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GREEN FINANCE IN THE LOCAL CAPITAL MARKETS

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Abstract

Green finance has grown exponentially worldwide since its inception in the late 2000's, with several sovereigns and corporates tapping into the sustainable market daily, be it from an issuance or an investment point of view. These instruments have become so popular and sought after, that some investors are willing to take in less return, in terms of yield, just to acquire the asset within their portfolio. However, this still does not reign true for the local scenario, as despite local authorities' efforts, so far, no local green instrument has been as yet listed on the Malta Stock Exchange. Only a small percentage of Maltese investors stated that they have invested in green finance and consider taking on more green bonds should the opportunity arise. Issuers have noted that there is a large knowledge gap in this area within the domestic financial market as well as many other barriers to entry that were identified in this study.

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Acronyms

AFME	Association for Financial Markets in Europe
BPS	Basis Points
CBI	Climate Bonds Initiative
DNSH	Doing No Significant Harm
ESG	Environmental, Social, and Governance
EU	European Union
EUGBS	European Green Bond Standard
GBP	Green Bond Principles
HLEG	High-level Expert Group
ICMA	International Capital Markets Association
LCDS	Low Carbon Development Strategy
MSE	Malta Stock Exchange
SDG	Sustainable Development Goal
SRI	Socially Responsible Investments
TEG	Technical Expert Group
TSC	Technical Screening Criteria

1. Introduction

Global interest in climate change heightened after the 21st Conference of the Parties of the United Nations Framework Convention on Climate Change in Paris, in 2015. The topic became central in world key players' agendas to achieve the "Paris Agreement's" set out objectives, signed by 189 countries who collectively aim to limit global warming to well below two degrees Celsius by 2050 (EC, n.d.a).

The transition of financial flows and investments towards a low-carbon and climate resilient economy has recently become the new objective toward building a sustainable future. As investors become more conscious, the demand for sustainable investment opportunities has increased significantly since their creation. According to Climate Bonds Initiative (CBI), a cumulative total of US\$1.52 trillion have been issued till December 2021, from an initial €600 million issued in 2007. Although the market is growing remarkably, literature has found that a thin market persists for Socially Responsible Investments (SRI).

European Commission (EC) President Ursula von Der Leyen presented the Commission's targets and pledge that by 2050 Europe will become the first climate-neutral continent (EC, 2020a) through its long-term strategy for net-zero Green-House-Gas (GHG) emissions target. Estimated figures suggest that public money alone would not fund the transition needed, and thus turning to the private sector to mobilise funds toward sustainable investments is inevitable. The EU aims to finance 30% of the €800 billion Covid-19 pandemic recovery fund with green bonds through its Next Generation EU (NGEU) programme. In October 2021, the NGEU issued its inaugural green bond, raising €12 billion, the world's largest green bond issued so far. Furthermore, the total amount of envisaged NGEU green bonds (up to €250 billion by end-2026) will make the EU the world's largest green bond issuer (EC, 2021a).

Furthermore, other institutions are also committing to include climate change within their policy frameworks. In fact, the ECB is looking into climate risks and how to incorporate such issues within its Monetary Policy and non-Monetary Policy operations. In February 2021, the ECB announced that the 19 euro area national central banks and the ECB defined a common stance for applying sustainable and responsible investment principles in the euro area non-monetary policy portfolios as well as promoting disclosures in the next two years (ECB 2021)¹

Other than the obvious repercussions of climate change, one must also recognise its implied economic and financial risks. Historically, climate change is not a new phenomenon, as one can note dramatic climate change occurrences from the beginning of the Industrialisation era. The occurrence of extreme weather events have become more frequent in recent years, resulting in the possible destruction or damage of firms' assets such as machinery, premises and natural resources, further causing shutdowns, unmet delivery commitments and deterioration of credit worthiness. According to a study by Steininger, et al, 2015, it is estimated that between the years 2020 and 2029, the climate crisis will cause annual damages of about €20 billion and these are expected to rise to a maximum of €150 billion by 2059. Financially, these repercussions will result in higher net costs, ultimately resulting in deteriorated profits and company value. The latter would only result in a domino effect impacting different financial participants. It is known that climate change can give rise to the materialisation of any risk category, including credit risk, investment risk, market risk, operational risk and insurance risk (Task Force on Climate-related Financial Disclosures, 2017).

These implications create a direct link between financial markets and climate change, further justifying the notion of green financing. The impact on the financial markets will depend on how climate change is tackled. If no action is taken amid increasing temperatures, the occurrence of such weather events increases, implying further physical damage to economic sectors. Moreover, a late transition to a net zero carbon economy is expected to result in sudden and severe changes which brings with it higher transaction costs. Timely and appropriate action with

¹ https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210204_1~a720bc4f03.en.html

which Co2 emissions are reduced as highlighted in the Paris Agreement would result in less distortions to financial markets.

Apart from the negative impacts caused by climate change, the need for evolution and adaptation opens a universe of opportunities for economic development. With the right tools in hand, businesses may grow and expand. Thus, the financial industry should take advantage of this and promote financial products and services that contribute to the mitigation of climate change risks.

The aim of this report is to investigate the knowledge and interest toward developing a green bond market in Malta through a survey aimed at different market participants. This research therefore explores the readiness of the local market to join peer European markets in the fight against climate change through financing the transition to a net zero emissions economy.

2. Development of the Market

2.1. Sustainable finance, ESG, and Green Bonds Development

More investors have been turning to socially responsible investing (SRI) decisions over time, mostly based on Environmental, Social, and Governance (ESG) criteria. Environmental considerations refer to activities that contribute toward climate change mitigation, adaptation, and other related topics and risks. The Social criterion focuses on issues of inclusiveness, labour relations, equality, and others. Governance relates to the management and conduct of public and private institutions. Through the criteria, ratings were established to classify sustainable investments into levels, helping investors identify and understand material risks at the individual security and portfolio level.

Global green bond issuance hit \$500.0 billion in 2021 and marked the tenth consecutive year of higher growth rates in green bond markets, with cumulative issuance surpassing the \$1.49 trillion mark (CBI, n.d.a). When compared to the same figure at the end of 2015, the cumulative green bond market registered an average annual growth rate of 60% (Jones, 2020). It is envisaged that by the end of Q4 2022, green bond investment could reach the \$1 trillion milestone in a single year (Fatin, 2021).

2.2. International Capital Markets Association

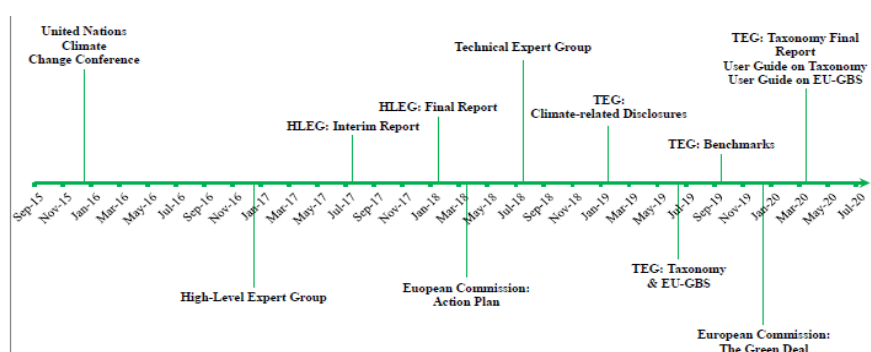
The International Capital Markets Association (ICMA) is a non-profit organisation that aims to fund sustainable economic growth and development (ICMA, 2021). ICMA published guidelines for the alignment of funds toward activities that promote and contribute to sustainable growth, named the Green Bond Principles (GBP)². The GBP are a voluntary guide for green bond frameworks and the transparency of transfer of funds to environmentally sustainable activities. Their success across international markets has made them a preferred foundation for other guidelines to be built upon. The framework as proposed by the principles rests on four pillars which are: Use of Proceeds, Project Evaluation, Management of Proceeds, and Reporting.

2.3. European Progression

Two years after the Paris Agreement, the EC made a call for experts to establish a task force to evaluate the steps needed for the way forward to a sustainable future, as shown in Figure 2.1. The High-level Expert Group (HLEG) published its final report one year later in 2018, in which recommendations were made to the Commission, which included a Taxonomy, climate related disclosures, a European Green Bond Standard (EuGBS), and benchmarking. Reports on these recommendations were then published, authored by another group established by the EC tasked with the technical development of each of the aforementioned. This group was named the Technical Expert Group (TEG) and was established later in 2018 after the publication of the EC Action Plan in March 2018.

² <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/>

Figure 2.1 – Timeline of European Commission Developments



Source: Authors' Depiction

Two years down the line, in January 2020, the EC published The European Green Deal in which key policies regarding the range of environmental objectives were outlined. Later in the same year the TEG published their User Guide on Taxonomy and EuGBS. Throughout 2021, the Commission has been in ongoing discussions with member states on the possible improvements on the standards and the Taxonomy as a whole.

3. Green Bond Issuance

3.1. Pricing, Liquidity, and the “Greenium”

Green bonds are structured the same way as standard bonds in terms of seniority, rating, execution process, and pricing. The sole difference is the use of proceeds. For green bonds these are allocated to climate or environmentally sustainable projects (IFC, 2016) whilst proceeds drawn from conventional bonds can serve many purposes. Another key feature of green bonds is the due diligence process that is expected from the issuer in terms of identifying and monitoring the projects that funds were raised to sustain (Reichelt, 2010).

One of the main focuses in this segment of financial literature relates to green bonds' market pricing in both the primary and secondary markets (Cheong & Choi, 2020). These studies particularly investigate the concept of a green bond yield discount (or a price premium) when compared to a plain vanilla bond, also commonly referred to as the “greenium”. The notion is that these securities provide the issuer a less expensive source of funding as the proceeds have a beneficial impact on environmental or social issues as compared to traditional fixed-income bonds.

The comparison between the pricing of vanilla and green bonds was first published in a white paper by Barclays' analysts, Preclaw and Bakshi, (2015) with the term “greenium” first coined in a pricing paper for the Climate Bonds Initiative (CBI) annual conference in 2017 (Harrison, 2017). In another paper, Agliardi and Agliardi, (2019) specify that the “greenium” is the difference between the yields on a conventional bond and a green bond with the same characteristics, representing itself in lower yields for green issues.

Usually, a company or entity seeking to finance its borrowing needs would be willing to give the investor a return which is slightly above the prevailing market yield, known as the new issue yield premium. However, on auctioning green bonds, market participants noted that these were being offered at a new issue yield discount. This behaviour is basically a reflection of the investor appetite, willing to pay a price premium they would not pay for other bonds. If a “greenium” exists, green bonds would provide bond issuers the benefit of raising capital at a low cost. Such appeal for green bonds shows a trade-off between the wealth forgone and the societal benefits attained (Cheong & Choi, 2020).

Another factor possibly contributing to the “greenium” is the imbalance between supply and demand (Amundi Research et al. 2021), where the demand for such securities is growing at a faster pace than the supply, leading

investors to bid aggressively for these issues. As new policies continue to impose the disclosure of green instruments on companies' balance sheets, a lot of funds are left thirsty for these securities, coupled with the hold-to-maturity nature taken on these bonds (World Bank, 2017).

It is challenging however to isolate the singular effect of the green label, since yields are affected by many factors. Due to data limitations on green bonds, both on the secondary and primary markets, empirical studies of green bond pricing report mixed results, mostly depending on the sample selection and matching methods (Cheong & Choi, 2020). In fact, there are also other contenders to this theory where it is argued that, when properly priced, these should not exhibit any difference in pricing when compared to conventional bonds, suggesting that no “greenium” exists

Studies which found a discrepancy between green bonds and a comparable conventional counterpart ranged from around seven basis points to 63 basis points across different time periods (Preclaw and Bakshi, 2015; Nanayakkara et al., 2018; Tang and Zhang, 2018; Gianfrate and Peri, 2019). In contrast, Larcker and Watts (2019) found no evidence of a “greenium” in their study, specifying that when risk and payoffs are held constant investors value equally green and non-green bonds as exact substitutes.

A more recent study by the Association for Financial Markets in Europe (AFME), suggests that the “greenium” has practically vanished in the euro corporate bond market (AFME, 2021), with the average premium standing at just 9 bps during 2020. The driver behind this pattern was a big rise in supply (Bahceli, 2021).

Governments are increasingly resorting to the green label to raise their funding needs, benefiting from the lower borrowing costs. Germany inaugurated its first green bond concurrently with its conventional bond “twin” in 2020, enabling the tracking of the yield difference between the two instruments. The yield difference between the two bonds remains present, proving that investors are willing to pay more to hold the environmentally friendly debt.³ The first Italian green bond issue held in 2020 was also priced at a slight premium when compared with its conventional Italian sovereign debt counterpart.

The steady rise of the green bond market would help balance out the supply with the demand, particularly as responsible investment is becoming the new normality rather than an investment diversification. This is expected to lessen the yield gap between the green bonds and the vanilla bonds, possibly even eliminate the existence of the “greenium” in certain markets as shown in a study by ICMA, (2020) and AFME, (2020). However, in a recent release by the CBI, (2021), 80% of the 36 yield curves analysed show that the existence of the “greenium” is still prevalent.

4. The Local Scenario

4.1. Malta's Environmental Goals

Although it is seemingly without its flaws, SRI for smaller countries may present itself as a more complex venture when compared to those experienced by larger, and more naturally resourceful countries.

Measuring at only 316 km² in land area with a population of circa 519,562 people (NSO Census, 2022), Malta is one of the world's most densely populated countries with very few natural resources to support it. Backing this statement is the fact that for most of the year, the islands endure hot weather conditions with high possibility of dry periods which in turn may turn soils arid and unproductive.

³ A charting of these yields may be viewed in Appendix 1.

In 2019, the government via the Ministry for the Environment, Sustainable Development and Climate Change, published the country's sustainable development vision for 2050, setting up a long-term framework whilst identifying existing gaps (see Annex II).

4.2. Current Local Requirements

In 2021, the Malta Stock Exchange (MSE) announced that the Malta Financial Services Authority (MFSA) has approved the byelaws for allowing the listing of Green Bonds on the local capital markets (MSE, 2021a).

The potential issuers are subject to meet the MSE's Green List criteria which are based on ICMA's Green Bonds Principles. Furthermore, proceeds would need to be invested in projects that contribute towards one of the following six environmental objectives and adhere to the DNSH rules (MSE, 2021a):

- Climate Change Mitigation,
- Climate Change Adaptation,
- Sustainable and Protection of Water and Marine Resources
- Pollution Prevention and Control,
- Transition to a Circular Economy
- Protection and Restoration of Biodiversity and Ecosystem

The issuers who seek to finance green projects which encompass either one of the environmental objectives and meet the Green List criteria, qualify for discounted listing fees of 50%. This a measure that should help incentivize companies and financial institutions which require to raise capital venture into the green issuances.

Issuers who have been granted admission to the MSE Green Bond list must ensure that eligibility is retained throughout the bond term and as long as the bond remains listed on the regulated main market of the Exchange. On an annual basis the issuer shall provide the Exchange, with an updated Accredited External Reviewer's report and certifying that the bonds remain eligible for Green Bond status. Furthermore, the issuer shall provide a brief description of each respective project, amount of proceeds allocated, progress on the project made since listing or last reporting date and how the specific project is meeting the performance thresholds laid. All this should aid in the transparency which would incentivise the investor to invest in green bonds rather than in other instruments.

Local issuers who pursue to raise capital allocated to sustainable projects and list their bonds on this market segment would be more accessible to the investing public, giving them visibility and another financing route. Furthermore, this should promote the corporate image of the issuer and attract the socially responsible investor.

4.3. Local Perspective Survey

Although statistics show the green bond market has been growing exponentially worldwide, the local green bond market seems to be still lacking as no green instruments were yet publicly listed on the MSE at the time of this research.

For the purpose of this paper the Bank has conducted a survey in the last quarter of 2021, investigating the local market's perspective towards the issuance of green bonds and the knowledge related to the area. Local investors' perspectives were also considered to provide for a holistic view and thereby evaluate the demand for these securities should there be any future local issuances.

The targeted audience consisted of three types of respondents, to gather two views to green bonds for the local market – the issuance, and the investing perspective. All categories received a questionnaire customised to provide their own perspective of the topic at hand. The first category were local issuers who have, one time or another, sought funding through a bond or equity issuance on the MSE. The investors' view was gathered from brokerage companies and publicly listed banks. The third segment consisted of companies/financial institutions who can provide both views on the matter, mostly made up of local credit institutions. The surveys were conducted through the use of e-mail.

The questionnaire directed to the participants forming part of both the investors and issuers category, was divided into three sections:

- Section A: Prospective green bonds issuers,
- Section B: Potential institutional investors, and
- Section C: Environmental Financial Standards.

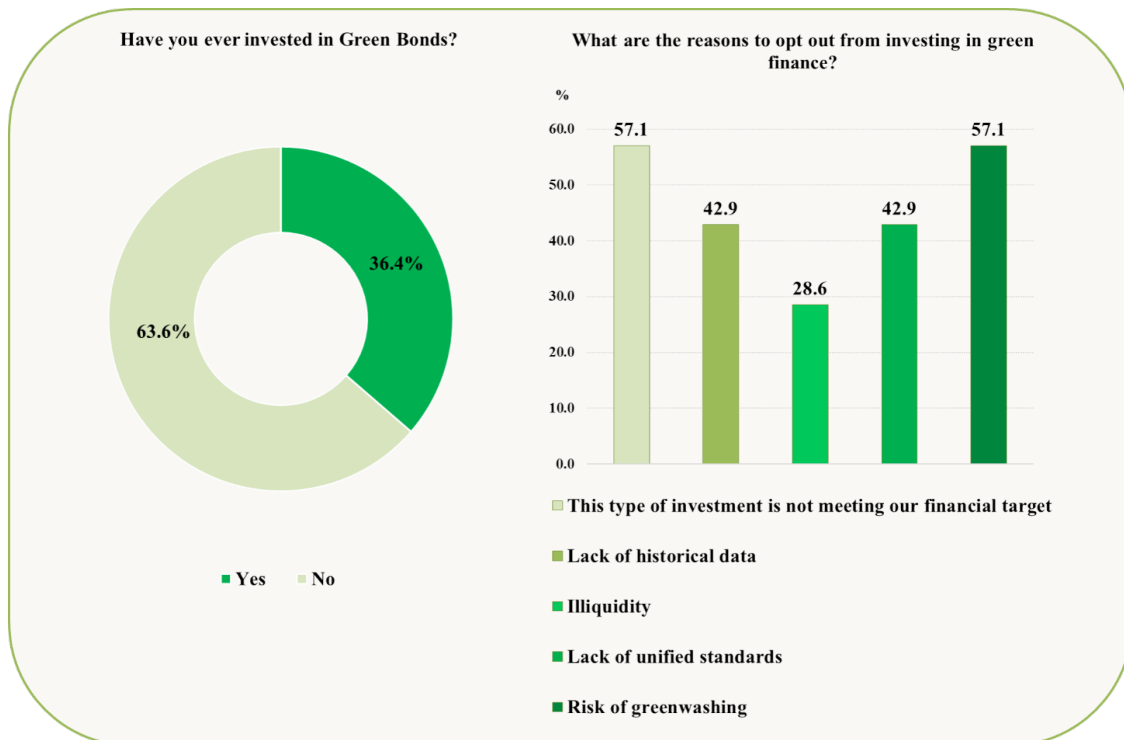
Just over a hundred questionnaires were sent out to targeted respondents, of which 56 were successfully completed. Such a response rate was somewhat satisfactory, and the findings of this study provide a useful insight, reflecting the view of stakeholders directly involved in a niche market.

5. Results

5.1. Investors

Survey responses show that the local investor is still relatively new to green investments. As illustrated in Figure 6.1.1, 63.6% of respondents stated that they never invested in green bonds. Most investors pinned the lack of green bonds investing to the risks of green washing and to not meeting financial targets in place. Other reasons provided include the lack of historical data, the lack of unified standards and the current bond market illiquidity, in this order.

Figure 6.1.1 – Investors’ Survey - Investing in Green Bonds

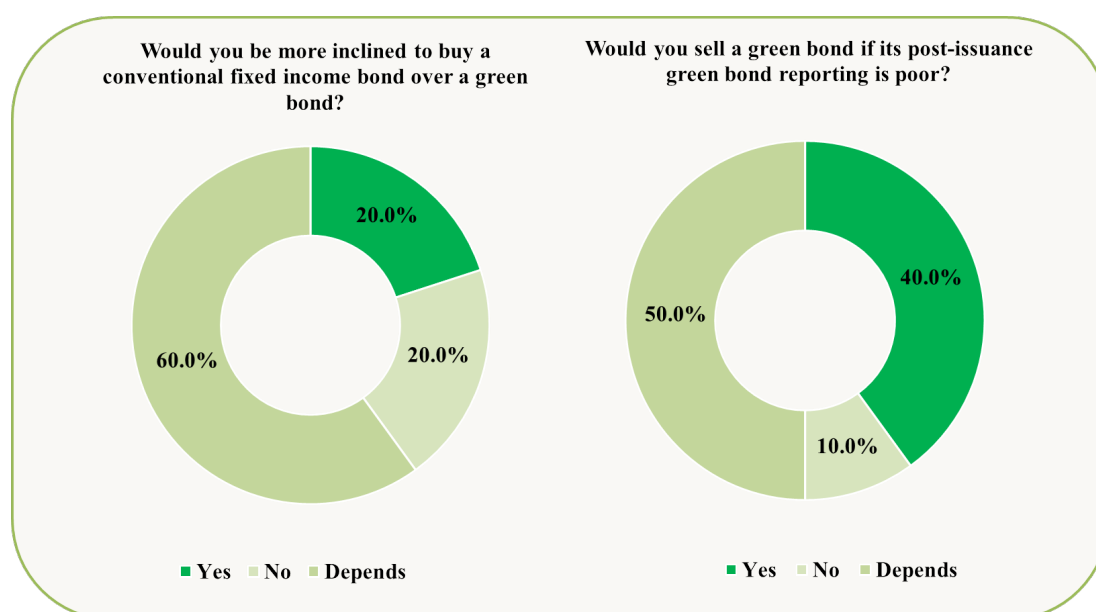


Source: Authors' calculations

The 36.4% of the respondents who said that they have invested in green finance provided the percentage of the company's Assets Under Management dedicated to this category of investment. These range between 0% and 3.0%. This percentage is relatively low and therefore further demonstrates that green investment by local institutions is not yet a primary focus. However, it may also be the consequence of a thin market due to insufficient supply to satisfy overwhelming demand. Additionally, the hold-to-maturity nature of these instruments further dries out secondary market activities for these securities. The latter result is supported by the fact that all the respondents in this category stated that they would consider adding more green bonds in their investment portfolio. This finding also indicates that local demand for these investments may grow in the foreseeable future and may therefore be encouraging to local issuers to consider green securities as a form of investment. The three most prominent motivations to invest in the instrument for those respondents who had invested in green finance were namely that of contributing to more sustainability, portfolio diversification, to improve the public corporate image and be recognised as a sustainable company with green investments, in that order.

Through Figure 6.1.2 one may see that 60.0% of the green investing respondents said that, all things being equal, they would prefer a green bond investment over an identical conventional counterpart. This sheds light on the market gap that there exists within the local scenario, indicating opportunities for relevant local issuers. A fifth, on the other hand, said that the conventional bond would be their first choice. The remaining 20% of candidates said that it would depend on other characteristics such as those that define the green projects underlying the instrument. This therefore highlights the importance of the green projects' selection and the full disclosure that is expected to accompany it.

Figure 6.1.2 – Investors' Survey - Holding Green Bonds in an Investment Portfolio

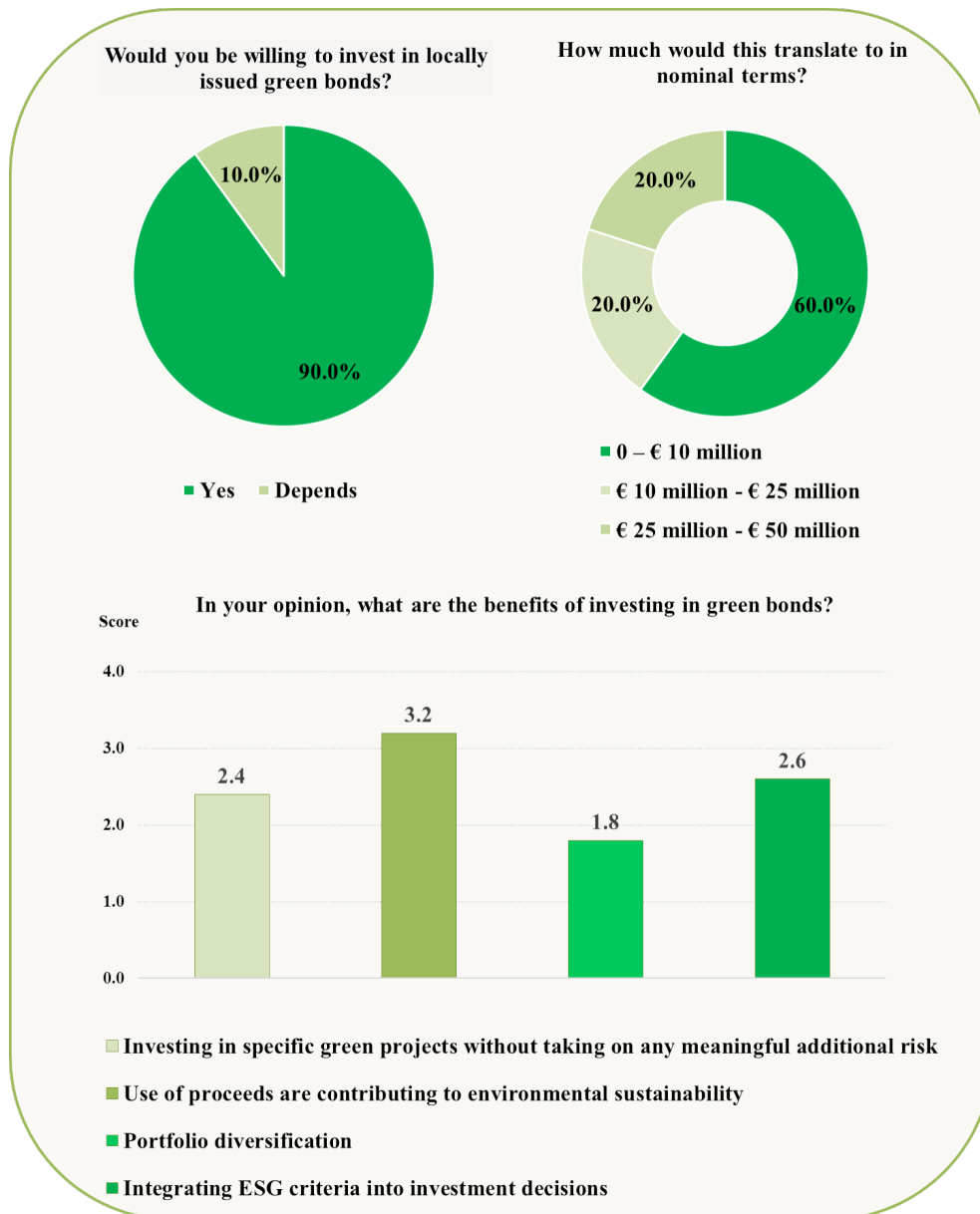


Source: Authors' calculations

Only ten per cent, when given the choice, opted to invest in a green bond with a scenario of the proceeds not clearly being allocated to green projects. Some 40% said they would sell the instrument whilst the remaining 50% said it would depend on other factors such as the availability of accessible financial information, its performance, possible future regulation changes, and whether it would move to greener solutions in the future. Another respondent said that they would retain the bond depending on its credit metric.

All respondents of the survey showed interest for locally issued green bonds, with one respondent specifying sole interest in sovereign or sovereign-backed green bond issuances. The participants also provided the maximum percentage that they would hypothetically be willing to hold if they were able to in their investment portfolio, ranging from 5% to 20%. Indications were made to the nominal value of such investments that respondents were willing to hold, as shown in Figure 6.1.3, overleaf. Most respondents are likely to recommend green bond investments to other investors, therefore further intensifying the thirst for these securities in the local market. This is an important finding as it suggests that sufficient demand could meet any potential supply of green investments in the local market.

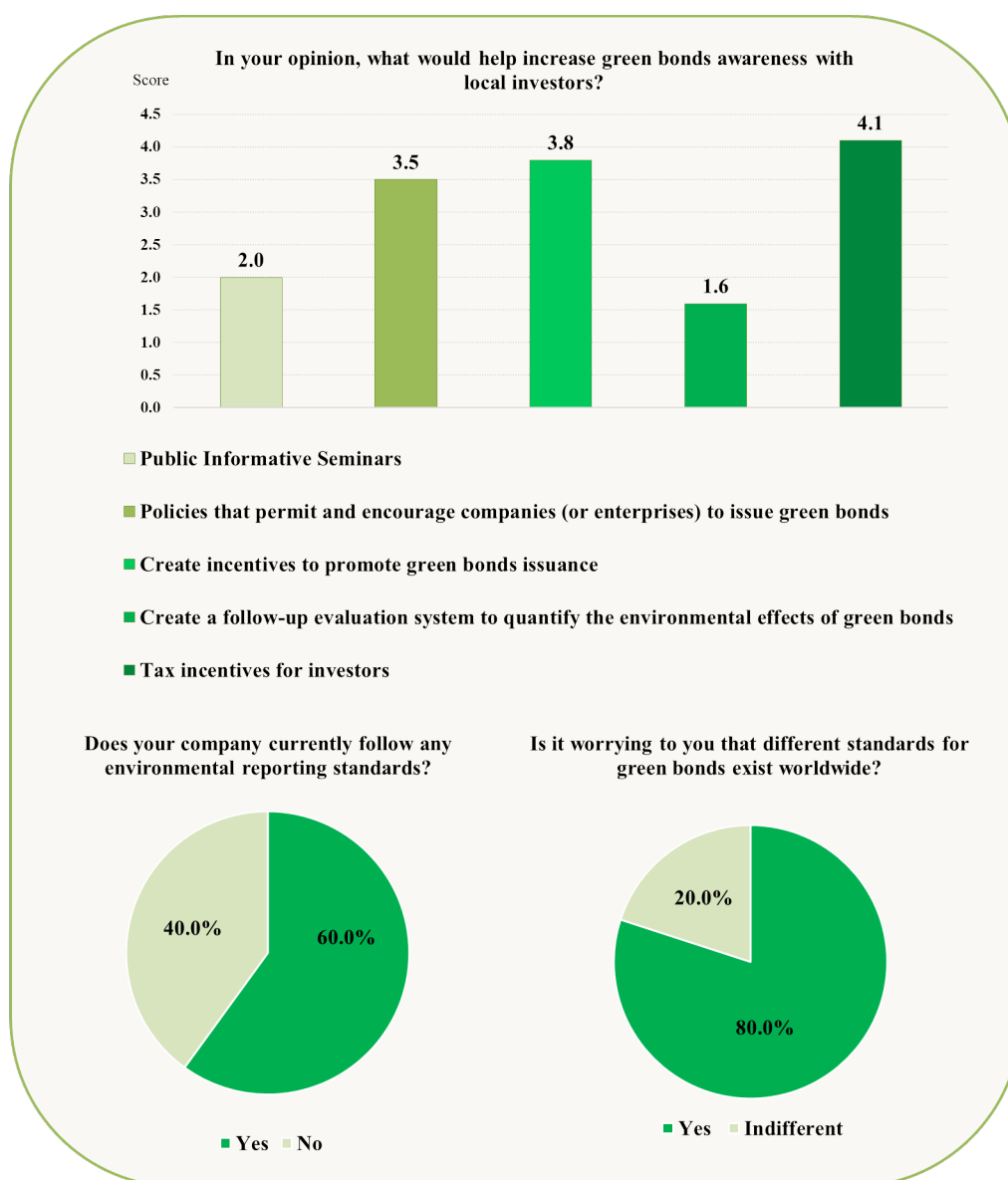
Figure 6.1.3 – Investors' Survey - Benefits of Investing in Green Finance



Source: Authors' calculations

Figure 6.1.3 also shows the views of the respondents regarding the benefits that can be attained from investing in green fixed income securities. Four main benefits that green bonds provide according to the literature were presented to the survey participants to rank them in order of most beneficial in their view. The use of proceeds contributing to environmental sustainability ranked as the most beneficial, followed by the integration of ESG criteria into investment decisions for reporting purposes and investing in green projects not taking on any meaningful additional risk. Portfolio diversification scored the least number when considering green bonds in their portfolio and was therefore ranked last. The importance of proceeds contributing toward environmental sustainability signals that local investors are also turning to SRI decisions, should they be given the chance and green liquidity to do so.

Figure 6.1.4 – Investors’ Survey - Green Bond Awareness and Reporting Standards



Source: Authors' calculations

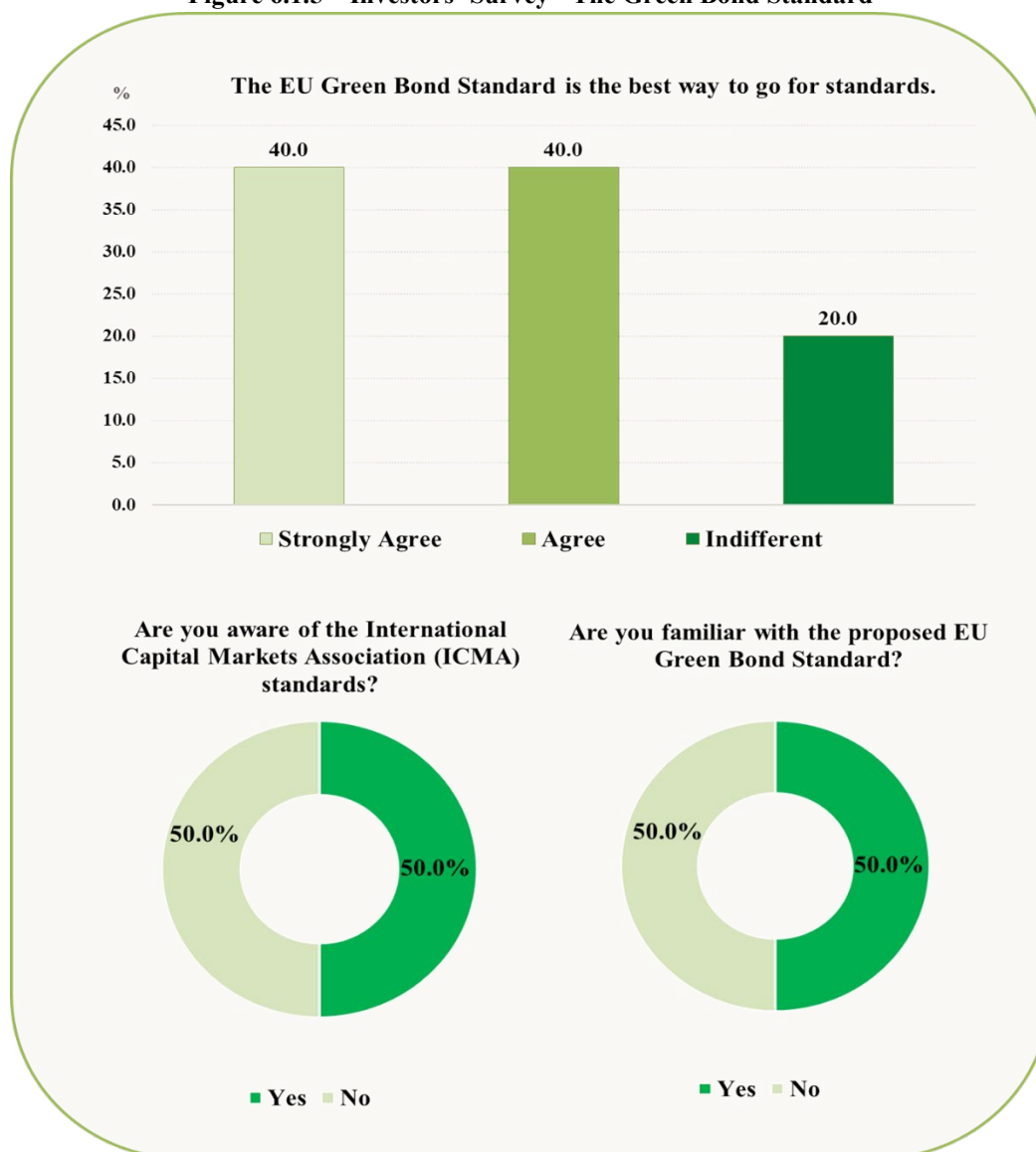
As clearly underlined by these results, the awareness and education on green bonds locally is very limited. When given options to increase investors' knowledge on the matter and asked to rank them in the order which they best think would mitigate the information gap that there exists, tax incentives for investors ranked first while incentives directed to the issuers were a close second, as shown in Figure 6.1.4.

One way to encourage green bonds investments is by tax-exempting coupon payments from these instruments, as currently, bond holders must pay a withholding tax of 15%. Another option would be for investors to receive tax credits as a substitute of interest income from these green bonds. In this way, the government would be incentivising both the issuer and the investor. Tax credit bonds were used by Municipalities in the U.S. under the Clean Renewable Energy Bonds (CREBs) and Qualified Energy Conservation Bonds (QECBs) program (CBI, n.d.b). The MSE offers a 50% discount on trading fees of green bonds to encourage the listing of these instruments.

Policies that encourage companies to issue green bonds were also listed as a top option to boost awareness, while public informative seminars and the creation of a follow-up evaluation system to quantify the environmental effects of green bonds were the least preferred option.

Sixty per cent of investors that responded to the survey said that they follow specific environmental reporting standards. Eight out of ten participants also expressed that the existence of different standards worldwide is worrying. The remainder are indifferent to not having a unified standard.

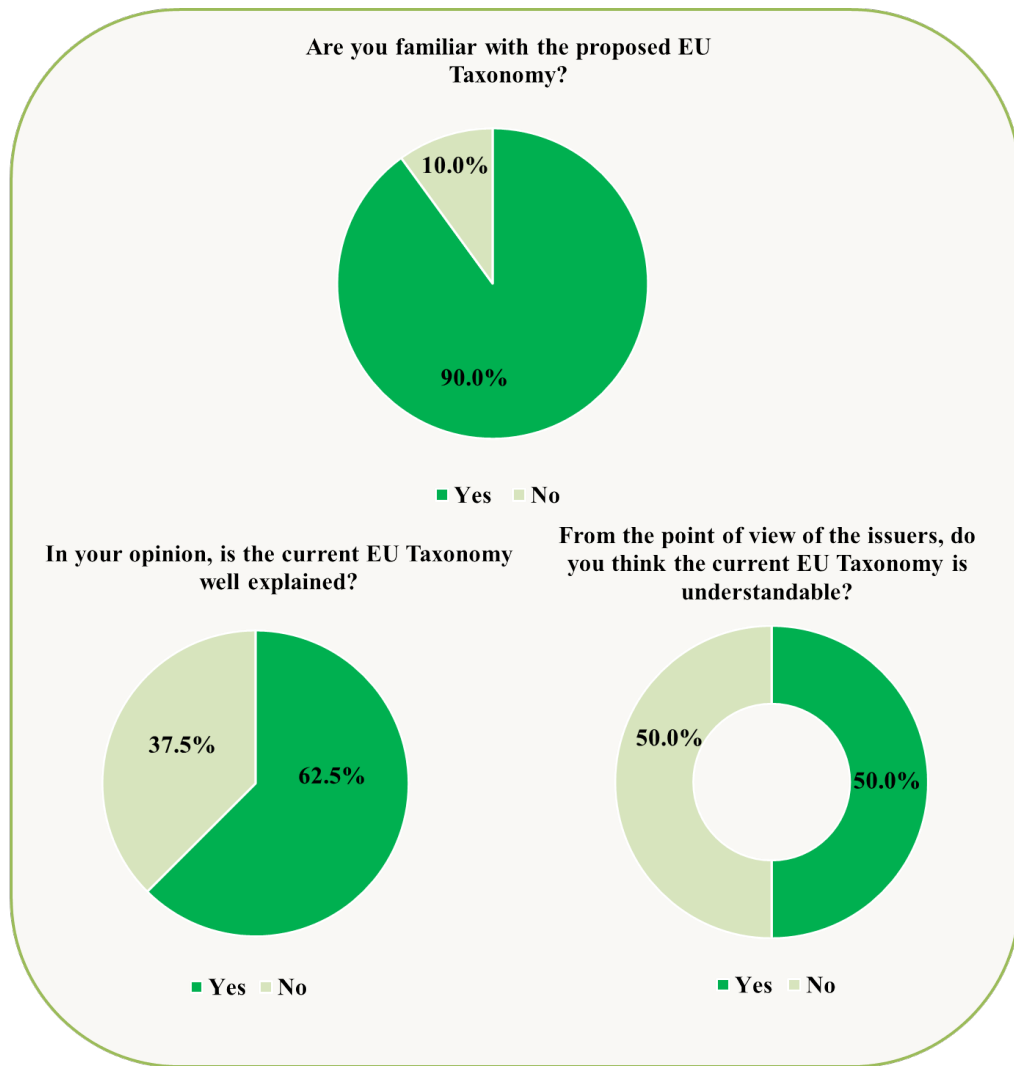
Figure 6.1.5 – Investors’ Survey - The Green Bond Standard



Source: Authors' calculations

Although most of the respondents stated that the existence of different standards worries them, only half the respondents were aware about the different standards for the issuance and regulations of green bonds issued by ICMA and the European Commission, specifically, the Green Bond Principles and the EU Green Bond Standard (EuGBS), respectively. On the other hand, 90% replied that they were familiar with the EU Taxonomy, 62.50% of which said that it is well explained. For the respondents who said they were aware of the EuGBS, 40% agreed that it is the best way to go in terms of standards, whilst another 40% only agreed, and the remainder were indifferent, as shown in Figure 6.1.5.

Figure 6.1.6 – Investors' Survey - The EU Taxonomy



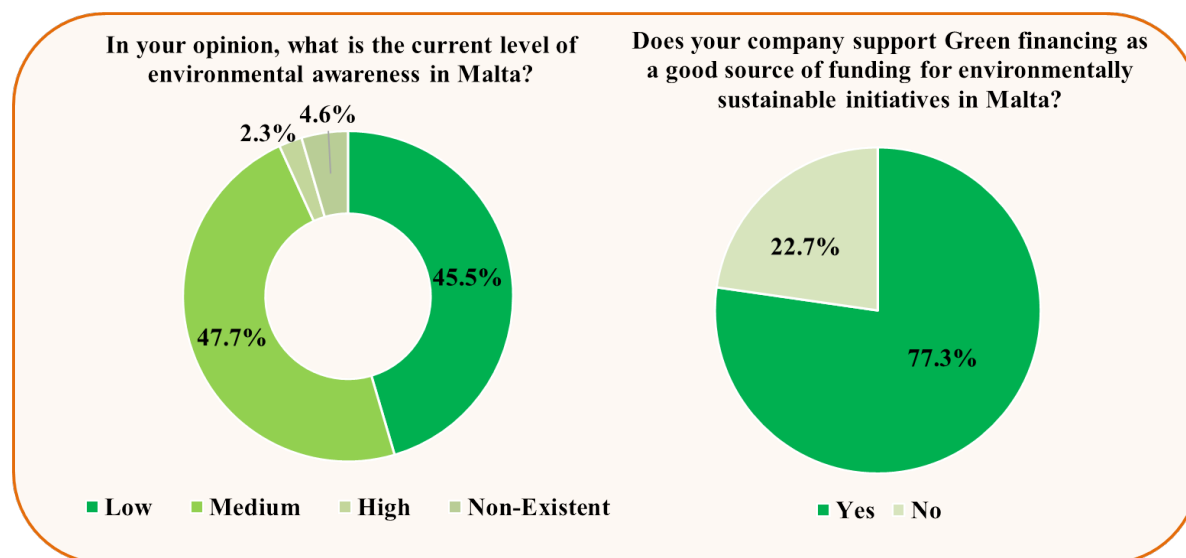
Source: Authors' calculations

Very similar replies were given regarding the provision of consistent standards and guidelines on management duties. It was also noted that it has the potential to reinforce the transition towards a net-zero carbon economy through the channelling of funds to sustainable activities which would reinforce more resilient systems in the face of climate and environmental risks. Some, however, noted that the Taxonomy might be viewed to be too bureaucratic which may discourage usage. Comments also suggested more guidance in terms of frequently asked questions with answers regarding the standard.

5.2. Issuers

In this section issuers' responses have been compiled and analysed. As shown in Figure 6.2.1, issuers participating in this survey were almost evenly split between viewing the level of environmental awareness in Malta as being medium (47.7%) or low (45.5%). These perceptions of the local environmental awareness may be a factor why local issuers have as yet shied away from issuing any green bonds, since lack of awareness may influence potential demand for such products. Visual representations of this data may be seen through Figure 6.2.1, below.

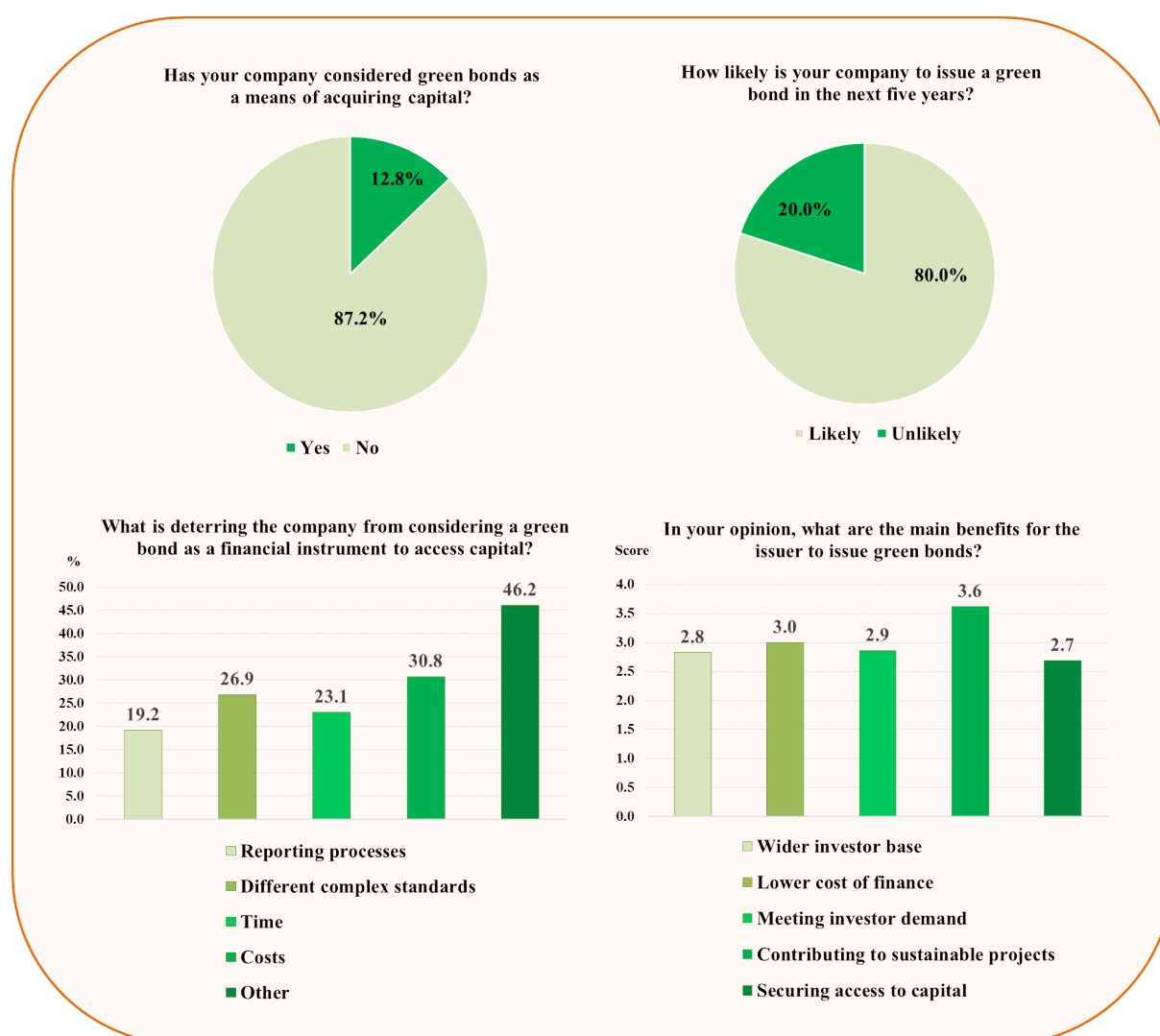
Figure 6.2.1 – Issuers' Survey - Green Bond Awareness in Malta



Source: Authors' calculations

The survey shows that 77.3% of issuers participating in the survey stated that their company supports green financing as a good source of funding for environmentally sustainable initiatives in Malta. When asked whether their companies have considered the issuance of a green instrument, however, the number dropped to only 12.8%, of which 80% expressed that they are likely to issue a green bond within the next five years, as shown in Figure 6.2.2. This indicates that most issuers are reluctant to issue green bonds anytime soon and not before they perceive a significant increase in investor awareness within the local green market. However, such response provides some hope for a possible start of a local green finance market within the mentioned timeline. The remaining 20% of the 12.8% of respondents said, however, it is unlikely that they would do so.

Figure 6.2.2 – Issuers’ Survey - Green Bond Issuance

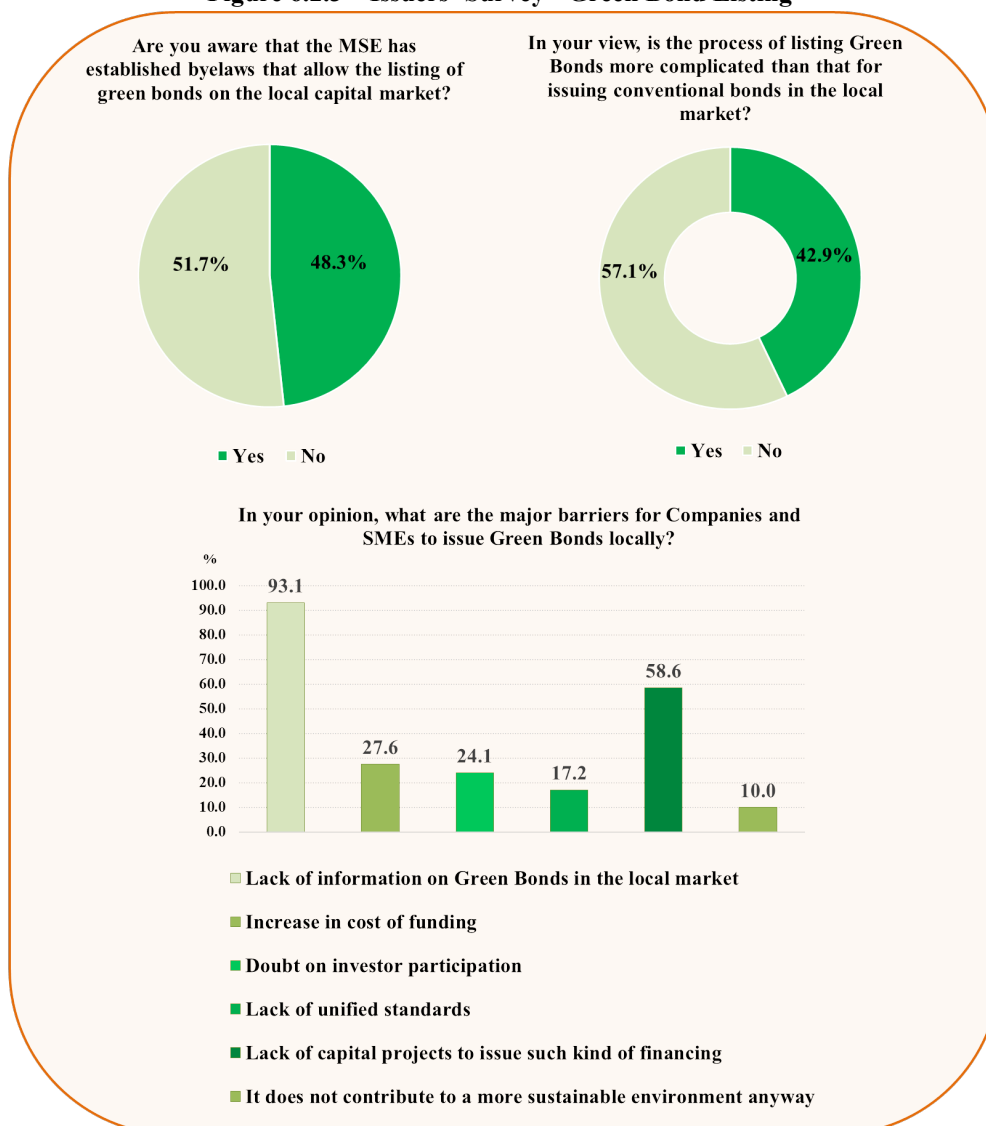


Source: Authors' calculations

A total of 30.8% of those who have not considered green bonds as a means of acquiring capital attributed their decision to the costs associated with issuing these instruments. Although the MSE offers a 50% discount on annual listing fees of green bonds, issuance, and reporting costs are still considered as an issue by potential local issuers (MSE, 2021b). Thus, such a response may indicate that either this discount is not attractive enough, or else the issuers are not aware of this incentive by the MSE, which suggests that more effort needs to be directed to raise more awareness on this matter among local issuers. Another 26.9% stated that different and complex standards are deterring them from considering green bonds. Most of the participants chose the “Other” option with most stating that increase in capital is currently not needed by the company. An additional common reason was the lack of information and awareness on these financial products. The reporting processes was the least worrying for the participants, after the time needed to create the instrument and see it through to its issuance. In fact, when asked if the participants consider the issuance of a green bond to be more complicated than the issuance of a conventional bond, 57.1% did not subscribe to such view, as depicted in Figure 6.2.3. This might imply that the issuers are not concerned about the reporting requirements as per green bonds standard, or they are unaware of the actual procedures required by a green issue. Contributing to sustainable projects is seen as the top benefit by the candidates, followed by the lower cost of finance to meet investor demand. A wider investor base and securing access to capital came in last in terms of scoring. The latter gives an indication of a possible mismatch of information between the issuers and investors. The fact that issuers do not believe that they would benefit from a

wider investor base suggests that they are not aware of the interest coming from local investors. On the other hand, investors are interpreting the lack of issuances as an absence of interest from the issuers side.

Figure 6.2.3 – Issuers’ Survey - Green Bond Listing

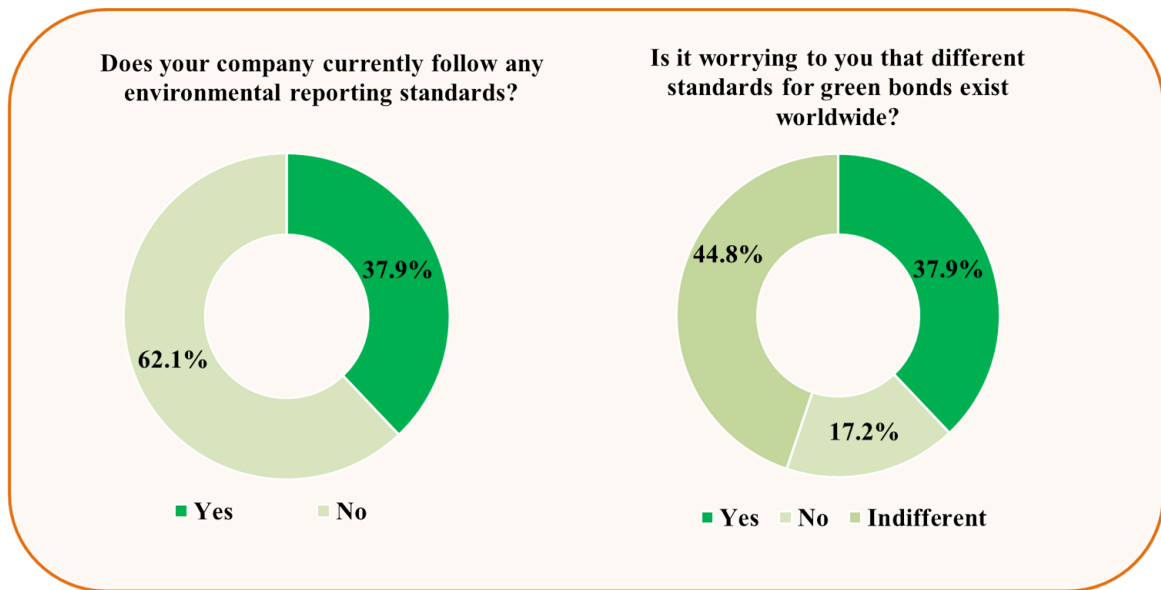


Source: Authors' calculations

In Figure 6.2.3 it is illustrated that over half of the participating issuers (51.7%), do not know that the MSE has established its own Bye-Laws that allow the listing of green bonds on the local capital market. It is of concern that a Bye-Law specifically targeted towards issuers goes unnoticed. This supports the earlier finding regarding the fact that issuers are probably unaware that the MSE already offers discounts on listing fees for green bonds. Therefore, an increase in awareness on this matter is essential to help develop the market.

Respondents were also asked which, in their view, are the major barriers for companies and small and medium-sized enterprises to issue green bonds. According to respondents, the major factor was lack of information in the local market, followed by the lack of capital projects suitable for this kind of financing.

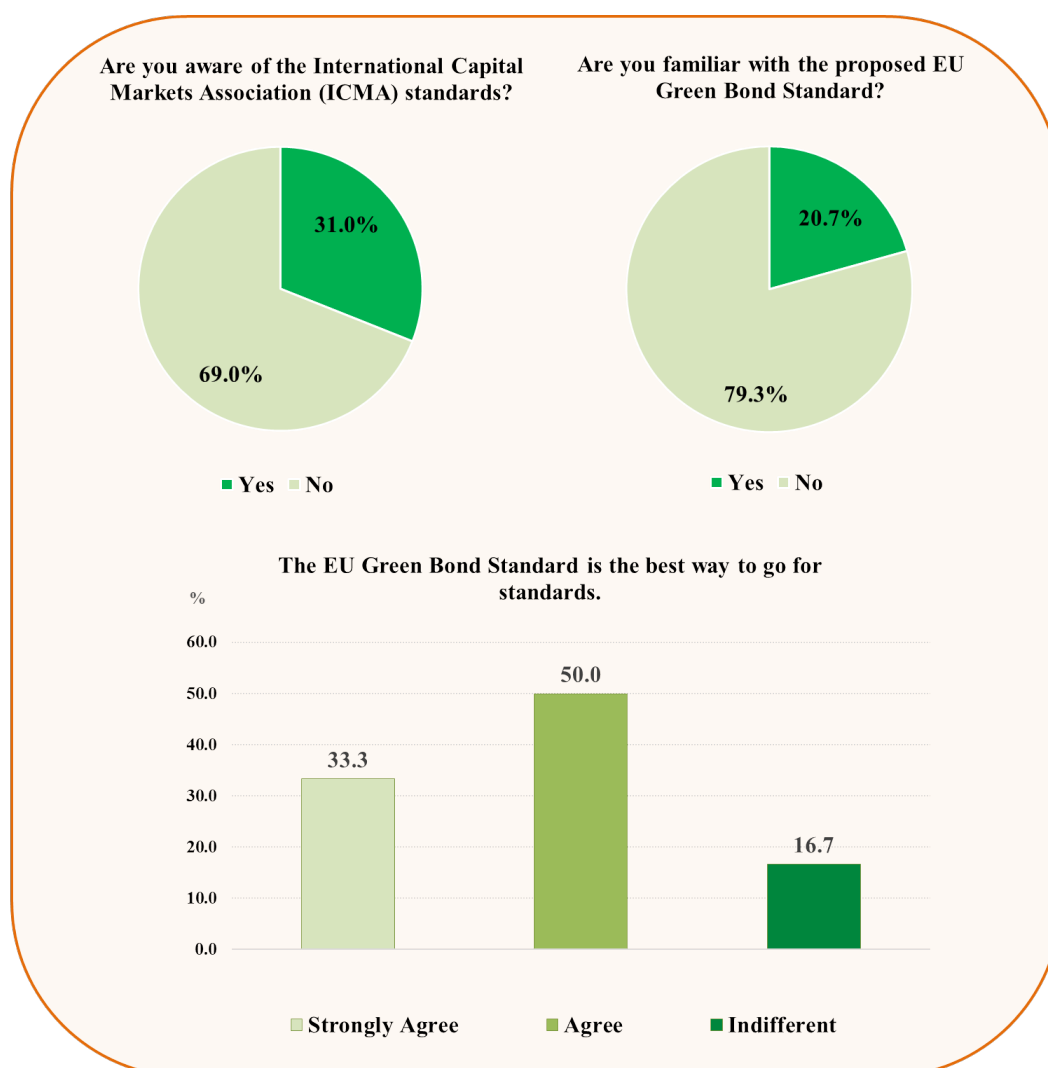
Figure 6.2.4 – Issuers’ Survey - Standards for Green Bonds



Source: Authors' calculations

Figure 6.2.4 illustrates the results from questions relating to the different standards that exist on green finance. When asked whether they follow any kind of reporting standards only 37.9% said that they did. However, most respondents were not aware of the different standards in existence to issue green bonds, with only 31.0% and 20.7% stating that they had heard about the ICMA Standards and the EuGBS, respectively. When asked if it is a worry that different standards exist worldwide, most participants said no or that they were indifferent (62.0%), which could be attributed to the fact that the majority are not aware about such standards and differences between them, whilst 37.9% said that it is of concern. Respondents who did know of the EuGBS were of the view that it is the best way to go in terms of standards to follow for the issuance and monitoring of green bonds.

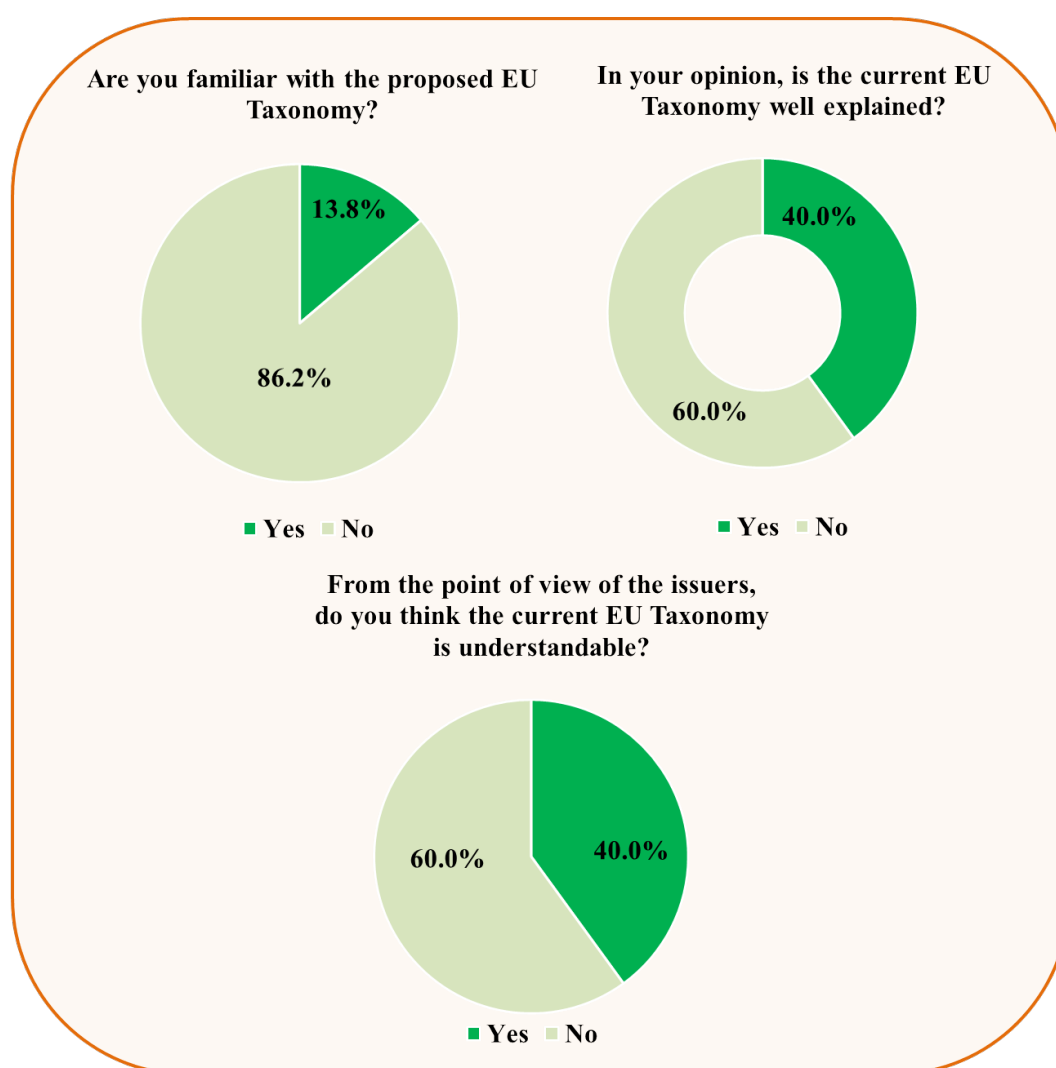
Figure 6.2.5 – Issuers' Survey - The Green Bond Standard



Source: Authors' calculations

As shown in Figure 6.2.5, only 13.8% of respondents had heard of the proposed guidance tool by the EC, the EU Taxonomy. Out of these, 60% state that the Taxonomy is not well explained, not user friendly and therefore not understandable. In the open-ended questions, respondents expressed their views on which points of the Taxonomy could be improved, with the most common reply being the need to improve upon simplicity and understandability for the user to be able to abide by the DNSH criteria, as stated in the Taxonomy.

Figure 6.2.6 – Issuers’ Survey - The EU Taxonomy



Source: Authors' calculations

Additional comments left at the end of the survey provided more insight to what the participants believe to be the best course of future action. Capital relief and capital related benefits were incentives mentioned by one respondent to improve the appetite to issue a green instrument locally. Other respondents suggested the Government needs to lead the market and regulate in a manner that would instigate growth within this area. Interestingly, this point was also mentioned by an investor. Other respondents made it clear that all incentives, although welcome, would be futile should the market become over-regulated, as it may deter companies from entering the market. This is especially true for smaller companies in small jurisdictions as these may not be able to issue instruments with very large nominal amounts given that the size of projects would not demand as much capital. This would therefore exclude the possibility for issuers to take advantage of any economies of scale that may be present for other, much larger international companies or sovereigns that opt to issue green instruments.

5.3. Main findings

The main findings that emerge from the survey suggest that a mismatch is prevalent in the market between the perspective of the investors and that of the issuers on the demand for green investments. The results point to an apparent demand for green bonds from potential investors, however, issuers lack the necessary knowledge and interest in tapping this kind of investment opportunity. Policies promoting educational awareness in this regard are still largely lacking and would certainly benefit both the local investor as well as issuers. While the scope of this survey was primarily that of assessing the views of market participants on green finance in the local capital market, information about this matter needs to be dynamic. In this regard, a common platform could be created where both investors and issuers would be able to interact and share ideas with the scope of developing such market.

Incentives, like for example tax-exemptions or tax credit bonds could also be effective in enticing prospective investors. The latter would also serve as an incentive for issuers which can be coupled with capital relief and capital related benefits. It is also recommended that increased awareness on the established MSE Bye-Laws is provided via appropriate communication channels. Emphasis should be made on the annual listing fees and trading fees discount, as well as other indirect advantages, such as enhanced corporate image that the issuer would benefit from.

From the survey results it is apparent that a market leader is necessary to jumpstart the local green bond market as such a move might diminish uncertainty in this market for both issuers and investors, encouraging more active market players. As the largest issuer of bonds in the local capital market, the government could also take the initiative by introducing the first local green bonds to the market, which would pave the way for the growth of a sustainable investment market.

6. Conclusion

In recent years, internationally the green bond market has grown rapidly. Since its inception, it has surpassed the \$1 trillion mark in cumulative green bond issuance (Jones, 2020). This substantial rise can be attributed to the rise in environmental awareness and risks of climate change as green finance continues to be at the top of various stakeholders' agenda.

Although, the MSE has allowed for entities, and the Government alike, the opportunity to raise finance for sustainable projects locally, to date, no locally issued green bonds have been listed. As a result, this study was aimed at assessing the appetite of the potential Maltese institutional investors for green bonds, as well as to study the issuers' perception of the benefits and challenges involved in potentially issuing such kind of instruments in the domestic capital market. A survey was conducted for such purpose.

The survey results show that less than half of the participants have to date invested in green bonds. As highlighted by respondents, the risk of greenwashing is a major concern amongst investors. The fact that different standards for green bonds exist worldwide is also a major concern amongst potential local investors. Encouragingly, around 90% of the survey participants said that they were willing to invest in locally issued green bonds in the future.

The results also show that a vast majority of potential local issuers have never considered green bonds as a means of acquiring capital, although those respondents who considered issuing green bonds stated that they are likely to do so in the next five years. When it comes to issuing green bonds on the local market, several respondents were not aware that the MSE had established Bye-Laws that allow the listing of such instruments. Thus, it is clear that more effort is needed in raising awareness on this matter among potential issuers. The survey also shows that to date, the major barriers for entities in issuing green bonds locally are most notably lack of both information and green capital projects, and associated high costs of issuance.

It may be concluded that despite the efforts made so far by international and local authorities, the local green bond market is still yet to be developed, even though there seems to be interest among investors in this segment. The opportunities that there may exist for local issuers to tap into this market do not seem to outweigh the costs of the barriers to entry that have been identified in this study. While Malta faces its own challenges due to its unique characteristics, especially in terms of size and natural resources which might limit the scale of green projects, nevertheless, the results of the survey are overall encouraging. These suggest that there is the potential for a local green bond market to flourish, but requires time and effort to create conditions that can fulfil the needs of local issuers.

The findings that emerge from this study suggest that there is an informational mismatch between investors and issuers. The few issuers that expressed interest in acquiring capital through green bonds do not seem to be aware of the appeal of such products to local investors. The creation of a common platform where both investors and issuers can formally interact and share ideas with the scope of developing the market could help to bridge the information mismatch. Additionally, local investor demand could be further enhanced through tax incentives, while increased awareness on the already existing Bye-Laws and incentives by the MSE would benefit potential issuers. Lastly, it seems that a market leader is required to kickstart the green bond market locally. In this regard, the government could take the lead by issuing its own green bonds.

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Annex 1

The EU High-Level Expert Group

To reach the objectives set out in transitioning to a climate-neutral continent by 2050, a High-level Expert Group (HLEG) on sustainable finance was established in December 2016 (EC, 2020c). The group was created with the aim to provide the Commission with recommendations for a comprehensive EU strategy on sustainable finance as part of the Capital Markets Union.

These recommendations to the Commission were then published in a report⁴ in January 2018 which formed the basis for the Commission's action plan on sustainable finance, published in March 2018 (EC, 2020c).

The EU Action Plan

The EU Action Plan brought forward 10 proposed actions to work towards reorienting capital flows to sustainable investments, managing financial risks originated from climate change and to foster transparency and long-termism in financial and economic activity (EC, 2020d).

The action plan set out a comprehensive strategy to further connect finance with sustainability, with its key actions being (EC, 2020d):

1. Establishing a clear and detailed classification system for sustainable activities- EU Taxonomy.
2. Establishing EU labels for green financial products.
3. Introducing measures to clarify asset managers' and institutional investors' duties regarding sustainability.
4. Strengthening the transparency of companies on their ESG policies - disclosures relating to sustainable investments and sustainability risks.
5. Introducing a 'green supporting factor' in the EU prudential rules for banks and insurance companies – low-carbon and positive carbon impact benchmarks.

The European Commission

Europe has been at the forefront to mitigate the effects of climate change, with its first efforts starting in 2017 following the Paris Agreement. A timeline is presented in Figure 3.1.1. A brief explanation of the events, policies, discussions, and developments that followed suit shall be explained hereunder.

Technical Expert Group on Sustainable Finance

The Technical Expert Group (TEG) was set up in July 2018 to work toward four objectives proposed by the EU Action Plan. The main targets under the group's remit are the Green Bond Standard and the EU Taxonomy, explained in more detail below (EC, 2020e).

The EU Green Bond Standard

The European Green Bond Standard (EUGBS) is a voluntary standard for issuers who may wish to align with the established classification system as stipulated by the EU Taxonomy Regulation. The standard essentially aims to provide an international standard framework for the green bonds market (TEG, 2019).

An EU Green Bond is any type of listed or unlisted bond or capital market debt instrument that aligns with the requirements of the EUGBS whilst exclusively financing or refinancing in part or in full new

⁴ https://ec.europa.eu/info/sites/default/files/180131-sustainable-finance-final-report_en.pdf

and/or existing Green Projects which would all be verified by an accredited external verifier (TEG, 2020).

Discussions on the subject are still currently ongoing and are yet to be finalised.

The Components

Green Projects

Proceeds from EU Green Bonds would be allocated only to finance or refinance Green Projects that align with the delegated acts given by the EU Taxonomy.

The Framework

The Framework confirms the voluntary alignment of the green bonds with the EUGBS, providing details on all the key aspects of the proposed use of proceeds and its green strategy.

Reporting

Two types of reporting are required under the EUGBS: Allocation Reporting and Impact Reporting.

An allocation report is to be published on at least an annual basis until full allocation of proceeds have been settled. The Final Allocation Report shall need verification and will include the following (TEG, 2020):

- A statement of alignment with the EUGBS.
- A breakdown of allocated amounts to the projects at least on sector level.
- The geographical distribution of the projects.

The impact report is only expected to be published at least once during the bond's lifetime. The impact report should describe the projects pursued and their environmental objectives together with other information and metrics about the projects' environmental impacts. Verification of the impact reporting is not mandatory but encouraged (TEG, 2020).

External verifiers are appointed to confirm the alignment of frameworks with the EUGBS and that the allocation of the proceeds to green eligible projects are in alignment with the Allocation Reporting as outlined in the EUGBS. The Verification of the frameworks are to be made publicly available before or at the time of the issuance of its EU Green Bond(s).

The EU Taxonomy

The EU Taxonomy is a scientific-based classification tool to help investors and companies make informed investment decisions on environmentally friendly economic activities based on six environmental objectives (EC, n.d.b):

1. climate change mitigation.
2. climate change adaptation.
3. sustainable use and protection of water and marine resources.
4. transition to a circular economy, waste prevention and recycling.
5. pollution prevention and control; and
6. protection of healthy ecosystems.

An economic activity is considered “sustainable” if it contributes substantially to at least one environmental objective and does no significant harm to the other five, whilst meeting minimum social safeguards. Technical Screening Criteria (TSC) is set for determining what is Substantial Contribution and Doing No Significant Harm (DNSH) to avoid ambiguity.

The EU Taxonomy is intended to amend the shortcomings of the green bond market by providing the following benefits (EC, n.d.b):

- Provide clarity via a common language used to avoid unintended greenwashing.
- Bridges the gap between the internationally set goals and investment practice.
- Save time and money for investors and issuers.
- Support different investment styles and strategies.
- Put environmental data into context.
- Avoid reputational risks and ensure robust strategies.
- Provides a tool to understand company business models.
- Reward companies undertaking environmentally sustainable activities.

Discussions on the subject are still currently ongoing and are yet to be finalised.

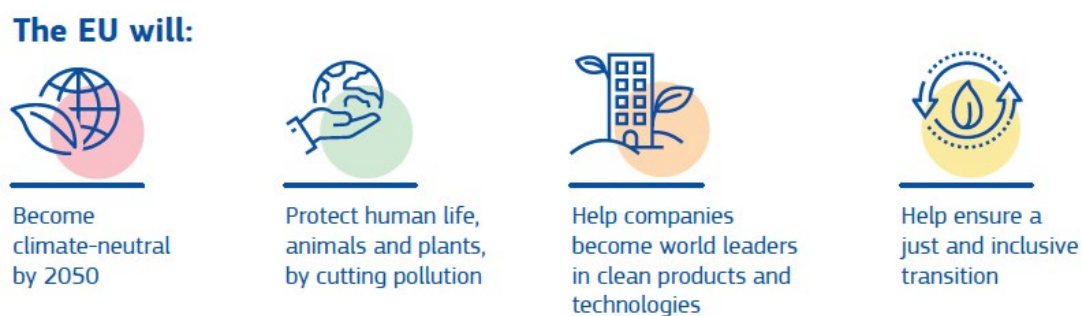
General Application

The application of the EU Taxonomy follows other market practices with the difference that it provides unified underlying definitions of what ‘green’ is across green financial products. This is believed to lead to more accountability and transparency, providing greater reassurances to investors that the underlying assets are contributing to one or more environmental objectives.

The European Green Deal

The European Green Deal’s aim is to equip citizens and businesses alike to benefit from the proposed transition. Key policies presented emphasise on a vast range of environmental objectives and are designed to “leave no man or region behind in the path for transition” and is therefore considered to be a just and socially fair proposition. The Commission recognises, however, that the Green Deal’s success is dependent on the involvement and commitment of the public, private, and all stakeholders within the area. Figure 3.7.1 below shows the propositions made by the Commission to reach its 2050 target (EC, 2019b).

Figure 3.7.1 – The Green Deal Proposition



Source: European Commission: What is the European Green Deal?(2019)

On 14 January 2020, the Commission presented the European Green Deal Investment Plan which is expected to mobilise at least €1 trillion of sustainable investments over the next decade. Its aim is to enable a framework in the EU that facilitates public and private investments needed for the transition to becoming the first climate-neutral continent (EC, 2020f).

Annex II

Malta's Sustainable Development Vision

The Ministry for the Environment, Sustainable Development and Climate Change⁵ published the sovereign's vision for the transition to a sustainable path in early 2019. The vision lays out the SDGs most relevant to the country's way of business and those other objectives aspiring to achieve through the transition of low-carbon energy, sustainable buildings and urban development, and the protection and conservation of the territory.

Malta's vision rests on three main pillars (EC, 2021b):

- a) Enhancing Economic Growth
- b) Safeguarding Our Environment
- c) Social Cohesion and Wellbeing

The Low Carbon Development Strategy

Further to the vision on sustainability, the Government of Malta, in collaboration with Ernst & Young, has proposed a Low Carbon Development Strategy (LCDS) following undisputable evidence of the new threats that will arise should climate change persist on its damaging path. The LCDS was built on the foundations of the transition toward a net zero carbon economy, that plans Malta's journey to decarbonising its economy by 2050 (Ministry for the Environment, Climate change and Planning, 2021).

The strategy is stretched over a span of time focusing on the importance of the transition allowing a certain amount of time for it to be achieved. It also considers the change of technology and that things will develop in the future. To this effect, the strategy is split in batches of ten years and tackles local sectors individually to account for such changes that may be policy or structural in nature (Ministry for the Environment, Climate change and Planning, 2021).

The main objective is to calculate a ratio of the costs involved versus the abatement benefit. The target here is to abate emissions fully within the stipulated timeframe.

Results show that should the country's way of doing business remains in a status quo, emissions would increase with very low possibility of abatement. Further, energy was pinpointed as the sector which produces most emissions in Malta primarily due to high level of energy consumption to transform sea and rainwater to potable water. The second-most producer of emissions is then the transport sector (Ministry for the Environment, Climate change and Planning, 2021).

The mitigation plan for the first ten years includes twelve key measures directed both to the individual and the private sector and over time, further measures will be explored and assessed as necessary to boost the emissions reduction potential in line with emerging technologies and possibilities.

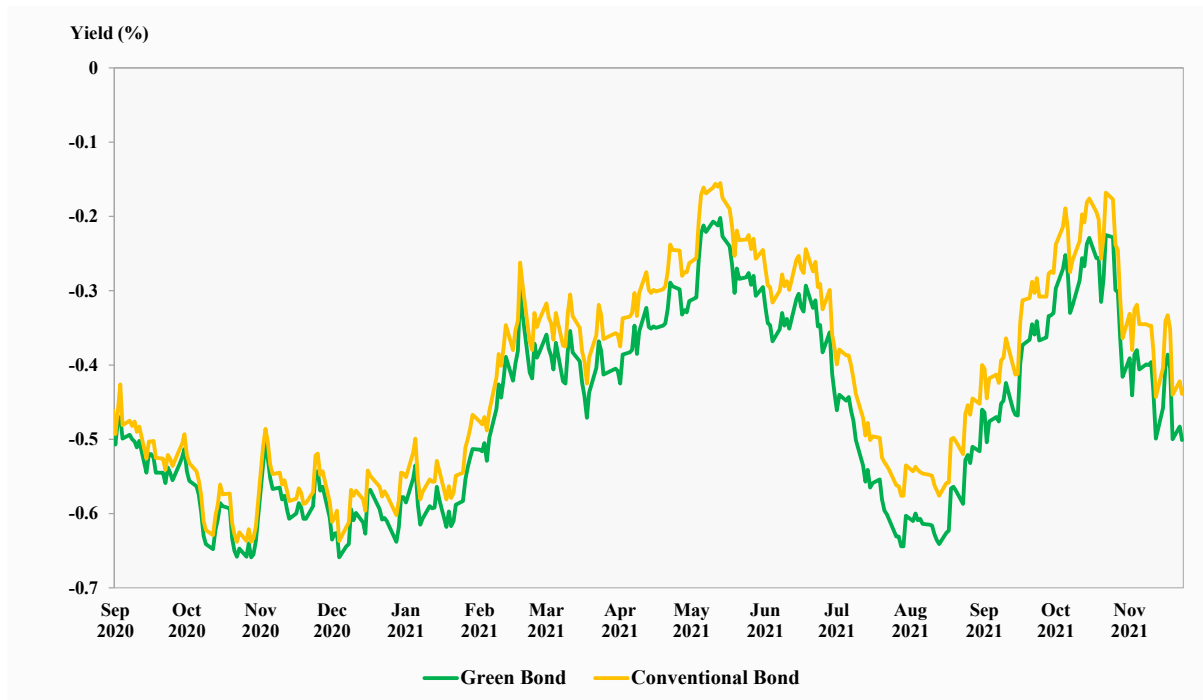
The outcome of the measures up to the 2050 pathway would fulfil Malta's 2030 climate targets and move us as close as possible to carbon-neutrality as possible.

⁵https://meae.gov.mt/en/Public_Consultations/MSDEC/Documents/Malta's%20Sustainable%20Development%20Vision%20for%202050.pdf

Appendix I

Figure 4.1.1 illustrates the yield, in percentage terms, of the firstly issued German green bond alongside its counterpart German conventional bond which has an identical issuer, coupon rate, and maturity.

Figure A.II.1: German Twin Bonds (Green Bond and Conventional Bond)



Source: Reuters, 2021

Appendix II



BANK ĊENTRALI TA' MALTA
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CENTRAL BANK OF MALTA

Green Bonds Green Investment Survey

The objective of this survey is two-fold:

- To investigate the issuers' perception of the benefits and challenges involved in issuing green bonds in the domestic market.
- The appetite of the Maltese institutional investor to such instruments.

The survey is divided into 3 sections: Section A targets prospective green bonds issuers, Section B is aimed towards potential institutional investors, and Section C relates to environmental standards. You are kindly requested to fill all sections. All responses will be treated with strict confidentiality.

The data collected from this survey will be analysed accordingly. The findings will form part of a report which aims to identify the investment appetite, for both demand and supply, amongst local market participants in green bonds.

Please note that questions with an * are required for the survey to be complete.

Green Bonds Section A - Prospective Issuers

1. In your opinion, what is the level of the current environmental awareness in Malta? *

- ☐ Low
- ☐ Medium
- ☐ High
- ☐ Non-existent

2. Do you think Green financing would be a good source of funding for environmentally sustainable initiatives in Malta? *

- ☐ Yes
- ☐ No

If Q.2 is yes:

3. Has your company considered green bonds as a means of acquiring capital? *

- ☐ Yes
- ☐ No

If Q.3 is yes:

4. How likely is your company to issue a green bond in the next five years? *

- ☐ Most likely
- ☐ Likely
- ☐ Unlikely
- ☐ Highly Unlikely

If Q.3 is no:

5. What is deterring the company from considering a green bond as a financial instrument to access capital? *

More than one answer may be chosen.

- ☐ Reporting processes
- ☐ Different complex standards
- ☐ Time
- ☐ Costs (please specify): _____

- Other (please specify):

6. In your opinion, what are the main benefits for the issuer to issue green bonds? *

Please **rank** your answers from 1 to 5, 1 being the preferred answer.

- ☐ Wider investor base
- ☐ Lower cost of finance
- ☐ Meeting investor demand
- ☐ Contributing to sustainable projects
- ☐ Securing access to capital

- Other (please specify):

7. Would you sacrifice yield in favour of sustainability? *

- ☐ Yes, how much? Range from 2 basis points to 10 basis points _____
- ☐ No

8. Are you aware that the Malta Stock Exchange (MSE) has established byelaws that allow the listing of green bonds on the local capital market? *

- ☐ Yes
- ☐ No

9. In your view, is the process of listing Green Bonds more complicated than that for issuing conventional bonds in the local market? *

☐ Yes

☐ No

10. In your opinion, what are the major barriers for Companies and SMEs to issue Green Bonds locally? *

More than one answer may be chosen.

☐ Lack of information on Green Bonds in the local market

☐ Increase in cost of funding

☐ Doubt on investor participation

☐ Lack of unified standards

☐ Lack of capital projects to issue such kind of financing

☐ It does not contribute to a more sustainable environment anyway

- Other (please specify):

Green Bonds Section B - Institutional Investors

11. Have you ever invested in Green Bonds? *

☐ Yes

☐ No

If Q.11 is yes:

12. If yes, what was the motivation behind this investment decision? *

More than one answer may be chosen.

☐ Portfolio diversification

☐ Lower risk

☐ To contribute to a more sustainable environment

☐ To improve the public corporate image and be recognized as a sustainable fund company with green investments

Other (please specify):

If Q.11 is yes:

13. What is the percentage of green bonds investments respective to the company's Assets Under Management (AUM)?

If Q.11 is yes:

14. Would you consider adding more green bonds to your investment portfolio? *

☐ Yes

☐ No

If Q.11 is no:

15. What are the reasons to opt out from investing in green finance? *

More than one answer may be chosen.

- ☐ This type of investment is not meeting our financial target
- ☐ Lack of historical data
- ☐ Illiquidity
- ☐ Lack of unified standards
- ☐ The risk of greenwashing⁶

16. Consider a conventional fixed income bond and a green bond both with identical characteristics (Maturity, Issuer, and Coupon). Would you be more inclined to buy a conventional fixed income bond or a green bond? *

- ☐ Yes
- ☐ No
- ☐ Depends

What is the reason behind your decision?

17. Would you buy a green bond if it was not clear that proceeds were going to be allocated to green projects? *

- ☐ Yes
- ☐ No
- Depends (state reason):

⁶ Greenwashing is disinformation that is carried out by an organization to present an environmentally responsible public image.

18. Would you sell a green bond if post-issuance green bond reporting is poor? *

☐ Yes

☐ No

- Depends (state reason):

19. Would you be willing to invest in locally issued green bonds in the future? *

☐ Yes

☐ No

- Depends (state reason):

20. If yes, what would be the maximum percentage given to these locally issued green bonds in the green investment portfolio?

21. How much would this translate to in nominal terms? *

☐ 0 – € 10 million

☐ € 10 million - € 25 million

☐ € 25 million - € 50 million

☐ € 50 million - € 100 million

☐ > € 100 million

22. How likely would you recommend green bond investing to other investors? *

☐ Most likely

☐ Likely

☐ Unlikely

☐ Most unlikely

23. In your opinion, what are the benefits of investing in green bonds? *

Please **rank** your answers from 1 to 4, 1 being the preferred answer.

- ☐ Investing in specific green projects without taking on any meaningful additional risk
- ☐ Use of proceeds are contributing to environmental sustainability
- ☐ Portfolio diversification
- ☐ Integrating ESG criteria into investment decisions

- Other (please specify):

24. In your opinion, what would help increase green bonds awareness with local investors? *

Please **rank** your answers from 1 to 5, 1 being the preferred answer.

- ☐ Public Informative Seminars
- ☐ Policies that permit and encourage companies (or enterprises) to issue green bonds
- ☐ Create incentives to promote green bonds issuance
- ☐ Create a follow-up evaluation system to quantify the environmental effects of green bonds
- ☐ Tax incentives for investors

- Other (please specify):

Section C: Standards for Environmentally Sustainable Activities

25. Does your company currently follow any environmental reporting standards? *

- ☐ Yes
- ☐ No

26. Is it worrying to you that different standards for green bonds exist worldwide? *

- ☐ Yes
- ☐ No
- ☐ Indifferent

27. Are you aware of the [International Capital Markets Association](#)(ICMA) standards? *

☐ Yes

☐ No

28. Are you familiar with the proposed [EU Green bond standard](#)? *

☐ Yes

☐ No

If Q.28 is yes:

29. The [EU Green bond standard](#) is the best way to go for standards. *

☐ Strongly Agree

☐ Agree

☐ Disagree

☐ Strongly Disagree

☐ Indifferent

- Reason:

30. Are you familiar with the proposed EU Taxonomy? (* Skip Q. 31, 32, 33, and 34 if answer is no)

The EU taxonomy aims to establish a common language and a clear definition for which economic activities can be considered environmentally sustainable. This should protect private investors from greenwashing, help firms to become more climate-friendly, mitigate market fragmentation and help shift investments where they are most needed ([European Commission, 2021](#)).

☐ Yes

☐ No

If Q.30 is yes:

31. In your opinion, is the current EU Taxonomy well explained? *

☐ Yes

☐ No

If Q.30 is yes:

32. From the point of view of the issuers, do you think the current EU Taxonomy is understandable?

*

☐ Yes

☐ No

If Q.30 is yes:

33. In your opinion, what are the strong points offered by the EU Taxonomy? *

If Q.30 is yes:

34. In your opinion, what suggestions would you give to improve the EU Taxonomy? *

Additional Comments
