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Directorate for Financial and Enterprise Affairs
COMMITTEE ON FINANCIAL MARKETS

Report on green, social and sustainability bonds issued by multilateral development banks and its use for infrastructure financing

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Thank you to those Delegations which have provided comments which have been fully integrated into this final report.

This report has been approved and is now declassified.

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1 Introduction

1.1 Objective and Methodology

1. Green and social bonds are popular debt instruments which allow investors to contribute to the green transition, as well as social causes. The sustainable debt market has grown substantially in the last 15 years, reaching in Q3 2022 a total of USD 3.5 trillion of issuance to date (Climate Bonds Initiative, 2022^[1]), of which USD 2 trillion are green bond issuances.

2. This report discusses how the green, social and sustainability (GSS) bond market has developed through issuances by multilateral development banks (MDBs), and how further this market can contribute to advancing infrastructure as an asset class. This report mainly focuses on use-of-proceeds of bonds, and the conditions these bonds apply in the framework of private sector standards and MDBs issuance. The proposal for this report (DAF/CMF/AS(2023)1) was approved by the Task Force on Institutional Investors and Long-term Financing via written procedure on 3 March 2023.

3. The objective of the report is to map the landscape of GSS bonds in terms of standards for the use-of-proceeds, the process for evaluation and selection of projects, the management of proceeds, and the monitoring and reporting activities. This is done to link such instruments to infrastructure projects that fulfil green, social and sustainability objectives.

4. This section presents the GSS bonds market outlook and introduces use-of-proceeds bonds; section 2 outlines principal private sector standards for GSS bonds issuance in terms of structural characteristics and compatibility with infrastructure projects; section 3 considers how MDBs have taken up such standards and used them to develop GSS bonds frameworks and taxonomies, as well as how infrastructure projects are integrated in the latter; and section 4 concludes the report.

1.2 Sustainable debt instruments

5. Capital markets have always been among the main sources of long-term funding for bond issuers, and of steady revenue and risk diversification for investors, thus matching different economic interests and creating value. Even though capital markets offer heterogeneous products, as all types of bonds matching different needs can be found, the issuance of specific types of debt instruments is largely driven by investor demand, that in turn reflects current market preferences.

6. That is why, in the last decade, investment instruments designed to help the transition to sustainable development and climate mitigation and adaptation have seen developments in terms of both volume and structure (IOSCO, 2020^[2]). This reflects a globally widespread requirement that capital markets align with political and social concerns and help in achieving related goals. Actions taken to address such concerns are, among others, the Paris Agreement Goals, the United Nations Sustainable

Development Goals (SDGs)¹, the Glasgow Financial Alliance for Net Zero (GFANZ), and the national and supranational frameworks for climate change mitigation and adaptation and social inclusion.

7. At the issuer's level, the challenge has been to offer investors products that, on top of raising capital and diversifying risk at the same rate as traditional products do, also direct funding towards financial vehicles and projects that contribute to the achievement of climate and social goals. Such capital raising vehicles are often generally referred to as sustainable bonds.

8. The sustainable bonds market grew rapidly in 2021 and 2022, reaching USD 1 trillion and approximately USD 1.35 trillion in annual issuance, respectively (Environmental Finance, 2022^[3]), and achieving in Q3 2022 the mark of USD 3.5 trillion of issuance to date. It comprises a plethora of different bonds, reflecting the variety of aspects of the sustainable cause.

9. Such fixed income instruments can be divided into two main categories:

- Use-of-proceeds bonds: most common type of sustainable bonds, whose characteristics are similar to normal bonds, but whose proceeds are exclusively allocated to projects aimed at achieving green and/or social impact. A use-of-proceeds approach allows any company to issue such bonds, regardless of their main business activity. Usually bonds labelled as green, social or sustainable are use-of-proceeds bonds. Therefore, the present report, when using the acronym GSS, refers to use-of-proceeds bonds only.
- Sustainability-linked bonds (SLBs): any type of bond instrument for which the financial and/or structural characteristics vary depending on the issuer's achievement of predefined sustainability/ESG objectives. Issuers thereby commit explicitly to future improvements in sustainability outcomes. This characteristic makes such bonds a forward-looking performance-based instrument. Importantly, the proceeds of SLBs are intended to be used for general purposes.

10. Volumes growth can be explained by various reasons: in terms of market dynamics, sustainable bonds demand outstrips supply, reflecting rising institutional investor appetite, leading to higher volume of issuances (OECD, 2021^[4]). Moreover, sustainable bonds often benefit from the high credit rating of issuing institutions, especially in the case of sovereign and supranational issuances, that can meet financial commitments with ease and have low risk of default for conventional debt instruments.

11. Additionally, certain types of sustainable bonds, such as green bonds, are characterised by what is called the "greenium", i.e., a lower yield and volatility in secondary markets if compared with "vanilla" bonds (Amundi, 2020^[5]). This secondary market negative yield is heterogeneously present across green bond issuance, evolves over time and depends on various characteristics of the issuers and the bond's subscribers (Pietsch and Salakhova, 2022^[6]). In terms of effect size, many studies find a secondary market negative premium for green bonds between -5 and -2 basis points on average, and a lower volatility of green bonds portfolios compared to conventional ones².

12. Because of these reasons, the sustainability bonds market can bring solutions to the different needs of issuers, investors and projects implementers, by achieving profitability and sustainable growth at the same time.

¹ Throughout this report, the Paris Agreement Goals and the SDGs are generally referred to as "sustainability goals".

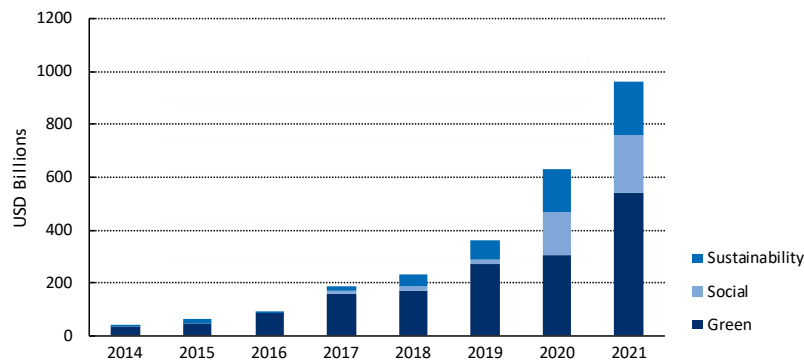
² Evidence of this phenomenon is found both in the private and the public sector. For sovereign GSS issuance, instances are present both in developed economies -- the German Sovereign Green Bund issuance example offering a perfect comparison of green and vanilla bonds yields (Climate Bonds Initiative, 2020^[48]) --, and in emerging markets, --- the Thailand 2020 sustainability bond issuance supported by the Asia Development Bank (Climate Bonds Initiative, 2021^[50]) -- .

1.3 Use-of-proceeds bonds

13. Use-of-proceeds bonds issuance hit almost USD 1 trillion in 2021. Such bonds are usually further divided into three categories, depending on how proceeds are used:

- Green bonds: proceeds are used for financing or re-financing eligible projects aimed at achieving climate mitigation and adaptation goals, or other environmental goals.
- Social bonds: proceeds are used for financing or re-financing eligible projects aimed at improving various social issues or achieving positive social outcomes.
- Sustainability bonds: combine green and social purposes.

Figure 1. GSS bonds volumes in 2014-2021



Source: (Climate Bonds Initiative^[7]).

14. These types of bonds usually imply that financed projects belong to specific eligible sector categories, often grouped and/or classified by activities or assets in relevant taxonomies. Principal green and social project categories developed by private sector standards and MDBs are listed in Annexes A and B.

15. Even though GSS bonds' main nature is use-of-proceeds, issuers often design them in a way that achieves compliance with other widely recognised frameworks for sustainable development. For instance, GSS bonds labelled by the Climate Bonds Initiative and the ICMA Sustainable Finance Principles and Guidelines (section 2), can be aligned to climate mitigation goals of the Paris Agreement and can be mapped to the United Nations Sustainable Development Goals (SDGs). Such interdependency is not by default, and strongly depends on both the bond characteristics and the framework developed for the instrument's issuance, whose establishment is a pre-requisite for issuing a sustainable debt instrument.

16. Proving solid legal and operational grounds to GSS financing instruments was crucial in the early stages of GSS bonds issuance, both to reassure investors of the instruments' soundness, and to avoid greenwashing or accusation of greenwashing. To comply with such necessities, issuers have often adopted private sector standards aimed at providing precise definitions for green, social and sustainability bonds labelling.

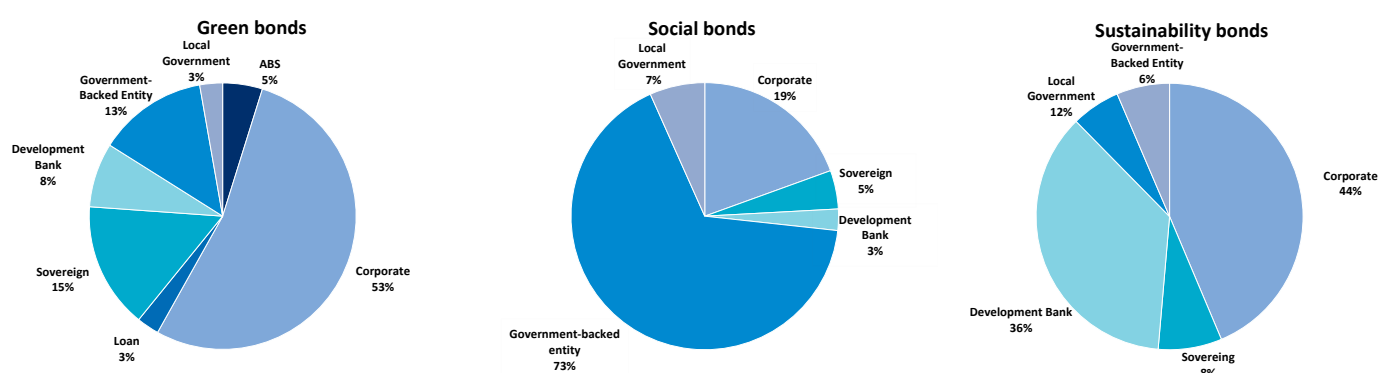
17. The most successful private sector initiatives are the International Capital Market Association (ICMA) Sustainable Finance Principles and Guidelines and the Climate Bonds Initiative (CBI) Climate Bonds Standard and Certification. Such guidance is aimed at defining the nature, scope and characteristics of GSS instruments, and setting a framework for the identification, financing, monitoring and impact

reporting of eligible projects towards which the proceeds are directed. The goal of these initiatives is to scale up GSS bonds issuance volumes through clearer benchmarks and definitions, which result in lower issuance costs, increased quality of instruments, higher investor demand and easier disclosure and strategic planning.

18. From a broader point of view, such standards contribute to the harmonisation of market conditions, providing solid grounds to the development of the sustainable capital market, which is reaching all market participants and offering various solutions to heterogeneous investment needs.

19. Looking at recent market figures, issuers of all types are issuing GSS bonds and employing standards and guidelines. The main issuer categories in the GSS market are sovereign institutions, such as national governments, local governments and government-backed entities; supranational entities, such as multilateral development banks; loan providers and asset-backed securities (ABS) providers, such as commercial banks; and firms from the corporate sector. As shown in Figure 2, relative shares of different type of issuers vary within each bond category.

Figure 2. 2021 issuer breakdown of green, social and sustainability bonds



Source: (Climate Bonds Initiative^[7]).

20. However, private sector guidance is not the only effort towards sustainable bonds standardisation. Globally, regional and national governments have developed or are developing legal frameworks for GSS bond labelling, issuance and disclosure.

21. For instance, the proposed European Union Green Bonds Standards, which will soon be reflected in an *ad hoc* Regulation which builds on the EU Taxonomy for Sustainable Activities, aims to enhance transparency and credibility of issuances, and further support the development of the green bond market in the EU and beyond (EU Technical Expert Group on Sustainable Finance, 2020^[8]).

22. Another national legal framework for GSS bonds labelling is the Chinese Green Bond Endorsed Project Catalogue (People's Bank of China, 2021^[9]), which has undergone various revisions recently.

23. The main reason why these frameworks differ from private sector guidance, and the rationale for which they're excluded from the present report, is that national frameworks are often mandatory for issuers from that geographic area, depend on the national or supranational legal infrastructure, and have, by definition, a lower degree of take up from GSS supranational issuers, i.e., MDBs (section 3). Nonetheless, given the similarities between these two types of standards, and the shared role in building a conducive ecosystem for sustainable finance, national standards for sustainability bonds issuance, as well as sovereign issuance of GSS bonds complying with private sector standards, could be the subject of further research.

24. Finally, there are many relevant sustainability standards for corporates operating in various sectors of the economy, that seek funding for their projects from fixed income instruments, which for the infrastructure sector could include G20 Principles of Quality Infrastructure Investment Principles, or the Fast-Infra Label and the Blue Dot Network Certification. However, such guidance is different and complementary to GSS bonds issuance principles and guidelines for issuers.

1.4 Summary

25. The green, social and sustainability bond market is scaling up in recent years, thanks to favourable investment conditions that increased market appetite and encouraged issuance of these products. Sustainable bonds compensate higher issuance costs with negative yields and lower portfolio volatility compared to conventional bonds, as well as with a series of reputational effects. This makes GSS debt instruments issuance, and thus sustainable development, more and more convenient in the capital raising environment.

26. Issuers of all kinds have entered the GSS bonds market in the last 15 years, focusing on use-of-proceeds GSS bonds, which raise funds for projects that have green and social impacts. This differentiates GSS bonds from conventional sustainability-linked bonds, since proceeds are not used for general purposes. In fact, financing is thematic, as it is conditional to the creation of specific impacts of funded projects belonging to various sectors of the economy.

27. GSS bonds issuance is being progressively harmonised by private sector guidance aimed at setting rigorous frameworks for the use-of-proceeds, the process for project evaluation and selection, the management of proceeds, and the monitoring and impact reporting practices. These standards bring increased harmonisation across the market, resulting in higher investor confidence and lower issuance costs, which in turns facilitate volume growth.

28. As a result, the sustainable capital raising market is becoming mainstream finance, and, most importantly, it is contributing to the achievement of sustainability goals.

2 Private sector GSS bonds guidance

2.1 Structural characteristics of private sector guidance

29. Private sector guidance for sustainable bonds issuance promote integrity in sustainable finance markets in a number of ways. It is designed to enable the provision of information needed to increase capital allocation to green, social and sustainable projects by guiding issuers, subscribers and investors on key components involved in launching a sound GSS framework for which targeted impacts of financed projects can be evaluated.

30. Such guidance is aimed at defining the nature, scope and characteristics of GSS financing instruments, as well as setting enabling conditions for the identification, financing and monitoring of eligible projects towards which the proceeds are directed.

31. Specifically, using private sector guidance for GSS bonds issuance has benefits for the following market participants:

- Institutional investors can use them to better implement responsible investment strategies, based for example on ESG or decarbonisation considerations, and to facilitate client, public and non-financial disclosure obligations.
- For retail investors, standardised definitions can lower entry barriers to sustainable finance markets, and go as far as enabling the assignment of sustainability labels for investments that comply with certain sustainability indexes, taxonomies, ratings etc.
- Issuers benefit from such guidance by facing lower issuance costs and higher investor demand, and by having a benchmark against which the sustainability of their assets can be assessed when dealing with disclosure. Moreover, labelled bonds usually increase alignment between the maturity of instruments and the project lifecycle.
- Underwriters can expect strong subscription when engaging with bond issuers.
- The public sector can use such guidance to strengthen climate and social policy making, to steer public investments, for stress testing, and for industrial production monitoring.

32. Through these benefits, such labels have gained high popularity and a substantial take up rate in recent years, contributing to the growth of the sustainable financing market.

33. The main characteristics of this guidance, regardless of the nature of the developer, are the following:

- Voluntary: GSS bonds principles and guidelines are usually voluntary standards that issuers can decide whether to implement or not in their sustainable bonds issuance, by taking into account the associated implementation costs and undergoing an external review process. In this respect, they differ from national sustainable finance frameworks, that are usually mandatory for issuers.

- Framework-oriented: one of the main pillars of private sector guidance is to provide the issuer with some grounds to build a sustainable finance strategic framework that relies on such principles to issue specific debt instruments, and also extends to its whole business activity and strategic direction. The framework includes climate transition strategy and governance, and enables the assessment of business environmental materiality.
- Transparency-centred: disclosure is at the core of GSS bonds guidance, as the reliance on eligible green, social and sustainable projects and on proceeds management and impact reporting can happen only if there is a continuous flow of information between the issuer and the public, ensuring the legitimacy of operations. In most cases, external verifiers enter the process via formal second-party opinions.
- Eligibility criteria: GSS principles often provide high-level sectoral categories for eligible green and social projects towards which the proceeds of bonds are directed, primarily based on internally developed or existing taxonomies for eligibility evaluation. Principles and guidelines sometimes also refer to other parties that provide complementary definitions, standards and taxonomies for determining the environmental and social sustainability of projects. This accounts for both the diversity of current views on sustainable finance and the ongoing development in the understanding of environmental and social issues and consequences.

34. In general, GSS bond principles promote a contextual and flexible approach to identifying green and social activities that can contribute to sustainability goals of issuers and investors. Importantly, their efficacy depends upon the degree of rigorousness and transparency of the framework developed by issuers in accordance with the standards. Therefore, second-party opinion providers, external verifiers, and use-of-proceeds and impact reporting and verification play a crucial role. In fact, they allow GSS principles and guidance to be correctly implemented and to help issuers in delivering forecasted impact and reaching stated sustainability goals. In general, availability of post-issuance reporting is widespread and increasing in quality, mainly thanks to favourable conditions of an expanding market and increasing guidance on reporting practices. Nonetheless, even though both use-of-proceeds and impact reporting are dependent upon issuer nature, deal size and regional market maturity (Climate Bonds Initiative, 2021^[10]), use-of-proceeds reporting is more common and standardised than impact reporting and verification.

2.2 Main private sector guidance

35. The following section outlines the main private sector guidance for GSS bonds issuance. Even though there are others available in the market, the guidance mentioned here act as blueprints for other private sector guidelines that may be developed internationally or regionally, and for specific issuers or market segments. Instances of these derived standards include, but are not limited to, the ASEAN Green and Social Bond Standards, the Green and Social Loan Principles, and many other sectoral standards.

2.2.1 ICMA sustainable finance Principles and Guidelines³

36. Since 2014, the International Capital Markets Association (ICMA) has been at the forefront of market-based guidance for sustainable finance and sustainable bonds issuance. It has done so by publishing recommendations and guidelines aimed at setting best practices for issuers that want to raise capital through use-of-proceeds or sustainability-linked debt instruments.

³ Detailed information on ICMA Principles and Guidelines is provided in Annex A.1.

37. Focusing on use-of-proceeds bonds, ICMA has developed Green and Social Bond Principles and Sustainability Bond Guidelines, on top of extensive documentation on impact reporting, eligible project categories, mapping to existing frameworks and relation with taxonomies and nomenclatures⁴.

38. All types of sustainable bonds issuers have embraced the ICMA voluntary standards, which in 2020 covered 97% of sustainable bonds issuance worldwide (ICMA, 2021^[11]). This is by far the most utilised private sector standard in sustainable finance, likely because of its holistic approach that addresses multiple aspects of sustainable bonds issuance and climate transition strategic development, while also providing a high degree of comparability with other market-based taxonomies and standards, and, in some cases, national and supranational legal frameworks. Moreover, ICMA guidance is often the base for the development of other private sector standards for GSS bonds issuance, such as the ASEAN Green and Social Bond Standards, which contain the provisions of ICMA Principles, as well as specific guidance on how such principles are to be applied across ASEAN countries (Asian Capital Market Forum, 2018^[12]).

39. The ICMA Green Bond Principles (GBP), first published in 2014, focus on supporting bond issuers in financing environmentally sustainable projects that foster a net-zero emissions economy by providing transparent green credentials. Use-of-proceeds, impact reporting and external verification are at the core of GBP-aligned issuance and ensure full transparency throughout the lifecycle of the bond and the financed projects. Within this framework, green bonds are defined as any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible green projects, and which are aligned with the four core components of the GBP (ICMA, 2021^[13]).

40. The ICMA Social Bond Principles (SBP), whose first version was published in 2017, have a similar structure, but are aimed at supporting issuers in financing socially sound and sustainable projects that achieve greater social benefits. Core components and distinctive general features, such as transparency and external review, are the same of the GBP, as well as the underlying rationale, with respect to the use of existing taxonomies and the development of sustainability frameworks. Within the SBP framework, social bonds are any type of bond instrument where the proceeds, or an equivalent amount, will be exclusively applied to finance or re-finance in part or in full new and/or existing eligible social projects, and which are aligned with the four core components of the SBP (ICMA, 2021^[14]).

41. Reflecting the rise of a market share of bonds that comply with both the Green and Social Bond Principles, ICMA has developed Sustainability Bond Guidance that complements both sets of Principles in sustainable bonds issuance. Sustainability bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance a combination of both green and social projects. Sustainability bonds are aligned with the four core components of both the GBP and SBP (ICMA, 2021^[15]).

42. As specific social projects may also have environmental co-benefits, and vice versa for green projects, the classification of a bond as a green bond, social bond, or sustainability bond should be determined by the issuer based on its primary objectives for the underlying projects.

43. A final note that applies to all ICMA Principles and Guidelines pertains to the so-called “SDG Bonds”, and in general sustainability-themed bonds. Since such bonds may not fully align to the four core components of the Principles, investors will need to be informed accordingly, so as not imply they have GBP or SBP features. Nonetheless, issuers of these bonds are encouraged to adopt, when feasible, the relevant best practices outlined by the Principles, which ICMA has mapped to SDGs to provide common financing objectives and to align future issues of SDGs-aligned bonds with the Principles (ICMA, 2022^[16]).

⁴ Detailed information on ICMA Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines is outlined in Annex A.1.

2.2.2 Climate Bonds Initiative Climate Bonds Standard and Certification⁵

44. The other main private sector guidance for sustainable finance issuance is the Climate Bonds Standard and Certification developed by the Climate Bonds Initiative (CBI), an international not-for-profit organisation founded in 2010 to promote investments that help in fostering a low-carbon and climate-resilient global economy in accordance with the goals of the Paris Agreement.

45. While ICMA Principles and Guidelines refer to all classes of sustainable bonds, the CBI Standard is focused on green bonds, green loans and green debt instruments issuance. Bonds certified by the Climate Bonds Standard represent about 20% of global green bond market volumes, as of 2021 (Climate Bonds Initiative, 2021^[17]). Social and sustainability bond guidance is currently under development by CBI.

46. Nevertheless, the process of the Climate Bonds Standard and Certification is similar to the one employed by the ICMA Green Bond Principles, as well as the required disclosure and reporting practices for issuers. This similarity is represented also by the mention of compliance with the Green Bond Principles in the CBI Standard guidance.

47. The CBI architecture relies on fundamental pillars, establishing the ground for the robustness, flexibility and effectiveness of the certification. The method differs from the one outlined by ICMA, as the CBI Certification is achieved through a process that goes first through pre-issuance requirements, centred around use-of-proceeds, projects selection and proceeds management, and assessed by an approved external verifier; then the issuance of the bond, using the Certified Climate Bond mark; and finally continuous verification through post-issuance requirements, still structured around core components similar to the ones employed by ICMA.

48. What differentiates CBI from ICMA is that, while ICMA encourages the use of existing taxonomies and project eligibility criteria to implement frameworks and select projects, CBI has developed both a taxonomy and a set of sector eligibility criteria to assess eligibility of projects to be financed by the proceeds of green bonds, founding such criteria on science-based guidance on sustainability. Such features make the CBI Standard more stringent than ICMA Principles and Guidelines, as issuers have less flexibility in developing a tailored framework for their GSS bonds. This frequently means that issuers opt for broader standards, since this allows them to more easily develop debt instruments in accordance with their needs. The difference between the market coverage of the two sets of guidance exemplifies such a preference.

49. Regardless of their differences, these two instances of private sector guidance are the most frequently employed guidelines for GSS bonds issuance worldwide, irrespective of the nature of the issuer or the type of financed projects. They are relatively comparable and can help in achieving a market-wide degree of standards harmonisation for the benefit of all market participants.

50. It is debatable how to achieve an optimal level of harmonisation among standards, and most importantly an outcome that improves market conditions for issuance and that maximises volumes. Currently, ICMA Principles cover almost the whole market, while the CBI Standard is employed by issuers that can comply with very detailed requirements. Steps could be taken in the direction of increasing the requirements in some areas to create optional specificity for the more general social bonds guidance, trying to strike a balance between compatibility with a large pool of issuers and depth of screening criteria. In all cases, additional standards and certifications should be developed for social bonds, as, to date, there exist no such guidance comparable to the Climate Bonds Initiative Climate Bonds Standard and Certification for green bonds.

51. In relation to taxonomies, which either accompany the standards or are internally developed by the GSS bond issuer, a higher degree of harmonisation and interoperability among different green or social taxonomies would improve market integration and facilitate cross-border investment in GSS bonds.

⁵ Detailed information on Climate Bonds Initiative Standards and Certification is outlined in Annex A.2.

2.3 Identification of infrastructure projects for GSS private sector guidance

52. Sustainable infrastructure is a critical sector for the achievement of the Paris Agreement goals, greenhouse gas emissions reduction above all. However, there remains a lack of identifiable, investment-ready and bankable projects. Tackling such issue is crucial for global sustainable development, since infrastructure can be at the core of various projects that receive funding through GSS bonds issuance, because, by nature, it covers multiple eligible project categories in terms of applicability of labels.

53. Nonetheless, when dealing with infrastructure, the definition becomes central, as there is no internationally recognised definition for infrastructure that could be applied, for instance, for the purpose of data collection (OECD, 2023^[18]), and often available definitions don't mention the economic sectors that infrastructure comprises. This results in a lack of understanding of what types of assets and projects qualify for financing.

54. The OECD Working Party on National Accounts, and the EDHECinfra Infrastructure Company Classification Standard (TICCS) provide a definition of infrastructure and a classification of interested sectors. The former defines infrastructure as the “set of fundamental facilities and systems that support the provision of goods and services essential to enable, sustain, or enhance societal living conditions and protect the surrounding” (OECD Working Party on National Accounts, 2021^[19]), while the latter provides a business risk classification, an industrial classification, a geo-economic classification and a corporate governance classification of infrastructure assets (EDHECinfra, 2018^[20]). The two definitions have some degree of overlap, as they share some economic criteria and data collection implications.

55. Comparing these two definitions, relevant sectors are divided between economic and social infrastructure, the former comprising sectors such as transport, utilities, flood protection and water management and IT and communications, and the latter entailing education, public order and safety, health, culture and recreation.

56. Specifically, criteria used by sustainable finance initiatives, including but not limited to the ICMA Principles and Guidelines and the CBI Standard, share with these definitions many assessment indicators, both environmental and social. Such an overlap helps in targeting the eligible project categories that GSS bond standard setters list out and that include infrastructure projects.

57. As previously mentioned, while ICMA guidance only lists potential eligible project categories that could contribute to the achievement of environmental and social high-level objectives, CBI has developed a taxonomy and a series of sector criteria that provide guidance with respect to sectors and projects that are eligible for green financing. Therefore, the comparability assessments are substantially different⁶.

58. All ICMA Green and Social Bond Principles project categories can entail infrastructure projects, but the actual compatibility at an asset level depends on the issuer's green and social bond framework developed in accordance with the guidance and the chosen green or social taxonomy⁷.

59. The CBI Standard and Taxonomy, on the other hand, allow for a deeper degree of comparability with the benchmarks mentioned above, as they go into the specifics of sector subcategories and asset types. An inclusive⁸ comparison between CBI guidance and infrastructure classifications results in a wide

⁶ Overlapping sector and subsector categories between infrastructure definitions and GSS private sector standards are outlined in detail in Annex A.3.

⁷ Instances of such compatibility are given in Annex C, where actual MDBs green and social bond frameworks and taxonomies are assessed in terms of infrastructure projects presence.

⁸ As explained in the CBI subsection of Annex A.3, the matching between the CBI Taxonomy subsectors and asset types and infrastructure categorisations takes an inclusive approach, by listing CBI assets that are either compatible

applicability of infrastructure to CBI eligible green projects categories, as every subsector present in the CBI Taxonomy entails some infrastructure applications in terms of assets and projects. This means that, in terms of compatibility, sustainable infrastructure projects have substantial scope to receive financing from green bonds issuers, as many eligible projects entail infrastructure aspects.

60. Nonetheless, while there are some sectors in which the infrastructure applicability is established, such as in the fields of renewable energy and transport, there are others, such as information and communication technologies, in which comparability can be further developed.

61. Finally, even though the OECD and TICCS classifications of infrastructure include social infrastructure too, it is not possible to perform a comparison between such class of infrastructure and social bond standards that go deeper than the high-level eligible social project categories provided by ICMA. This is because there exists no private sector guidance for social bonds that has the same level of detail and depth that the one the CBI Standard and Taxonomy reach for green bonds issuance. Thus, the possibility to receive financing from social bonds for infrastructure projects remains dependent upon the specific framework that the issuer develops in compliance with available social bond standards.

2.4 Summary

62. Private sector guidance for green, social and sustainability bonds share structural features that make them an important tool for the issuance of sustainable debt instruments. They have disclosure, standardisation, cost reduction and framework setting benefits not only for issuers implementing them, but for all market participants.

63. Such forms of guidance are voluntary for issuers and provide guidelines for the development of bond-specific and issuer-wide sustainability frameworks, based on transparency, monitoring and impact reporting. Additionally, they are both rigorous, as they entail sector eligibility criteria for financed projects evaluation and selection, and flexible, by allowing for internally developed green and social activities taxonomies, if valid.

64. The impact on sustainability goals that these standards can deliver is conditional upon the correct implementation of transparency and reporting practices by issuers. Post-issuance use-of-proceeds and impact reporting practices are increasingly common and standardised, but are dependent upon various conditions and can be further improved.

65. The two most frequently employed private sector standards for GSS bonds issuance are the ICMA Green and Social Bond Principles and Sustainability Guidelines, and the Climate Bonds Initiative Climate Bond Standard and Certification.

66. The ICMA Principles and Guidelines, on one hand, are structured by four core components that guide the development of sound green and/or social bonds frameworks: use-of-proceeds, process for projects evaluation and selection, management of proceeds, and monitoring and impact reporting. They also allow the issuer to rely on other taxonomies and categorisations for green and/or social activities labelling. ICMA Principles and Guidelines cover almost the entirety of the GSS bonds market, most likely because complying with them allows for a holistic and flexible approach that addresses multiple aspects of sustainable bonds issuance. This flexibility must be balanced by the rigorousness of labelling, evaluation and reporting practices, to ensure that compliance with the standards have material impacts for all the process participants.

to the economic infrastructure classes and sub-classes listed by the OECD National Accounts and TICCS classifications, or applicable in general to the broader definition of infrastructure provided by them.

67. The CBI Standard, on the other hand, pertains to green bonds only, and follows a chronological structure that starts from pre-issuance requirements for the achievement of a pre-issuance certification, and post-issuance requirements for maintaining the certification throughout the outstanding duration of the bond. It is also accompanied by a green eligible activities Taxonomy and a series of quantitative sector specific eligibility criteria for activities that are not automatically compliant with green requirements. The degree of detail and comprehensiveness of this standard implies that compliant issuers must go through a more burdensome process if compared to compliance with ICMA Principles and Guidelines, and this is reflected by the lower share of the market that the Climate Bonds Initiative Certification covers.

68. Various paths lead to the achievement of an optimal level of harmonisation among guidance and of an outcome that improves market conditions for issuance and maximises volumes. These paths can either rely on the integration of flexible principles and guidelines with more detailed eligibility criteria for high-level objectives, sector categories and projects, or account for the coexistence of broader market-wide standards with more technical and highly priced certification schemes for each type of sustainable bonds. As for taxonomies that underpin the standards, a higher degree of harmonisation among issuers would benefit market size and cross-border investment.

69. In all cases, more detailed social bond standards should be developed, to allow for a level playing field among all GSS types of bonds, and thus foster social bonds framework development and increase social bonds issuance and subscription.

70. Sustainable infrastructure projects compatibility with private sector GSS guidance depends upon the degree of depth that the guidance reaches in terms of sector, subsector and asset type categorisation, and on how infrastructure is defined. In this report, infrastructure is defined employing the OECD Working Party on National Accounts and EDHECinfra categorisations.

71. ICMA Green and Social Bond Principles only list high-level project categories that can in theory always cover infrastructure projects. This ultimately depends on the issuer's green and social bonds framework and employed taxonomies, which give a deeper breakdown of sectors, assets and projects that are eligible for financing.

72. The CBI Standard and Taxonomy, on the other hand, can be compared in a more structured way to the considered categorisations thanks to the granularity of the Taxonomy, and such comparison results in a wide overlap between CBI eligible assets and sustainable infrastructure activities. Finally, it is not possible to perform a comparison between social infrastructure and social bond standards that go deeper than the high-level eligible social project categories provided by ICMA, as there is a current lack of such standards, that represent a natural parallel to the CBI Standard and Taxonomy for green bonds.

3 Multilateral Development Banks

GSS bonds issuance

73. The GSS bonds market started to grow well before the publication of ICMA and CBI guidance, as the first green bond issuance dates to 2007, when the European Investment Bank (EIB) issued a Climate Awareness Bond that raised EUR 600 million from investors. From then on, and especially after the publication of private sector standards, the GSS market grew to larger present volumes mentioned in section 1.

74. Even though the nature of GSS bonds issuers is heterogeneous, and shares of the market vary from year to year, MDBs have always been at the forefront of the GSS market. In addition to the EIB inauguration of the green bonds market, there are many other instances of the leading role that MDBs have played in the rise of GSS bonds issuance. For instance, in the green bonds market, MDBs were the sole issuers until 2012 (International Finance Corporation, 2016^[21]), while in the social bonds market, multilateral organisations and non-sovereign financial institutions were the first issuers of social bonds in terms of timing. As for sustainability bonds, MDBs have been driving the recent growth of this market segment, together with corporate issuance.

75. Given these premises, focusing on how MDBs issue and label their GSS bonds is important to better understand the sustainable fixed-income market.

3.1 The role of MDBs in the GSS bonds market

76. From a conceptual point of view, MDBs have played a multifaceted role in the green, social and sustainability bond market.

77. First, MDBs that issue green, social and sustainability bonds can leverage their high credit rating to offer near risk-free investment opportunities to institutional investors, even in non-conventional or newly born investment fields. Moreover, MDBs GSS issuances have additional benefits for issuers, as they tend to be oversubscribed (OECD, 2021^[4]), and also diversify the investor base by attracting more sustainability-minded investors. Due to these reasons, these issuances potentially have high financial gains, which MDBs can transfer to clients, by offering them better lending conditions.

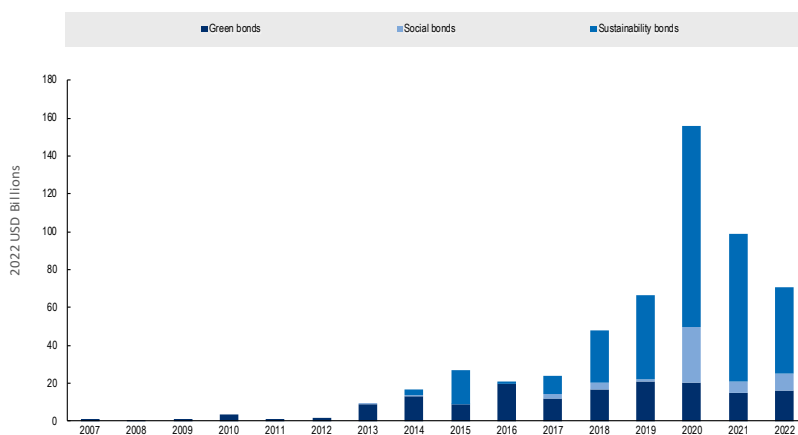
78. Even when MDBs are on the subscribers' side of GSS bonds marketing, they can still play a crucial role for issuers. As anchor investors of GSS bonds, their subscription of a specific bond has positive credibility effects ("market creation") on the issuer, thereby reducing the perceived risk of the issued bond. As guarantors, they can enhance the risk/return profile of specific projects that the GSS bonds are going to finance, by issuing guarantees or providing first loss tranches, and ultimately attracting investors. Finally, they have a double supporting role: they can provide technical assistance to other entities, mostly governments, that want to issue their first GSS bonds, and also support policy action by regulators in the development of national sustainable bond frameworks, as well as in initiatives aimed at developing local capital market infrastructure. This blueprint role is perhaps the most important with respect to MDB-client

countries that seek to enter the GSS bond market on the issuer's side, but still lack adequate expertise and solid frameworks to appropriately do so.

79. GSS bonds issuance by MDBs has grown consistently over the years, while shares of the market has greatly varied mainly because of the different types of issuers entering the market. MDBs now comprise a small share of the green bonds market, dominated by corporates, while they still make up a large fraction of social and sustainability bonds recent issuances, as these two market segments are still in an early stage of development.

80. Volumes confirm the substantial role of MDBs in GSS markets. Figure 3 shows self-reported GSS bonds issuance of multilateral development banks in 2022-adjusted USD billions.

Figure 3. MDBs GSS bonds issuance since 2007



Source: Refinitiv-Eikon and OECD Secretariat.

81. Looking at these figures and at the different roles that MDBs can play in the GSS bonds market, the drive that they had and still have on the direction of the market is evident. On top of contributing to the scale up that the market experienced, they play a central role in making GSS bond issuance and subscription mainstream, especially in the sustainability bonds market segment, for which MDBs are among major issuers in 2021, together with corporates (Figure 2).

82. Even though, as mentioned earlier, MDBs started issuing GSS bonds before any private sector guidance was developed, they were among the first issuers to take up these sets of guidance when they were published. For instance, between 2016 and 2021, 21 MDBs have adopted ICMA Principles and Guidelines in sustainable finance (ICMA_[22]).

83. As the figures show, green bonds are issued more frequently by MDBs than their social counterparts. The main reasons can be attributed to the longer existence of the green bond market compared to social bonds. The prevalence of green bonds may be linked to climate issues being perceived by the market as being more urgent than social ones, as represented by many international initiatives such as the Glasgow Financial Alliance for Net Zero or the Paris Agreement. Moreover, climate related action can be more easily priced if compared to social issues, since, in the climate related action field, there are straightforward metrics and impact indicators, such as reduction of greenhouse gases emission and reduction of the risk of adverse impact of current climate conditions on economic activities.

84. Nonetheless, general and MDBs' social bond issuance increased rapidly during the pandemic, as a result of emergency needs for economic support in distressed times, and is now consolidating its presence in GSS bonds issuers balance sheets regardless of Covid-19. This will perhaps result in issuers

strengthening their social bond framework to facilitate increased volumes of social bonds, and private sector standards providers updating their principles and guidelines, or publishing new ones, to reflect and in part drive the shift of the market towards social objectives.

3.2 MDBs compliance with private sector guidance for GSS bond issuance

85. This section provides an overview of the manner in which MDBs are complying with private sector GSS bond guidance. More details of single MDBs' compliance with private sector guidance can be found in Annex B.

86. In general, MDBs have adapted their issuance of GSS bonds to internal and client needs, shaping the related frameworks in accordance with the selected standards. ICMA Principles and Guidelines, which enable more flexibility on the classification and evaluation of eligible projects, have more frequently served this purpose. This has resulted in comparable but slightly different green and social bond frameworks across MDBs.

87. Because of this, there is scope for harmonisation of green and social bonds frameworks across issuers, in terms of both structure and content. This would facilitate investors by increasing comparability of financed projects.

88. Practically, such harmonisation could be operationalised by adding specific requirements to provide detailed taxonomies for projects evaluation and selection, and ensuring better reporting practices with respect to use-of-proceeds and impact.

89. Additionally, social bond frameworks are not as frequently utilized as their green counterparts across issuers. They also lack a sufficient level of comparability, reference to common taxonomies, depth of eligible projects categories and, as a general consequence, associated issuance volumes.

90. By implementing these actions, MDBs can once again lead the way in the GSS bonds market, ensuring that all market segments develop at adequate rates, and that sustainable development is achieved in all its aspects.

Box 1. MDBs joint actions in the sustainable finance landscape

In the context of harmonising standards and taxonomies, coordination can also take the form of joint actions across MDBs, for instance via pooled investment vehicles providing anchor investments in GSS bonds. Coordinated initiatives, rather than isolated intervention by single MDBs, could further drive the market and incentivize investors to subscribe GSS issuances.

One relevant action is the Global Green Bond Initiative, that the European Commission and a consortium of EU development finance institutions (DFIs) under the lead of the EIB are going to launch in 2023 to promote the development of green bonds markets in developing countries. The Initiative will support partner countries to mobilise capital from institutional investors to finance environmental projects through green bonds, increase and diversify access to private capital, and develop credible green bond frameworks. This is done by building issuers' capacity and know-how at the local level, and by crowding-in private investors by providing confidence and de-risking mechanisms, through a Green Bond investment vehicle that pools resources of EU DFIs backed by a European Fund for Sustainable Development Plus guarantee.

In the broader context of sustainable finance, meeting the goals of the Paris Agreement and implementing the Sustainable Development Goals in investment decisions has always been a top priority for institutional investors, and for development banks in particular.

In 2020, 450 Public Development Banks, including the majority of the MDBs analysed in this report, issued a Joint Declaration, in the context of the Finance in Common Summit, committing to “collectively contributing to the preparation and implementation of common methodologies for the characterization of SDGs- and Paris Agreement-aligned investment” (Finance in Common, 2020^[23]). This was an important step towards the shift to mainstream finance that climate finance experienced, including GSS bonds financing.

3.2.1 European Investment Bank

91. The European Investment Bank (EIB) is one of the pioneers in the GSS bonds market, as it was the first market player to issue a green bond in 2007. The instrument was an equity-linked Climate Awareness Bond (CAB) conceived to test “prospectus passporting” in all domestic markets of the EU and, most importantly, to implement the use-of-proceeds feature that would imply “accountability in the future disbursement in the fields of renewable energy and energy efficiency and precise definition of the types of projects to be included in this category” (European Investment Bank, 2023^[24]).

92. More than 15 years later, the EIB is still one of the main issuers of green and sustainability bonds, due to continuous development of frameworks and constant investors’ appetite for these bonds. To date, it has issued EUR 68.7 billion of Climate Awareness Bonds (EUR 58.7 billion outstanding) in 23 different currencies and EUR 14.8 billion of Sustainability Awareness Bonds (SAB), all outstanding, in eight currencies.

93. Since 2014, the EIB’s issuance of CABs and SABs has been carried out adopting ICMA Green and Social Bond Principles and Sustainability Bond Guidelines⁹.

94. Reporting is carried out both on disbursements and by sustainability objectives, and since proceeds and disbursements only have a notional link, investor risk is left unchanged, while potential distribution is maximised. As for environmental and social objectives, selected objectives and activities are reviewed externally for verification. All CABs’ and SABs’ substantive components are audited with Reasonable Assurance (ISAE 3000), in accordance with the external review component of the ICMA Principles and Guidelines.

95. ICMA Principles don’t provide issuers with a specific taxonomy for green and social project categorisation. Therefore, for green bonds, and specifically for climate change mitigation and adaptation eligible projects, the EIB participates since 2014 to the Joint Climate Finance Tracking Group, a MDBs platform established in 2014 for the development of the Common Principles for Climate Mitigation Finance Tracking (Joint Climate Finance Tracking Group, 2021^[25]) and the Common Principles for Climate Adaptation Finance Tracking (Joint Climate Finance Tracking Group, 2021^[26]). These taxonomies comprise a set of definitions and guidelines, and a list of eligible activities that allow for consistent accounting and reporting of financial flows for climate change mitigation and adaptation finance¹⁰. The Common Principles have been subscribed by major MDBs across the world and by International Development Finance Club (IDFC) member banks.

96. Finally, a key feature of CABs and SABs is that, as the EIB is closely tied with the European Union, compliance with ICMA Principles and Guidelines was progressively integrated with gradual alignment with

⁹ Alignment is periodically reported by the EIB Projects and Finance Directorates, and a summary of key points is outlined in Annex B.1. The latest CABs and SABs framework were published in 2023.

¹⁰ Specifics on project categories and compatibility with infrastructure assets are provided in Annex C for all the analysed MDBs, as they are all signatories of these principles. As for social bonds, there is no such common taxonomy available, and eligible projects categories and assets employed by single MDBs are listed with an inclusive rationale, both in general terms and with an infrastructure focus.

the EU Taxonomy Regulation and the EU Green Bond Standards, currently under development. As mentioned in section 1, legislative frameworks for sustainable bonds are not the focus of this report, but it is nonetheless important to briefly outline how the EIB has managed to achieve compliance with both private sector and legislative standards.

97. As mentioned in the CAB and SAB Frameworks, proceeds are allocated only to activities in line with evolving EU legislation on sustainable finance, which relies upon the principles of substantial contribution and do no significant harm (DNSH) to specific sustainability objectives, and employs minimum safeguards principles as well¹¹.

3.2.2 World Bank - International Bank for Reconstruction and Development (IBRD)

98. The World Bank (IBRD), in partnership with the Skandinaviska Enskilda Banken (SEB), launched its first green bond in 2008, issuing SKr 3.35 billion (approximately USD 440 million) to respond to the demand from Scandinavian pension funds seeking to support climate-focused projects through a fixed-income product, and, more generally, to offer an attractive product to investors interested in sustainable and responsible investing (SRI) and in innovative climate finance. Since then, the World Bank has issued USD 17.7 billion in 330 green bond transactions in 27 currencies (World Bank_[27]).

99. Similar to the EIB, the World Bank has adopted the ICMA Green Bond Principles since 2014, adapting its green bond issuance practices to the Principles' requirements (World Bank, 2022_[28])¹².

100. Moreover, the World Bank, in accordance with its group strategy to end extreme poverty and promote shared prosperity, has a set of goals that are aligned with the global community's efforts to reach the SDGs by 2030. As of today, all World Bank bonds finance sustainable development activities designed to achieve positive environmental and social impact (World Bank, 2021_[29]). Therefore, all its bonds are labelled "Sustainable Development Bonds", including green bonds. Since 2017, such bonds are aligned with the ICMA Sustainability Bonds Guidelines.

3.2.3 International Finance Corporation

101. The International Finance Corporation (IFC), a multilateral development bank focused on the private sector in developing economies and part of the World Bank Group, initially issued its first green bond in 2010 with a privately placed transaction of USD 200 million. As the demand of investors seeking climate-related investments with a fixed-income increased, the IFC issued larger size bonds, culminating in two USD 1 billion green bonds issued in 2013, the largest green bonds in the market at the time. To date, the IFC has issued over 178 green bonds, raising USD 11.6 billion outstanding in 20 currencies (International Finance Corporation, 2023_[30]).

¹¹ CABs and SABs are aligned with the logic of the EU Taxonomy Regulation and the proposed EU Green Bonds Standards, i.e., they're "structured to include criteria or processes for the assessment of substantial contribution, no significant harm and minimum social safeguards" (European Investment Bank, 2023_[46]). EIB's asset allocations were aligned with the TEG's proposal and already partially aligned with the EU Taxonomy's Delegated Act with respect to the substantial contribution principle. Moreover, with respect to DNSH and minimum safeguards, EIB Environmental and Social Standards were compared to the provisions of Articles 17 and 18 of the EU Taxonomy Regulation, establishing a platform for further improvement over time.

¹² Detailed information on how the World Bank issuance of GSS bonds complies with ICMA Principles and Guidelines is given in Annex B.2.

102. Being part of the World Bank Group, the IFC have also adopted the ICMA Green Bond Principles for guiding green bonds issuance (International Finance Corporation, 2022^[31])¹³.

103. The IFC has also been one of the first MDBs to take up social bond issuance with its Social Bond Program launched in 2017. To date, the IFC has issued 73 social bonds, raising USD 4.9 billion in six different currencies. The program entails investments that achieve specific SDGs through projects from the IFC's Banking on Women and Inclusive Business programs. In issuing these bonds, the IFC has adopted ICMA Social Bond Principles, as described in Annex B.3.

3.2.4 Asian Development Bank

104. The Asian Development Bank (ADB) launched its Green Bonds Program in 2015, reflecting the interest that Asian policy makers and financial institutions have towards green and sustainability bonds. Up to date, the ADB has issued USD 10 billion in green bond issuance, with USD 1.7 billion in 2021 only (Asian Development Bank, 2022^[32]).

105. Asia is one of the regions in which the proliferation of national green bonds standards is happening. For instance, the ASEAN Capital Markets Forum has developed a set of Green Bonds Standards in collaboration with ICMA, that serves as a benchmark for GSS bond issuers in South-East Asia.

106. The ADB applies ICMA Green Bond Principles for its Green and Blue Bonds Framework, outlined in Annex B.4, supporting its developing member countries that seek to mitigate greenhouse gases emissions and adapt to the consequences of climate change, whilst also delivering environmentally sustainable growth (Asian Development Bank, 2022^[33]).

107. The ADB also has a Theme Bonds for sustainable development Program, whose funded projects are aligned with the SDGs (Asian Development Bank, 2022^[34]), and which raised almost USD 8 billion up to date. Even though the majority of these bonds are use-of-proceeds, the ADB has not indicated any private sector standards or principles with which the Program complies with. It has nonetheless published a dedicated framework that regulates the issuance of such bonds, as summarized in Annex B.4.2.

3.2.5 African Development Bank

108. The African Development Bank (AfDB) started issuing green and social bonds in 2013 and 2017 respectively, being part of the Bank's Ten-Year Strategy of supporting African countries' transition to green growth and promoting inclusive growth. To date, the AfDB has issued USD 2.7 billion of green bonds through ten operations in three different currencies, and USD 6.5 billion of social bonds committed through ten operations in five currencies (African Development Bank, 2021^[35]).

109. In operationalizing its strategy, the AfDB is focusing on five priority areas, referred to as the "High 5s", which identify structural areas of improvement for Africa (African Development Bank, 2017^[36]). To achieve these goals, green and social bonds play a crucial role. To ensure adequate quality and volumes, the AfDB has aligned with ICMA Green and Social Bond Principles (African Development Bank, 2013^[37]). Details of the AfDB alignment with ICMA Principles are given in Annex B.5.

3.2.6 Development Bank of Latin America

110. The Development Bank of Latin America (CAF) is the most recent GSS bonds issuer among MDBs, as it started participating in the market from 2019. Since then, it has issued more than USD 1.2

¹³ The framework and the related practices that resulted from complying with the Principles are described in Annex B.3 of this report.

billion in green bonds, and almost USD 1 billion in social bonds, whose issuance started in 2020, in response to the Covid-19 outbreak (Development Bank of Latin America, 2020^[38]).

111. The CAF has adopted ICMA Principles and Guidelines to govern green and social bond issuance and to help support the national commitments undertaken by CAF country members in the context of the Paris Climate Agreement, by tackling selected SDGs through financial resources mobilization (Development Bank of Latin America, 2019^[39]). Specifics of the CAF alignment to ICMA guidance are reported in Annex B.6.

112. The CAF is among the Latin-American green bond issuers whose GSS issuances have been included in the Inter-American Development Bank Green Bond Transparency Platform (Inter-American Development Bank^[40]), an initiative that aims at promoting transparency in the green bonds market in Latin America and the Caribbean (LAC) through the harmonization and standardization of green bond use-of-proceeds and impact reporting, and the facilitation of granular, credible and comparable data for evidence-based decisions. The Climate Bonds Initiative is among the market actors that collaborated to develop the platform, even though the bonds mapped by the platform don't necessarily comply to their standards (nor to ICMA ones). The platform, whose basic principles are completeness, transparency, traceability and comparability, covers USD 41.7 billion issued through 218 green bonds from 18 active countries, that make use of several standards and taxonomies for developing green bond frameworks.

3.2.7 Asian Infrastructure Investment Bank

113. The Asian Infrastructure Investment Bank (AIIB) is the only MDB with an infrastructure focus. Its mandate is based on two main pillars: foster sustainable economic development, create wealth and improve infrastructure connectivity in Asia by investing in infrastructure and other productive sectors; and promote regional cooperation and partnership in addressing development challenges by working in close collaboration with other multilateral and bilateral development institutions.

114. The AIIB has set a target of ensuring that 50 percent of overall approved financing by 2025 is directed toward climate finance.

115. In 2021, the AIIB launched a Sustainable Development Bond Framework that applies to all AIIB's instruments and presents the policies, strategies, processes, and mechanisms that govern AIIB's sustainable financing activities - including supporting members' efforts in meeting their commitments under the Paris Agreement on climate change and to achieve their targets under the SDGs (Asian Infrastructure Investment Bank, 2021^[41]). The AIIB Environmental and Social Framework integrates international good practices on environmental and social planning, and risk and impact management into the decision-making process of issuers and investors, which is based on four core components structure, even though no mention of compliance with ICMA or CBI principles and standards is made. Details on the Sustainable Development Bond Framework are provided in Annex B.7.

116. The AIIB has also developed, in partnership with Amundi and the Climate Bonds Initiative, the Climate Change Investment Framework, that translates the key objectives of the Paris Agreement into fundamental metrics to assess an issuer's level of alignment with climate change mitigation, adaptation and low-carbon transition objectives on a strategic level, and beyond labelled use-of-proceeds GSS bonds. This is possible in the context of sustainability-linked bonds, that integrate sustainability considerations through key performance indicators and ensure that the issuer's degree of exposure to sustainability risks and opportunities related to climate change is assessed at the balance-sheet level (Asian Infrastructure Investment Bank; Amundi, 2022^[42]).

3.2.8 Council of Europe Development Bank

117. The Council of Europe Development Bank (CEB) issued its first EUR 500 million social inclusion bond (SIB) in 2017, which expanded to 34% of its 2022 general funding programme, with more than EUR

8 billion issued. In terms of denomination, the CEB has issued USD bonds since 2020, and SEK as well as CAD bonds since 2023. Since 2020, SIBs were issued specifically in response to COVID-19 and Ukraine refugee crises, in line with the CEB's social mandate (Council of Europe Development Bank, 2023^[43]).

118. The CEB's social bond issuance is compliant with ICMA Social Bond Principles and, as a founding member of the ICMA Social Bond Working Group and its sub-groups, the CEB implements the ICMA's Harmonised Framework for Impact Reporting for Social Bonds. Moreover, in 2022 the CEB decided to update the SIB Framework moving to a portfolio approach in the management of the proceeds (Council of Europe Development Bank, 2022^[44]). Details of compliance with the SBP are given in Annex B.8.

3.3 Infrastructure projects in MDBs GSS frameworks and taxonomies

119. All MDBs mentioned above employ private sector guidance to develop a framework for GSS bond issuance. What these standards give to MDBs, and in general to issuers, is a basis to build operations and strategies in accordance with the two-fold objective of raising capital and achieving sustainable development goals. For MDBs specifically, GSS bonds standards serve as a tool to better link their mandates to debt instruments, and as a device to further establish their leading role in the sustainable capital market, thanks to guidance and practices outlined in green and social bond frameworks.

120. The green and/or social bond frameworks that issuers develop in accordance with the standards must comprehend a taxonomy that contains eligibility criteria that issuers use to select projects across economic sectors. In this context, it is insightful to assess how each MDB includes infrastructure into its own sector eligibility criteria for projects evaluation and selection. This gives a better understanding of how sustainable infrastructure projects can exploit their sustainability features to access funding coming from GSS bonds issuance by MDBs.

121. As mentioned above, all the MDBs analysed in this report are aligned to the ICMA Green and Social Bond Principles, and most are also signatories of the Common Principles for Climate Mitigation and Adaptation Finance Tracking, that serves as a taxonomy for green bonds eligible projects evaluation and selection¹⁴. Therefore, assessing infrastructure project compatibility with MDBs' GSS bonds issuance will translate into a comparison between the infrastructure definition presented in section 2, and the analysed MDBs taxonomies, that, for green bonds, are represented by the Common Principles for Climate Mitigation and Adaptation Finance Tracking¹⁵.

122. As for green bonds, the comprehensiveness of MDBs' green bond frameworks mentioned above and outlined in Annex B, together with the granularity of the Common Principles for Climate Mitigation and Adaptation described in Annex C, allows for a detailed comparison between listed eligible projects and infrastructure.

123. The Common Principles for Climate Mitigation and Adaptation are structured in different ways, since, while climate change mitigation activities are listed by sector and category, and provide applicable screening criteria and general guidance, the climate change adaptation part is currently under review, and only comprehends a process-based approach for the identification of relevant activities, and instances of potential activities. Nonetheless, it is possible to carry out an analysis of this taxonomy to assess the level of compatibility with infrastructure projects.

¹⁴ The Common Principles structure and content is outlined in Annex C.1.

¹⁵ Detailed reference to the comparability between MDBs taxonomies and infrastructure projects is given in Annex C.2.

124. Such an assessment is carried out by listing eligible activities compatible with infrastructure assets relating to the classes and sub-classes listed by the OECD National Accounts and TICCS classifications mentioned in section 2.3, or that are linked to these broader definition of infrastructure.

125. As outlined in Annex C.1, both climate change mitigation and adaptation activities have several infrastructure applications, with different degrees of presence across economic sectors. Even though the result seems similar to the comparison between infrastructure categorisation and the CBI Taxonomy, the Common Principles don't provide asset types and asset specifics, that give a precise idea of the selected type of economic asset in the context of an activity. Therefore, it is difficult to highlight the subcategories that infrastructure projects can be linked to, as the broad definition of infrastructure makes this asset class applicable to all sectors.

126. As for social bonds, it is not possible to carry out a similar comparison, because of the lack of internationally agreed-upon social project taxonomies, across all types of GSS bonds issuers. Therefore, MDBs' social bond framework are the only benchmarks against which to assess compatibility with sustainable infrastructure projects.

127. As outlined in detail in Annex C.2, the definitions of infrastructure employed for social infrastructure, and, in general, social projects that enable the access to basic services and systems, pertain to enabling infrastructure and facilities for target populations. Thus, even though not as granular as the comparison between green taxonomies, the compatibility assessment of infrastructure projects with social bond frameworks still brings some results, in the form of broad applicability of sustainable infrastructure projects and possibility to receive funding depending on the MDBs' framework and operations.

3.4 Summary

128. MDBs have a leading role in the GSS bond market, both as issuers, promoting GSS issuance with low risk profiles, and as supporting or enabling actors, providing credibility to instruments they subscribe and supporting issuers in the development of GSS bond framework and during the actual issuance of the instrument. Well before the publication of any private sector guidance for GSS bond issuance, the first green bond was issued by the EIB in 2007, and MDBs remained the sole issuers of such bonds until 2012. As for other types of bonds, they remain at the forefront of social and sustainability bonds issuance. Once main sets of private sector guidance were published by ICMA and CBI, several MDBs have employed them to guide their GSS bond issuance in a systematic albeit flexible way.

129. MDBs have taken up private sector guidance in many ways, adapting their issuance framework to internal and client needs. This has historically been easier with the ICMA Principles and Guidelines, enabling more flexibility on the classification and evaluation of eligible projects.

130. Different MDBs adopting flexible guidance has resulted in comparable but slightly different green and social bond frameworks, that sometimes closely follow ICMA guidance and wording, and sometimes reflect the MDB's specific needs and strategic priorities. What all these frameworks have in common is the development of a strong architecture for the financing of green and/or social projects, based on common principles for activities classification and tracking, and that contributes to the achievement of sustainability goals, while also raising capital and consolidating the MDBs' role in the market by providing guidance and implementing best practices.

131. Nonetheless, there remains scope for harmonisation of green and social bonds frameworks across issuers, in terms of both structure and content, to facilitate investors and increase comparability of financed projects. Such harmonisation could mean optional additional requirements to provide detailed taxonomies for projects evaluation and selection, and better reporting practices with respect to use-of-proceeds and impact. While many MDBs have developed such structures for their GSS bonds issuance, others can further exploit common features and available guidance to align to leading issuers.

132. Additionally, social bond frameworks lag behind their green counterparts in terms of frequency across issuers, comparability, reference to common taxonomies, depth of eligible projects categories and, as a general consequence, associated issuance volumes. MDBs can once again lead the way in implementing these improvements in the GSS bonds market, to ensure that all market segments develop at adequate rates, and that sustainable development is achieved in all its aspects.

133. Finally, understanding MDBs' sector eligibility criteria for projects that can access GSS funding could better clarify the types of infrastructure projects that qualify for financing.

134. On one hand, the comparison between the infrastructure definitions used so far and the Common Principles for Climate Mitigation and Adaptation Finance Tracking used by analysed MDBs as a green projects taxonomy highlights general compatibilities between infrastructure projects and green projects taxonomies, with variation across economic sectors and activities.

135. On the other hand, given the lack of internationally adopted social project taxonomies, infrastructure classifications can, in this context, be assessed against single MDBs social bond frameworks. The latter, even though not standardized and comprehensive as their green counterparts, still account for eligible projects macro-categories in which infrastructure projects with social impacts can be categorized and therefore find financing.

4 Conclusions

136. The sustainable bonds market has grown rapidly during the last 15 years, as substantial volumes of bonds were issued in the context of achieving various sustainability goals set nationally and internationally. This was possible because of GSS bonds features: on top on enabling the achievement of the issuers' sustainable development goals, they also raise capital at efficient costs, as the higher issuance costs are compensated by the so-called "greenium" and by reputational effects, which usually result in oversubscription of such instruments.

137. Sustainable bonds market participants focus mainly on use-of-proceeds GSS bonds, which raise funds for projects that have green and/or social impacts. This differentiates GSS bonds from conventional sustainability-linked bonds, as proceeds are not used for general purposes. In facts, GSS financing is thematic, as it is conditional to the creation of specific impacts of funded projects belonging to various sectors of the economy.

138. A key feature of the GSS market is the presence of private sector guidance that provides issuers with the necessary steps to ensure that issued bonds have a sufficient degree of compliance with green and social best practices and minimum standards. This allows market participants to benefit from increased harmonisation, lower issuance costs, additional guidance and inputs for frameworks setting. Thus, from a policy making point of view, it is beneficial to foster the development and mutual integration of such initiatives, to give the sustainable capital market solid grounds for debt instruments issuance.

139. GSS private sector guidance is voluntary for issuers and provide advice for the development of bond-specific and issuer-wide sustainability frameworks, based on transparency, monitoring and impact reporting. Additionally, they entail sector eligibility criteria for financed projects evaluation and selection, while also allowing for internally developed green and social activities taxonomies, if valid. This gives them both rigorousness and flexibility, which is crucial for combining high compliance rates and materiality of sustainable development impacts.

140. Specifically, the impact on sustainability goals that these standards can deliver is conditional on the implementation of transparency and reporting practices by issuers. Post-issuance use-of-proceeds and impact reporting practices are increasingly common and standardised, but are dependent upon various conditions and can be further improved. Thus, policies should be directed towards the promotion of such disclosure practices both within and outside voluntary frameworks, to ensure that sustainable development impacts are indeed achieved and rewarded.

141. ICMA and CBI are the main developers of private sector guidance for GSS bond issuance. Their guidance is comparable, as they both employ high-level environmental and social objectives and map them to eligible project categories, and ensure transparency of proceeds management. Also, both focus on monitoring, external verification and impact reporting. Nonetheless, they differ in the structure, and in the reliance on internally developed taxonomies for green and social projects.

142. This results in different degrees of compliance feasibility for issuers and, ultimately, in market coverage differences. ICMA Principles and Guidelines cover almost the entirety of the GSS bonds market, most likely because complying with such guidance allows for a holistic and flexible approach that addresses multiple aspects of sustainable bonds issuance, that is balanced by practicalities to ensure impact. The CBI Standard, on the other hand, covers green bonds only, and its degree of detail and

comprehensiveness implies that compliant issuers must go through a more burdensome process if compared to compliance with ICMA Principles and Guidelines. This is reflected by the lower share of the market of the Climate Bonds Initiative Certification Mark.

143. The achievement of an optimal level of harmonisation among standards, and an outcome that both improves market conditions for issuance and maximises volumes, can be achieved in many ways. Such harmonisation could mean optional additional requirements to provide detailed taxonomies for projects evaluation and selection, and better reporting practices with respect to use-of-proceeds and impact. Policy action should go towards facilitating the development of other social bond standards, to allow for a level playing field among all GSS types of bonds, and thus foster social bonds framework development and increase social bonds issuance and subscription. Additionally, increasing interoperability among green or social taxonomies would reduce market fragmentation and foster international investment in GSS bonds.

144. Infrastructure projects as defined by the OECD Working Party on National Accounts and the TICCS EDHECinfra categorisations have different degrees of compatibility with private sector GSS guidance. On one hand, only a broad comparison is possible with ICMA green and social eligible project categories, as they leave to the issuer the task of developing more granular taxonomies for projects evaluation and selection. On the other hand, green infrastructure projects are eligible for many CBI Taxonomy subsectors and asset types, as almost all listed sectors are included as mapped activities. It is not possible to perform a similar granular comparison between social infrastructure and social bond standards, as there are no instances of guidance that go beyond the eligible social project categories provided by ICMA Social Bond Principles.

145. MDBs have been the first issuers of GSS bonds, and have a leading role in setting the path of this market. As issuers, they were the first to promote consistent and substantial GSS issuance, scaling up the green bonds market and leading the way in social bonds issuance. They also contributed to the scaling up of the market as bonds subscribers, providing higher credibility to issuances, and enabling actors, by supporting issuers in developing of GSS frameworks.

146. MDBs have employed private sector guidance to guide their GSS bonds issuance in a systematic albeit flexible way. Historically, MDBs preferred taking up ICMA standards, as they enable for more flexibility on the classification and evaluation of eligible projects, by suggesting issuers to develop internal or take up existing taxonomies. This has resulted in comparable but slightly different green and social bond frameworks, that sometimes closely follow ICMA guidance and wording, and sometimes reflect the MDBs' specific needs and strategic priorities. In the context of promoting GSS bond issuance and the general scaling up of the sustainable capital market, greater harmonisation of the taxonomies employed by MDBs for GSS bonds could benefit both issuers, in increasing comparability, and project developers, in accessing potential funding.

147. Further work could be carried out analysing sovereign and private sector issuance of GSS bonds, to develop a more global picture of the market and gain further insight on the possibilities for sustainable infrastructure projects financing. Moreover, the analysis can be extended towards the investigation of other types of green and social standards, such as the one developed by sovereign institutions for national bonds issuance, or private sector standards for projects implementers, who are recently proliferating in the market and towards which many harmonisation efforts are directed.

Annex A. GSS private sector standards

A.1 ICMA Sustainable Finance Principles and Guidelines

A.1.1 Green Bond Principles

1. The Green Bond Principles structure is composed of four core components, whose compliance with should be highlighted in the summary of the bond documentation, and, most importantly, in an ad hoc Green Bond Framework, that relates to the issuer's overarching sustainability strategy. Proof of alignment with the Green Bond Principles should be reviewed before issuance by an appointed external reviewer.

a) Use-of-proceeds

2. The cornerstone of a green bond is how proceeds from that bond are utilised in eligible green projects, that should provide clear environmental benefits assessed and quantified by the issuer. These benefits contribute to the achievement of environmental objectives such as: climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control.

3. Eligible projects should be classifiable in high-level project categories which include but are not limited to: renewable energy; energy efficiency; pollution prevention and control; environmentally sustainable management of living natural resources and land use; clean transportation; climate change adaptation; and green buildings. The Green Bond Principles do not rely on a specific taxonomy or nomenclature to identify project categories that ensure environmental benefits, but explicitly acknowledge national and international taxonomy initiatives and recommend that issuers reference them. This allows issuers to tailor eligible project categories to the nature of projects they want to finance or to the general financing scope they're characterized by, as long as there is a sufficient degree of overlap with the high-level categories indicated by ICMA and the underlying taxonomy is valid.

b) Process for Project Evaluation and Selection

4. For the assessment of which projects can be financed with the proceeds from green bonds, the issuer should give specific communications to investors that relate to: the environmental sustainability objectives of the eligible green projects; the process by which the issuer determines how the projects fit within the eligible green projects categories; and complementary information on processes by which the issuer identifies and manages perceived social and environmental risks associated with the relevant projects.

5. Issuers should position the communications above within the issuer's overarching environmental sustainability strategy, and provide information on the alignment of projects selection with referenced official or market-based taxonomies and green standards or certifications.

6. Finally, the GBP encourage issuers to develop a process that identify mitigants to known material risks of negative social and/or environmental impacts from the relevant projects, via trade-off analyses and monitoring of risks.

c) Management of proceeds

7. The GBP require that net proceeds of the green bond, or an equal amount, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, together with unallocated proceeds.

8. As long as the green bond is outstanding, the balance of the tracked net proceeds should be periodically adjusted to match allocations to eligible green projects made during that period.

9. Whatever the proceeds management method (bond-by-bond or portfolio approach), it should be highly transparent, and verified by an external auditor or another third party.

d) Reporting

10. The last core component refers to the disclosure activity that the issuer must make when allocating proceeds to projects. Periodic information on financed projects, amounts allocated and expected impact¹⁶, on top of prompt updates in case of material developments, should be made available through annual reports.

11. The Green Bond Principles take into account differences in types of green bonds, from an instrument's structure point of view. Even though the use-of-proceeds feature is a constant, other characteristics may differ across issuances. The types of bonds referenced in the GBP are:

- Standard use-of-proceeds bond: unsecured debt obligation, i.e., not backed by assets, with full recourse to the issuer only.
- Green revenue bond: a non-recourse-to-the-issuer debt obligation in which the credit exposure in the bond is to the pledged cash flows of the revenue streams, fees, taxes etc., and whose use-of-proceeds go to related or unrelated green projects.
- Green project bond: a project bond for a single or multiple green projects for which the investor has direct exposure to the risk of the projects, with or without potential recourse to the issuer.
- Secured green bond: a secured bond where the net proceeds are exclusively applied to finance or refinance either the green projects securing the specific bond only ("secured green collateral bond"); or the green projects of the issuer, where such green projects may or may not be securing the specific bond in whole or in part ("secured green standard bond"). Bonds in this category may be covered bonds, securitisations, asset-backed commercial paper, secured notes and other secured structures, where generally, the cash flows of assets are available as a source of repayment or assets serve as security for the bonds in priority to other claims. Avoiding double counting and ensuring full alignment with the GBP is crucial in this type of obligation.

A.1.2 Social Bond Principles

a) Use-of-proceeds

12. Social bonds seek to address or mitigate a specific social issue and/or seek to achieve positive social outcomes, especially but not exclusively for a target population, whose composition can vary depending on the local context. Instances of target populations can include: living below the poverty line; excluded and/or marginalised populations and/or communities; people with disabilities; migrants and/or

¹⁶ Issuers are recommended to use qualitative performance indicators and, where feasible, quantitative performance measures and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination (ICMA, 2022^[49]).

displaced persons; undereducated; underserved; unemployed; women and/or sexual and gender minorities; aging populations and vulnerable youth; other vulnerable groups, including as a result of natural disasters.

13. As in the GBP, social projects should be divided in high-level project categories, which include: affordable basic infrastructure; access to essential services; affordable housing; employment generation and unemployment alleviation; food security and sustainable food systems; and socioeconomic advancement and empowerment.

14. Similar to what outlined in the GBP, issuers are encouraged to use existing frameworks and taxonomies to guide their project evaluation and selection process.

15. As for other core components and types of social bonds, the SBP and the GBP are comparable, with the only difference that the selected projects lie in the social project categories outlined above.

A.1.3 Sustainability Bond Guidelines

16. The common four core components of the GBP and SBP and their key recommendations on bond frameworks and the use of external reviews also apply to Sustainability Bonds, as they are defined as any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance a combination of both green and social projects.

A.2 The Climate Bonds Initiative

A.2.1 Climate Bonds Standard

17. The CBI Climate Bonds Standard contains the requirements and eligibility criteria for Climate Bond Certification, that, when met, award the issuer the Certification Mark in relation to that bond, loan or other debt instrument.

A. Pre-issuance requirements

18. Prior to issuance or closing of the debt, loan or debt instrument, the issuer has to comply with a set of requirements that ensure appropriateness of internal processes and controls, through the publication of a Green Bond Framework.

A.1 Use-of-proceeds

19. The issuer has to document the nominated projects and assets which are to be associated with the bond and which have been assessed as likely to be eligible projects and assets. Moreover, the expected net proceeds of the bond have to be smaller than the issuer's total investment exposure to the proposed projects and assets.

A.2 Process for evaluation and selection of projects and assets

20. The issuer has to create and maintain a decision-making process to determine nominated projects and assets eligibility. This document has to clearly set out: how the climate-related objectives of the bond are consistent with the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability; the issuer's rationale for issuing the bond; a process to determine whether nominated projects and assets can meet the eligibility criteria set out in the Taxonomy and Sector Eligibility Criteria (see below); and any green standards or certifications used in the selection of nominated projects and assets.

A.3 Management of proceeds

21. The issuer has to disclose to the external verifier arrangements for proceeds tracking, management of unallocated proceeds and earmarking of funds to nominated projects and assets.

A.4 Reporting prior to issuance

22. The issuer shall prepare and publish a Green Bond Framework including:

- Confirmation that the issued bonds are aligned with the Climate Bonds Standard and other applicable standards.
- Summary of the expected use-of-proceeds, including unallocated ones.
- Description of the decision-making process referenced above.
- Information on the methodology and assumptions to be used for confirming the characteristics or performance of nominated projects and assets required to conform to the relevant eligibility requirements under the Taxonomy and Sector Eligibility Criteria.
- Engagement with the external verifier and reporting updates plans.

B. Post-issuance requirements

23. After the issuance of the bond, loan or debt instrument, all the following requirements shall be met. Moreover, issuers seeking Certification for instruments not certified at the pre-issuance stage need to prepare a Green Bond Framework and meet all of the following requirements to receive Certification under the Climate Bonds Standard.

B.1 Use-of-proceeds

24. All net proceeds shall be allocated to nominated projects and assets that meet the climate-related objectives of the bond and are compliant to the Taxonomy and Sector Eligibility Criteria. Moreover, such proceeds shall be allocated to projects within 24 months from issuance, and shall meet the same size requirements set out in the use-of-proceeds paragraph on pre-issuance requirements. Finally, in case of refinancing, proceeds shall be closely tracked.

B.2 Process for evaluation and selection of projects and assets

25. Even though this section is most relevant for pre-issuance requirements, the issuer is asked to maintain and update the eligibility decision-making process, with all relevant items.

B.3 Management of proceeds

26. Very similarly to what is suggested by ICMA, the net proceeds of the bond shall be credited to a sub account, moved to a sub-portfolio or otherwise identified by the issuer and tracked. Also, an earmarking process shall be implemented to manage and account for funding to the nominated projects and assets, and enable estimation of the share of the net proceeds being used for financing and refinancing, including unallocated proceeds.

B.4 Reporting

27. For the whole period that the bond remains outstanding, the issuer shall annually prepare and make available to the public an update report that contains:

- An allocation report that states: compliance of issued bonds with Climate Bonds Standard and other applicable standards; a statement on the climate-related objectives of the bond; and, most importantly, funding specifics of nominated projects and assets.

- An eligibility report that contains confirmation that nominated projects and assets continue to meet the relevant eligibility requirements specified in the Taxonomy and Sector Eligibility Criteria.
- An impact report that links actual or expected outcomes and impacts of projects and assets to the climate-related objectives of the bond, using qualitative and quantitative performance indicators and measures, as well as related methods and underlying assumptions.

C. Eligibility of projects and assets

28. This section of the Standard serves to assess the eligibility of specific projects and assets that can be regarded as contributing to the rapid transition to a low carbon and climate resilient economy in line with the goals of the Paris Agreement.

C.1 Climate Bonds Taxonomy

29. The Taxonomy provides an overview of the climate mitigation and adaptation aligned investment opportunities across the major sectors of the global economy, providing categories for nominated projects and assets. More detail on the taxonomy's categories is provided below.

C.2 Climate Bonds Sector Eligibility Criteria

30. These criteria set out the requirements that projects and assets have to meet to be considered eligible for certification, divided by economic sector. More detail on the eligibility criteria is provided in section A.2.3.

D. Certification

31. This last section of the Standards links to the process mentioned above that bonds must go through to obtain the formal Certification Mark. As the process starts pre-issuance and goes parallel to the instrument's life, the Mark can be used during the pricing and marketing of the bond, and its integrity can be ensured to be maintained after issuance or closing of the bond, including during the allocation of net proceeds.

D.1 Pre-issuance certification

32. Once the issuer has complied with all pre-issuance requirements, it has to undergo an external verifier assessment to obtain pre-issuance Certification for the green bond. The external verifier expresses an opinion on the conformity of the bond to the CBI Standards by either an assurance report, or by using the CBI Readiness Assessment Protocol, which is then evaluated by the CBI Secretariat and Board. If the evaluation results in a positive outcome, the bond receives the CBI Certification Mark, valid for two years or until the bonds receives post-issuance certification, loses conformance to the Standards or the Issuer expresses the will to withdraw the instrument. Certification is maintained by complying with reporting requirements of section A.4.

D.2 Post-issuance certification

33. The same procedure outlined above works for post-issuance requirements and the updated Green Bonds Framework. If the Board express a positive outcome of the verifier's assurance report, the bond is awarded the post-issuance Certification Mark, that is valid until conformance loss or withdraw from the issuer. Certification is maintained by complying with reporting post-issuance requirements.

D.3 Programmatic certification

34. This type of certification is available for issuers with large portfolios of eligible projects and assets and programs for issuance of multiple certified deals over a number of years. The Programmatic Certification approach enables frequent issuers to have greater flexibility with respect to the timing and scale of issuing bonds, by engaging in a periodic relation with external verifiers, which provide to the CBI Secretariat and Board with yearly assurance reports.

35. Finally, the Standard outlines the different types of green bonds that can apply for certification, from an instrument structure point of view while maintaining the use-of-proceeds feature. While the first four categories are common to the ones outlined by ICMA (see above), the Climate Bond Standard also mentions, among others:

- Convertible bonds: bonds or notes, either listed or unlisted, which have the right but not the obligation to convert into a specified number of ordinary shares (or other securities) under specified terms and conditions. If the bond or note was certified when it was issued and then later converted to equity, then its status as a Certified Climate Bond would end at the point of conversion.
- Loan facilities: a credit line made available to borrowers to finance projects and assets which meet the relevant Sector Eligibility Criteria of the Climate Bonds Standard. Loans can be unsecured (with general recourse to the issuer) or secured (non-recourse or limited recourse to the issuer). Examples of loan facilities are bilateral loans, syndicated loans and revolving credit facilities.
- Commercial paper: Short-term unsecured promissory notes issued by strong credits including both financial institutions and non-bank corporates.
- Debt instruments issued by a green bond fund: obligations issued by a fund which invests in green bonds based on a set of screens or criteria. Screens for the fund could include that the underlying projects and assets must meet the relevant Sector Eligibility Criteria of the Climate Bonds Standard. Certification is only available for the debt instruments issued by the fund, not for the fund itself.
- Green deposits: client funds held by a financial institution which are clearly identified and allocated to a portfolio of projects and assets which meet the relevant Sector Eligibility Criteria of the Climate Bonds Standard.

A.2.2 Climate Bonds Taxonomy

36. Since 2013, the Climate Bonds Taxonomy identifies the assets, activities and projects needed to deliver a low carbon economy consistent with the goals of the Paris Agreement, by providing an independent and science-driven guidance for common green definitions across global markets, updated regularly and with a multi-stakeholder approach.

37. The Taxonomy is composed of eight high-level project categories (energy, transport, water, buildings, land use and marine resources, industry, waste and pollution control, ICT) with more specific subcategories, asset types and asset specifics, that go as deep as specific investments in those areas¹⁷.

38. Using a traffic light system, the Taxonomy identifies assets that are automatically compatible with a 1.5°C degree decarbonisation trajectory (green light) those that are compatible only after the screening

¹⁷ The complete breakdown of the Climate Bonds Taxonomy is available on the CBI website dedicated section (<https://www.climatebonds.net/standard/taxonomy>).

of some specific criteria (orange light), incompatible by nature (red light), and those for which more work is needed to identify screening criteria (grey light).

39. Moreover, if detailed analysis of a sector has been undertaken and specific eligibility criteria have been developed, bonds in that sector can be Climate Bonds Certified, via a blue ‘Climate Bonds Certification tick’. On the contrary, if detailed sector-based criteria for Certification are still under development, this is indicated by a yellow circle, which indicates that bonds in that sector cannot yet be certified under the Climate Bonds Standard.

40. The Taxonomy aims at ranking assets and projects in a way that is compliant with science-based green objectives, and is usable for the projects selection and evaluation phase of pre and post issuance requirements (Climate Bonds Initiative, 2022^[45]). This is the main difference between CBI and ICMA as standards setters, since while CBI has developed its own taxonomy, using also other available taxonomy and contributing to the creation of new ones, ICMA Principles and Guidelines only acknowledge national and international taxonomy initiatives and recommend that issuers reference their use.

Table A.2.1. Climate Bonds Initiative Taxonomy summary

Energy	Transport	Water	Buildings	Land use and marine resources	Industry	Waste and pollution control	ICT
Solar	Private transport	Water monitoring	Residential	Agriculture Green bond	Steel production	Preparation	Broadband networks
Wind	Public passenger transport	Water storage	Commercial	Agri-food transition finance	Cement production	Reuse	Telecommuting software and service
Geothermal	Freight rail	Water treatment	Products and systems for efficiency	Commodity supply chains	Basic chemicals production	Recycling	Data hubs
Bioenergy	Aviation	Water distribution	Urban development	Commercial forestry	Hydrogen production	Biological treatment	Power management
Hydropower	Water-borne	Flood defense		Ecosystem conservation and restoration	Mining of metals and minerals	Waste to energy	
Marine renewables		Nature-based solutions			Fossil gas transition	Landfill	
Electrical grids and storage					Carbon capture and storage	Radioactive waste management	
Nuclear					Early coal phase out		

Note: Subsectors for which Certification criteria have been approved are marked in purple, subsectors for which criteria are under development are marked in orange, and subsectors for which criteria development is due to commence are marked in grey.
 Source: (Climate Bonds Initiative, 2022^[45]).

A.2.3 Sector Eligibility Criteria

41. The Taxonomy uses eligibility criteria for assets that are not automatically compatible with the goals of the Paris Agreement. Those are developed in a multi-stakeholder process that involves also technical and industry working groups, providing credible grounds to projects assessments, and are subject to public consultation and revisions, and accordingly reviewed and approved by the CBI.

42. In practice, each sector criterium sets climate change benchmarks that are used to screen assets and projects so that only those that have climate integrity, either through their contribution to climate

mitigation, and/or to adaptation and resilience to climate change, are awarded the Climate Bonds Certification Mark¹⁸.

A.3 Infrastructure projects applicability of private sector GSS standards

43. The following section compares ICMA Principles and Guidelines and the CBI Standard and Taxonomy to internationally recognized definitions of infrastructure assets, to analyse whether there exists an overlap between definitions and standards, and thus how can sustainable infrastructure projects be financed in the context of the frameworks developed in accordance with the standards.

A.3.1 ICMA eligible project categories

44. ICMA Green and Social Bond Principles only list potential eligible project categories that should contribute to the achievement of environmental and social high-level objectives. It therefore depends on the issuer's green and social bond framework developed in accordance with the standards and the chosen green or social taxonomy on whether to go in more detail in terms of required characteristics of eligible projects, as well as evaluation criteria.

45. Highlighting green and social project categories could bring greater understanding on how infrastructure-centred projects could become eligible. Given the broadness of ICMA categories, eligibility is assessed against general infrastructure definitions provided by the OECD Working Party on National Accounts and the EDHECinfra Infrastructure Company Classification Standard (TICCS).

46. Infrastructure projects can fall into the following green bond categories:

- Renewable energy and energy efficiency
- Pollution prevention and control
- Clean transportation
- Sustainable water and wastewater management
- Climate change and adaptation projects
- Eco-efficient and/or circular economy adapted products production technologies and processes
- Green buildings

47. As for Social Bond Principles, infrastructure projects can fall into project categories that provide or promote:

- Affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transport, energy)
- Access to essential services (e.g. health, education and vocational training, healthcare, etc.)
- Affordable housing
- Employment generation, and programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, including through the potential effect of SME financing and microfinance

¹⁸ The full set of sector criteria available for certification is available on the CBI website dedicated section (<https://www.climatebonds.net/standard/available>).

- Food security and sustainable food systems

48. The selected categories are broad in terms of application, and it is important to refer to the issuer’s green and social bond frameworks to assess if infrastructure projects can fall into a specific category and produce relevant metrics¹⁹.

A.3.2 CBI eligible projects categories

49. The Climate Bonds Initiative has developed a Taxonomy and a series of Sector Criteria that provide guidance with respect to sectors and projects that are eligible for green financing.

50. On top of that, CBI regularly publishes a series of papers on green infrastructure investment opportunities that aim to identify and demonstrate green infrastructure investment opportunities globally to promote green use-of-proceeds bonds as a tool for infrastructure projects financing.

51. Using all these tools, it is possible to carry out a precise mapping of where infrastructure projects fall in terms of eligible sectors for green financing. Such a classification highly depends upon the “traffic light system” and the Climate Bond Certification tick’ employed by the Climate Bonds Taxonomy, as assets and projects that are automatically compatible with a 1.5°C degree decarbonisation trajectory, and sectors for which specific eligibility criteria are already available, are more likely to represent an accessible, immediate and bankable opportunity for infrastructure financing.

52. The following table lists all the Climate Bonds Initiative Taxonomy sectors and subsectors, asset types and projects that are compatible with infrastructure green financing. This matching takes an inclusive approach, by listing CBI assets that are either compatible to the economic infrastructure classes and sub-classes listed by the OECD National Accounts and TICCS classifications mentioned in section 2.3, or applicable in general to the broader definition of infrastructure provided by them.

Table A.3.1. Climate Bonds Taxonomy asset types compatible with infrastructure assets under OECD and TICCS definitions

Energy		
Electricity and heat production		
	Asset type	Asset specifics
Solar	Generation facilities	Photovoltaic generation facilities (onshore)
		Concentrated solar power facilities (onshore)
	Supply chain facilities	Manufacturing facilities wholly dedicated to onshore solar energy development such as PV cells & components, CSP dishes, troughs & components etc. Dedicated storage, distribution, installation, wholesale and retail
Infrastructure	Dedicated transmission and supporting infrastructure	
Wind	Generation facilities	Onshore wind farms
	Supply chain facilities	Manufacturing facilities wholly dedicated to onshore wind energy development such as wind turbines Dedicated storage, distribution, installation, wholesale and retail
	Infrastructure	Dedicated transmission and supporting infrastructure
Geothermal	Generation facilities	Electricity generation facilities
		Direct heat application such as Geothermal Heat Pump (GHP)
	Supply chain facilities	Manufacturing facilities wholly dedicated to geothermal energy developments such as geothermal turbines Dedicated storage, distribution, installation, wholesale and retail
Infrastructure	Dedicated transmission and supporting infrastructure	
Bio-energy	Facilities	Facilities producing liquid biofuel, solid and gaseous biomass for heating and cogeneration

¹⁹ This analysis is carried out in Annex C.2, where single MDBs green and social frameworks and taxonomies are scrutinized in terms of applicability to infrastructure.

	Producing biofuel, biomass, biogas	Facilities producing liquid biofuel, solid and gaseous biomass for electricity production
		Facilities producing biofuel for transport
	Generation facilities	Electricity generation facilities
		Heating facilities
		Cooling facilities
		Combined Heat & Power facilities
	Supply chain facilities	Manufacturing facilities wholly dedicated to bioenergy development
		Dedicated storage, distribution, installation and wholesale and retail
		Blending facilities
	Infrastructure	Dedicated transmission and supporting infrastructure
Hydropower	Generation facilities	Run of river
		Impoundment
		Pumped storage
	Supply chain facilities	Manufacturing facilities wholly dedicated to hydropower development
Dedicated storage, distribution, installation and wholesale and retail		
Infrastructure	Dedicated transmission and supporting infrastructure	
Marine renewables	Generation facilities	Offshore wind farms
		Offshore solar farms
		Tidal and wave energy generation facilities
		Other marine electricity generation facilities
		Heating or cooling facilities using ocean thermals
	Supply chain facilities	Manufacturing facilities wholly dedicated to marine renewable energy development such as wind turbines and platforms, vertical and horizontal axis turbines, instream generators, etc.
Dedicated storage, distribution, installation and wholesale and retail		
Infrastructure	Dedicated transmission and supporting infrastructure	
Fossil fuels	Generation facilities	Coal or oil power without carbon capture and storage (CCS)
		Coal or oil with carbon capture & storage (CCS)
		Coal or oil powered combine heat and power (CHP)
		Waste heat recovery from coal or oil fuelled power generation
		Gas power without carbon capture & storage (CCS)
		Gas power with carbon capture & storage (CCS)
		Gas powered combine heat and power (CHP)
		Waste heat recovery from gas fuelled power generation
	Mining and extraction	Coal mining or oil extraction, refining, processing or production and associated supply chain infrastructure
		Gas extraction, refining, processing or production and associated supply chain infrastructure
Nuclear	Generation facilities	Power plants
		Dedicated supporting infrastructure
	Mining facilities	Uranium mining
Other	Generation facilities	Heat pumps using soil or air gradients
	Advanced alternative fuel power plants	Alternative fuel power plants
		Supporting infrastructure
Transmission, distribution and storage		
	Asset type	Asset specifics
Transmission and distribution	Infrastructure	<p>Construction, upgrading or operation of:</p> <ul style="list-style-type: none"> • Overhead lines (conductors and insulators) and pylons • Transformers, reactors and substations • Underground cables • Circuit breakers and switchgear • Sub-stations, buildings, fences and busbars

		<ul style="list-style-type: none"> • Fuses, circuit breakers, disconnectors, reactors, capacitors, transformers, voltage regulators and switchgear
		Interconnectors between transmission systems
		Installation of T&D transformers
		Equipment and infrastructure where the main objective is an increase of the generation or use of renewable electricity generation
		Sensors and measurement tools (including meteorological sensors for forecasting renewable production)
		Communication and control (including advanced software and control rooms, automation of substations or feeders, and voltage control capabilities to adapt to more decentralized renewable infeed)
		Equipment to carry information to users for remotely acting on consumption
		Equipment to allow for exchange of renewable electricity between users
		Equipment to increase the controllability and observability of the electricity system and enable the development and integration of renewable energy sources.
Storage	Infrastructure	Batteries, capacitors, compressed air storage and flywheels & large-scale energy storage facilities
		Manufacture facilities dedicated to any of the above
Transport		
Passenger, freight & supporting infrastructure		
	Asset type	Asset specifics
Private passenger transport	Supply chain facilities	Dedicated manufacturing facilities for vehicles and key components
	Infrastructure	Dedicated charging and alternative fuel infrastructure (when separate from fossil fuel filling stations and garages)
		New roads, road bridges, road upgrades, parking facilities, fossil fuel filling stations, etc.
Public passenger transport	Infrastructure	Dedicated infrastructure for electrified public transport
		Dedicated product or supporting infrastructure for fossil fuel or hybrid vehicles or rolling stock
		Dedicated charging and alternative fuel infrastructure (when separate from fossil fuel filling stations and garages)
		Public walking and cycling infrastructure and cycling schemes
		Bus rapid transit systems
Cross Cutting		ICT that improves asset utilization, flow and modal shift, regardless of transport mode
		Intermodal freight facilities
		Terminals to improve journey times
		Smart freight logistics
		Multi-modal logistics hubs
Freight Rail	Infrastructure	All infrastructure for electrified freight rail
		All infrastructure for nonelectrified freight rail
Aviation	Infrastructure	Dedicated manufacture
		Supporting infrastructure
		Supporting buildings
Shipping	Infrastructure	Supporting infrastructure
Miscellaneous vehicles	Supply chain facilities	Dedicated manufacturing facilities for vehicles and key components, such as batteries, being used in eligible vehicles
	Infrastructure	Dedicated charging and alternative fuel infrastructure (when separate from fossil fuel filling stations and garages)
Water		
Supply management & wastewater treatment		
	Asset type	Asset specifics
Water infrastructure	Water monitoring	Smart networks, early warning systems for storms, droughts, floods or dam failure, water quality or quantity monitoring processes
	Water storage	Rainwater harvesting systems, storm water management systems, water distribution systems, infiltration ponds, aquifer storage, groundwater recharge systems, sewer systems, pumps, sand dams
	Water distribution	Rainwater harvesting systems, gravity fed canal systems, pumped canal or water distribution systems, terracing systems, drip, flood and pivot irrigation systems
	Water desalination	Seawater desalination plants and brackish water desalination plants
	Flood	Surge barriers, pumping stations, levees, gates

	defences	
	Nature based solutions	Water storage from aquatic ecosystems, aquifer storage, snowpack runoff, groundwater recharge systems, riparian wetlands
		Flood defences by ecological retention, restoration of riparian wetlands, relocation of assets
		Drought defences by aquifer storage, recharge zone management, wetland management
		Water treatment by natural filtration systems, forest and fire management
		Stormwater management by permeable surfaces, erosion control systems, evapotranspiration systems
	Products	Water saving technologies
Buildings		
Urban development		
	Asset type	Asset specifics
Urban planning	Infrastructure	District heating for residential and commercial applications
		Building, maintaining or upgrading utility tunnels for cables or pipelines
Land use and marine resources		
Agriculture, husbandry, aquaculture and seafood		
	Asset type	Asset specifics
Supply chain assets Management	Supply chain	Input supply systems for seed production, distribution and access
		Primary processing and storage facilities for eligible agricultural produce
		Primary processing and storage facilities for eligible forestry produce
		Primary processing facilities and storage for eligible fisheries and aquaculture activities
Agriculture	Infrastructure	Machinery and equipment to manage and cultivate eligible land or livestock
		Associated management, information systems and other technologies
		Drip, flood and pivot irrigation systems
Commercial forestry	Infrastructure	Machinery and equipment to manage and cultivate eligible forested land
		Associated management, information systems and other technologies
	Pulp & paper	Production facilities incorporating efficient pulping process, biorefineries, use of recyclates
Natural ecosystem protection and restoration	Infrastructure	Machinery and equipment to manage eligible ecosystems
		Associated management and information systems and other technologies
Fisheries and aquaculture	Infrastructure	Machinery and equipment to manage and harvest in fisheries and fish farms
		On shore and offshore fish processing and storage facilities connected to eligible fisheries and fish farms
		Associated management, information systems and other technologies
Industry		
Industrial and energy intensive processes		
	Asset type	Asset specifics
Cement	Cement production facilities	Production facilities, incorporating dry processes, reduced clinker content
Steel	Steel and iron production facilities	Production facilities and equipment, incorporating electric arc furnace, smelting reduction, efficient casting processes
Basic chemicals	Basic chemical production	Production facilities incorporating lower carbon feedstocks and more efficient processes
Fuel production	Biofuel production facilities	See Bio-energy
	Hydrogen fuel production facilities	
Clean up	Carbon scrubber	Facilities and products for clean-up, such as treatment of exhaust gases from industrial plants
		Products dedicated to clean-up or efficiency of fossil fuel energy
	Carbon Capture & Storage	Facilities and products dedicated to CCS

Waste and pollution control		
Recycling, re-use and other waste managements		
	Asset type	Asset specifics
Supply chain	(CCS)	
	Manufacturing facilities	Facilities dedicated to manufacturing key components for eligible facilities Facilities dedicated to manufacturing energy efficient appliances and equipment
	Other supply chain	Facilities dedicated to the storage, distribution or retail of eligible industrial or manufactured products
Preparation	Facilities for collection, sorting and material recovery	Facilities and assets with high recovery rates of reusable or recyclable material
Waste storage	Waste storage facilities	Storage and bulking facilities
Re-use	Facilities for the re-use of materials	Facilities refurbishing or repairing products or cleaning components or products for reuse in their original function
Recycling	Facilities for the recycling of materials	Facilities for recycling metals, plastics, glass (except aggregate) and paper
Biological treatment facilities	Anaerobic digestion facilities	Facilities for the production of biogas from green waste
	Composting facilities	Facilities for the production of compost from residual waste
Waste to energy	Waste to energy plants	Facilities for solid waste treatment with production of electricity or heat as a by-product
Information and communication technology		
Networks, management and communication tools		
	Asset type	Asset specifics
Broadband networks	Broadband networks	Fibre optic and cable networks
	Supporting infrastructure	Such as internet exchange points
IT solutions	Connectivity	Teleconferencing and telecommuting software and service
	Data hubs	Including data storage centres
	Supporting infrastructure	Such as hardware and manufacture of hardware
Power management	Infrastructure, software and hardware for remote power management	Remote solutions for appliance power management, and load-balancing of renewables
	In situ power management	Including automatic switching, energy monitoring & data systems

Source: (Climate Bonds Initiative, 2022⁽⁴⁵⁾).

53. On top of this extensive breakdown of the Taxonomy, the Climate Bonds Initiative also publishes papers under the Green Infrastructure Investment Opportunities (GIIO) Programme, that aims at highlighting green infrastructure needs and potential of specific countries.

54. So far, the key sectors in which green infrastructure opportunities have been identified in the Taxonomy are:

- low-carbon transport: transportation modes and ancillary infrastructure that produce low or zero direct carbon emissions. This can include national and urban passenger rail and freight rail networks; Bus Rapid Transit (BRT) systems; electric vehicles; and bicycle transport systems.
- renewable energy: energy generation, transmission or storage technology that has low or zero carbon emissions. This can include solar energy, wind energy, bioenergy, hydropower, geothermal energy, marine energy or any other renewable energy source.
- sustainable water management: Assets that do not increase greenhouse gas emissions or aim at emission reductions over the operational lifetime of the asset, address adaptation, and increase the resilience of surrounding environments. This covers built as well as nature-based water infrastructure.
- green buildings: commercial and residential buildings, new or upgraded, operating with low-carbon emissions. The low-carbon credentials and emissions performance of the buildings are demonstrated through an accepted rating or 'green' assessment process, for example, Green Star certification.
- sustainable waste management: the efficient use of resources to cut down on waste production, coupled with collection and disposal systems that promote reuse and recycle, thereby minimising residual waste going into waste to energy facilities. Where waste must go to landfill, there are gas capture systems installed to minimise emissions as well as measures to minimise run-off and other negative impacts on surrounding environments.

Annex B. Multilateral Development Banks' GSS bonds frameworks

B.1 European Investment Bank

55. Tables B.1.1 and B.1.2 summarise how the EIB Climate Awareness Bonds and Sustainability Awareness Bonds comply with ICMA Principles and Guidelines core components and key recommendations, as well as progressively aligning with European Union legislation on sustainability bonds.

Table B.1.1 Summary of CAB-alignments with the GBPs

Use-of-proceeds	Process for project evaluation and selection	Management of proceeds	Reporting	External reviews
<p>Loan Eligibility</p> <ul style="list-style-type: none"> - activities contributing substantially to Climate Change Mitigation - Technical Screening Criteria determined by Projects Directorate in full alignment with the logic of the EU Sustainability Taxonomy and partial alignment with the TEG Taxonomy Proposal <p>Disbursement Eligibility</p> <ul style="list-style-type: none"> - Allocations are only once and to new disbursements that take place after bond issuance date (no refinancing) 	<p>Competence of Projects Directorate</p> <ul style="list-style-type: none"> - Selection of eligible financings, assignment of eligibility percentages and their input into IT systems upon Board approval* - Quarterly quality checks of eligibility percentages <p>* Approvals are based on EIB's environmental and social due diligence, which conforms with two publicly available documents:</p> <ul style="list-style-type: none"> - Environmental and Social Principles and Standards** (ESPS), which reflect the institutional and legal framework of the EU - Environmental and Social Practices Handbook**, ruling EIB's due diligence <p>** Documents not part of the CAB internal criteria</p>	<p>Competence of Finance Directorate</p> <ul style="list-style-type: none"> - Retrieval of daily CAB eligible disbursements (automated) - Allocation of CAB proceeds on a daily first-in first-out basis (automated) - Semi-annual booking of the daily balances of unallocated CAB proceeds in dedicated Treasury portfolios 	<p>EIB-financed projects</p> <p><i>Ex ante</i></p> <ul style="list-style-type: none"> - Environmental and Social Data Sheets on Public Register (unaudited) <p><i>Ex post</i></p> <ul style="list-style-type: none"> - Environmental and Social Completion Sheets on Public Register (unaudited) - Aggregate results of Carbon Footprint Exercise in the annual Sustainability report (limited assurance) <p>CAB projects</p> <p><i>Use-of-proceeds</i></p> <ul style="list-style-type: none"> - Annual Financial Report (aggregated), unaudited - Semi-annual CAB-Newsletters (project-by-project and bond-by-bond), unaudited - Annual CAB Framework (project-by-project and bond-by-bond), assured <p><i>Expected impact</i></p> <ul style="list-style-type: none"> - Annual CAB Framework (assured) 	<p>Verification</p> <p>Annual external Reasonable Assurance (ISAE 3000) of the CAB Framework in accordance with the CAB internal criteria (objectives, procedures, responsibilities, processes and reports)</p> <p>Bond rating and label</p> <ul style="list-style-type: none"> - Sustainability bond rating by oekom research AG (B+) - Green Bond label by LuxFLAG <p>Complementary Aspects EU Law</p> <p>Regulation (EC 1367/2006)** prescribes that Aarhus Convention applies to the transparency policy and public disclosure rules of the EIB</p> <p>Governance control</p> <ul style="list-style-type: none"> - Art. 12 of EIB Statute prescribes that a Committee appointed by the Board of Directors 'shall verify that the activities of the Bank conform to best banking practice' - GBP have been included in EIB's list of 'best banking practices'

Source: (European Investment Bank, 2023^[24]).

Table B.1.2 Summary of SAB-alignments with the GBPs and SBPs

Use-of-proceeds	Process for project evaluation and selection	Management of proceeds	Reporting	External reviews
<p>Project Eligibility</p> <ul style="list-style-type: none"> - Activities contributing Substantially to environmental objectives other than climate change mitigation and social objectives - Environmental objectives as per art. (9) EU Regulation on the establishment of a framework to facilitate sustainable investment entering into force in July 2020 ("Taxonomy Regulation"). - Social objectives: defined by EIB until Taxonomy Regulation is extended to EU social objectives <p>Disbursement Eligibility</p> <ul style="list-style-type: none"> - Allocations are only once and to new disbursements that take place after bond issuance date (no refinancing) 	<p>Competence of Projects Directorate</p> <ul style="list-style-type: none"> - Selection of eligible financings, assignment of eligibility percentages and their input into IT systems upon Board approval* - Quarterly quality checks of eligibility percentages <p>* Approvals are based on EIB's environmental and social due diligence, which conforms with two publicly available documents:</p> <ul style="list-style-type: none"> - Environmental and Social Principles and Standards** (ESPS), which reflect the institutional and legal framework of the EU - Environmental and Social Practices Handbook**, ruling EIB's due diligence <p>** Documents not part of the SAB internal criteria</p>	<p>Competence of the Finance Directorate</p> <ul style="list-style-type: none"> - Retrieval of daily SAB-eligible disbursements (automated) - Allocation of SAB proceeds on a daily first-in-first-out basis (automated) - Semi-annual booking of the daily balances of unallocated SAB proceeds in dedicated Treasury portfolios 	<p>EIB-financed projects</p> <p><i>Ex ante</i></p> <ul style="list-style-type: none"> - Environmental and Social Data Sheets on Public Register (unaudited) <p><i>Ex post</i></p> <ul style="list-style-type: none"> - Environmental and Social Completion Sheets on Public Register (unaudited) <p>SAB projects</p> <p><i>Use-of-proceeds</i></p> <ul style="list-style-type: none"> - Semi-annual SAB-Newsletters (project-by-project and bond-by-bond), unaudited - Annual SAB Framework (project-by-project and bond by-bond), assured <p><i>Expected impact</i></p> <ul style="list-style-type: none"> - Annual SAB Framework (assured) 	<p>Verification</p> <p>Annual external assurance engagement of the SAB Framework in accordance with the SAB internal criteria (objectives, procedures, responsibilities, processes and reports)</p> <p>Complementary aspects EU Law</p> <p>Regulation (EC 1367/2006)** prescribes that Aarhus Convention applies to the transparency policy and public disclosure rules of the EIB</p> <p>Governance control</p> <ul style="list-style-type: none"> - Art. 12 of EIB Statute prescribes that a Committee appointed by the Board of Directors 'shall verify that the activities of the Bank conform to best banking practice' - GBPs and SBPs have been included in EIB's list of 'best banking practices'

Source: (European Investment Bank, 2023^[46]).

56. Moreover, Table B.1.3 enumerates the environmental and social objectives employed by the EIB, based on ICMA high-level objectives. As noted in section 3.2.1, there is no perfect overlap between the two sets of objectives, but they're still evaluated as compatible.

Table B.1.3 CAB/SAB eligible objectives

Objectives	Sustainability Awareness Bonds	
	Climate Awareness Bonds	Social
	<p>Environmental</p> <ul style="list-style-type: none"> • Climate change mitigation (2007) 	<p>Environmental (Other than climate change mitigation)</p> <ul style="list-style-type: none"> • Sustainable use and protection of water and marine resources (2018) • Pollution prevention and control (2018) • Protection and restoration of biodiversity and ecosystems (2021)
		<p>Social</p> <ul style="list-style-type: none"> • Access to water and sanitation (2018) • Natural disasters risk management (2018) • Access to inclusive and equitable education (2019) • Universal access to affordable health services (2019) • Health emergency response and preparedness capacity (2020)

Source: (European Investment Bank, 2023^[24]).

57. Finally, Table B.4 lists the eligible activities employed in CABs and SABs, following ICMA Principles guidance on eligible projects evaluation and selection. This is complemented by and integrated with the sector breakdown performed in the Common Principles for Climate Mitigation and Adaptation Finance Tracking mentioned above, and for which a higher degree of detail is provided in Annex C.1.

Table B.1.4. CAB/SAB eligible activities

Eligible activities	Climate Awareness Bonds	Sustainability Awareness Bonds	
	Environmental	Environmental (Other than climate change mitigation)	Social
	<ul style="list-style-type: none"> • Renewable energy (2007) • Energy efficiency (2007) • Electric rail infrastructure and vehicles and other electric public land transport vehicles (2020) • Research, development and deployment of innovative low carbon technologies (2020) 	<ul style="list-style-type: none"> • Water supply and management (2018) • Wastewater collection and treatment (2018) • Sustainable forest management (2021) 	<ul style="list-style-type: none"> • Water supply and management (2018) • Wastewater collection and treatment (2018) • Flood protection (2018) • Education (2019), including higher education (2020) • Health (2019), including COVID-related activities (2020)

Source: (European Investment Bank, 2023^[24]).

B.2 World Bank

B.2.1 Green Bonds

58. The World Bank closely follows ICMA Green Bond Principles in issuing green bonds. Compliance is achieved by employing the usual four core components structure in its Green Bond Framework.

59. All World Bank projects follows six stages in their lifecycle, accompanied by various rounds of supervision and evaluation. On top of that, World Bank green bond projects undergo three additional steps that are closely linked to the GBP core components.

60. For the first core component of the Principles, the World Bank ensures compliance by defining eligible green projects using the expertise of World Bank environment specialists and defined World Bank eligibility criteria for low-carbon and climate resilient developments.

61. As for the eligible projects selection process, green bonds projects undergo the same review and approval process that all World Bank projects are subject to, which culminates with the assessment by the World Bank Board of Executive Directors. The process includes early screening to identify potential environmental or social impacts and designing policies and concrete actions to mitigate any such impacts. The World Bank subscribes to the Common Principles for Climate Mitigation and Adaptation Finance Tracking.

62. As for proceeds management, the World Bank follows a specific policy that requires that proceeds of green bonds issuance are credited to a special account and invested in accordance with the bank's liquidity policy until used for the World Bank's financing of eligible green bond Projects.

63. Moreover, disbursement requests for eligible projects, carried out in accordance with the bank's established policies and procedures, are often made over a period of several years, depending on when each project milestone is reached. Every time a disbursement takes place, corresponding amounts from the green bonds special account are allocated to the general lending pool on a quarterly basis.

64. As for the reporting component of the Principles, supervision of projects implementation is carried out by requesting regular reports by the implementing government agency on project activities, including a mid-term review of project progress, outcomes and impacts. Metrics are documented in ad hoc summaries and key impact reports. Moreover, an independent evaluation group carries out an ex-post review of all projects reports, and an in-depth performance assessment of about a quarter of all projects,

measuring outcomes against original objectives, sustainability of results and institutional development impact²⁰. External verification is carried out by CICERO Shades of Green.

B.2.2 Sustainable Development Bonds

65. The World Bank closely follows ICMA Sustainable Bond Guidelines in issuing sustainability bonds, complying with the GBP and SBP core components.

66. As for use-of-proceeds, the World Bank published an extensive list²¹ of environmental and social projects, programs and activities that can be classified as eligible to receive proceeds from sustainable development bonds, as well as an exclusion list of activities that by nature generate impacts incompatible with sustainable development. It has also developed a list of social projects target populations that closely follows the one contained in the Social Bond Principles.

67. The process for evaluation and selection of eligible projects is supported by a rigorous Environmental and Social Framework that entails environmental and social standards, aimed at addressing all the environmental and social risks and impacts that can occur during a project, as well as a Vision for Sustainable Development and Environmental and Social Policy for Investment Project Financing.

68. Management of proceeds and reporting practices are similar to the ones outlined above for Green Bonds, ensuring compliance with the last two core components of the Sustainability Bond Guidelines.

B.3 International Finance Corporation

B.3.1 Green Bonds

69. Following the adoption of the ICMA Green Bond Principles, the IFC has developed a Green Bond Framework that regulates the issuance of green bonds. Being part of the World Bank Group, some features of the IFC Framework track World Bank's practices, for instance in project lifecycle, second opinion and reporting practices. The IFC also finances investments in third-party green bonds that must be aligned with the Green Bond Principles.

70. The IFC issues bonds whose proceeds will be exclusively used to finance or refinance activities or assets that substantially contribute to at least one of the following four environmental objectives:

- Climate change mitigation
- Climate change adaptation
- Biodiversity protection
- Ocean and water protection.

71. For the first two high-level objectives, the IFC outlines eligible activities in line with the Common Principles for Climate Mitigation and Adaptation Finance Tracking mentioned above. For biodiversity protection and ocean and water protection, the IFC has developed internal taxonomies of eligible projects.

72. As for eligible projects evaluation and selection, the IFC has a rigorous process that entails confirmation of the standing of the project in compliance with the IFC Sustainability Framework, composed by dedicated performance standards and policies in part shared with the World Bank, confirmation that the project meets IFC's requirements on Paris alignment, and confirmation that the project has successfully

²⁰ More information on established practices in proceeds management and reporting are available in the World Bank Proceeds Management and Reporting Guide.

²¹ <https://www.worldbank.org/en/topic>.

passed a rigorous due diligence process that includes disclosure and consultation requirements, and integrity due diligence. Moreover, supervision practices are common with all IFC investments, and include input from the World Bank's IEG, mentioned above.

73. Management of proceeds and reporting practices are the ones described above in the World Bank's Green Bond Framework.

B.3.2 Social Bonds

74. The IFC Social Bond Framework closely follows the structure outlined in the ICMA SBP.

75. As for the first core component, net proceeds are allocated to a sub-portfolio linked to lending operations for social bond eligible projects, that meet the requirements of the SBP and/or either IFC's Banking on Women or Inclusive Business programs. Target populations are therefore identified in underserved people who lack access to the basic goods and services that are important aspects of well-being and low-income households that lack access to quality health care and small farmers with no market for their crops, as stipulated in the SBP, as well as women-owned small business owners who lack access to finance, and companies that incorporate people at the "base of the economic pyramid" into their value chain as suppliers, distributors, or customers, as per the IFC's Banking on Women or Inclusive Business program.

76. As for the evaluation and selection process, all projects undergo a rigorous due diligence process, assessing compliance with IFC Performance Standards on Environmental and Social Sustainability and the IFC Corporate Governance Framework. Moreover, projects are subject to ongoing monitoring and supervision, in a similar way to the one outlined for green bonds.

77. Management of proceeds is complied with by setting social bonds net proceeds aside in a designated Social Cash Account and investing them in accordance with IFC's conservative liquidity policy until disbursement to eligible projects, following what described for the World Bank management of proceeds.

78. Finally, the IFC publishes impact reports that contain relevant metrics as outlined in ICMA impact reporting guidance.

B.4 Asian Development Bank

B.4.1 Green and Blue Bonds

79. The Green and Blue Bonds Framework developed by the ADB closely follows the ICMA GBP. The ADB has included blue bonds also as eligible projects that fall into various GBP project categories for green bonds. Blue bonds are a subcategory of green bonds, focused on financing eligible projects impacting ocean health and marine and coastal management and sustainable development.

80. In terms of eligible projects, green bonds include investments that support climate change mitigation (such as renewable energy, energy efficiency, and sustainable transport) and climate change adaptation (such as energy infrastructure resilience, water supply and infrastructure, agriculture, and transport) in accordance with the Common Principles for Climate Mitigation and Adaptation Finance Tracking.

81. Moreover, blue bonds include investments that contribute to marine and coastal ecosystem management and restoration, pollution control for marine and coastal environments, including the rivers that drain to the ocean, and sustainable coastal and marine development.

82. Given the potential overlapping between the two types of bonds, the ADB, to avoid double counting, determines to which category a specific bond applies, if the circumstances require it.

83. As for the evaluation and selection of projects, the ADB has established dedicated working groups that use its Safeguard Policy Statement to screen potential environmental, involuntary resettlement and indigenous peoples impacts. Moreover, as early as during project preparation, they address climate change risks and other social and governance aspects through operational policies and strategies.

84. Management of proceeds works in the standard way across MDBs. Net proceeds are allocated to a special sub-portfolio that is linked to the ADB's financing of eligible projects. Moreover, while green bonds are outstanding, the balance of the sub-portfolio will be periodically reduced by amounts matching disbursements made in respect of eligible projects. Pending such disbursement, the sub-portfolio will be invested in liquid instruments, consistent with the ADB's liquidity policy.

85. Reporting is ensured by periodically publishing allocation and impact reports, newsletters and environmental and social safeguard documents that assess compliance with environmental, social and governance aspects of the ADB operational policies and strategies. If there are issues with safeguards compliance, borrowers are subject to an accountability mechanism that can be triggered by project-affected people, and forces borrowers to take corrective action to rectify the situation.

B.4.2 Theme bonds for Sustainable Development

86. Projects funded by theme bonds are aligned with the Sustainable Development Goals (SDGs) for quality education, gender equality, clean water and sanitation, and good health, but don't explicitly refer to any social bond standard. Issuance volumes are substantial and cover themes including education, access to water, health and gender, which align with some of the high-level objectives set out in the SBP.

87. As for management of proceeds, the ADB commits to use its best efforts to apply an amount equal to the net proceeds thereof for use in its ordinary operations to finance a pool of projects related to the relevant sectors, directly or indirectly through governments or rural governments of the ADB members or financial institutions or investments in private sector projects. Payment of principal of and interest on the Notes are based solely on the creditability of the ADB, and not on the performance of investments and loans under the ADB's projects in the education sector.

88. Reporting practices are not explicitly indicated in the Framework.

B.5 African Development Bank

B.5.1 Green Bonds

89. For green bonds issuance, the AfDB has developed a Green Bonds Framework that is consistent with ICMA Principles, albeit having a slightly different structure in terms of core components.

90. Under the portfolio selection section, eligible projects for the Bank's Green Bonds Portfolio are defined as "a pool of projects that have been selected firstly based on the Bank's methodology for tracking climate change mitigation and adaptation finance and secondly based on additional criteria to be applied for the specific purpose of the Bank's Green Bonds Portfolio" (African Development Bank, 2013^[37]).

91. Being part of the Common Principles for Climate Mitigation and Adaptation Finance Tracking signatories, the AfDB adopts the definitions referenced above and clusters eligible green bond projects under these two categories, that further differentiate between renewable energy, energy efficiency, clean transportation, on one side, and climate smart agriculture and resilient infrastructure on the other side, with sustainable water and wastewater management that is shared across categories.

92. Eligible projects then go through a two-phases selection process. First, the Energy, Environment and Climate Change Department both the Joint MDBs Climate Finance Tracking Methodology and the ones developed by the AfDB, to identify and categorize climate change projects among all projects

approved in any given fiscal year. Secondly, additional selection criteria under the AfDB's Green Bonds Program are applied, to further categorize the projects that can be part of the program. Projects that advance in both screening phases populate the Green Bonds Portfolio.

93. Allocation of proceeds and monitoring practices are similar to the ones described for other MDBs green bond frameworks.

B.5.2 Social Bonds

94. Turning to social bonds, the Social Bond Framework developed by the AfDB defines social projects as “activities and investments that directly aim to help address or mitigate a specific social issue and/or seek to achieve positive social outcomes, especially, but not exclusively, for a target population(s)” (African Development Bank, 2017^[36]), and closely follow ICMA Principles core components structure.

95. As for use-of-proceeds, eligible projects should be approved by the AfDB Board of Directors, to ensure that they're aligned with the Bank's strategy and its operational priorities, the High 5s; should promote or provide specific social outcomes such as poverty reduction, job creation, and inclusive growth across age, gender and geography; and should and have an impact for specific target populations, listed in the Framework. Exclusion criteria are based on AfDB's Policy on Eligible Expenditures and Environmental and Social Integrated Safeguards System.

96. As for the process for projects evaluation and selection, the AfDB operations department and the Integrated Safeguards System perform a projects categorization that first screens social outcomes and impacts for all AfDB financed projects, and then looks at environmental and social implications of screened projects through Operational Safeguards.

97. Allocation of proceeds and monitoring practices are similar to the ones described for previous MDBs green bond frameworks. Notably, the AfDB has engaged Sustainalytics to act as an external reviewer and SPO on its Social Bond Framework, to confirm its alignment both with the AfDB's sustainability objectives and the key features of the Social Bond Principles.

B.6 Development Bank of Latin America

B.6.1 Green Bonds

98. The CAF green bonds issuance is operationalized in compliance with the ICMA Green Bond Principles. Eligible green projects categories mentioned in the CAF Green Bond Framework are: renewable energy, energy efficiency, clean transportation, sustainable management of living natural resources and land use, waste management and water management and projects. More detailed eligibility criteria for sectors are outlined in the Framework, on which a second party opinion was provided by Sustainalytics.

99. A project is classified as green if it meets at least one of the following criteria: greenhouse gases emissions reduction; greenhouse gases removal from the atmosphere; climate resilience and/or adaptation promotion; efficient use of resources promotion; ecological services promotion.

100. The process for projects evaluation and selection closely follows what outlined in the Common Principles for Climate Mitigation and Adaptation Finance Tracking, as the CAF is an IDFC member. On top of that, the CAF takes into account additional aspects, such as reputation, client transparency and magnitude of the environmental impacts, and scrutinizes projects against its own Environmental and Social Safeguards. For inclusion in the bank's portfolio, the loan selection process goes through the same process all CAF credit operations do, and it is also followed by a green bond program dedicated team, that monitors the whole projects lifecycle.

101. The same logic is followed for the management of proceeds. On top of being subject to the bank's portfolio monitoring policy, execution status and contractual compliance, disbursements for projects under the green bond program are monitored by a dedicated team in order to control the proper use of the green bond proceeds and ensure a balance between disbursement and liquidity requests by the project lifecycle phase.

102. Monitoring practices are similar to the ones outlined in other MDBs' frameworks, and are centred around annual publication of allocation and impact reports and specific impact metrics such as annual GHG emission reduction, energy efficiency improvement achieved, and renewable energy plants capacity achieved.

B.6.2 Social Bonds

103. The CAF's Social Bond Framework, launched in 2020, has been developed to finance socially impactful projects, in particular those that support mitigation of and recovery from Covid-19. It does so by complying with ICMA Social Bond Principles, and closely following the core components outlined there. Second party opinion is still pending at the moment.

104. Reflecting the Covid-19 mitigation and recovery focus mentioned above, the CAF social bonds categories mainly pertain to healthcare system support and emergency economic support, and target populations refer to the general public as of 1 February 2020.

105. The process for projects evaluation and selection, the management of proceeds and monitoring practices are carried out in a similar fashion to what is provided for green bonds, by the social bond program team, and with core impact indicators such as value of medical supply financed, number of individuals supported by healthcare programs, and sectors supported and monetary value of support.

B.7 Asian Infrastructure Investment Bank

B.7.1 Sustainable Development Bond Framework

106. The AIIB has developed a framework for use-of-proceeds GSS bonds issuance, which does not refer to any of the standards and guidelines mentioned so far. Nonetheless, the framework closely follows the four core components structure that both ICMA and CBI use in their standards, with slight differences in the content of the components.

107. The use-of-proceeds component refers to the AIIB corporate mission called Financing Infrastructure for Tomorrow, and the related corporate strategy to ensure that all AIIB investments are financially, economically, environmentally and socially sustainable as well as inclusive. Furthermore, the corporate strategy defines thematic priorities to shape and guide AIIB's investment portfolio and business activities, such as green infrastructure, connectivity and regional cooperation, technology enabled infrastructure and private capital mobilization. All this trickles down to concrete financing targets of reaching 50% climate financing by 2025, 25%-30% cross-border connectivity by 2030 and 50% private sector projects by 2030.

108. Specific strategies guide investment in infrastructure sectors with sustainability principles, and serve as projects selection criteria.

109. The process of projects evaluation and selection component follows five steps. First, projects are screened comparing requested documentation against the AIIB Environmental and Social Framework. Then, once a project enters the AIIB's investment pipeline, the Bank conducts a due diligence assessment, involving interactions with the prospective client and review of the client's own assessment as well as public information pertaining to the proposed project. After that, if the project is approved for financing by

the Board of Directors, clients are required to comply with the applicable provisions of the Bank's Environmental and Social Framework and to conduct project procurement in accordance with AIIB's procurement policy to start off implementation. Monitoring happens thanks to periodic progress reports, including financial, environmental and social management reports that the AIIB requires projects implementers to prepare and submit.

110. The management of proceeds component pertains to the tracking of the outstanding amount of approved financing. Pending the use of bond proceeds in support of AIIB's approved financing, the proceeds are invested in accordance with the Bank's assets and liabilities management policy and other relevant internal policies as part of AIIB's liquid assets portfolio.

111. As for reporting, the AIIB carries out project level and portfolio level results reflecting environmental and social benefits generated by AIIB's financing. Portfolio level reporting looks at GSS bonds portfolio volumes, alignment with the AIIB mission, and performance. Project level reporting reflects granular impact and contribution to wider goals and priorities, and it is based on project description, project objectives and results framework, financing amounts, financing approval date, and environmental and/or social documentation, all on a case study level.

B.8 Council of Europe Development Bank

112. The CEB green bonds issuance is operationalized in compliance with the ICMA Green Bond Principles. The eligible categories for the use-of-proceeds are social housing, education and vocational training, health and social care, and SMEs financing for the creation and preservation of viable jobs. Target populations include low-income persons, unemployed persons, persons with reduced mobility and vulnerable groups.

113. The evaluation and selection process for eligible projects is overseen by the CEB's Project Monitoring Unit. As stated in the SIB Framework, the CEB follows its established processes to identify and consistently monitor the projects it finances. In particular, the CEB performs an in-depth appraisal of the social objectives of all potential projects, screens social and environmental risks and impacts – against a set of Environmental and Social Safeguard Standards, as well as their alignment with the Paris Agreement on climate change, and closely monitors and controls projects at every stage of their implementation.

114. CEB's processes for management of proceeds are handled by its Finance department using a portfolio approach. Unallocated proceeds if any are managed in line with the standard processes of the CEB's Treasury until full allocation. Proceeds must be fully allocated to a portfolio of Eligible Social Loans within 24 months.

115. The CEB reports on the allocation of proceeds by publishing a Social Inclusion Bond Report on its website, which also includes relevant impact metrics, on an annual basis until full allocation. An independent auditor reviews CEB's allocation of proceeds.

Annex C. Multilateral Development Banks GSS taxonomies

C.1 Common Principles for Climate Mitigation and Adaptation Finance Tracking

116. In 2019, nine MDBs²² committed to targets of USD 65 billion of climate finance (comprising both loans, bonds, and other instruments) annually by 2025 (USD 50 billion for low- and middle-income countries and USD 18 billion for climate adaptation). Their efforts were joined by the IDFC, which includes 26 regional and national development banks with a collective total of USD 187 billion reported in 2019, and a similarly increasing focus on adaptation and transition.

117. The Joint Climate Finance Tracking Group Common Principles for Climate Mitigation and Climate Adaptation Finance Tracking come from this common intent. These guidelines primarily provide guidance on climate change mitigation and adaptation tracking and reporting, comprising also a series of definitions and eligible activities, going from a sectoral level to more granular examples of sub-sector economic activities. Thus, they serve as a climate change mitigation and adaptation taxonomy for the MDBs analysed in this report, which have used them as the taxonomy that the ICMA Green Bond Principles require.

118. In the Common Principles, climate change mitigation activities are defined as “those that target a reduction of GHG emissions into the atmosphere, measuring it against the GHG emissions that would have occurred in absence of the project”. Concerned sectors are:

- Energy
- Mining and metal production for climate action
- Manufacturing
- Agriculture, forestry, land use and fisheries
- Water supply and wastewater
- Solid waste management
- Transport
- Buildings, public installations and end-use energy efficiency
- ICT and digital technologies
- R&D and innovation
- Cross-sectoral activities.

²² The MDBs involved are the African Development Bank; Asian Development Bank; Asian Infrastructure Investment Bank; European Bank for Reconstruction and Development; European Investment Bank; Inter-American Development Bank Group; Islamic Development Bank; New Development Bank; and the International Bank for Reconstruction and Development, International Development Association, International Finance Corporation, and Multilateral Investment Guarantee Agency of the World Bank Group.

119. As for activities, the Common Principles on Climate Mitigation (CM) recognises the following three categories of activities:

- Negative or very low emission activities, which result in negative, zero or very low GHG emissions and are fully consistent with the long-term temperature goal of the Paris Agreement.
- Transitional activities, which are still part of GHG-emissive systems, but are important for and contribute to the transition towards a climate-neutral economy.
- Enabling activities, which are instrumental in enabling other activities to make a substantial contribution to climate change mitigation.

120. As institutions may wish to set specific quantitative thresholds according to individual mandates and specific circumstance, or apply thresholds set in other standards or taxonomies, such as in the case of the EIB alignment with the EU Taxonomy, no fixed quantitative requirements are set. Nonetheless, they require project-specific evidence to claim impact.

121. Moreover, the CM rely on overarching principles of conservativeness of reporting, to avoid double counting, granularity of reporting, to disaggregate mitigation activities from non-mitigation activities, and complementarity of mitigation activities with the Sustainable Development Goals.

122. Climate change adaptation (CA) activities are defined as “those which target the reduction of vulnerability of human or natural systems to the consequences of climate change and enhance resilience and adaptive capacity” (Joint Climate Finance Tracking Group, 2021^[26]). Unlike CM Principles, which are based on an extensive list of eligible activities, CA Principles have a process-based approach that consists of setting out the context for climate-related risks, vulnerabilities and impacts, stating the intent to address them, and demonstrating a direct link between the climate risks, vulnerabilities and impacts and the financed activity.

123. Eligible activities are:

- Activities that integrate measures to manage physical climate risks and ensure that the project's intended objectives are realized despite these risks,
- Activities that directly reduce physical climate risk and build the adaptive capacity of the system within which the activity takes place, and
- Activities that contribute to reducing the underlying causes of vulnerability to climate change at the systemic level and/or removing knowledge, capacity, technological and other barriers to adaptation.

124. Overarching principles are the same of CM Principles.

125. In general, both sets of principles are complemented by Joint Methodologies, that were updated in 2021. They link the Common Principles to other existing taxonomies, such as the EU Taxonomy, and impact reporting guidelines, like the ones published by ICMA, and align MDBs and IDFC common efforts in climate change mitigation and adaptation to the Paris Agreement Goals.

C.2 Compatibility between climate mitigation and adaptation activities and taxonomies of infrastructure assets

126. This section outlines the details of how MDBs issuing green and social bonds have included infrastructure projects in their frameworks and taxonomies. All the MDBs analysed in this report share alignment to the ICMA Green and Social Bond Principles, and most of them take up the Common Principles

for Climate Mitigation and Adaptation Finance Tracking as the selected taxonomy for green bonds eligible projects evaluation and selection.

C.2.1 Green bonds

127. The most frequently utilized taxonomy for green eligible projects and activities among supranational issuers are the Joint Climate Finance Tracking Group Common Principles for Climate Mitigation and Adaptation Finance Tracking, which offer a comprehensive classification of activities that substantially contribute to these two high-level objectives.

128. Albeit climate change mitigation and adaptation are two major objectives and categories for green bond-compatible projects, others include but are not limited to biodiversity protection and ocean and water protection. To date, no comprehensive set of common principles covers these residual categories, as they are not considered consistently across MDBs, and sometimes fall into CM and CA activities.

129. As for CM, the Common Principles list eligible activities by sector and category, providing applicable screening criteria on GHG emissions reduction, and also some guidance on recommendations that should be followed as much as possible where relevant or highlights issues to consider, but is not intended as a universal requirement.

130. The main issue with such a classification is that, unlike the Climate Bonds Initiative, the Common Principles do not list asset types and assets specifics, that provide a more precise categorization within an economic activity. Because of this, it is more difficult to highlight the subcategories that infrastructure projects can be linked to, as the broad definition of infrastructure makes this asset class apparently applicable to all the sectors listed for climate change mitigation.

131. Nonetheless, providing a list of climate change mitigation sectors and activities mentioned in the Common Principles with which infrastructure projects are compatible is indeed informative, as it reflects the plethora of sustainable infrastructure activities that can receive funding from MDBs green bonds proceeds and where the Common Principles and infrastructure definitions such as the ones employed by the OCED and EDHECinfra overlap.

132. This is a matching exercise similar to the one performed in section A.3. While in that case infrastructure assets were compared to project categories (and asset types, in the case of the CBI Taxonomy) required by standards, here infrastructure assets are compared to asset types and project categories contained in taxonomies concretely developed by MDBs, following guidance from the ICMA standards, which requires issuers of GSS bonds aligned with the GBP to develop their own taxonomy for projects evaluation and selection.

Table C.2.1 Common Principles on Climate Mitigation Finance Tracking eligible activities applicability with infrastructure assets under OECD and TICCS definitions

Climate mitigation eligible activities are compared with compatible infrastructure assets following the OECD Working Party on National Accounts and the EDHECinfra definitions.

Energy		
Compatible categories in the Common Principles and the definitions	Eligible Activity in the Common Principles	Infrastructure applicability within OECD and TICCS classes
Renewable energy generation	Generation of renewable energy with low lifecycle GHG emissions to supply electricity, heating, mechanical energy or cooling	Generation facilities, supply chain facilities, supporting infrastructure
	Joint use of renewable energy and fossil fuel to supply electricity, heat, mechanical energy or cooling	Generation facilities, supply chain facilities, supporting infrastructure

Lower-carbon fuel	Production, storage or use of low-carbon hydrogen	Production facilities, supply chain facilities, fuel infrastructure
Lower-carbon energy generation	Brownfield displacement of a carbon-intensive fuel with a different, lower-carbon fuel to supply electricity, heat, mechanical energy or cooling	Production facilities, supply chain facilities, fuel infrastructure
	Use of waste gas as a feedstock or fuel to supply electricity, heat, mechanical energy or cooling	Production facilities, supply chain facilities, fuel infrastructure
Efficient energy generation	Brownfield conversion from production of one type of energy to joint generation or delivery for use of electricity, heat, mechanical energy, cooling	Facilities dedicated to manufacturing energy efficient components
Energy efficiency	Brownfield energy-efficiency improvement in energy production to supply electricity, heat, mechanical energy or cooling	Facilities dedicated to manufacturing energy efficient components
GHG-emission reduction	Carbon capture	Storage facilities and infrastructure
Energy storage and network stability	Energy storage or measures to improve network stability that increase consumption of very-low-carbon energy	Storage and transmission facilities and infrastructure
Transportation of electricity	Greenfield transmission or distribution of electricity that increases the share of very-low-carbon electricity delivered	Transmission and metering infrastructure
Transportation of heating and cooling energy	Greenfield high-efficiency transmission or distribution of heat or cooling energy	Transmission and metering infrastructure
Energy transportation and sale	Brownfield efficiency improvement or reduction of CO ₂ e emissions in transmission or distribution of electricity, heat or gas	Supply chain and transmission facilities
	Commercial and collection loss reduction in distribution of electricity, heat or gas	Metering infrastructure
Fugitive emissions	Reduction of fugitive GHG emissions in existing energy transportation or storage infrastructure	Transmission and storage infrastructure
Mining and metal production for climate action		
Category	Eligible Activity	Infrastructure applicability
Mining for climate action	Projects that support mining of minerals and metal ores prevalently used in or critical for renewable energy, technologies that increase energy efficiency, other low-carbon technologies, or materials and products with low embedded GHG emissions	Mining facilities and supply chain infrastructure
Metal production for climate action	Projects that support production of metals or alloys prevalently used in or critical for renewable energy, technologies that increase energy efficiency, other low-carbon technologies, or materials and products with low embedded GHG emissions	Metal production facilities and supply chain infrastructure
Manufacturing		
Category	Eligible activity	Infrastructure applicability
Energy efficiency	Brownfield industrial energy-efficiency improvement	Facilities dedicated to manufacturing energy efficient components
Efficient energy generation	Brownfield conversion from production of one type of energy to joint generation, or delivery for use of electricity, heat, mechanical energy, cooling, or desalination	Facilities dedicated to manufacturing energy efficient components
Energy and resource efficiency	Highly efficient or low-carbon greenfield manufacturing facilities or greenfield supplementary equipment or production lines at an existing manufacturing facility	Manufacturing facilities
GHG-emission reduction	Carbon capture	Storage and utilization facilities and infrastructure
CO ₂ e-emission reduction	Retrofit of existing industrial infrastructure resulting in avoidance of industrial GHGs, a switch to industrial GHGs with lower global warming potential, or implementation of technologies or practices that minimise leakages	Storage and utilization facilities and infrastructure

Resource demand management	Improvements to existing industrial processes, new processes, or advanced manufacturing technology solutions	Replacement facilities
Energy storage	Energy storage or smart industrial-scale solutions to increase integration of very-low-carbon energy or use of previously waste energy	Storage and transmission facilities and infrastructure
Support for low-carbon development	Projects that support production of components, equipment or infrastructure dedicated exclusively to utilisation in the renewable energy, energy efficiency improvement, or other low-carbon technologies	Production facilities
Lower-carbon fuel	Production or use of low-carbon hydrogen	Production facilities
Lower-carbon energy generation	Use of waste gas as a feedstock or fuel to supply electricity, heat, mechanical energy or cooling	Production facilities, supply chain facilities, fuel infrastructure
Agriculture, forestry, land use and fisheries		
Category	Eligible activity	Infrastructure applicability
Agriculture: energy efficiency	Reduction in energy consumption in operations	Traction, irrigation, pumping, harvesting, crop cooling, storage and transportation infrastructure
Agriculture: carbon sequestration	Agricultural projects that contribute to increasing the carbon stock in the soil or avoiding loss of soil carbon through erosion control measures	Associated management, information systems and other technologies
Agriculture: GHG-emission reduction	Reduction of non-CO ₂ GHG emissions from agricultural practices or technologies	Associated management, information systems and other technologies
Livestock: GHG-emission reduction	Projects that reduce methane or other GHG emissions from livestock	Associated management, information systems and other technologies
Livestock: carbon sequestration	Livestock projects that improve carbon sequestration through rangeland management	Associated management, information systems and other technologies
Forestry: GHG-emission reduction and carbon sequestration	Forestry or agroforestry projects that sequester carbon through sustainable forest management, avoided deforestation or avoided land degradation	Machinery and equipment to manage and cultivate eligible forested land; Associated management, information systems and other technologies
Marine and other water habitats: GHG-emission reduction	Projects that reduce GHG emissions from the degradation of marine ecosystems or other water-based ecosystems	Machinery and equipment to manage eligible ecosystems; Associated management and information systems and other technologies
	Projects that reduce CO ₂ e intensity in fisheries or aquaculture	On shore and off shore fish processing and storage facilities connected to eligible fisheries and fish farms; Associated management and information systems and other technologies
Food and diet: resource use efficiency	Projects that reduce food losses or waste or promote lower-carbon diets	Supply chain infrastructure
GHG reduction through biomaterial production	Projects that contribute to reduction of GHG emissions through production of biomaterials/bioenergy from biomass	Production and storage facilities, transportation infrastructure
Water supply and wastewater		
Category	Eligible activity	Infrastructure applicability
Energy and resource efficiency and demand management in water supply	Brownfield energy efficiency improvement in water supply systems through deployment of low-energy-consumption technologies or equipment, promotion of better auditing	Monitoring, storage, treatment and distribution infrastructure

	practices, or reduction of water losses	
	Greenfield water supply projects meeting high energy efficiency standard or making use of demand management	
Lower-carbon water supply	Lower-carbon greenfield and brownfield water supply projects that replace tanker use or local coping mechanisms with a piped utility water supply system	Supply chain infrastructure and facilities
Energy and resource efficiency and GHG-emission reduction in water supply and wastewater management	Greenfield and brownfield projects that promote improved operation and maintenance to reduce water losses, promote energy savings, or meet or exceed wastewater treatment targets	Associated management, information systems and other technologies
	Greenfield projects that reduce methane or nitrous oxide emissions through wastewater, faecal sludge or septage collection and treatment	
	Brownfield projects for wastewater that reduce emissions through energy efficiency improvements or improved treatment targets	
GHG-emission reduction in wastewater collection	Greenfield or brownfield projects that improve latrines or collection of wastewater, faecal sludge or septage	Collection facilities and improving infrastructure
Efficient use of wastewater	Wastewater reuse	Reuse facilities
Solid waste management		
Category	Eligible activity	Infrastructure applicability
Waste collection and transport	Separate collection and transport of source-segregated waste fractions	Waste collection infrastructure, technological infrastructure and applications of information and communications technologies
Waste storage and transfer	Temporary storage, bulking, or transfer of separately collected source-segregated waste fractions	Transfer facilities
Product reuse	Repair and reconditioning of products or product components to enable their reuse	Associated management, information systems and other technologies
Material recovery from solid waste	Material recovery from separately collected waste involving mechanical processes	Construction and operation (or modification, replacement and upgrading for brownfield projects) of recovery facilities
	Material recovery from separately collected or pre-sorted waste involving processes other than mechanical processes	
Recovery and valorisation of bio-waste	Anaerobic digestion of separately collected bio-waste	Construction and operation (or modification, replacement and upgrading for brownfield projects) of recovery facilities
	Composting of separately collected bio-waste	
	Other types of recovery and valorisation of bio-waste	
Treatment of mixed residual waste	Mechanical or biological treatment of mixed residual waste	Construction and operation (or modification, replacement and upgrading for brownfield projects) of recovery facilities
	Waste incineration with energy recovery (waste-to-energy) from mixed residual waste, RDF or SRF	
Landfill gas capture, abatement and utilisation	Landfill gas capture, abatement or utilisation as part of closure of old landfills, landfill cells or dumpsites	Capture and abatement and treatment and utilisation systems
	Landfill gas capture, abatement or utilisation in new sanitary landfills or landfill cells	
Energy efficiency	Brownfield projects aimed at improving energy efficiency in waste management facilities	Associated management, information systems and other technologies
Transport		
Category	Eligible activity	Infrastructure applicability
Urban and rural transport	Urban and rural public transport projects	Supply chain facilities, fuel and electricity infrastructure, charging stations, roads, public walking and cycling infrastructure and cycling schemes

	Non-motorised transport (NMT) or schemes for sharing bicycles	Supply chain facilities, charging stations, cycling infrastructure and schemes
Low-carbon inter-urban transport	Inter-urban railway projects for freight or passengers	Infrastructure for electrified and non-electrified freight rail
	Bus or coach public passenger transport	Supply chain facilities, fuel and electricity infrastructure, charging stations, roads
Low-carbon mode and efficiency improvement in maritime transport	Water transport projects for freight or passengers, or efficiency improvement	Supporting infrastructure
Low-carbon vehicles and associated infrastructure	Passenger or freight fleets or associated infrastructure with zero or low direct emissions	Supporting infrastructure
Low-carbon fuels for transport	Transport operations using biofuels or synthetic fuels with low lifecycle GHG emissions	Associated management, information systems and other technologies
	Use of waste gas as a transportation fuel	
Transport demand management policy and systems	Transport demand management policy or associated intelligent transport systems (ITS)	Associated management, information systems and other technologies
Air Traffic management	Efficient air traffic management	Supporting infrastructure
Efficiency and renewable energy in aviation	Efficient airport system operations or on-site renewable energy generation	Associated management, information systems and other technologies
Buildings, public installations and end-use energy efficiency		
Category	Eligible activity	Infrastructure applicability
Energy efficiency, on-site renewable energy, CO ₂ e-emission reduction, and carbon sinks in buildings	Measures that reduce net energy consumption, resource consumption or CO ₂ e emissions, or increase plant-based carbon sinks in greenfield and brownfield buildings and associated grounds	Facilities dedicated to manufacturing energy efficient components; electrification infrastructure; energy management systems
	Measures that reduce net energy consumption, resource consumption or CO ₂ e emissions, or measures that increase plant-based carbon sinks in new or retrofitted buildings and associated grounds, enabling certification standards to be met	
Energy efficiency, on-site renewable energy, CO ₂ e-emission reduction, and carbon sinks in public areas and installations	Measures that reduce net energy consumption, resource consumption or CO ₂ e emissions, or increase plant-based carbon sinks in public areas or installations	Urban planning infrastructure
End-use energy efficiency	Brownfield stand-alone end-use energy efficiency improvement or CO ₂ e-emission reduction in existing appliances or equipment	Associated management, information systems and other technologies
	New or replacement stand-alone energy efficient appliances or equipment	
Information and communications technology (ICT) and digital technologies		
Category	Eligible activity	Infrastructure applicability
Energy efficiency, renewable energy and CO ₂ e-emission reduction	Energy Efficiency improvement, renewable energy deployment, or CO ₂ e-emission reduction in existing data centres	Supporting infrastructure
Energy efficiency and renewable energy	Greenfield data centres that meet best international practices for energy efficiency or that are supplied largely by on-site renewable energy generation	Supporting infrastructure
Energy efficiency	Telecommunications networks with energy efficiency levels that meet best international practices	Supporting infrastructure
Research, development and innovation		
Category	Eligible activity	Infrastructure applicability
Research, development and innovation	Research on or development of renewable energy, energy efficiency improvement, low-carbon technologies, or other technologies instrumental to achieving full decarbonisation	Associated management, information systems and other technologies

Note: Cross-sectoral activities not included.

Source: (Joint Climate Finance Tracking Group, 2021^[25]) and OECD Secretariat.

133. As for climate change adaptation, signatories of the Common Principles are reviewing the principles to propose a more detailed and comprehensive list of CA activities similar to the ones developed for climate change mitigation.

134. The publicly available methodology seeks to identify the links between adaptation activities and the project's intent to reduce vulnerability to climate change, through a three steps approach that identifies:

- Setting out the climate change vulnerability context of the project.
- Making an explicit statement of intent of the project to reduce climate change vulnerability.
- Articulating a clear and direct link between specific project activities and the project's objective to reduce vulnerability to climate change.

135. Moreover, while updating the CA methodology, signatories of the Common Principles have provided examples of potential adaptation activities in some sectoral groupings. Even though not exhaustive, such examples can give instances of where infrastructure projects enter this under-development classification of climate change mitigation activities.

Table C.2.2 Common Principles on Climate Adaptation Finance Tracking examples of climate adaptation activities compatible with infrastructure assets using OECD and TICCS definitions

Instances of climate adaptation activities are compared with compatible infrastructure assets following the OECD Working Party on National Accounts and the EDHECinfra definitions.

Water and wastewater systems			
Common Principles Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Water supply	Increased risk of flooding of well fields leading to contamination	Well fields relocated away from floodplains, raised well heads	Relocation facilities
Wastewater infrastructure/management	Increased exposure to damage and storm-water overload due to coastal flooding and sea-level rise	Protection of wastewater infrastructure from increased flooding	Protective infrastructure; Associated management, information systems and other technologies
Water resource management	Reduction in river water levels and flows due to reduced rainfall	Improved catchment management planning and regulation of water abstraction	Supporting infrastructure; Associated management, information systems and other technologies
Crop and food production			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Primary agriculture and food production	Increased variability in crop productivity due to increased climate variability	Increased variability in crop productivity due to increased climate variability	Associated management, information systems and other technologies
Other agricultural and ecological resources			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Agricultural irrigation	Increasing drought, including seasonal droughts and shorter rainy seasons	Supplemental irrigation, multi-cropping systems, drip irrigation, levelling and other approaches and technologies that reduce the risk of large crop failures	Supporting infrastructure and systems
Forestry	Increased frequency of forest fires and pest or disease outbreaks	Improved management of forest fires and pest or disease outbreaks	Associated management, information systems and other technologies; Machinery and equipment to manage eligible ecosystems
Fisheries	Loss of marine/lake/river fish stocks due to changes in water	Adoption of sustainable fisheries and aquaculture techniques to	Associated management, information systems and other technologies

	flows, water temperatures, acidity levels or other climate-induced pressures	compensate for the reduction in local fish supplies	
Ecosystems or biodiversity (including ecosystem-based flood-protection measures)	Drought leading to loss of wetlands and livelihoods or biodiversity	Establishment of core protected areas and buffer zones for sustainable use of biodiversity and water to meet livelihood needs in more extreme droughts	Associated management, information systems and other technologies; supporting infrastructure
Industry, manufacturing and trade			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Manufacturing	Historic standards for the key parts of equipment which are rendered inappropriate under new climate conditions	Design of climate-resilient equipment, such as more stable cranes for harbours in cyclone zones	Facilities dedicated to manufacturing key components for eligible facilities
Food processing, distribution and retail	Increased risk of food poisoning and/or spoilage due to increased temperatures	Improved refrigeration or other changes in food processing and/or distribution that address more extreme heat	Supply chain infrastructure
Trade	Disruption of national trade due to climate-related disasters	Establishment of alternative trade routes in case of disruption to main route	Connecting infrastructure, roads, transport facilities
Coastal and riverine infrastructure			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Coastal defences or flood-protection barriers	Increased storm damage along coastline due to sea level rise and increased storm surges	Physical or natural reinforcement of coastline and/or additional coastal structures or vegetation	Associated management, information systems and other technologies; supporting infrastructure
River flood protection measures	Increased risk of riverine flooding due to heavier and/or more frequent rainfall events	Increased river dredging programmes, reinforcement of levees, re-establishment of natural flood plains and vegetation in upstream areas or river banks	Associated management, information systems and other technologies; supporting infrastructure
Energy, transport, and other built environment and infrastructure			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Construction	Shift in zones affected by typhoons, hurricanes or storm surges	More robust building regulations and improved enforcement	Associated management, information systems and other technologies
Transport	Torrential rains, more extreme river flows and flooding cause erosion of embankments and loss of roads or bridges	Use of revised codes for infrastructure design that consider increased frequency or severity of extreme events	Associated management, information systems and other technologies
Urban development	Increased risk of floods	Improved solid waste management and collection, increased capacity and other changes in drainage systems	Waste collection infrastructure, technological infrastructure and applications of information and communications technologies
Tourism (generally referring to Tourism infrastructure)	Storms disrupt tourist season, damage tourism infrastructure	Diversification of tourist attractions to encompass inland or low-risk areas	Associated management, information systems and other technologies; supporting infrastructure
Solid waste management	Increased risk of pollution of areas below landfill sites due to risk of floods	Completion of a climate risk assessment prior to location of landfill sites	Associated management, information systems and other technologies
Thermal energy generation	Increased seasonality of rainfall, creating periods of low river flows	Investment in thermal power generators with minimal cooling	Generation facilities, supply chain facilities, infrastructure

		water requirements	
Energy generation (including renewables)	Reduction in river flows leading to loss of generation from a hydroelectric plant	Optimisation of the design of hydro infrastructure subject to due diligence based on climate and hydrological models	Associated management, information systems and other technologies; supporting infrastructure
Energy transmission and distribution	Higher temperatures reduce distribution efficiency	Investment in embedded renewable generation to reduce distribution requirements	Generation facilities, supply chain facilities, infrastructure
Information and communications technology (ICT)			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
ICT hardware and software to beneficiary organisations	Damage to key national data centres and infrastructure from increased storms or floods	Identification of sites at greatest risk and enhancement of resilience of those sites and/or services	Supporting infrastructure, new facilities
Information technology	Lack of sector-relevant, short-term weather forecast	Investments in weather and climate services that can reach the end users efficiently	Associated management, information systems and other technologies; supporting infrastructure
Financial services			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Banking	Increased strain on banking sector as climate-sensitive clients (such as utility companies, manufacturers, retailers susceptible to supply-chain disruptions associated with extreme weather events) experience climate impacts that affect their business continuity	Creation of infrastructure and “hubs” that would support improved business continuity during and after extreme weather events	Associated management, information systems and other technologies; supporting infrastructure
Insurance	Traditional risk assessment falls short or becomes obsolete in the face of a new climate reality	Development of risk assessment which integrates climate change considerations, for example, expansion of agricultural insurance market and coverage	Associated management, information systems and other technologies
Institutional capacity support or technical assistance			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Technical services or other Professional support	Increase in the demand for professional services, such as for climate risk assessment due to increased impacts related to climate change	Provision of finance to small and medium-sized enterprises providing relevant services, such as the engineering of adaptation solutions	Financing enabling infrastructure
Cross cutting sectors			
Sub-sector	Vulnerability to climate change	Potential adaptation activities to address stated vulnerability	Infrastructure applicability within the OECD and TICCS classes
Education	Climate change results in outdated curriculum and technical syllabus, particularly in science, technology, engineering and mathematics	Technical capacity-building for training of trainers in water and agricultural sectors; development of sustainability curricula in schools	Associated management, information systems and other technologies
Health	Changing patterns of disease as a result of changing climate conditions; potable water scarcity	Monitoring of changes in disease outbreaks; development of national response plans;	Associated management, information systems and other technologies; monitoring facilities; supporting infrastructure

	as a direct threat to human health	measures to secure access to potable water	
Cross-sector policy and regulation	Rapidly outdated policy and regulation regimes due to climate change impacts	Institutional reforms and strengthening to include climate aspects in policies and regulations, in public investment prioritisation criteria	Associated management, information systems and other technologies
Disaster risk management	Increased frequency and intensity of hydro-meteorological disasters	Integration of climate change scenarios and climate risk assessments into disaster risk plans and preparedness	Associated management, information systems and other technologies

Source: (Joint Climate Finance Tracking Group, 2016⁽⁴⁷⁾).

C.2.2 Social bonds

136. Social bonds issuance and framework development lags behind its green counterpart in terms of volume and harmonisation of standards, and is only recently catching up. While the majority of social bonds issuance in 2020 and 2021 was linked to the recovery from the pandemic, projects funded in 2022 and 2023 began to cover a wider spectrum of social bond eligible project categories outlined, for example, by ICMA Social Bond Principles.

137. Many project categories have a direct link with infrastructure, since, by definition, access to basic services and systems require enabling infrastructure and facilities that target populations often lack. Thus, social bonds eligible project categories that contain infrastructure projects are widely recognised.

138. Nonetheless, the quality of this mapping suffers from the absence of internationally recognised taxonomies for social bond projects, since no comprehensive breakdown of sectors, activities and related screening criteria is available as it is for green bonds related activities, and it is therefore not possible to carry out a similar comparison. Thus, single MDBs social bond frameworks are the only benchmarks against which it is possible to assess compatibility with sustainable infrastructure projects.

139. The EIB has the most comprehensive and detailed eligible social activities internally developed taxonomy, the 2022 SAB lists the following social objectives:

- Access to water and sanitation
- Natural disaster risk management
- Access to equitable and inclusive quality education
- Universal access to affordable health services
- Health emergencies response and preparedness facilities
- Access to social and affordable housing.

140. The above objectives can be reached by funding infrastructure projects as follows:

- Water supply and wastewater infrastructure (construction, upgrade or rehabilitation of water and wastewater infrastructure and facilities)
- Flood protection and prevention (Construction, upgrade, or rehabilitation of grey or green infrastructure, like coastal protection works, dams, reservoirs, dykes, drainage systems, storm water infrastructure, early warning systems, eco-system based rainwater collection, re-use and natural flood protection)
- Pre-primary, primary and secondary education (Construction, upgrade or renovation of academic facilities of public institutions for pre-primary, primary and secondary education),

higher education (Investments in the new construction, upgrading or refurbishment of facilities of public higher education institutions)

- Healthcare services (Construction, upgrade or renovation of healthcare infrastructure and provision of health technologies and equipment for the delivery of healthcare, public health and prevention services)
- Operations and services for health emergencies (Construction, renovation or upgrade of healthcare infrastructure; provision of health technologies and medical equipment; and emergency-specific operational expenditures for response and preparedness capacity to Health Emergencies defined by the World Health Organisation)
- Construction, Upgrading and Renovation of social and affordable housing units.

141. The World Bank lists all its debt instruments as sustainable development bonds, of which green bonds are a subset with a dedicated framework. Social bonds don't share the same identification rigorousness, but many eligible projects in the World Bank financing pool have social benefits and co-benefits. The World Bank focuses on access to basic infrastructure high level objectives such as:

- Rural roads and safe transport for access to health and education facilities
- Electrification of clinics, schools and households in rural areas to improve digital connectivity
- Improved road safety and clean cooking to reduce mortality and morbidity
- Digital and other skills needed for implementing infrastructure investments.

142. The IFC has developed a specific Social Bond Framework, described above, that lists all social project categories indicated by the ICMA SBP and social projects pertaining to the Banking on Women or Inclusive Business programs, but that does not go into further detail on activities, making the establishment of a link with infrastructure projects as broad as the one performed in Annex A for ICMA SBP.

143. The ADB funds social projects within its Theme Bonds for sustainable development program. Education, health and water projects and programs all share related infrastructure activities with what outlined above for the EIB SAB. As for gender bonds, the ADB identifies five areas and/or dimensions of gender equality and women's empowerment, namely:

- Women's economic empowerment through access to finance and/or credit; micro, small, and medium-sized enterprise development; agriculture development; value chain support; financial literacy and entrepreneurship training
- Gender equality in human development through education, skills development, and technical and vocational education and training
- Reduced time poverty of women through reduced drudgery and time spent on unpaid care and domestic work
- Participation in decision-making and leadership through community groups, local governments, and public and private sector management
- Women's resilience against risks and shocks including climate change and disaster impacts through environmental protection and/or rehabilitation; flood and disaster risk management; budget support and social protection.

144. Infrastructure projects can contribute to the achievement of all the above through:

- Supporting infrastructure to enterprise and agriculture development
- Educational facilities

- Transport, sanitation and energy infrastructure
- Associated management, information systems and other technologies
- Construction, upgrade, or rehabilitation of protection infrastructure.

145. The AfDB, which closely follows ICMA in its social bonds issuance, lists high-level objectives and eligible project categories similar to what is outlined in the Social Bond Principles. The AfDB Social Bond Framework also lists eligible project examples that contribute to both the achievement of the objectives, and the alignment with the High 5s, five operational priority areas that the Bank has developed to respond to the challenge of supporting inclusive growth and the transition to green growth by scaling up investment and implementation of the Ten-Year Strategy.

Table C.2.3 AfDB High 5s and infrastructure applicability

Social eligible projects are compared with compatible infrastructure assets following the employed definitions.

High 5s	Sector of operation	Eligible project compatible with the definitions	Infrastructure applicability within OECD and TICCS classes
Light up and power Africa	Energy	Rural electrification	Generation facilities, supply chain facilities, transmission infrastructure
Feed Africa	Agriculture and food security	Provision of farm infrastructure and agricultural inputs for rural farmers	Supporting infrastructure and storing facilities
Industrialize Africa	Agri-business, industries and services	SMEs and value chain financing	Associated management, information systems and other technologies
Integrate Africa	ICT	Last mile connectivity for rural communities	Transmission infrastructure
Improve the quality of life for the people of Africa	Health	Health systems development; Construction and/or rehabilitation of hospitals and healthcare centres	Construction, upgrade, or rehabilitation of enabling facilities

Source: (African Development Bank, 2017^[36]).

146. As for the Development Bank of Latin America, the Social Bond Framework mainly revolves around eligible projects that pertain to healthcare system and emergency economic, in light of the support that CAF provided during the recovery from COVID-19. The potential link with infrastructure projects is closely tied with building hospital facilities and infrastructures, as outlined for instance in point 4 of the EIB SAB high-level objectives and activities list, and with emergency economic support, to which infrastructure projects can contribute by providing associated management, information systems and other technologies.

147. The AIIB has not developed a benchmarking of eligible projects against high level social objectives, as it opts to include key infrastructure sectors in its sustainable development bonds framework. Strategies are developed for energy projects, sustainable transport, sustainable cities, water projects, digital infrastructure and private capital mobilization for infrastructure. Socially desirable outcomes are ensured by the framework in general, as it retains the classic components of project selection and evaluation process, management of proceeds, and, most importantly verification and monitoring.

148. The CEB's Social Inclusion Bond Framework eligible project categories closely follow ICMA SBP categories, while also specifying the nature of funded projects and the eligibility criteria employed. Infrastructure projects can be found in affordable housing and access to essential services categories, and pertain to social housing, education and vocational training, and health and social care projects. The Framework also provide an indication of target populations and a link to relevant SDGs.

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