sup>. The first green city bond was issued by Gothenburg in 2013, and the green bonds are growing their market share, the major green bond issuers being US states<sup>9</sup>.

Green bonds are expected to play a big role in responding to the threats of the climate change, but yet the government regulators are missing from green bonds market. The governance regarding to green bonds is decentralized and is based on private governance regimes like investment standards, third-party assessment, certification schemes and ratings. While the private governance may be faster to implement and may be able to respond to the needs of market participants more accurate, it may have lack of legitimacy and consistency and also leave it open what is really a green, which leaves again space for abuse of green bonds which can also be called "green-washing" meaning that something claimed to be green is not actually environmental beneficial.

When looking green bonds from the legal point of view, there raises important question like what is defined as "green" and what would be the consequences of "green-washing" or in other words, of the miss-use of green bonds. As stated above, one important factor is transparency, which requires information about where the funds are used. Also, the European Commission in its renewed sustainable finance strategy in 2020 included transparency to its agenda, making it easier for investors to identify sustainable investments and ensuring their credibility<sup>11</sup>. The transparency is needed, but so is the more specified classification of what is green.

### 2.1 The Green Bond Principles and Climate Bond Standard

The Green Bond Principles were published in 2014 facilitating the Standardization of Green Bonds Market. Green Bond Principles were published by several banks and was later supported by the International Capital Market Association (ICMA) and GBD was adopted by the great majority of

<sup>&</sup>lt;sup>8</sup> Initiative Climate Bonds.

<sup>9</sup> Ibid

<sup>&</sup>lt;sup>10</sup> S. K. Park. Investors as Regulators: Green Bonds and the Governance Challenges of the Sustainable Finance Revolution. Stanford Journal of International Law, January 1, 2018, p. 1.

<sup>&</sup>lt;sup>11</sup> European Commission. EU Green Bond Standard. Available online: <a href="https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-green-bond-standard">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-green-bond-standard</a> en (28.2.2021).

market participants.<sup>12</sup> The Green Bonds Principle has four mandatory principles including the use of proceeds, process for project evaluation and selection, management of proceeds and reporting<sup>13</sup>. To be more precise, according to the Green Bond Principles the key components of green bond issuance are; the use of proceeds for environmental or climate beneficial activities, a process which determines the project is suitable for green bond, transparent management of the proceeds, which can be tracked and verified and lastly the reporting of the use of the proceeds annually.<sup>14</sup>

What is essential for the green bond is that the proceeds are used for green projects, which should provide clear environmental or climate benefits. That should be described in the legal documentation for the security and, should be assessed by the issuer. The green project categories listed in Green Bond Principles are; renewable energy, green buildings, energy efficiency, pollution prevention and control, biodiversity conservation in land and in aquatic environment, clean transportation, environmentally sustainable management of living natural resources and land use, sustainable water and wastewater management, climate change adaptation and, eco-efficient products, production technologies and processes.<sup>15</sup> What is good to notice is that even Green Bond Principles lists these categories, the projects are not limited to them<sup>16</sup>.

As mentioned, green bonds require transparency which is important in order to make sure the funds are actually used to green projects. The transparency is also important so that the investors can rely on green bonds, which would also lower the possible reputation costs, when it is necessary that the issuer communicates clearly to the investors. The need of transparency is not only the wish of investors, but also Green Bond Principles encourages to it. The clear communication from the issuer to the investor is defined in Green Bond Principles, where it is stated that the issuer should communicate to the investors at least the following information; the environmental sustainability objects, the process how the issuer determines how the process fits to the Green Project categories and the related eligibility criteria.<sup>17</sup> As seen here, also the Green Bond Principles leaves it to the issuers responsibility to determine whether the process or use of funds qualifies as green. So, even

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<sup>&</sup>lt;sup>12</sup> TEG Report, Proposal for an EU Green Bond Standard, 2019.

<sup>&</sup>lt;sup>13</sup> ICMA, GBP 2018. Available online: https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-June-2018-270520.pdf

<sup>&</sup>lt;sup>14</sup> T. Ehlers & F. Packer. Green bond finance and certification. BIS Quarterly Review, 9.2017, p. 92.

<sup>&</sup>lt;sup>15</sup> ICMA, Green Bond Principles 2018.

<sup>16</sup> Ibid

<sup>&</sup>lt;sup>17</sup> ICMA, Green Bond Principles 2018.

the Green Bond Principles set the guidelines here, it still leaves the regulation wide open regarding on what is actually green.

The third core component of Green Bond Principle handles with the management of proceeds, and it requests a description of how the funds are allocated and how they can be tracked by the issuer. According to GBP, the net proceeds or an equal amount should be credited to a sub-account or moved to a sub-portfolio, or they should be otherwise tracked by the issuer. The balance of the tracked net proceeds should be periodically adjusted to match allocations to suitable Green Projects and the issuer should inform investors of the intended types of temporary placement for the balance of unallocated net proceeds. The fourth core component states, that the use of proceeds needs to be reported and the report should include information on the environmental impact of the projects, if that is possible.<sup>18</sup>

The Green Bond Principles recommend that the issuer name an external review provider or providers, who confirms that the bond follows the above mentioned four core components. The external review can be done by various ways, including having a second party opinion which is independent from the issuer, and having an independent verification which reviews whether the bond is green according to the standards. Also, the certification can be used, where the green bond or the use of proceeds is certified by an external green standard or label. The external review can also be in form of scoring the Green Bond, where qualified third parties evaluates the green bond or the use of the proceeds. As seen from the nature of the Green Bond Principles, which is that they function on voluntarily basis, and from the terminology used in GBP, the regulation is left much to the responsibility of the issuer. So it is rather a guideline which leaves it to the issuers conscience how precise they are with their green bond, and what is the level of beneficial impact on environment or climate that can be called as "green".

It is not a coincidence that both the EU Green Bond Standards, which will be cover later, and the Green Bond Principles highlights the importance of transparency and external review. As the climate change and environment are burning issues currently, there is high need to address investments to the green projects. When people have become more aware of climate change and environmental issues, there is also more will to act for "the better future". Since the green bonds can be seen as a part of a solution to tackle with those issues, they can be seen attractive for investors, which again may lead

<sup>&</sup>lt;sup>18</sup> ICMA, GBP 2018

<sup>&</sup>lt;sup>19</sup> Ibid.

to green-washing. Transparency makes green bond markets more stable, but also may increase investors interests, since they know better where the funds are used. The fact that the green bond sector remains mainly unregulated, may lead to questionable funding of projects which premise to be green, but have no environmental beneficial impact in fact<sup>20</sup>. That makes transparency even more important, and lack of such may scare investors.

The weakness of Green Bond Principles is that even it defines the categories of green projects, it doesn't define which practices are optimal from the environmental point of view. In theory it doesn't even set minimum environmental goals which has to be achieved, which makes it possible that a project is qualified as "green" even its positive environmental impact is minor. This proofs that the existing principles do not offer a comprehensive definition of what is qualified as green, and that leaves the responsibility to do so to the issuer. That doesn't exclude the issuer's responsibility to inform the investor about those environmental impacts achieved by the green bond but leaves the assessment whether it is sufficiently green up to investors' own judgement. Also, using external reviewer is not compulsory, even it is recommended by the Green Bond Principles. This means, that the issuer can call the bond "green" without third party assessment. This means, that the investor may have to rely purely on the issuer's assessment. This is a great example of how the lack of sufficient regulation might put the investors to difficult situation, but more over it is also hard for the issuers, since they don't have clear rules to follow when doing the assessment. This can lead to the situation where green bond issuance is slow down due the issuers are afraid of reputation costs if it comes up that the bond is not green enough, and making assessments takes too much efforts, while in other hand the investors do not want to invest to the green bonds so eager than they could be, since the reliability is missing.

As seen here, sufficient definitions of green are highly needed to best achieve the benefits of green bonds, and thus more specific definitions and rules should be required in future. One good example of a certification as a model of governance is the Climate Bonds Initiative, which is an international investor-focused organization, which aims to promote large-scale investments to projects that aim for more climate-friendly global economy<sup>21</sup>. Climate Bonds aim to increase the green investments by mobilizing investors, industry and governments so that the goals of the Paris Climate Agreement

<sup>&</sup>lt;sup>20</sup> C. M. Banahan. The Bond Villains of Green Investment: Whe an Unregulated Securities Market Needs Government to Lay Down the Law. Vermont Law Review, 1.6.2019.

<sup>&</sup>lt;sup>21</sup> S. K. Park.. Investors as Regulators: Green Bonds and the Governance Challenges of the Sustainable Finance Revolution. Stanford Journal of International Law, 2018, p. 25.

could be met. The Climate Bond Standard and Certification Scheme allows the identification and prioritizing of low-carbon and climate resilient investments, at the same time when avoiding greenwashing. The Climate Bonds Standard certification confirms that the bond is fully aligned with the Green Bond Principles, that the issuer of a bond is using best practice for internal controls, tracking, reporting and verification and that the use of proceeds happens so that it supports to achieve the goals of the Paris Climate Agreement.<sup>22</sup>

As seen, most of the regulatory structures of green bonds keeps the transparency, reporting and verification fundamental for green bond's regulation.<sup>23</sup> Best practices has defined the standard for what is a green bond, but countries or regulatory regimes are not bound by these standards.<sup>24</sup> Also in EU, the green bond standards are voluntary and thus unenforceable, but EU has been finding solution to this by issuing the recommendations on how to regulate the European Green Bond Market, as will be better discussed later. Even the different regulatory structures exist already, there is need for clearer rules of what is green in order to create stability and thus lower the risk of investors. It can be said also, that the various regulatory structures would need harmonization to make the green bond market more stable.

#### 2.2 ISO 14030

The International Organization for Standardization (ISO) announced in spring 2018 that it will start to draft a standard ISO 14030 regarding the green bonds. The aim of the 14030 standard is to make the green bonds field clearer. It was seen that the fact that there exist several frameworks available to assess green bonds would lead to preventing the potential growth of Green Bond market. Thus ISO 14030 was drafted to address that issue, by harmonizing pre-existing standards like Green Bond Principles and Climate Bonds Standard, and to prevent existing of overlapping standards by creating an international standard. The ISO 14030 builds on the principles of Green Bond Principles and Climate Bond Standard, and takes into account the core principles of both.<sup>25</sup> The ISO 14030 is

<sup>&</sup>lt;sup>22</sup> Climate Bonds Initiative. Climate Bonds Standard Version 3.0. Available online: https://www.climatebonds.net/files/files/climate-bonds-standard-v3-20191210.pdf (28.4.2021)

<sup>&</sup>lt;sup>23</sup> K. W. Echo. Financing Green: Reforming Green Bond Regulation in the United States. Brooklyn Journal of Corporate, Financial & Commercial Law, Vol 12:2, 2018. P. 475.

<sup>&</sup>lt;sup>25</sup> R. Gould. The Secret to Unlocking Green Finance, 2018. Available online: https://www.iso.org/news/ref2287.html

currently still under development<sup>26</sup>, so it leaves the question open how it will affect to the green bond market, and particularly whether it is capable to bring the needed clearness and stability to the green bond markets globally.

Even the ISO 14030 principle is build on the principles of the Green Bond Principles, it goes further in order to provide specific requirements and guidance for the green bonds verification.<sup>27</sup> It sees that the objective of green bond designation is to be promoting investments with positive environmental impact and in contrary reducing negative impacts of investments. It particularly states that the environmental impacts which are monitored under green bonds should be "specific, measurable, achievable, relevant, transparent and theoretically sound"<sup>28</sup>. While respecting the Green Bond Principles, the ISO 14030-1 addresses its own requirements for calling a bond as green, which are eligibility criteria for the use of proceeds<sup>29</sup>, management of proceeds<sup>30</sup>, environmental performance<sup>31</sup> and reporting<sup>32</sup>.

As seen here, there exists different standards, which more or less have the same aims, but different ways. As the International Organization of Standardization claims, there is need to get clearness to the standardization and transparency to the green bond issuance, so that the full potential of green bonds would be achieved. The Green Bonds market attracts investors, but it should also be the interest of the governments and international actors globally, because it can offer us tools to tackle with the climate change and environmental issues. Because those two current issues interest people and companies the potential is huge, but the harmony has to be found so that the green bond market can continue its grown. European Union has made efforts in order to try to address those questions. While the EU has set ambitious sustainability goals particularly regarding to the climate change, it has seen the need to better regulate the green bonds, which are seen as an important "tool" to help in the tackle with environmental challenges. The situation of the Green Bonds in EU will be evaluated in next chapter.

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<sup>&</sup>lt;sup>26</sup> ISO/DIS 14030-1 Available online: https://www.iso.org/standard/43254.html

<sup>&</sup>lt;sup>27</sup> ISO/DIS 14030-1

<sup>&</sup>lt;sup>28</sup> Ibid.

<sup>&</sup>lt;sup>29</sup> Ibid, clause 5.

<sup>&</sup>lt;sup>30</sup> Ibid, clause 6.

<sup>&</sup>lt;sup>31</sup> Ibid, clause 7.

<sup>&</sup>lt;sup>32</sup> Ibid, clause 8.

#### 3. GREEN BONDS IN EUROPEAN UNION

The EU ratified the Paris Agreement in 2016<sup>33</sup> and adopted the 2030 Agenda for Sustainable Development in 2015. The Paris Agreement is a global climate change agreement which sets a framework to limiting global warming, by among other things making financial flows correspond the development towards low-emissions.<sup>34</sup> While the Paris Agreement is addressed to tackle with the climate change, the UN Sustainable Development Goals is an action plan, which sets 17 sustainable development goals, including sustainable economic growth while taking into account the climate and environment at the same time.<sup>35</sup> EU takes sustainability seriously, and sustainability is also seen as a key to ensure the competitiveness of its economy<sup>36</sup>. The EU have ambitious targets regarding climate and environment, and in order to meet its goals raising from the agreements the EU has bound itself, including the Paris Agreement and the UN Sustainable Development Goals, there is a need for private and public investments, and sustainable finance is needed to reach those goals.<sup>37</sup> This is where the green bonds, which aim to fund environment and/or climate beneficial projects can offer a great solution.

The EU tackles with the climate and environmental challenges by responding to them with European Green Deal which aims to transform EU to resource-efficient and competitive economy. This includes that there would be no net-emissions of greenhouse gases by the year 2050 and that the economic growth is decoupled from using resources.<sup>38</sup> Reducing emissions is a great challenge, which needs to be handled rather sooner than later. To achieve the objectives, it would require public investments and directing private capital towards climate and environmental actions<sup>39</sup>. The Green bonds have an important role in financing assets which are needed for the low-carbon transition. Even the importance of sustainable financing and green bonds has been understood, the European Union does not yet have uniform green bond standard.<sup>40</sup> Establishing EU green bond standard was proposed by European Commission High-Level Expert Group on sustainable finance and establishing such was

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<sup>33 (</sup>EU) 2016/1841

<sup>&</sup>lt;sup>34</sup> The Paris Agreement art. 2:1(c). https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22016A1019(01)&from=EN

<sup>35</sup> A/RES/70/1 p. 21-26

<sup>&</sup>lt;sup>36</sup> COM(2018) 97 final. European Commission. Action Plan: Financing Sustainable Growth.

<sup>&</sup>lt;sup>37</sup> https://ec.europa.eu/info/sites/info/files/business\_economy\_euro/accounting\_and\_taxes/documents/190618-sustainable-finance-factsheet\_en.pdf

<sup>&</sup>lt;sup>38</sup> European Commission. The European Green Deal COM(2019) 640 final.

<sup>39</sup> Ibid

<sup>&</sup>lt;sup>40</sup> European Commission. Commissio Work Programme 2021. COM (2020) 690 final.

included as an action in the Commission Action Plan on Financing Sustainable Growth 2018.<sup>41</sup> The Commission Technical Expert Group on sustainable finance made its proposal for the EU Green Bond Standard in June 2019<sup>42</sup>, which defined how the EU Green Bond Standard would look like, and also it provided the usability guide in March 2020. These will be covered hereinafter.

The EU Green Bond Standard is seen to encourage market participants to issue and invest EU green bonds by making identifying of sustainable investments easier and adding their credibility. That would require improving the transparency, comparability and credibility of the green bond market. As mentioned, European Commission in its Action Plan sets out strategy to better connect finance and sustainability, and is committed to create standards for green financial projects<sup>43</sup>. The Technical Expert Group on sustainable finance (TEG) set by European Commission develops recommendations for four work areas, including an EU classification system which determines whether the activity is environmentally sustainable, and an EU Green Bond Standard and guidance to improve corporate disclosure of climate-related information<sup>44</sup>. According to TEG's proposal, any type of listed or unlisted bond or capital market debt instrument which is issued by European or International issuer and follows the EU Green Bond Standard should be qualified as an EU Green Bond. 45 As stated above, it is essential to the green bond, that the funds are used to benefit environment or/and climate. Therefore, it is important to notice that the draft model of EU GBS links together the use of proceeds of EU Green Bonds to the EU taxonomy regulation<sup>46</sup>. The EU-wide classification system is needed in order to encourage private investment in sustainable growth, while it sets the common understanding to identify what economic activities are considered as environmentally sustainable. This helps investors to invest towards more sustainable technologies and businesses, which again is essential for EU in order to achieve its sustainability goals regarding Paris agreement and EU's goal to be climate neutral by the year 2050<sup>47</sup>. The EU-wide classification system, or taxonomy aims to

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<sup>&</sup>lt;sup>41</sup> European Commission. Action Plan: Financing Sustainable Growth. COM(2018) 97 final.

<sup>&</sup>lt;sup>42</sup> TEG Report Report, Proposal for an EU Green Bond Standard, 2019. Available online: https://ec.europa.eu/info/sites/info/files/business\_economy\_euro/banking\_and\_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard\_en.pdf

<sup>&</sup>lt;sup>43</sup> EU Technical Expert Group on Sustainable Finance. Usability Guide. TEG Proposal for an EU Green Bond Standard. March 2020, p. 2.

<sup>44</sup> Ibid.

<sup>&</sup>lt;sup>45</sup> Ibid.

<sup>&</sup>lt;sup>46</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> Council of the EU. Sustainable finance: EU reaches political agreement on a unified EU classification system. 18.12.2019. Available online: <a href="https://www.consilium.europa.eu/en/press/press-releases/2019/12/18/sustainable-finance-eu-reaches-political-agreement-on-a-unified-eu-classification-system/">https://www.consilium.europa.eu/en/press/press-releases/2019/12/18/sustainable-finance-eu-reaches-political-agreement-on-a-unified-eu-classification-system/</a> (28.4.2021)

address two challenges, which are to reduce fragmentation which results from national practices or market-based initiatives and, reduce greenwashing<sup>48</sup>.

As mentioned, the EU classification system, or Taxonomy Regulation, aims to encourage sustainable investment by making it clearer which economic activities can be defined as "green" and which are the most meeting the EU's environmental objectives<sup>49</sup>. Setting "common framework" reduces fragmentation which is caused for example by national practices which may differ widely from each other inside the EU, and by adding transparency, which again reduces the possibility to green washing. This also serves the EU and its internal market, since common rules within EU attract investors, and that maintains the competitiveness of the EU.

In 2019 the European Commission presented the European Green Deal, which is a programme of actions for making EU's economy more sustainable. The European Green Deal highlights the role of the private sector in green transition financing and resets the EC's commitment to tackle environment and climate challenges. It also recognizes the EU Taxonomy and development of an EU Green Bond Standard. EC is not alone with its goals. In 2020 also the European Securities and Market Authority (ESMA) published its Strategy on Sustainable Finance, aiming to direct private capital to more sustainable investments and promoting transparency.<sup>50</sup> ESMA also states in its Strategy on Sustainable Finance, that it "stands ready to accept new supervisory mandates, if requested, such as for example in relation to the European Green Bonds Standards.<sup>51</sup>"

In 2020 the TEG Taxonomy report was published, and it sets out final recommendations for the EC, including recommendations to EU Taxonomy as well as guidance for its users. The technical annex which supplements the TEG Taxonomy report includes a list of technical screening criteria for economic activities which can significantly contribute to climate change mitigation or adaptation. The EU Green Bond Usability Guide from TEG aims to support potential issuers, verifiers and investors of EU Green Bonds, reflecting the latest changes in the draft model of the EU Green Bond

<sup>&</sup>lt;sup>48</sup> Ibid.

<sup>&</sup>lt;sup>49</sup> European Commission: Sustainable Finance and EU Taxonomy: Commission takes further steps to channel money towards sustainable activities. 21.4.2021.

<sup>&</sup>lt;sup>50</sup> European Securities and Markets Authority. Strategy on Sustainable Finance. Available online: https://www.esma.europa.eu/sites/default/files/library/esma22-105-1052\_sustainable\_finance\_strategy.pdf (28.4.2021).

<sup>&</sup>lt;sup>51</sup> Ibid. p. 8. (14).

Standard.<sup>52</sup> Also the EU Green Bond Standard highlights the importance of the taxonomy regulation, by stating that in the green bonds, the use of proceeds has to comply with the taxonomy<sup>53</sup>.

It can be said that the reason EU takes green bonds "seriously" and highlights the need of the EU-wide classification is that it sees the potentiality of the Green Bonds when pursuing its sustainability goals. The EU-wide classification aims to encourage the directing of capital flows towards sustainable investments, which again is essential in order to achieve EU's sustainable development goals<sup>54</sup>. EU is making effort to tackle the climate and environmental issues, while maintaining its competitiveness and thus it needs to take into account the investors needs and make sustainable investing more attractive. The importance of more stable green bonds regulation is understood, and the EU taxonomy regulation is taking its place and conform with the needs of society.

#### 3.1 The EU Green Bond Standard

Establishing the EU Green Bond Standard (GBS) was recommended by the Commission's High-Level Expert Group on sustainable finance, and was included as an action in Commissions Action plan on financing sustainable growth. The Green Bond Standard was developed in order to create EU-wide standard which would encourage market participants to issue and invest in EU Green bonds. As TEG proposed, the EU GBS is voluntarily based, and builds on the best practices in the market. So to say, its application by market participants is voluntary. It is proposed to the issuers who wish to act according to the best market practices, and is accessible to issuers located both inside and outside of the EU. The best market practices to which the EU GBS builds on are among others the Green Bond Principles (GBP) which are developed by the International Capital Market Association (ICMA) and the Climate Bonds Standard by the Climate Bonds Initiative (CBI).<sup>55</sup>

The Green Bond standard has four core components which are that (i) the use of proceeds has to comply with the EU Taxonomy, (ii) the content of a Green Bond Framework to be produced by the

<sup>54</sup> Regulation on the European Parliament and of the Council on the Establishment of a framework to facilitate sustainable investment, and amending Regulation 2019/2088 on sustainability-related disclosures in the financial services sector. 14970/19 ADD1 (8). Available online: <a href="https://data.consilium.europa.eu/doc/document/ST-14970-2019-ADD-1/en/pdf">https://data.consilium.europa.eu/doc/document/ST-14970-2019-ADD-1/en/pdf</a> (28.4.2021).

<sup>&</sup>lt;sup>52</sup> TEG. EU Green Bond Usability Guide, p. 3.

<sup>&</sup>lt;sup>53</sup> Ibid, p. 10.

<sup>&</sup>lt;sup>55</sup> TEG. EU Green Bond Standard Usability Guide, p. 10-11.

issuer; (iii) allocation and impact reporting and allocation requirements, and (iv) the requirements for external verification by an approved verifier.<sup>56</sup> As stated above, the EU Taxonomy Regulation lists the green projects which are aligned with the EU environmental and climate objectives. The projects fulfilling the GBS has to be aligned with them, acknowledging that the EU Taxonomy may be modified over time. The EU Taxonomy identifies broadly the sustainable activities and, is not only addressed for assets.

The EU Taxonomy Regulation entered into force in 12 July 2020<sup>57</sup> setting out four conditions to be met so that an economic activity can be qualified as environmentally sustainable. The EU Taxonomy Regulation states that:

"For the purposes of establishing the degree to which an investment is environmentally sustainable, an economic activity shall qualify as environmentally sustainable where the economic activity: (a) substantially contributes to one or more of the six environmental objectives determined under the EU Taxonomy Regulation, (b) does not significantly harm any other environmental objectives under the EU Taxonomy Regulation, (c) is carried out in compliance with the minimum safeguards under article 18, and (d) complies with technical screening criteria established by the Commission".<sup>58</sup>

The same regulation states the six environmental objectives in EU, which are: climate change mitigation, climate change adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, the protection and restoration of biodiversity and ecosystems.<sup>59</sup>

To open the terminology of the criteria set in the EU Taxonomy regulation it is necessary to mention that by the minimum social safeguards is meant that the economic activity needs to comply with the minimum social safeguards which are represented by the principles and rights set in International Labour Organization's declaration on Fundamental Rights and principles at work. The Technical Screening Criteria includes principles, metrics and other related thresholds which are qualified environmentally sustainable. Since the green bonds are relatively new phenomenon and so is the taxonomy related to it, the external verifiers and issuers will have an important role to look of the fundamentals of the EU Taxonomy to verify whether the projects claimed to be green actually meet

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<sup>&</sup>lt;sup>56</sup> Ibid.

<sup>&</sup>lt;sup>57</sup> Regulation (EU) 2020/852

<sup>58</sup> Regulation (EU) 2020/852 art 3.

<sup>59</sup> Ibid art. 9

<sup>&</sup>lt;sup>60</sup> TEG Report on EU Green Bond Standard, p. 27.

the criteria, particularly until the EU Taxonomy and Technical Screening Criteria are fully available and when the Technical Screening Criteria is not directly applicable by the issuer due to the nature of the green projects.<sup>61</sup>

As highlighted several times, one of the important questions or factors related to the Green Bonds is transparency. Transparency is needed in order to avoid so called green washing, but also to attract investors and issuers when it adds reliability. The current market practice is that the allocation of Green Projects funds is reported regularly, at least once in a year until full allocation. Such reports include information both on the proceeds raised by an issuer with a green bond and information on the amounts allocated to Green Projects. Reports can be given on a project-by-project basis or based on portfolio. Also, some issuers provide investors with impact reporting which contain quantitative and qualitative impacts. The practice to provide investors an impact report is increasing, and it is also required under the EU Green Bond Standard.<sup>62</sup>

The EU Green Bond Standard requires both Allocation Reporting and Impart Reporting, both based on existing market practice. The Allocation Reporting needs to include a statement that it fulfills the requirements stated in the EU Green Bond Standard, analysis of allocated amounts to Green Projects at least on sector level and the regional distribution of Green Projects, while the Impact reporting shall include the description of the green project, the environmental object which the Green Project aims to achieve, a breakdown of the Green Projects by the nature of what is being financed, the share of financing, the information and metrics of the environmental impact or impacts of the green project, and the information on the methodology and assumptions used to evaluate the impacts of the Green Project, if it has not be defined in the issuer's GBF previously.<sup>63</sup> The Allocation Reporting and Impact Reporting doesn't only need to be done, but it needs also be published on the issuer's website or in any other communication channel and they should be published and be available until maturity of such EU Green Bonds, unless it is replaced by further reports. The same rules apply for the Green Bond Framework, and for the relevant external reviews.<sup>64</sup>

The fourth component of the EU Green Bond Standard is the verification, which is mandatory and requires accreditation of external verifiers. According the guidance of the Green Bond Principles, the

<sup>&</sup>lt;sup>61</sup> Ibid, p. 28.

<sup>62</sup> TEG Report on EU Green Bond Standard, p. 30.

<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

term 'external review' is used to refer two different steps in verification process which are so called pre-issuance verification of the Green Bond Framework (GBF) and a post-issuance verification of the Final Allocation Report. The verification required by EU GBS needs to follow the best market practices, meaning that the pre-issuance verification which focuses on the GBF and post-issuance verification which covers the alignment of actual use of proceeds with the GBF, taxonomy and the use of funds is mandatory, while the estimated impact reports do not need to be verified. The verification can be made only by formally accredited external verifiers and, needs to be published on the issuer's website and other communication channels available. The external verification of the GBF must be published before or at the time of issuance of its Green Bond.<sup>65</sup>

As conclusion, it can be said that the EU has understood the importance of the Green Bonds and makes its efforts to make the market more attractive. Its main goal is to increase its market-size and maintain its competitiveness while directing the financial flows towards its environmental objects including both environmental and climate objectives. What it comes to the attractiveness of the EU Green Bonds, the EU sees transparency as a key issue. The EU created the Green Bond Standards which aim to preserve and adopt the best market practices in the growing green bond market, but it is working as voluntary basis, like a recommendation. Because the EU Green Bond Standard is voluntary as nature, it requires that it is adopted by the market participants. As banks as underwriters and investors play an essential role in developing and promoting best practices and standards, it is important to encourage the investors to increase holdings in the EU Green Bonds which are align with the EU Green Bond Standards. Here again incentives might play a key role. 66

### 4. HOW GREEN BONDS CAN ATTRACT INVESTORS?

The green bond market has been growing fast after the issuance of the first green bond about a decade ago in 2007. It is suggested that their popularity will increase when more institutions take into the account the demands from investors who want to invest to investments with positive environmental impacts<sup>67</sup>. There exists regulations on emission standards globally, but the "environmental

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<sup>&</sup>lt;sup>65</sup> TEG Report on EU Green Bond Standard, p. 31.

<sup>&</sup>lt;sup>66</sup> TEG Report on EU Green Bond Standard, pp. 32-43.

<sup>&</sup>lt;sup>67</sup> K. W.Echo. Financing Green: Reforming Green Bond Regulation in the United States. Brooklyn Journal of Corporate, Financial & Commercial Law, Vol 12:2, 2018. P. 468.

awareness" of people has increased the support to environmental sustainability and thus created a need for green investment. That means, that the demand of green investments is increased.<sup>68</sup> Addressing funds to environmental and climate beneficial projects is not only attracting because of the consumer needs, but also because climate change can have large negative consequences on investments<sup>69</sup>. Thus, green bonds can be seen also as a way to lower the economic risk in a long-run and in a big picture, and it can be said that it is also an investor's best interest to invest to sustainable finance like green bonds, which help to tackle the climate change and environmental issues. The negative impacts of climate change and environmental issues to the global economy is also a great reason why there is need for more stable green bond standards and incentives to make green bonds more attractive to the investors.

We can agree that the green bonds are gaining popularity, and that the green bonds are needed in order to achieve the sustainability goals, but what is a question is whether their popularity increases fast enough, so that they can offer us a partial solution to tackle with the environmental issues and climate change. Indeed, green bonds are dept securities which are issued by corporations, governments and institutional banks to raise capital for environmental or climate beneficial projects, and their market share is growing. The question is whether the "growing speed" is enough to answer to the needs of society. For example, the EU has ambitious sustainability goals including Paris Agreement and UN Sustainability Goals, where the actions have to be taken rather sooner than later in order to meet those goals.

When the demand of Green Bonds exploded there was very few regulations which would ensure that the investments would be actually used for environmentally beneficial projects. The clear definitions are needed to provide issuers clarity and to ensure investors that their funds are being used properly for environmentally beneficial and sustainable development projects. While in the US the Securities and Exchange Commission, Environmental Protection Agency, and the Municipal Securities Rulemaking Board are providing the definitions of green and the EU they are defined by EU taxonomy regime and the EU Green Bonds Standard. While the EU Green Bond Standard and

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<sup>&</sup>lt;sup>68</sup> B. Baily. An Institutional Truth: Increasing Institutional Investor Involvement in Climate Finance. The Georgetown Int'l Envtl. Law Review. Vol 27:447, pp. 451-452.

<sup>69</sup> Ibid.

<sup>&</sup>lt;sup>70</sup> L. Trompeter. Green Greed is Good: How Green Bonds Clutivated into Wall Street's Environmental Paradox. Sustainable Development Law & Policy, 2017.

<sup>&</sup>lt;sup>71</sup> Ibid.

<sup>&</sup>lt;sup>72</sup> Ibid.

Taxonomy Regulation aims to create stability and make EU Green Bonds more attractive, there has been also discussion about incentives which would attract investors at least in the EU area.

The incentives to be effective, there is also need for more accurate regulation, since as seen green bonds are regulated voluntary basis, which can be problematic when the corporations can sell green bonds which it has self-defined or labelled green, and take the advantages raising from the green bond, like tax exemptions, but in reality investing the proceeds to the things which do not benefit the environment. This is so called green-washing, which is trying to be avoided by transparency and more precise guidelines. As seen before, even there is no global definition of environmental beneficial use-of-proceeds, there is different standards which are accepted by market participants, including the European Green Bond Standard.

Different organizations provide green label certifications, which indicates how the particular definition of green is fulfilled. By that it directs incentives of those who want to invest in these bonds, and make satisfying those preferences easier for asset managers. 73 It is important for asset managers to be able to identify that the bonds are actually green – meaning they have actual environmental benefits or it helps to tackle with climate change – since by external certification asset managers are able to show beneficiaries that they are really investing to green bonds, if they so specifically desire.<sup>74</sup> As seen before, there exists different forms of green bond certification, all aiming to proof that the funds are used for green investments. The Green Bond Principles by ICMA as well as the EU Green Bond Standard and Climate Bond Standard are voluntary guidelines. The Green Bond Principles sets the criteria which most certification schemes follow, including the EU Green Bond Standard, since it is based on the best market practice. In addition to these international certification mechanisms many jurisdictions have their own taxonomies regarding what can be qualified as a green bond. For example, China has its own taxonomy. As a huge economy it can be reasonable for China to have its own taxonomy, but that might also carry a risk of limiting the investors to the domestic ones only.<sup>75</sup> That is one reason the EU-wide Green Bond Standards are needed, so that it would ensure that the EU Green Bond Market would be more attractive also for foreign investors.

<sup>&</sup>lt;sup>73</sup> T. Ehlers & F. Packer. Green bond finance and certification.BIS Quarterly Review, 9.2017, p. 89.

<sup>&</sup>lt;sup>74</sup> T. Ehlers & F. Packer. Green bond finance and certification.BIS Quarterly Review, 9.2017, p. 98.

<sup>&</sup>lt;sup>75</sup> Ibid, p. 93.

#### 4.1 Incentives make Green Bonds more considerable

Why to invest in green bonds in first place? For many investors it might be the wish to act environmentally friendly, but as stated, the green bonds, among other sustainable finance, are important "tools" in order to achieve the global sustainability goals. Thus, more capital should be directed to green projects, which of course needs to benefit not only the environment or climate, but also the investor, so that they would be a rational choice for the investors. Here the possible incentives play a role. The green bonds' ability to be success can be seen as a two-way route, where the attractiveness of green bonds help not only the issuer or investor, but also the society. By making issuance of green bonds more convenience, we make it possible also to better attract investors. By directing more funds to the green projects again helps us to answer to the global needs of sustainability.

Some financial institutions have applied positive factors when providing loans to finance green assets, but that is done again voluntary basis. That aims to give a better price than other financial instruments to the corporations, and thus better pricing in green loans might lead to higher demand for green finance instruments. That again would lead the financial institutions to issue more new green bonds for financing these green loans, when the demand is higher. An example of that is a French Bank Natixis, which introduced Green Weighting Factor in 2019. The idea was that the Green Weighting Factor would be applied to the company's financing deals by providing positive adjustments to the deals that create positive actions regarding the climate and/or environment and in the contrary to have negative adjustments on deals with negative environmental impact. Here the expected profitability threshold of transactions is adjusted according to their effects to the climate change. This mechanism helps Natixis in its financing operations to comply with the Paris Agreement targets. The state of the provided profitability is the paris and provided profitability threshold of transactions is adjusted according to their effects to the climate change. This mechanism helps Natixis in its financing operations to comply with the Paris Agreement targets.

The Natixis Green Weighting Factor is a great example of an in-house capital allocation mechanism which promotes financial deals with positive environmental or climate actions. But the financial incentives can also be made at wider scale. The EC and the EU Member states could support the green financing and European Green Bond Standards by different ways, including co-financing or

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<sup>&</sup>lt;sup>76</sup> TEG Report on Green Bond Standard, p. 46-47.

<sup>&</sup>lt;sup>77</sup> Natixis. Natixis innovates on climate action by introducing the first Green Weighting Factor for its financing deals to comply with Paris Agreement goals, 2.11.202+. Available online: <a href="https://www.natixis.com/natixis/en/natixis-innovates-on-climate-action-by-introducing-the-first-green-weighting-factor-for-its-financing-deals-to-comply-with-paris-agreement-goals-rep">https://www.natixis.com/natixis/en/natixis-innovates-on-climate-action-by-introducing-the-first-green-weighting-factor-for-its-financing-deals-to-comply-with-paris-agreement-goals-rep">https://www.natixis.com/natixis/en/natixis-innovates-on-climate-action-by-introducing-the-first-green-weighting-factor-for-its-financing-deals-to-comply-with-paris-agreement-goals-rep">https://www.natixis.com/natixis/en/natixis-innovates-on-climate-action-by-introducing-the-first-green-weighting-factor-for-its-financing-deals-to-comply-with-paris-agreement-goals-rep</a>

credit enhancements by partial public guarantees or by public institutions. The fact that private investments are combined with partial public guarantees improve the risk profile of EU green bonds, and thus may attract the investors.<sup>78</sup>

#### 4.2 Tax Incentives

There are also other incentives, like tax incentives, which can be considered when the EU wants to attract investors to invest to the Green Bonds, but they are not so easy to implement since they require the other authorities to agree with them. There is no decision made of them in the EU yet, but they might be essential in future to attract investors and keep the EU market competitive, and thus I will cover the ideas here shortly. Tax incentives for the EU Green Bonds might be effective, but they might be difficult to be implemented since the EU tax policy requires the acceptance of each member state. Each member state is competent to decide about their tax policies, and thus the European Commission should direct the Member States to make decisions which support the EU goals regarding Green Bonds. One solution might be to enhance the green bond market by tax incentives for assets which are located in the EU.<sup>79</sup>

One effective tax incentive is so called "accelerated depreciation scheme" where the company can depreciate a fixed asset so that the amount of depreciation is higher during the first years of the asset's life<sup>80</sup>. That affects to the company's profit-and-loss account cash flow positively, when lower taxes are paid during the first years of a capital investment. The possibility of such "discount" make the green investing more attractive. If this would be applied only to the capital expenditures which are made according to the EU Taxonomy regarding green, this kind of tax incentives would encourage more Green bonds to be issued, since it would increase the green projects and direct more funds to them but it would also favor green financing instruments, which leaves less "space" for others.<sup>81</sup> That would attract investors since they get actual benefits by investing to green bonds, but also it would be a great possibility to increase the market share of Green Bonds within EU. That would mean that more projects fulfilling the requirements of a "green" according to EU Taxonomy would be done, and more funds directed to them. But also, that when investing green bonds would offer actual

<sup>&</sup>lt;sup>78</sup> TEG Report on Green Bond Standard, p. 47.

<sup>&</sup>lt;sup>79</sup> ibid, p. 49.

<sup>&</sup>lt;sup>80</sup> TEG Report on Green Bond Standard, p. 49.

<sup>81</sup> Ibid.

benefits in terms of tax deduction, there would be more investing to green, and less to others. That would again support EU's sustainability goals greatly.

Since green bonds are relatively new financing instrument, they are still finding their place in market. Even they are gaining popularity, there is also factors that prevent the green bond market from growing. Green bonds are less volatile than its equivalents, because they tend to attract long-term institutional investors and more diversified investor base, but still the lack of regulation lowers their growing potential. The uncertainty of green activities is preventing the possible investments not only because of a fear of greenwashing but also because the lack of standardization may lead to mispricing. The fact that the green bonds are relatively new phenomenon, leads to the fact that there is no data available to help investors to make their decisions. But it is not only the investors who we need to convince about green bonds, it is also the issuers. Due the green bonds require specific characters and procedures, many issuers tend not to enter the market, which again leads if not to the lack of supply, to the lost potential. Since the green bonds by nature require reviewing of the green bond framework, proceed identification, reporting and review, they can be seen as laborious and thus costly. This puts banks to difficult situation when the intermediaries to issuing companies are needed to tackle the uncertainty, but in the other hand charging extra fees from issuers would lead issuing green bonds to be more costly and thus less competitive<sup>82</sup>. In the other hand when the investors are more willing to invest to green bonds, the increased demand will affect positively to the price-level.<sup>83</sup>

It has also been argued, that the price or regulations are not the most important reasons to issue green bonds, but for issuers the reasons are visibility, higher interest of investors towards green and more diversified and long-term investors. What drives the green bond issuance are the wider investor base, the increased amount of visibility of the financing strategy, closer relationships to stakeholders and accelerating the corporation's new business. <sup>84</sup> The green bonds are talked more and more, and thus they are gaining more positive attention. The wider investor base increases stability for issuers which is beneficial when the markets are unstable. Green bonds tend to attract investors who are interested of social responsibility, and thus by issuing green bonds a corporation can get wider investor pool.

<sup>&</sup>lt;sup>82</sup> P. Deschryver Pauline & F. de Mariz. What Future for the Green Bond Market? How Can Policymakers, Companies, and Investors Unlock the Potential of the Green Bond Market? Journal of Risk and Financial Management, 2020, pp. 7-8

<sup>&</sup>lt;sup>83</sup> Danske Bank. Vihreät joukkovelkakirjalainat yritysten suosiossa – taustalla sijoittajien kasvanut mielenkiinto, 2020. Available online: <a href="https://danskebank.fi/yrityksille/artikkelit/artikkelit/2020/04/vihreaet-joukkovelkakirjalainat-yritysten-suosiossa---taustalla-sijoittajien-kasvanut-mielenkiinto">https://danskebank.fi/yrityksille/artikkelit/artikkelit/2020/04/vihreaet-joukkovelkakirjalainat-yritysten-suosiossa---taustalla-sijoittajien-kasvanut-mielenkiinto</a>

<sup>&</sup>lt;sup>84</sup> Climate Bonds Initiative. Green Bond Treasurer Survey 2020. Available online: https://www.climatebonds.net/files/reports/climate-bonds-gb-treasurer-survey-2020-14042020final.pdf

Those investors are often also more interested of their investments, which again adds knowledge and thus visibility to the organization. What more interest there is towards green bonds, the more there is issuance, which makes it possible to fund more on green projects. Thus, it is important to make the Green Bonds attractive for investors, so that we can reach the potentiality of green finance and use them to help to tackle with the climate change and environmental issues.

#### 5. CONCLUSION

The climate change and environmental challenges are burning issues in today's society. While we try to find our ways to protect the globe, new tools are needed. The Green Bonds among other sustainable finance instrument can help us to tackle with those topical issues, but they are still finding their place. The first Green Bond was issued in 2007 by World Bank and European Investment Bank. Afterwards they have been gaining popularity, which the trend to invest to responsible investments supports. Even the green bonds are gaining more market place, there doesn't exist comprehensive regulations to stabilize the market. Green Bonds are a form of debt finance, where essential is that the proceeds are used to benefit environment or climate, so they are created to fund sustainable projects. Here are two important elements which green bond regulations should address, which are; how to define green and how to ascertain the transparency. Since the definition of green is in the core of the green bonds, it is important to assess that the funds are directed to projects which have actual environmental or climate benefits.

Being relatively new financial instrument, the Green Bonds are still lacking clear regulation and their regulation is based mainly on the best market practices. Currently the governance of green bonds is decentralized and is based on private governance regimes like investment standards and certification. The private governance may lack of legitimacy and consistency, and more leaves it wide open what is actually defined as "green". This creates unclearness and shows that there is need to address those issues. As the potential of the green bonds has been better understood, so has grown the need of regulation which would ease the issuance of green bonds and make them more attractive for the investors by adding credibility. The Green Bond Principles were published in 2014 to offer guidelines for green bond markets. They were adopted by a majority of market participants, and act as a basis for other green bond standards. In the core of green bond principles is the use of proceeds, the process for project evaluation and selection, the management of proceeds and reporting. These principles aim

to ascertain transparency and to "regulate" that the proceeds are used for environmental or climate beneficial activities. As seen, Green Bond Principles works as voluntary basis, giving rather guidelines than rulings. Its weakness is that the even it defines the green project categories, it doesn't set minimum standards to the level of the positive environmental impact which is needed to call the project as green. This leaves lot to be depended on the issuer's judgement. Here the certification and "green labelling" can offer a solution, and one example is the Climate Bond Standard and Certification Scheme. The Climate Bond Standard certification makes sure that the bond aligns with the Green Bond Principles and that the use of proceeds supports to achieve the goals of the Paris Agreement.

As seen, there exist various standards regarding the green bonds. That can create uncertainty and affect negatively to the green bond value. The ISO 14030 Standard aims to address that issue, and aims to make the Green Bond market clearer by harmonizing pre-existing standards to an international standard. The International Organization for Standardization sees that the lack of harmonized regulation can prevent the Green Bond market from growing to its potential. It builds on the Green Bond Principles, but aims to provide more specific requirements and guidance for the green bond verification. The challenges of the green bonds are seen also by the EU, which aims to boost the growth of its green bond market by creating a EU-wide green bond standard.

Since the Green Bonds are financial instruments where the funds are used to benefit environment or climate, the EU sees them as a tool which helps to achieve its sustainability goals set in Paris Agreement and in UN Sustainable Development Goals. As a part of its action plan the EU has set a strategy to better connect the finance and sustainability, which green bonds indeed support. EU has understood the need to green investment and is thus creating the EU Green Bond Standard to answer to the needs of the market and in order to attract also foreign investments. Because to the green bonds it is essential to define what is green and also in order to make them credible have transparency. The European Green Bond Standard is based on the Green Bond Principles but linkss the EU taxonomy regulation to the EU Green Bonds, which is one of the core components of the EU GBS. The EU taxonomy regulation in its part aims to classify what is green and sets the EU level. The goal of the EU Green Bond Standard and Taxonomy Regulation is to encourage sustainable investment by setting clearer guidelines of what is defined as green.

It is not only coincidence that the existing standards including the EU GBS highlights the need of classification and transparency. It is indeed needed not only to avoid greenwashing, but also to attract

investors, and those issues has to be addressed so that the green bonds can achieve their potential. Clearer rules make it also easier to issuers, which may ease the issuance of the green bonds. While sustainable finance is seen as future, there needs to be rules so that its full potential can be utilized. In addition to transparency and clearness, different incentives have been on table. Those incentives can be for example in terms of tax reduction. The attractiveness of the green bonds is seen important because the issuance of more green bonds can on its part help to balance the needs of environment and economy, but also because while investing more to the green, it leaves less space for other projects with possible negative impact on environment. Sustainability is not only important for environment, but it is also essential for the economy in long run, since the negative impacts to environment might also affect negatively to the economy. Thus, in big picture, regulating the green bonds is needed also to ascertain the well-being and competitiveness of the economy.

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## **KEY WORDS**

- Sustainable Finance
- Green Bonds Regulation
- EU Sustainability Goals and finance
- EU Taxonomy Regulation
- Responsible Investment
- Green certification