



Fixed Income Special – ESG update

NORD/LB Floor Research



NORD/LB Fixed Income Special ESG update 2024

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ESG update 2024: An overview

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Fourth edition of our ESG update: Spotlight on regulatory aspects and market activity

As part of our annual ESG update, we summarise the most important developments within the ESG segment in addition to exploring the future opportunities and challenges presented by this part of the debt market. In addition to the global market activities seen over the course of the last year, regulatory aspects return to the forefront of our coverage, including the European Green Bond Standard and amendments to the EU taxonomy, among other aspects, in what is now the fourth edition in this publication series. Moreover, we shall shed light on the various approaches of selected central banks to the ESG segments and will bring together the assessments of risk experts at the rating agencies S&P, Moody's and Fitch with regard to the market for ESG bonds. In the following, we shall provide an overview of the core topics covered in our NORD/LB ESG update 2024.

ESG primary market in 2023: New issuance volume down on the previous year

Over the past two years, momentum in terms of issuance activity has been trending downward. In total, the global new issuance volume in the last year amounted to EUR 818.0bn (FY2023), which corresponds to a decline of -6.0% Y/Y. While a negative trend can also be seen in relation to gross new issues across the SSA segment, the covered bond market did have a surprise in store for us with a new issuance record. For the first time as part of our ESG update, we also look at the sustainable segment for senior bonds. In this context, we have observed significantly higher activity levels in the senior preferred category.

EU adopts Green Bond Standard (EUGBS) and expands the EU taxonomy

With regard to the regulatory landscape, we noted two main developments at the European level in particular. With the second delegated act entering into force, the European Union expanded the technical screening criteria for a series of sustainable business activities under the EU taxonomy. Furthermore, the EUGBS was adopted in 2023, through which the aim is to establish a global standard for green bonds.

ICMA Bond Principles left largely unchanged

Only minor changes were made to the ICMA Bond Principles last year. For example, the Social Bond Principles were adapted to include meaningful reporting requirements.

Ratings agencies: Forecast of slight to moderate market growth

Alongside our own assessments of market dynamics, we also regularly provide opinions and analyses from selected rating agencies. For example, both S&P and Moody's are forecasting slight to moderate growth in issuance activities on the global ESG market in the current year.

Green monetary policy?

Global challenges such as climate protection and sustainability are also highly relevant to the monetary authorities, who are acting as key players on the international financial markets. In addition to focusing on the measures adopted by the ECB, we also provide an overview of the sustainability efforts of a series of other selected national central banks.

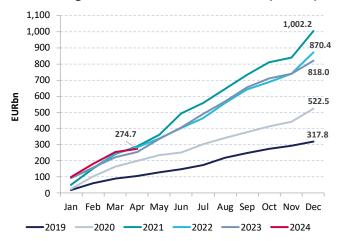


The market for ESG bonds

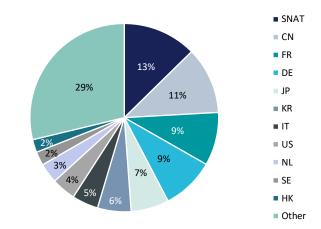
New ESG issuances declined again in 2023

While the global market for sustainable bonds - by our definition this includes bonds in the categories green, social, sustainability and sustainability-linked- reached another historically high level last year with a new issuance volume equivalent to EUR 818.0bn, the primary market did still fall short of expectations once again. In comparison with the volume recorded in 2022 of EUR 870.4bn, the value reflects a decline of -6.0% Y/Y. The record volume of EUR 1.0tn in 2021 therefore disappeared further into the horizon. Nevertheless, the fact remains: over the past five years, a cumulative volume of EUR 3.5tn in ESG bonds has been issued. In terms of the breakdown by jurisdiction, issuers from the supranationals segment top the charts. In absolute figures, their share of 13% reflected a new issuance volume of EUR 103.4bn. With a volume of EUR 93.9bn, reflecting a share of 11%, China occupied the second place in the ranking. Compared with the previous year, the top two have therefore switched places. Moreover, in relation to Chinese issuance activities, it should be noted that it was not until an overhaul of the Chinese regulations in mid-2022 that green bonds were required to be 100% aligned with the globally established ICMA Bond Principles (previously it was 70%). Incidentally, for state-owned enterprises, the threshold remains at 50%. In this way, large portions of new ESG issues from China cannot be equated with European issuances, for example, due to the fact that the proportion of "non-aligned" bonds (i.e. not aligned with established frameworks) here is barely of significance. With regard to the EU, it has become a major player in the global market for ESG bonds. With the NGEU (NextGenerationEU) stimulus package for a sustainable recovery of the Union, which features a volume of more than EUR 800bn (of which at least EUR 250bn in green bonds), the EU is expected to become the largest green bond issuer worldwide by 2026. Among the Member States themselves, France and Germany both stood out with shares of 9% each in the global ESG issue volume.

Cumulative global new issues of ESG bonds (EURbn)



ESG issuances in 2023: Breakdown by jurisdiction



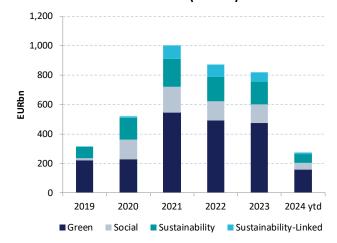
Source: Bloomberg, NORD/LB Floor Research



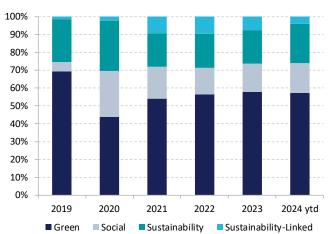
New ESG issuances in 2023: Downward trend confirmed for all sub-segments

The volume of newly placed ESG bonds in 2023 again declined against the value recorded at the end of the prior year – a development that applies to each sub-segment in our definition of the ESG universe. The green bond sub-segment was again the strongest, with a new issuance volume of EUR 474.5bn (-4.0% Y/Y). Sustainability bonds (EUR 154.2bn; -8.0% Y/Y) followed in second place, with social bonds (EUR 128.5bn; -2.0% Y/Y) and sustainability-linked bonds (EUR 62.3bn; -25.0% Y/Y) occupying third and fourth. The sharp decline in sustainability-linked bonds is certainly eye-catching here. These are instruments suitable for transitional financing that are not linked to the use of proceeds, but rather relate to ESG performance indicators defined in advance and are therefore particularly suitable for small issuers. In last year's study, we already reported on the declining momentum of new issue volumes on account of a challenging market environment. This trend was confirmed in 2023, with growth in sustainability-linked bonds ending up in negative territory at the aforementioned level of -25.0% Y/Y. In terms of relative market shares, there has been no real change in the picture compared with 2022: for example, green bonds once again accounted for the majority at 58%, while sustainability bonds were ranked second at 19%, followed by social bonds with a share of 16%. The market share of sustainability-linked bonds also fell as a result of the significant decline in issuance activity and accounted for a share of only 8% in 2023. While overall they still account for the smallest market share, it is worth mentioning that the granularity of the global market for ESG bonds has increased markedly in recent years.

ESG bonds: Global new issues (EURbn)



ESG bonds: Relative market shares of new issues



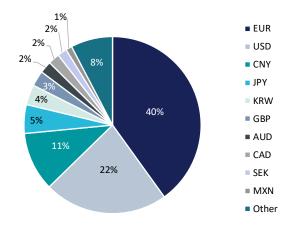
Source: Bloomberg, NORD/LB Floor Research

Public issuers and financials account for the largest new issuance volumes

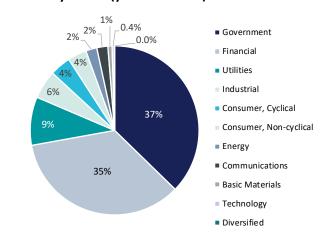
Around 37% of the green, social, sustainability and sustainability-linked bonds issued in 2023 are attributable to the "Government" segment, while the "Financials" segment accounts for a share of 35%. In comparison with the previous year, the rankings have not changed: in 2022, the respective shares stood at 37% (Government) and 34% (Financials). A look at the industrial sectors shows that utilities continue to play an important role within the sustainable bond universe, although their relevance is trending downwards. In 2023, utilities ranked in third place after accounting for a new issuance volume of EUR 75.7bn (previous year: EUR 104.3bn), which corresponds to a share of 9% overall (2022: 12%).



ESG bonds: Distribution of globally outstanding volume by currency (year-end 2023)



ESG bonds: Distribution of globally outstanding volume by sector (year-end 2023)



Source: Bloomberg, NORD/LB Floor Research

EUR and USD remain the primary currencies: USD remains constant, EUR loses ground

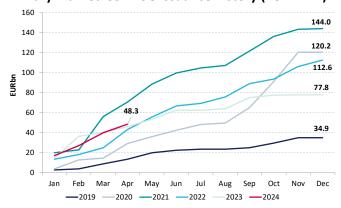
Despite the European single currency losing ground in terms of its market share, as before, the vast majority of the global outstanding bond volume in our definition of the ESG market is still denominated in EUR (40%; previous year: 43%). The USD accounts for just over one-fifth (22%) of the overall volume, which means that the greenback's share has remained constant year on year. In terms of currencies on the Asian market, the CNY (11%) and KRW (5%) continued to assert their dominance, accounting for a combined market share of 16%. Looking at Europe, the most commonly used currencies aside from the EUR were GBP (3%; previous year: 2%) and SEK (2%; previous year: 2%). In our opinion, the regulatory impetus on the part of the European Commission in the area of sustainability and accompanying special programmes such as NGEU should ensure that the EUR continues to dominate proceedings in the future. However, the USA is also aiming to halve greenhouse gas emissions by 2030 compared with the level in 2005, for which a funding programme of USD 369bn has been put in place. In September 2021, Xi Jinping, President of China, also reiterated his nation's ambition to become climate neutral by 2060 at the United Nations General Assembly. However, the world's largest emitter of CO₂ has since come under pressure to deliver initial results after China's carbon emissions actually increased by +4.7% Y/Y in 2023.



SSA-ESG year 2023 saw no new records, 2024 got off to a dynamic start

As it was the case in the previous section for the global ESG bond segment, we will now turn our attention to what was a busy year 2023 on the ESG market for our definition of SSA issuers (i.e. excluding sovereigns). As at the reference date of 31 December 2023, we recorded EUR-denominated ESG benchmarks with a total volume of EUR 77.8bn across the green, social and sustainability formats. Compared with the issuance trends of recent years, this value is significantly lower than those seen between 2020 and 2022 inclusive. The decisive factor for the record year 2021 was that the European Union issued a total of EUR 46.1bn in social bonds as part of the SURE programme between February and May alone. With the boost of SURE, EU Member States were afforded financial support to mitigate the social and societal consequences of the COVID-19 pandemic (e.g. in the form of government aid such as short-time work programmes). With the introduction of the SURE agenda, social bonds no longer play second fiddle to green bonds. Looking at 2024, January set a very high bar for new issues in particular: at EUR 16.9bn, the ESG issuance volume was EUR 4.0bn up on the second strongest month, namely April, when a volume of EUR 12.9bn was recorded. A total of 29 new ESG issues from 27 different issuers were placed in the first third of the year. The largest transaction in terms of volume was carried out by the EU at EUR 7.0bn, which generated an order book of a remarkable EUR 86.5bn. The aggregated new issuance volume as at the end of April 2024 amounted to EUR 48.3bn. This volume is only surpassed by the same period in 2021 (EUR 70.5bn). In terms of the distribution of the new issuance volume across the ESG sub-segments, green bonds were well ahead at 49%, followed by social bonds at 31% and sustainability bonds at 20%.

Primary market: SSA ESG issuance history (EUR BMK)



Primary market: SSA ESG issues 2024 (EUR BMK)



Source: Bloomberg, NORD/LB Floor Research; data as of 30 April 2024 eod

The EU as a mega issuer in the green and social bond segments

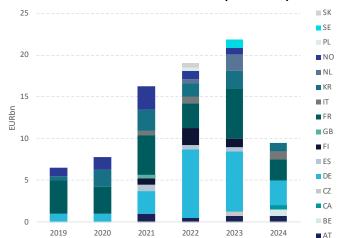
We would like to deal with the European Union (EU) separately as an ESG issuer. Under the SURE programme, which featured a maximum volume of EUR 100bn, social bonds amounting to EUR 98.4bn were issued up to the end of the programme in 2022. The picture is somewhat different for the NextGenerationEU (NGEU) programme: the EU is planning for an average annual funding target of EUR 150bn through to 2026, with the total programme volume being capped at more than EUR 800bn (at current prices). In this context, the intention is to raise up to 30% of the funding by way of green bonds. In this way, the EU would become the world's largest issuer of green bonds. For further information on the EU's role as a mega issuer, please refer to our Covered Bond & SSA View of 29 May.



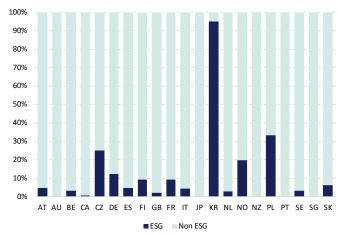
ESG covered bonds: Record value in 2023, promising start to 2024

It was another record year for the ESG sub-market in the EUR benchmark segment for covered bonds in 2023. For example, covered bonds amounting to EUR 21.9bn overall, split across 31 separate deals, were placed in the sustainable formats (green and social) last year. We did not observe any deals in the sustainability bond format on the primary market in 2023. The issuance volume in this sub-market was therefore up by EUR 2.75bn on the level recorded in the prior year (EUR 19.10bn). The new record issuance volume is not least attributable to the quite considerable growth in deals placed in the social format. Thus, a total of EUR 14.75bn was attributable to the green segment (2022: EUR 15.75bn), while the social category accounted for a total of EUR 7.10bn (2022: EUR 2.85bn). Continued generic growth in EUR benchmarks in the ESG segment was also reflected in the number of newcomers to the market in 2023 and 2024. In 2023, we recorded three EUR benchmark debuts in the green format and one in the social format. The first Czech issuer to place an ESG bond in the EUR benchmark segment is particularly noteworthy. In June 2023, UniCredit Bank Czech Republic & Slovakia approached investors with its first green covered bond, ultimately raising a total of EUR 500m on the market. The other three inaugural ESG benchmark issuers came from the jurisdictions of Germany, France and the Netherlands, which hints at a certain degree of geographical diversification. From our perspective, a similar dynamic can also be seen in the current year. In 2024, the issuance volume at the end of April 2024 stood at EUR 9.5bn. When looking at a breakdown at jurisdiction level, transactions from Germany (EUR 3.0bn) account for the largest share of deals, followed by France (EUR 2.5bn) and Italy and South Korea (EUR 1.0bn each). In our view, the first ESG deal by a Canadian issuer is quite encouraging. With an inaugural social covered bond (3.1y), Equitable Bank approached investors in April 2024, successfully placing a fresh bond in the amount of EUR 500m on the market in the process. For the rest of the year, we expect further market appearances by covered bond issuers in green and social formats. In our opinion, influences such as the introduction of the EU Green Bond Standard and other political implications will play a key role in influencing the dynamics of the ESG covered bond market in the years to come. Overall, we forecast continued growth on the market for covered bonds in sustainable formats.

Covered bonds: ESG issuance volume (EUR BMK)



Covered bonds: ESG shares in the overall market



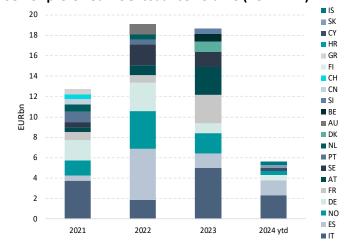
Source: Bloomberg, NORD/LB Floor Research; data as of 30 April 2024 eod



ESG deals: Senior preferred and senior non-preferred

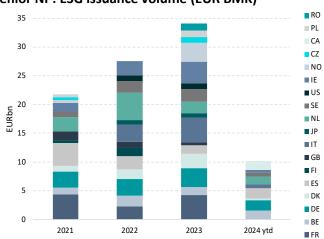
There was also increasing momentum in relation to ESG deals on the market for publicly placed deals in the Seniors segment. For example, ESG deals in senior preferred format amounted to EUR 18.7bn in 2023, with the largest volume in terms of jurisdiction of origin accounted for by Italy (EUR 5.0bn), France and Austria (EUR 2.8bn each), as well as Norway (EUR 2.0bn) and Sweden (EUR 1.5bn). In terms of issuance type, the green format was again dominant with a share of EUR 14.4bn, with the social category accounting for EUR 4.4bn. In the sub-segment of senior non-preferred (SNP) bonds, the primary market was far more active in terms of the volume, with a total of EUR 34.2bn successfully placed. Issuers from France and Italy (EUR 4.3bn in each case) as well as Ireland (EUR 3.8bn), Germany (EUR 3.4bn) and Norway (EUR 3.3bn) were the main drivers of this development. SNP issues in green format again dominated proceedings here (2023: EUR 29.2bn). In the current year, issuers from the Financials segment are again regularly making use of green senior deals. As such, a volume of EUR 7.5bn has been placed with investors in the preferred format, while a total of EUR 12.4bn has been brought to market in the NPS segment. At this point, we should emphasise that the respective dynamics are not necessarily replicated year on year. While the choice of ESG format often depends on the business model or the client base of the institution, the choice between preferred or non-preferred or even the covered format comes down to a number of additional factors. As the regulatory environment changes, a more pronounced shortage of available or suitable green assets cannot be ruled out. However, this does not automatically mean that growth in unsecured ESG deals will come to a standstill over the course of the year, but rather, banks will be forced to increase their efforts to keep pace with dynamic demand for sustainable bonds.

Senior preferred: ESG issuance volume (EUR BMK)



Source: Bloomberg, NORD/LB Floor Research; data as of 30 April 2024 eod

Senior NP: ESG issuance volume (EUR BMK)





Update: EU taxonomy

The EU taxonomy - An overview

Within the framework of the European Green Deal and the Paris Agreement on climate protection goals, the European Commission introduced a uniform market standard for the financing of sustainable economic activities in the form of the EU taxonomy. The latter is a central component of the Action Plan published by the European Commission in March 2018 for financing sustainable growth. In essence, the EU taxonomy is a classification system designed to channel capital flows into environmentally sustainable activities. The creation of a uniform market standard for sustainable financing and investment should also serve to aid the consolidation of the investment landscape in the ESG space in addition to curbing "greenwashing". Alongside the EU taxonomy, which in its current configuration focuses more on ecological aspects, a working group set up by the European Commission presented its first recommendations for an extension of the taxonomy to include social aspects in February 2022. Accordingly, in its current form, the EU taxonomy can be seen as a framework to which adjustments and revisions are regularly made. A relatively easy-to-navigate EU Taxonomy Compass, provided by the European Commission since the entry into force of the first delegated act in June 2021 and updated on an ad hoc basis, should serve as a guide. On the back of our last publication, we now propose to take another look at the current status quo of the framework and to shed light on the potential implications for sustainable bonds on the European market.

Requirements profile for sustainable activities under the EU taxonomy

In its current configuration, the EU taxonomy comprises the framework codified in Regulation (EU) 2020/852 as well as two delegated acts. While the regulation forms the basis for classifying sustainable activities, the delegated acts define technical screening criteria (TSC) to assess economic activities in terms of their contribution to achieving one of six environmental objectives. The six objectives defined in the EU taxonomy include: I. Climate change mitigation, II. Climate change adaptation, III. Sustainable use and protection of water and marine resources, IV. Transition to a circular economy, V. Pollution prevention and control, and VI. Protection and restoration of biodiversity and ecosystems. For an economic activity to be considered "taxonomy-eligible", it must satisfy four conditions. First, the activity must make a substantial contribution to at least one of the six environmental objectives, and second, it must not significantly violate any of the other objectives. Third, both conditions must also be in line with the technical screening criteria defined in the delegated acts. Fourth, the economic activity must not violate the "minimum safeguard" requirements. The minimum safeguard provisions cover international human rights standards in particular, although other regulations such as workers' rights, protection against corruption and fair competition are also included. An economic activity that meets all conditions is considered to be sustainable within the meaning of the EU taxonomy.



Delegated acts presented for all six environmental goals

The EU taxonomy provides a framework that is supplemented by targeted delegated legal acts that define selection criteria for economic activities that comply with the EU taxonomy. Overall, the European Commission has adopted two delegated acts since the EU taxonomy entered into force, both of which include specific selection criteria that apply to the six environmental objectives. These have been revised and adjusted at regular intervals over recent years. In June 2021, the first delegated act, namely the Climate Delegated Act, which defines the technical screening criteria for climate change mitigation and climate change adaptation, entered into force. It addresses the activities of around 40% of all European listed companies that are active in sectors that account for roughly 80% of greenhouse gas emissions in Europe. Of relevance here are the energy, forestry, manufacturing, transport and building sectors in particular. With the first amendment to the Climate Delegated Act in July 2022, the list of economic activities covered by the EU taxonomy was expanded to include nuclear and gas energy. Although this decision certainly stirred up some controversy, according to the EU, it is intended to accelerate the transition to a climate-neutral future. In March 2022, the "Platform on Sustainable Finance" presented its final report on the TSC of the EU Taxonomy Environmental Targets III. to VI. Based on the recommendations of the expert group, the European Commission then published a first draft of the second delegated act of the EU taxonomy in April 2023, which was eventually adopted in June of the same year. In the next section, we shall outline the main focal points in terms of the content of the Environmental Delegated Act in greater detail.

Environmental Delegated Act enters into force in January 2024

According to the European Commission, the first delegated act (Climate Delegated Act) for the initially prioritised environmental targets already addressed 40% of European companies, which in total represent more than 80% of direct greenhouse gas emissions. However, the scope has now been significantly further extended with the Environmental Delegated Act having entered into force on 01 January 2024. This has defined the technical screening criteria for economic activities in the fields of manufacturing, water supply, wastewater disposal, transport, waste management, renovation and housing, as well as information and communication technology, among others. In total, the new screening criteria of the Climate Delegated Act cover 35 activities across eight economic sectors. Most of the economic activities addressed can be allocated to the fourth environmental objective of the EU taxonomy (Transition to a circular economy). In addition, the European Commission has made adjustments to the Climate Delegated Act that relate to the technical screening criteria for activities associated with the first and second environmental objectives (climate change mitigation and climate change adaptation). Together with the Environmental Delegated Act, the European Commission also adopted an amendment of the Climate Delegated Act. In so doing, new activities were added to the environmental objectives of climate change mitigation and adaptation, including the manufacture of automotive and mobility components. Moreover, specific changes were made to the technical screening criteria of the economic activities defined in the first legal act.



Development of the EU taxonomy over time



Source: European Commission, NORD/LB Floor Research

ESG reporting in the financial sector: First reporting year under the SFDR

The standardised classification of economic activities as "sustainable" within the EU taxonomy forms the basis for a comparable disclosure standard within the EU. The Sustainable Finance Disclosure Regulation (SFDR) stipulates mandatory reporting obligations for non-financial companies as well as producers of financial products and financial consulting firms. The specific configuration of the relevant reporting standards based on the SFDR became apparent after the Delegated Regulation (EU) 2022/1288 entered into force in April 2022, and applied to non-financial companies from 01 January 2023. With the Delegated Regulation (EU) 2023/363, the SFDR was expanded to include reporting obligations for economic activities in the gas and nuclear sectors in February 2023. The SFDR aims to increase the market transparency of sustainable financial instruments in addition to boosting market growth in this segment. This is intended, in particular, to curb greenwashing by providing investors with consistent and comparable information on the environmental performance of assets as well as economic activities on the part of financial and non-financial companies. Since 01 January 2024, financial market players (e.g. asset managers, institutional investors, insurance companies and pension funds) must also comply with these disclosure obligations. Reporting is to be carried out on a retrospective basis, meaning that 2023 is the first reporting year. Financial market participants are obliged to use the templates provided by the supervisory authorities to report on their "sustainable" activities. In principle, these may not be altered. In addition to quantitative information, such as the proportion of sustainable investments with a social objective, the templates also contain qualitative information on how sustainability risks are dealt with. As it is the case with the EU taxonomy, the reporting requirements under the SFDR are also subject to a continuous adaptation process. Until 31 December 2023, individuals, organisations and industry participants had the opportunity to comment on the SFDR regulations as part of a public consultation process organised by the European Commission. The aim of this was to facilitate a comprehensive evaluation of the regulations and to identify potential shortcomings in terms of legal certainty, applicability of the regulation and its ability to help combat greenwashing. At the time of publication, no analysis or evaluation of the results of this consultation process had been made available.



KPIs should reflect business segments and industry specifics

The core element of the reporting requirements for financial market participants pursuant to Art. 8(1) of the Taxonomy Regulation are Key Performance Indicators (KPIs), which are calculated, for example, for credit institutions on the basis of on-balance sheet assets in connection with the financing business (lending business). The most important key performance indicator is the Green Asset Ratio (GAR), which sets EU taxonomycompliant assets in relation to total covered assets. Incidentally, receivables from sovereigns are initially excluded entirely for an indefinite period and therefore do not play a role in either the numerator or the denominator of the KPI. In contrast, derivatives are to be included in the numerator. In addition, there are other KPIs for various business areas, such as the FinGuar KPI, as in financial guarantees for companies, a green ratio for assets under management (AuM KPI), and a KPI for the commission business (F&C KPI). The calculation methodology for all KPIs follows the pattern of determining the EU taxonomy-compliant activities in the respective line of business of the credit institution and presenting them as a percentage. For the financial market players explicitly mentioned in the SFDR and Art. 8 of the Taxonomy Regulation (credit institutions, investment firms, asset managers, insurance/reinsurance firms), there are partly specified KPIs, which are intended to take account of the respective entrepreneurial activity.

ESG ratings

Another important element that should not be overlooked in the context of the EU taxonomy are ESG ratings, although it should also be noted that these are not explicitly part of the EU taxonomy. The aim of the ESG ratings is to increase trust on the part of investors in the sustainability of the products and businesses by evaluating the exposure to sustainability risks and their impact on society and the environment. In order to standardise the ESG ratings, the European Commission and European Parliament agreed a preliminary draft of a potential future regulation in June 2023. The new regulations are intended to improve the reliability and comparability of ratings by, for example, requiring rating agencies to publish their methodologies, models and basic assumptions of their ESG rating approach. In this way, the transparency and integrity of ESG rating providers should be improved and potential conflicts of interest can be avoided. To this end, ESG rating providers must be approved by ESMA, which also acts as their supervisory body. In addition, the EU's draft defines more precisely the circumstances under which ESG ratings would fall within the scope of the regulation. Overall, we are of the view that this regulation would represent another step in the direction of improved transparency and comparability of ESG ratings. The finalised regulation is not expected to be adopted until mid-2024 at the earliest.



Stakeholder request mechanism: Proposed amendments to the EU taxonomy

In October 2023, an instrument was put in place in the form of the <u>Stakeholder request mechanism</u>, the aim of which is to allow stakeholders to present proposed amendments to the EU taxonomy. On the basis of scientific and technical insights, new activities can be included in the EU taxonomy, or alternatively the technical screening criteria for existing activities in the EU taxonomy can also be adjusted. On a defined date, these requests are evaluated by a specific working group and subsequently evaluated by the European Commission. On the first such date (15 December 2023), the number of requests amounted to 646. The working group assesses the requests in terms of their compliance with the EU taxonomy and proposes selected steps for inclusion. Finally, the European Commission evaluates the working group's proposals and, where necessary, implements changes to one of the two delegated acts.

Time frame and connection to the EU Green Bond Standard

The EU taxonomy has been constantly evaluated over the past few years and supplemented by the inclusion of additional aspects such as the EU Green Bond Standard. At present, the focus of the European Commission is on reviewing the underlying legal act, in particular with regard to the treatment of risk positions of financial companies vis-à-vis sovereigns. This process is expected to be completed by the end of June 2024. Looking to the near future, we believe that the expansion of the scope of the KPIs that apply to credit institutions to include the trading book and non-banking services is particularly relevant for the 2025 reporting period. Another project in full swing concerns the legislation on ESG ratings, which, following an agreement between the European Commission and the European Parliament, is expected to be completed by mid-2024 at the earliest. With all legislative initiatives relating to the EU taxonomy, European legislators are seeking to create a comparable standard for "sustainable" investments by enabling investors to base their investment decisions on a comparable data basis. With these regulations, the EU is striving to advance the transformation in the direction of a climate-neutral society.

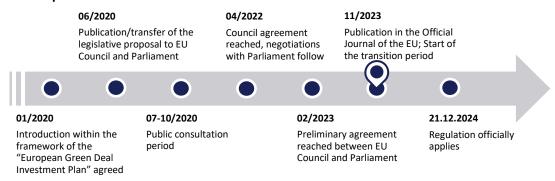


Update: EU Green Bond Standard

EU Green Bond Standard reaches milestone - Regulation enters into force

On 06 July 2021, the European Commission published its legislative proposal for a voluntary European Green Bond Standard (EUGBS) together with its new Sustainable Finance Strategy. Initially, it was clear from the outlined strategy that the investment volume required to finance the transition to a sustainable European economy would amount to EUR 350bn per year to achieve the 2030 emissions target alone, plus additional funds of EUR 130bn to realise the other climate goals. The legislative proposal follows the "gold standard" for European green bonds included in the Financing Sustainable Growth action plan since 2018 and recommended by the expert group. The EUGBS also explicitly lays claim to being a globally dominant label in the green bond market. After a preliminary agreement was reached at the end of February last year between the European Parliament and the European Council on the introduction of European Green Bonds (EuGBs), Regulation (EU) 2023/2631 was published in the Official Journal of the European Union. The main core elements of the Regulation include: I. A minimum guota of 85% for the allocation of issue proceeds to activities in line with the requirements of the EU taxonomy (flexibility framework of 15% for sectors not, or not yet, included and international support activities pursuant to Art. 5(1)), II. Uniform reporting standards on the part of issuers and notifications about the impact of bond investments on the transition plan of the issuing institution, III. A registration system and supervisory framework for external third parties for the purpose of reviewing EU green bonds (in accordance with the EUGBS) with information on the management of possible conflicts of interest, and IV. A transfer of supervisory competences from national supervisory authorities. After the Regulation was published in the Official Journal of the European Union at the end of November 2023, it officially entered into force 20 days later. This then triggered the start of a 12-month transitional period, which is set to end on 21 December 2024. From this point on, issuers will be able to apply the Regulation.

Development of the EU Green Bond Standard over time



Source: European Commission, NORD/LB Floor Research



Key features of the EU Green Bond Standard

1 G	Slobal application	Target group includes all issuers from EU and third countries such as enterprises, sovereigns, financial institutions and issuers of covered bonds and asset-backed securities.
2 V	oluntary basis	The EUGBS serves as a standard for all issuers who want to issue their bond as a "European green bond".
- 3	U taxonomy onformity	Pursuant to Art. 4, 100% of the issuance proceeds must be invested in EU taxonomy-compliant activities until the bond finally matures (exception in line with Art. 5 (1): flexibility framework of 85% can be applied).
4 "	Grandfathering"	If there is a change in the technical screening criteria in the EU taxonomy, affected outstanding bonds can rely on applicable rules at the time of issue for up to seven years.
5	xternal and national upervision	EuGBs are subject to external audit (second party opinion) and monitoring by the ESMA. National authorities are also given supervisory powers.

Source: European Commission, NORD/LB Floor Research

Transparency as the focal point

Far-reaching disclosure obligations and trustworthy external auditing are intended to ensure a high level of integrity for future European green bonds and effectively prevent greenwashing. The basic structure of the EUGBS is divided into three main features. First, pursuant to Art. 4, issuers commit to using all proceeds from green bonds for sustainable investment opportunities in line with the EU taxonomy. For financing in economic sectors, to which no technical screening criteria apply at the time of issuance, as well as for activities in the context of international support, a flexibility framework of 85% currently applies to the compliant use of proceeds pursuant to Art. 5. A prerequisite for this is, by definition, a significant contribution to one of the six environmental goals. "The extent to which this flexibility framework is applicable and necessary will be reassessed as more attractive green investment opportunities are expected to become available in the coming years as a result of Europe's transition to climate neutrality", as the European Council explains. Second, the use of the EuGB label is linked to far-reaching reporting requirements, where investors must be demonstrated the exact alignment with the EU taxonomy. If proceeds are directed towards taxonomy-compliant economic activities, a CapEx plan must also be drawn up in accordance with Art. 7 that sets a deadline for achieving taxonomy compliance. Within 60 days of the deadline, compliance with this plan must be externally audited. Transparency is further enhanced by the fact that, based on Art. 10, issuers must prepare a specified factsheet prior to issuing a European green bond and secure a positive evaluation of this as part of an external preissue audit. Post-issuance, an allocation report including information on the progress made in implementing the CapEx plan must be published every 12 months across the entire term of the bond. Art. 12 also stipulates that a one-off impact report outlining the environmental impacts achieved by the use of proceeds must be published. In addition, sustainability strategies must be publicly communicated and made accessible in an uncomplicated way. And finally, the third main feature concerns the establishment of a regulatory framework at the national and supranational levels. External auditors appointed for this purpose (providers of a second party opinion) are registered with ESMA, which will be the main supervisory body. National authorities are also given their own supervisory powers.



Clear rules for external auditors

The Regulation not only defines clear requirements for issuers, but also for external auditors of European green bonds, which are laid down in Title IV. Before external auditors can start their work, they must first register with ESMA and meet a list of defined requirements. In addition, they must publish their audit processes and methodologies. In line with Art. 38, external auditors are obliged to publish their pre-issue and post-issue audits as well as the impact report audit on their websites free of charge immediately after the assessment has been completed. In addition to external auditors from EU Member States, those based in third countries may also be authorised to provide their services by ESMA. In the event of intentional or negligent violations of the provisions of the Regulation, in line with Art. 60(2), fines of anywhere between EUR 20,000 and 200,000 can be imposed on external auditors. On its website, ESMA publishes a register of all authorised external auditors, in addition to all auditors whose authorisation has been revoked in the past.

Division of powers between ESMA and national supervisory authorities

ESMA is the main supervisory body tasked with ensuring compliance with the Regulation, although national supervisory authorities are also given powers, which are defined in Art. 45. In Germany, the Federal Financial Supervisory Authority (BaFin) exercises the powers assigned to it under the Regulation as the country's competent supervisory authority. For example, BaFin can require issuers to publish fact sheets on European green bonds, annual allocation reports and the impact report, to supply any information missing from their reports or to make good on missed publications. The EUGBS also empowers national supervisory authorities to suspend or prohibit offers or admission to trading of European green bonds on a regulated market for a maximum of ten consecutive working days. Sanctions can also be imposed in the event of violations of the Regulation. Another point that we should clarify are the aspects for which national supervisory authorities are explicitly not responsible. For example, they are not tasked with verifying whether all the information that issuers publish in their information sheets and various reports actually corresponds to the real facts – in other words, whether a European green bond actually complies with the criteria of the EU taxonomy and whether the proceeds from the issue are being used properly. In addition, national supervisory authorities do not monitor issuers of sovereign bonds.

The struggle for the 15% flexibility reserve

In the negotiations on the EUGBS, the Slovenian-led Council Presidency had tabled a proposal to introduce a flexibility reserve of 20% for economic sectors or activities that are not (yet) fully EU taxonomy-compliant or not yet covered by it (for example, no technical screening criteria exist). As a compromise, it then became 15% on the proviso that the funding in question makes a significant contribution to one of the six environmental goals (while complying with the minimum safeguards). This includes, for example, the controversial – and yet nevertheless incorporated – transitional financing in the nuclear and gas energy sectors, albeit under strict selection criteria and an already discernible phasing-out. According to the European Council, the additional flexibility is to be applied in particular in the start-up phase of the EUGBS and will be regularly reviewed or adjusted in the future.



Criticism from industry associations seems to have loosened the EUGBS "straitjacket"

As part of this study, we regularly return to focus on the opinions of relevant industry associations and stakeholders when it comes to the EUGBS. The main points of the Regulation were met with broad agreement prior to entering into force. At this point in last year's study, we summarised the key statements from relevant industry associations regarding the preliminary agreement. Since the basic structure of the EUGBS has been maintained in the version that has now entered into force, we take the view that these opinions and views expressed by the industry associations and stakeholders we looked at continue to apply. For example, while the German Banking Industry Committee (Deutsche Kreditwirtschaft; DK) welcomed the voluntary basis in its statement, it also expressed concerns about grandfathering in the event that future changes to the technical screening criteria could render a label issued in the past ineffective. The proposal from DK to extend the initially stipulated adjustment period ("grandfathering") of five years seems to have been well received by the regulators, with a period of seven years now defined in accordance with Art. 8 of the Regulation. Concerns that issuers would find themselves inside an excessively tight "straitjacket" when aligning with the EUGBS have therefore not materialised to the originally feared extent, with the framework actually being designed to be somewhat looser – also in terms of the ideas put forward by DK regarding possible preferred maturities or competition with other established frameworks such as the ICMA Principles and Guidelines. The European Mortgage Federation – European Covered Bond Council (EMF-ECBC) also took the view that the grandfathering concept may fundamentally lead to problems in the life cycle of a covered bond, which not infrequently outlasts the previously five, and now seven-year, adjustment phase. How to deal with any necessary subsequent improvements, for example in relation to cover pools, at the end of this transitional period remains an open question, as the EU taxonomy (and thus the EUGBS) is, as the European Commission has always emphasised, in a constant state of flux. With respect to EUGBS-compliant cover assets within the EU alone, the EMF-ECBC also argued that these would, in any case, initially need to be built up over a period of several years to finance the ambitious climate targets in the real estate sector. The demanded (basic) 80% threshold on the EU taxonomycompliant use of proceeds for a transitional period of five years has not been (fully) implemented in the version of the EUGBS that has now entered into force.

GDV welcomes adoption of the EUGBS

In the past, the German Insurance Association (Gesamtverband der Versicherer; GDV) was heavily involved in the debate about the introduction of a European framework for sustainable investments. The focus of the GDV has always been on the practical suitability of the standard, because only then investors and issuers would both actually make use of it. In a comment from 05 October 2023, the GDV welcomed two key elements in particular of the Regulation which has now entered into force: first, the voluntary nature of the standard, which from the perspective of the GDV ensures that the EUGBS promotes the sustainable development of the financial markets rather than hindering or replacing them. Second, the GDV once again underlines the benefits of the 15% flexibility reserve, which it had previously explained was of great importance. "If the EU Green Bond Standard were to stipulate 100% sustainability, the market would not be able to develop due to a lack of supply. It would also be of little interest to small and medium-sized issuers, who generally issue bonds only infrequently", as the GDV explained. According to the GDV, insurers, in their role as large institutional investors, are ready to invest more in the sustainable transformation.

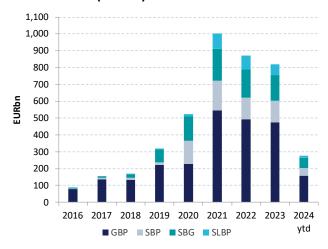


Update: ICMA Bond Principles

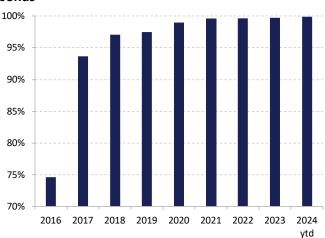
ICMA Bond Principles and Guidelines: Adjustments to three frameworks

Having reported on the comprehensive changes to the relevant frameworks related to the International Capital Markets Association (ICMA) in 2022 at this point in last year's study, there were notably fewer amendments to the familiar Green Bond Principles (GBP), Social Bond Principles (SBP), Sustainability Bond Guidelines (SBG) and Sustainability-Linked Bond Principles (SLBP) in 2023. To this end, an update to the Climate Transition Finance Handbook (CTFH) was published for the first time. The CTFH serves as a supplementary guide for issuers who wish to issue bonds to finance their climate change strategy. The GBP are an internationally established voluntary standard for green bonds. The issuance proceeds – in part or in full – may only be used for the purpose of (re)financing projects with (green) environmental benefits pursuant to the GBP. The core structure is divided into four areas: I. Use of proceeds, II. Process for project evaluation and selection, III. Management of proceeds, and IV. Reporting. In general, the basic structure of the SBP is identical to the GBP, not least because in their early formative stages the SBP were simply run as recommendations within the GBP. Since 2017, they have been listed as an independent member of the ICMA Principles family. In the same year, the SBG were also launched for the first time, which allow for mixed forms of green or social benefits in terms of project selection. For their part, the SLBP can be used for general corporate purposes aligned with individual sustainability KPIs and corporate goals. This sub-category is therefore particularly popular in the field of transformation finance and is suitable for issuers who cannot issue a green or social bond due to their size or business activities. The ICMA Principles and Guidelines — using the GBP as an example – have become much more relevant in recent years. In 2015, more than 70% of new green bonds issued around the world were already aligned with the GBP. Since then, however, the market has made substantial progress, and the GBPrelated share now stands at more than 90%.

Annual global new issues based on ICMA Principles and Guidelines (EURbn)



Shares of ICMA-oriented global new issues of green bonds



Source: Bloomberg, ICMA, NORD/LB Floor Research



Climate Transition Finance Handbook updated for the first time

In order to achieve the climate goals anchored in the Paris Agreement aimed at keeping the global rise in temperature this century well below 2°C above the pre-industrial level and to continue efforts that seek to further limit the rise in temperature to 1.5°C, substantial financial resources are required. To facilitate these financing flows, the Climate Transition Finance Handbook (CTFH), which was first published in December 2020, is designed to offer clear guidance to capital market participants and formulate common expectations on the practices, measures and information to be provided when raising funds on debt capital markets for climate action purposes. The 2023 edition of the CTFH represents the first update to the publication since it was originally published in late 2020 and integrates the progress made by the market and the public sector on climate transition guidance and disclosures. The document includes dedicated recommendations for climate-themed green, sustainability and sustainability-linked (GSS) bonds and acknowledges the development of "climate transition" bonds in certain jurisdictions. The CTFH provides additional guidance for issuers seeking to make use of ESG bonds for the implementation of their climate strategies. When raising funds for climate protection purposes, issuers are encouraged to refer to the CTFH recommendations in their reporting. In 2023, specific innovations involved the addition of an annex including infographics (Annex I) that illustrate how the CTFH guidelines work in conjunction with other ICMA Principles guidelines, as well as a list of additional official and market-related taxonomies for GSS bonds in Annex II that can be used to support climate change-related financial instruments.

Sustainability-Linked Bond Principles: Revisions to the core components and KPIs

To recap, sustainability-linked bonds are the only ESG instrument in the ICMA Bond Principles family where a sustainability goal is achieved not through the use of proceeds from the bond issue, but rather through the targeted use of proceeds for a sustainable corporate purpose measured against ex ante (self-)imposed sustainable performance indicators. In the last update of the SLBP, the list of performance indicators was therefore expanded to include additional KPIs in relation to social themes as well as indicators for sovereign issuers for the first time. The proposed KPIs for sovereign issuers represent a curated list of around 50 indicators selected by the members of the SLB Sub-Working Group on States and are based on relevant publications and tools from the public sector, such as the World Bank's report on Key Performance Indicators for Sovereign Sustainability-Linked Bonds in conjunction with its Sovereign ESG Data Portal. A comprehensive inventory of existing global data sets was carried out in advance and the most relevant indicators at national level were identified based on the selected criteria (relevance, materiality, transparency). Potential sovereign KPIs cover a wide range of development and sustainability topics that could be relevant to this group of issuers, such as climate change, biodiversity, water and marine resources, environmental pollution, the circular economy, education, poverty and health. Due to the high degree of heterogeneity between individual sovereign issuers in terms of their relevant sustainability topics and corresponding strategies, the ICMA recommends a case-by-case approach to selecting material and relevant KPIs or a basket of KPIs. The proposed indicators are covered by the environmental, social and governance pillars.



Green Bond Principles: Adjustments to impact reporting

With the continuous further development of the Green Bond Principles, the ICMA has been making an important contribution to the integrity and transparency of the sustainable bond market for years. Although no revised version was published last year, amendments were made to the requirements related to reporting documentation. The Handbook - Harmonic Framework for Impact Reporting summarises specific requirements in terms of reporting in the green sector. The version published in June 2023 updates the core principles and recommendations for reporting to serve as a reference for issuers seeking to develop their own methodology. This version includes metrics for the project categories "renewable energy" (including generation, transmission, distribution, equipment and products) and "energy efficiency" (e.g. in new and renovated buildings, energy storage, district heating, smart grids, equipment and products). While the existing quantitative core indicators essentially remain unchanged, a comprehensive list of supplementary sustainability indicators was introduced for the two previously mentioned project categories. The ICMA believes that the introduction of additional indicators is required, due to the fact that both product categories are primarily evaluated on the basis of carbon emissions savings and that up to now there has been no unified (measurement) standard or standardised methodology.

Social Bond Principles: Focus on the definition of relevant target groups

In 2023, the <u>Social Bond Principles</u> were also adjusted slightly with regard to meaningful reporting requirements. The updated version takes into account both feedback from member consultations and contributions from working groups coordinated by the Executive Committee. In particular, this version now references considerations about a "just transition" and clarifies the requirements with regard to the target population to be defined that eligible social projects should benefit. According to the SBP, issuers are encouraged to identify a relevant target group in order to ensure that the impact of social projects can be reliably verified and measured. However, the ICMA recognises that, in many cases, the definition of such groups is entirely dependent on the context. As such, it urges issuers to provide additional information and framework data on the target group they have identified. Annex I of the <u>Harmonised Framework for Impact Reporting for Social Bonds</u> offers support to issuers with the aim of ensuring that they are able to transparently report on the impact of social projects on the defined target group.

Interim conclusion: ICMA Bond Principles and Guidelines

In our view, the further development of the global market for sustainability-related bonds is also reflected in the regular updates and expansions of the ICMA Principles and Guidelines. We also take a positive overall view of the fact that the ICMA frameworks boast a long track record and have been making a significant contribution to the harmonisation of the market for sustainable bonds for several years on the back of their global success. In 2015 (one year after the initial launch of the ICMA Green Bond Principles), around 75% of global issuance activities in this ESG sub-segment was already ICMA-oriented; last year, the figure had already risen to just under 100%. Moreover, according to our definition, the figure has not been below the 90% mark since 2017. High levels of conformity can also be seen in the other sub-segments: in 2023, 94% of all newly issued social bonds and 95% of all sustainability bonds were based on the corresponding ICMA Bond Principles. However, for sustainability-linked bonds, the level of alignment came in lower, at just 83% last year. Given that this segment is still relatively young, we see considerable growth potential here in the future.



Rating agencies: Stagnation rather than market growth

S&P Outlook 2024: Forecast of moderate market growth

In its current forecast of global issuance activities in 2024, the rating experts at S&P expect newly placed deals to come in somewhere between USD 950bn and USD 1,050bn overall. This would equate to growth of +4.3% year on year. The rating experts also believe that the trend towards green bonds dominating proceedings in the ESG segment will continue in 2024, while they do not expect any significant growth in the categories of social and sustainability bonds. In geographical terms, according to S&P, emerging economies are increasingly becoming the focus of sustainable bonds as growth markets, while the share of ESG bonds from the USA is set to stagnate. In terms of the factors with the potential to support growth in the market for sustainable bonds, S&P identifies the introduction of sustainable legislative initiatives and new transparency requirements, increased issuance activities from emerging markets, and an acceleration of the energy transition and the additional financing needs that this will bring about. In contrast, according to S&P, there are some macroeconomic factors that may limit issuance activities. These include the risk of a broader economic downturn in the most important markets for sustainable bonds, among other aspects. Looking at the covered bond market, the volume of newly placed green and social covered bonds in benchmark format amounted to just under EUR 20bn as at year-end 2023, which accounted for a share of 12% in the overall issuance volume of covered bonds. In terms of the breakdown by currency, the rating experts at S&P expect the trend towards steady diversification to continue in 2024, which they attribute to growing demand from investors in their respective domestic currencies. Nevertheless, the assumption remains that the EUR and USD will remain the dominant currencies in this segment, as we have already outlined in the market overview section. According to S&P, in 2024 the "traditional" ESG bonds could increasingly be supplemented by bonds from the "blue" and "climate transition" categories in order to finance the increased demand for sustainable projects that cannot be allocated to one of the established ESG labels. Despite the forecast of moderate market growth, according to S&P the greatest growth potential for 2024 can in particular be found in relation to sovereign bonds and companies active in the financial sector. For example, countries such as Germany, Japan and France have committed to placing a significant volume of sustainable bonds on the market. Looking at the geographical breakdown of ESG bonds, the rating experts are anticipating higher growth in the Asia-Pacific region as well as from the Middle East and Africa. According to S&P, growth rates in the latter two regions are largely dependent on the respective macroeconomic conditions of individual countries. In summary, the rating agency expects further geographical diversification of the active ESG markets in addition to rather subdued growth overall.



Moody's expects 2024 ESG issuance volume on a par with the previous year

Moody's anticipates that issuances on the sustainable bond market as a whole in the current year will come in more or less on a par with 2023. The rating agency's projection is for a global issuance volume of sustainable bonds amounting to USD 950bn in 2024. In comparison with the previous year, the rating experts are therefore expecting only a marginal increase in the issuance volume, which would at the same time continue to lag significantly behind the record value seen in 2021 (USD 1,050bn). In its global ESG Outlook 2024, the rating agency identifies six ESG trends for the capital market this year and beyond. While disruptive innovations and new green technologies are set to increasingly become drivers of investment in the sectors with the most urgent pressure to adapt in terms of carbon footprint, at the same time the rating agency sees weakening economic conditions and geopolitical tensions as threats to a faster transformation process aimed at achieving the previously announced net zero goals. Furthermore, Moody's explains that the changes to ESG disclosure standards in some jurisdictions, an increased focus on the issue of greenwashing by regulatory authorities and upcoming elections (e.g., presidential election in the USA set for November 2024) are starting to come to the forefront of the minds of capital market players in the ESG segment. In addition to increased physical climate risks, the rating agency also expects a rise in economic and financial losses. On this basis, Moody's identifies an increased need for ESG investments in order to enhance resilience against climate risks. Moody's is of the view that the differences between emerging markets and developed nations in their capacity to mobilise capital with the aim of financing climate transformation projects will remain marked. This is a situation in relation to which the rating experts still see potential for development. Among other aspects, the rating agency identifies other core ESG topics beyond 2024 in the areas of environmental destruction and changes to the world of work. Overall, despite some challenges, Moody's continues to portray the sustainable bond market as stable, although the rating experts are not anticipating significant growth in 2024.

MSCI: Focus on disclosure standards and transparency of ESG products

In its annual ESG outlook for 2024, the rating agency MSCI assesses the factors with the potential to significantly influence the issuance of new green bonds over the coming years. Looking back at 2023, the rating experts contend that this was a year in which controversy arose in relation to investments in ESG products. In particular, varying definitions, labels and confusing terminology posed a challenge in terms of defending the credibility of ESG investments. However, looking ahead to the future, MSCI is hopeful that the disappointment of the previous year could actually help to energise efforts aimed at providing greater clarity in terms of communications, goals and intentions related to ESG products. The rating agency identified the EU's Sustainable Finance Disclosure Regulation (SFDR), the first reporting year for which is 2024, as a promising first step aimed at creating greater transparency for end consumers. Overall, MCSI expects innovation across the ESG landscape to increase further in 2024, driven by more transparently communicated investment assets in addition to higher quality disclosure standards. In a study published in January 2024, MSCI presented several quantitative methods to better assess the quality of the funds raised from the issuance of green bonds, through which additional transparency should be created. These include a Climate Value-at-Risk model, which forecasts the economic risks and opportunities that companies may be faced with as a result of climate risks.



Fitch: ESG bonds primarily used to finance existing projects

Against the backdrop of the constantly shifting requirements on sustainable bonds, it should come as little surprise that even the rating experts at Fitch view political implications as the dominant factor in the ESG segment for the coming year. In particular, the upcoming elections in a handful of key countries for the ESG segment (including the USA) pose the risk of potentially significant legislative changes in relation to sustainable bonds, according to Fitch. The rating experts see another significant trend in the fact that fixed income investors are becoming more demanding with regard to the sustainability of their financial investments. This is put down to two developments in particular: First, a greater appetite for sustainable bonds that take account of increasingly more aspects and technologies, as well as side effects such as food security, are being placed, while second, the credible and robust implementation of the projects financed by the bonds in terms of their sustainability impact is becoming more of a focus for investors and lenders. Looking at the market for sustainable financial products, Fitch sees a continuing trend towards a greater range of different products and frameworks. The rating experts are not expecting any significant changes in 2024 with regard to the use of refinancing funds raised via the issuance of green and social bonds on the market. Moreover, the categories of "green real estate", "sustainable water management", "renewable energies" and "energy efficiency" are likely to remain the primary investment areas that stand to benefit from the funding raised in these bond segments. Fitch has identified investments in the transformation of the economy and social added value of green investments as growth areas for 2024. However, the rating agency states that one of the biggest challenges for sustainable bonds is the small proportion of new sustainable projects financed via the issuance of bonds. In a previous analysis of its ESG rating data, Fitch discovered that for 90% of the ESG bonds it rates, less than 25% of the gross issuance proceeds are used to finance new sustainable projects. Fitch still sees potential for improvement in relation to this point, albeit the picture is not expected to change significantly in 2024. Overall, we believe the rating agency clearly demonstrates what a complex task it is to provide a comprehensive overview of sustainable bonds. In addition to overarching political decisions regarding sustainable investments and the use of allocated funds, the segment is undergoing a process of constant change.



Green monetary policy?

ECB presents concrete roadmap for addressing climate risks as early as 2021

As we have already mentioned several times in the past as part of our NORD/LB Fixed Income Special series in the context of the regular meetings of the European Central Bank (ECB), the ECB has been increasingly focusing on the issue of sustainability since 2021. Consequently, the action plan to include climate change considerations in its monetary policy strategy was presented in a press release published on 08 July 2021. This decision followed the conclusion of the 2020/21 strategy review, in which the ECB's role in relation to aspects such as climate change and environmental sustainability was discussed. As outlined in the press release, although the ECB has a primary responsibility to ensure price stability in the Eurozone, it recognises the need, within its mandate, to incorporate climate change considerations in its policy framework. After all, climate change and the transition to a low-GHG (greenhouse gases) economy in the Eurozone also have direct implications for price stability, as they affect macroeconomic indicators such as inflation, output, employment, interest rates, investment and productivity, financial stability, and the transmission of monetary policy, as the press release explains. Moreover, the value and risk profile of the assets held on the Eurosystem's balance sheet should be taken into account. As such, any potential accumulation of climate-related financial risks must be avoided. The concrete action plan seeking to address climate risks is mainly concentrated in three impact areas:

- I. Expanding analytical capacity in macroeconomic modelling, statistics and monetary policy with regard to climate change
- II. Integrating climate change considerations in monetary policy areas such as disclosure, risk assessment, collateral framework and corporate sector bond purchases
- III. Implementing the action plan in line with EU initiatives in the field of environmental sustainability disclosure and reporting

At the time of this press release, the ECB had already started to include relevant climate risks in its due diligence checks when making corporate sector bond purchases. It also announced its intention to in future incorporate climate change criteria in the regulatory framework for the allocation of purchases, in line with its mandate. At a minimum, these criteria will include the alignment of the issuers with EU climate goals for the implementation of the Paris Agreement (or a commitment to achieve this from the issuers). Furthermore, the ECB has planned to start disclosing the actual impact on the Corporate Sector Purchase Programme (CSPP) by Q1/2023. Along with the action plan, a roadmap was also presented outlining the schedule for incorporating climate risks into monetary policy considerations in a manner that is comparatively easy to grasp.



Further details relating to the CSPP followed in July 2022

A year later, on 04 July 2022, the ECB offered further details as to how it would deal with climate risks in relation to its corporate bond purchases (share of CSPP in the overall portfolio at that time: 10.5%). For the first time, the ECB outlined specific parameters for the selection of issuers: the level of individual climate performance is to be measured based on greenhouse gas emissions, carbon reduction targets and climate-related disclosures. In addition to reducing climate-related risks in the Eurosystem's balance sheet, this approach is also intended to create incentives for issuers to improve their sustainability-related reporting in addition to reducing their own carbon footprints. However, the time frame for the ECB's first reporting on the actual impact of taking climate risks into account for corporate bond holdings (Q1/2023), which was announced last year, remained unchanged. "With these decisions we are turning our commitment to fighting climate change into real action", as ECB President Christine Lagarde, explained, before adding: "Within our mandate, we are taking further concrete steps to incorporate climate change into our monetary policy operations. And as part of our evolving climate agenda, there will be further steps to align our activities with the goals of the Paris Agreement." In addition to offering further details regarding the CSPP, the ECB also announced a revision of its collateral framework: accordingly, the Eurosystem has moved to limit the assets of companies with sizeable carbon footprints that can be lodged as collateral to a certain proportion. This ceiling would initially only apply to marketable assets of non-financial companies, which account for just 3% of the total assets pledged as collateral. The ECB expects the new criteria to come into force before the end of 2024. In addition, starting in 2022, the Eurosystem began to take climate risks into account when adjusting the value of an asset serving as collateral in the form of haircuts. The revised framework aims to ensure that borrowers pay greater attention to the carbon footprint of assets when making their investment decisions. The ECB had already announced that it would accept as collateral green bonds that comply with the criteria of the future EU taxonomy. Based on the roadmap mentioned in the previous section, the ECB also published its Climate Agenda 2022, in which the ECB defines three core strategic goals around which its commitment to climate change revolves. Moreover, the priorities and activities designed to help the practical implementation of these aims are also described in the Climate Agenda 2022:

- Managing and mitigating financial risks of climate change and assessing the economic impact
- II. Promoting sustainable finance to support an orderly transition to a low-carbon economy
- III. Knowledge transfer to foster wider changes in behaviour

Based on this agenda, the ECB subsequently opted to publish the <u>Climate and Nature Plan 2024-2025</u> at the end of January 2024, which serves to specify the direction of travel for climate-related measures this year and next. In this context, navigating the transition to a green economy, addressing the increasing physical impact of climate change and analysing the economic risks from the loss and degradation of nature are cited as the most urgent focus areas.



Statements from in and around the ECB

In last year's edition, we turned to the current views on green monetary policy from in and around the ECB, with the landmark speech from Isabel Schnabel, member of the ECB's Executive Board, on 10 January 2023 at the International Symposium on Central Bank Independence forming a particular focal point. To summarise: Schnabel saw acute need for action across all purchase programmes if the ECB wants to achieve its climate goals in relation to a green orientation of its bond holdings. For example, the exclusive focus on reinvestments (known as the "flow-based approach") was not sufficient, according to Schnabel. As such, active portfolio interventions and, if necessary, exchanging bonds before they reach maturity in favour of a better carbon footprint (this is known as a "stock-based approach") would be needed. Schnabel also suggested applying the same approach to holdings of covered bonds and asset-backed securities (under the CBPP3 and ABSPP, respectively). In addition to bonds from the corporate sector, Schnabel attributes a major role to the public sector. However, she also underlined the difficulty of improving the carbon footprint of these holdings as purchases are geared towards the capital keys of the member states, which, for example, limits the scope for an approach based on carbon intensity. Moreover, there is currently no valuation framework for sovereign bonds in the context of the climate change targets stipulated by the Paris Agreement. Another member of the Executive Board, namely Frank Elderson, also discussed this issue in his speech during an event at the Bertelsmann Foundation on 22 November 2023 in Frankfurt am Main. The Dutchman criticised that the climate and nature-related risk intensity of the bonds placed by member states barely appears on radars owing to the lack of a clear and reliable assessment framework. At the same time, however, the universe of supranational bonds issued by EU institutions has been considerably extended since the onset of the COVID-19 pandemic, with green bonds accounting for a large proportion of this development. Elderson therefore suggested that at times when there are no clear monetary policy reasons for preferring government bonds, consideration should be given to increasing the share of EU bonds in the Eurosystem's total holdings, as this would avoid potential climate and nature-related risks while at the same time better aligning the balance sheet with the EU's general economic policy. This would not only be relevant for new (potential) bond purchases, Elderson surmised. In addition, in the spirit of a green monetary policy, Elderson highlighted that maintaining price stability is crucial to maintaining climate stability, choosing to define this mission as a "Stabilitätskultur" (culture of stability). Another adjustment that could potentially be made to encourage green financing in the future would be to introduce "dual interest rates" for carbon-intensive and low-carbon business activities. In this context, the French President Emmanuel Macron complained at COP28 in Dubai that the private sector benefits from the same interest rates irrespective of whether the focus of financing is renewable energies or gas and coal. Instead, he argued that environmental risks should be considered in refinancing costs and that the corresponding interest rates should be put in place. During a Q&A session on X (formerly Twitter), Macron's complaint was put to Isabel Schnabel, member of the ECB Executive Board. In response to a user's question, she replied that the ECB should focus on further intensifying its efforts in the area of green lending, which could possibly include the introduction of measures such as dual interest rates. François Villeroy de Galhau went into a little more detail when asked by French senators about Macron's proposal. The Governor of the Banque de France refused to rule out the possibility, although was at pains to stress that the optimum solution would be to properly take climate risks into account when evaluating the credit risk.



Thinking outside of the green box: Efforts made by international central banks

It is not only the ECB that is seeking to make significant progress in relation to green monetary policy. In line with their mandates, a whole host of other major central banks have also recently made plans to effectively promote the sustainable development of the economy in their jurisdictions and to contribute to climate protection. Even if progress can sometimes be slow and laborious, monetary authorities around the world are increasingly aware of the systemic and leading role that they play in the transition to a more sustainable planet. However, climate change can also be interpreted as a necessary opportunity to support the dual or hierarchical mandates of central banks. This could, for example, be the ECB's mandate to support the general economic policy of the EU, or the Fed's employment mandate in the USA, or the economic growth mandate of the People's Bank of China (PBoC). In the next couple of sections, we shall therefore attempt to delve deeper into the status quo regarding green monetary policy in the context of specific measures and declarations of intent from some of the global financial system's most important and influential central banks. In addition to the aforementioned Fed and PBoC, these include the Bank of England and the Bank of Japan.

Bank of England: Does tilting really work?

In similar fashion to the ECB, the Bank of England (BoE) also published its Climate Report 2023 last July. This report presents the BoE's measures to reduce climate risks that arise from its operational business and monetary policy functions. In this context, the central bank of the United Kingdom is seeking to reduce its GHG emissions from physical operations by 63% in comparison with 2016 by 2030. In 2023, a reduction of 37% versus 2022 was achieved. The BoE also published a Climate Transition Plan, according to which GHG emissions are to be reduced to net zero by 2040. In addition to green efforts linked to operating activities, the BoE, like the ECB, is also striving to make its holdings under the Corporate Bond Purchase Scheme (CBPS) greener. To this end, a new framework for the CBPS entered into force back in November 2021. With this step, the BoE abandoned its principle of market neutrality in the context of portfolio composition for the first time in its history. The central bankers based in London were primarily keen to ensure the compatibility of the assets held under the CBPS with the net zero emissions target by 2050. In the short term, the BoE is aiming to reduce the Weighted Average Carbon Intensity (WACI) of the CBPS by 25% in the period between 2020 and 2025. However, since beginning to actively reduce its portfolio holdings in January 2022, the "tilting" approach to reinvestments was only relevant for a short period. Since this time, climaterelated criteria have also played a key role in the structured sale of bond holdings. According to the BoE, the share of companies aligned with the 1.5°C target in the portfolio rose from 21% in 2021 to 47% by year-end 2023. Although the BoE is without doubt playing a vital role in the development of a green monetary policy, it could still certainly make additional adjustments to its approach. For example, thoughts about implementing climate-related measures within the BoE's collateral framework tend to occasionally fall by the wayside or in some cases even head in totally the opposite direction as the collateral is not screened for sustainable aspects: for example, taking 01 May 2024 as a reference date, the freely accessible securities lists of accepted collateral show that the BoE has accepted bonds from oil companies such as Shell (ticker: RDSALN) and BHP (ticker: BHP) as collateral in return for the provision of central bank liquidity.



Bank of Japan: Green lending facility as inspiration for the ECB?

At its regular meeting on 16 July 2021, the Bank of Japan (BoJ) announced a programme to finance climate-friendly investments. Via the implemented green loan programme, zero interest financing has been and is being offered by the BoJ directly to banks that support measures to help fight climate change (on 21 March 2024 the interest rate was increased to 0.1%). During the first auction at the end of 2021, loans totalling around JPY 2.1bn were granted, with these falling due in January 2023. In the run up to this, the Japanese central bank had clarified that similar loan disbursements would be offered roughly twice a year and that the liabilities of the loans, which have a maturity of 12 months, could be extended until the anticipated end of the programme (in March 2031 at the earliest). Adjustments to the programme are also planned if necessary. The most recent tranche of loans was disbursed on 29 January 2024. In addition, the programme offers banks the opportunity to reduce their negative-interest deposits with the BoJ. In order to be eligible to take part, banks are obliged to publish information in conformity with the recommendations of the "Taskforce of Climate-Related Financial Disclosures" and also disclose the criteria applied by the banks to determine the impact of the investments financed with the aim of tackling climate change. In this way, the hope is to generate an additional measure of transparency. From our perspective, the BoJ is pursuing a very interesting approach with its green loan programme. In fact, this could even potentially serve as a blueprint for the ECB in the future, under the assumption that additional details are provided with regard to dual interest rates. Nevertheless, there are also some aspects of the green efforts emanating from Tokyo that we would take a more critical view of. For example, the BoJ, as is the case with the BoE in London, has not yet announced any concrete changes to its collateral rules with regard to environmental sustainability. Finally, the BoJ announced in July 2021 that it would maintain its market neutrality with regard to monetary policy instruments and would, as far as possible, seek to avoid direct involvement in resource allocation at a micro level. This approach differs from that of the ECB, which highlighted the need to move away from market neutrality in the direction of carbon neutrality when it comes to the reinvestment of corporate bond purchases. This means that the BoJ is not currently minded to introduce environmental standards or comparable selection criteria for the purchase and reinvestment of corporate bonds, commercial paper and exchange-traded funds acquired within the framework of the Bank of Japan's purchase programmes.

Fed: Significant room for improvement

In terms of its efforts to achieve greater climate protection and to take account of climate risks in monetary policy measures, the US central bank system is more restrained in comparison with its international counterparts. The first step came in October 2023, when the Fed published its <u>guidance on climate-related financial risk management for large institutions</u> in conjunction with other regulatory bodies. While the principles do recognise climate change as a threat to financial stability for the US economy, they do not explicitly encourage banks to take action aimed at supporting the transition to a greener economy. The responsible central bankers made repeated mention of climate stress tests, although up to now the Fed has opted not to offer clear guidance of how these should be implemented. Only the Federal Reserve Bank of New York has carried out a dedicated <u>study</u> into how the relevant stress tests might potentially be configured. All in all, we therefore identify substantial room for improvement on the part of the USA in this area, which accounts for the second-highest share of global carbon emissions.



People's Bank of China: Greenwashing remains a point of criticism

The Chinese President Xi Jinping laid down a marker at the UN General Assembly in September 2020 when he announced that his country, which generates the largest share of global carbon emissions, intends to reduce its carbon footprint to zero by 2060. The PBoC will be front and centre of Chinese efforts in relation to the country's journey in the direction of carbon neutrality. To this end, it has subsequently put in place a number of instruments to support a greener economy. However, accusations of greenwashing are constantly thrown at the Chinese central bank, which is also the subject of ongoing criticism for instructing banks to continue to grant loans for coal-fired power plants, among other dubious practices. To pursue its overarching goals, PBoC established a Carbon Emission Reduction Facility (CERF) in November 2021. The CERF is a targeted refinancing tool designed to provide additional capital for carbon reduction measures and the development of sustainable technologies. In specific terms, low-interest loans are granted to financial institutions that support companies in reducing their own carbon footprint. In order to ensure that the CERF functions as effectively as possible, the Chinese central bank demands that the participating banks disclose information about these emissions-reducing loans and how much savings they help to generate. This information is verified by external institutions and is subject to public scrutiny. In addition, the Medium-term Loan Facility (MLF) of the PBoC has accepted green bonds as marketable assets since June 2018. As part of this expanded pool of eligible securities, green bonds with a rating of at least "AA" were also granted the status of "first among equals", through which the aim is to create incentives to support a green economy. A study carried out by the Bank of International Settlement (2021) shows that preferred treatment has led to a significant decline in bond yields.



Outlook: ESG segment caught between growth and stagnation

Can regulatory initiatives reignite market growth?

Since our last publication, several regulatory bodies have once again played a key role in setting the agenda for the ESG bond market. First and foremost, the precise structure of the EU taxonomy is becoming clearer and is also attracting a great deal of attention in the European market — although this is very much a mix of both optimism and scepticism. Moreover, another important milestone has been reached after the EU Green Bond Standard (EUGBS) officially entered into force. The regulation is intended to finally bring the persistent fragmentation of the ESG investment landscape to an end. Generally speaking, the response to this has been positive. At the same time, however, details such as the "grandfathering" regulations relating to the cover pools of covered bonds, the 15% flexibility reserve for the use of proceeds and the general dynamic adjustment option by the European Commission still need to be ironed out. The 12-month transition period expires on 21 December 2024, with issuers thereafter being able to officially make use of the EUGBS. Since 2021, the monetary authorities have also been injecting impetus into the market for ESG bonds in the EU. In addition to a "tilting" of reinvestments towards corporate issuers with better climate balances, Isabel Schnabel, member of the Executive Board of the ECB, saw a continued need for action in all purchase programmes in order to ensure that the climate targets laid down in the Paris Agreement can actually be achieved in view of declining reinvestments. According to her, it would not even be adequate to simply replace bonds falling due with less carbon-intensive alternatives. Rather, actively intervening in the portfolios before the bonds reach maturity would have to come under consideration. However, this approach has not yet been communicated by either Christine Lagarde, President of the ECB, or in a joint statement of the board members. Some interesting opportunities could present themselves to the ECB when we consider the efforts of a number of other central banks. For example, the introduction of a green loan programme in the style of the Japanese central bank since 2021 would be a conceivable measure, in particular. In terms of the global new issuance volume of ESG bonds, the primary market once again fell short of expectations. While the global market for sustainable bonds did reach what in historical terms is another extraordinarily high value in 2023 with a new issuance volume equivalent to EUR 818.0bn, when compared with the volume of EUR 870.4bn recorded in 2022, this actually reflects a decline of -6.0% year on year. As such, the record high of EUR 1.0tn seen in 2021 has for the time being disappeared further over the horizon. In terms of the future growth path, the EU, for example, is making waves in the green bond segment with planned issuances of up to EUR 250bn by 2026 (as part of the NGEU). This would make the EU the largest green bond issuer in the world. For the current year, we are again expecting record-breaking new issuance volumes in all ESG sub-markets. Rating agencies are also predicting moderate growth in issuance activities in 2024, with S&P and Moody's forecasting a new issue volume of at least USD 950bn. However, in view of the current mix of ongoing regulatory initiatives, economic factors and political uncertainties, it certainly remains to be seen whether and to what extent momentum might return to levels seen in previous years.



Appendix Publication overview

Covered Bonds:

<u>Issuer Guide – Covered Bonds 2023</u>

Covered Bond Laws

Covered Bond Directive: Impact on risk weights and LCR levels

Risk weights and LCR levels of covered bonds (updated semi-annually)

<u>Transparency requirements §28 PfandBG Q1/2024</u> (quarterly update)

Transparency requirements §28 PfandBG Q1/2024 Sparkassen (quarterly update)

SSA/Public Issuers:

<u>Issuer Guide – German Laender 2023</u>

<u>Issuer Guide – German Agencies 2023</u>

<u>Issuer Guide – Canadian Provinces & Territories 2024</u>

Issuer Guide – European Supranationals 2023

Issuer Guide – French Agencies 2023

<u>Issuer Guide – Dutch Agencies 2024</u>

<u>Issuer Guide – Non-European Supranationals (MDBs) 2024</u>

Beyond Bundeslaender: Belgium

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Beyond Bundeslaender: Spanish regions

Fixed Income Specials:

ESG-Update 2023

ECB preview: Don't be afraid of your own courage, please

NORD/LB: Floor Research NORD/LB:

NORD/LB:

Bloomberg:

Covered Bond Research

SSA/Public Issuers Research

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