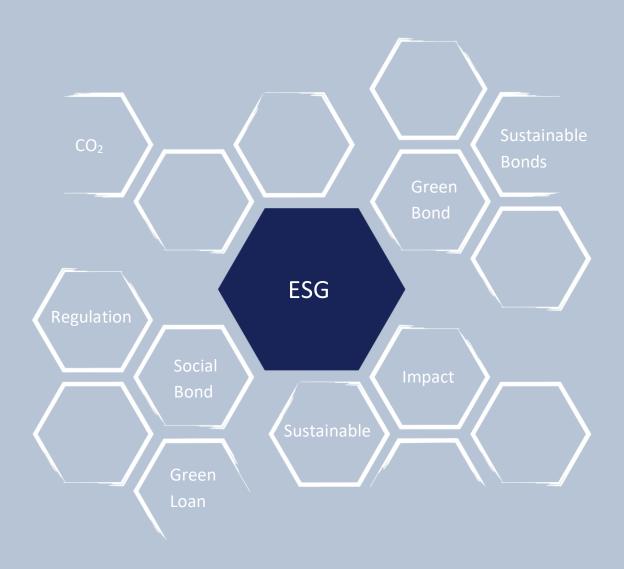
NORD/LB



Fixed Income Special – ESG update

NORD/LB Markets Strategy & Floor Research





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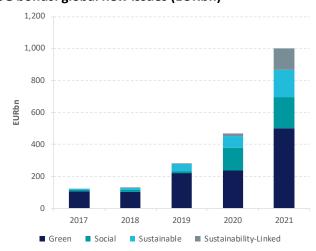


The market for ESG bonds

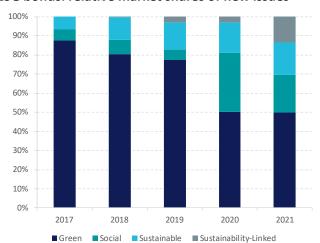
Annual new issues of ESG bonds exceed EUR 1tn threshold for the first time in 2021

The global market for sustainable bonds grew significantly again last year. After a cumulative new issuance volume of over EUR 2tn across all ESG asset classes since 2008, half of the bonds newly brought to market in this period were issued in 2021 alone. Green bonds were once again the largest sub-segment with a volume of over EUR 500bn, followed by social bonds (EUR 197bn), sustainable bonds (EUR 168bn) and sustainability-linked bonds (EUR 136bn). The latter also showed the strongest relative growth (tenfold), rising from EUR 14bn in 2020 to EUR 136bn as at the end of 2021. As a result of the brisk issuance activity in this segment there were shifts in relative market shares, with green bonds once again accounting for the lion's share (50%) at the end of December. Social bonds were also again in second place, with market share falling to 20% in the last calendar year after jumping in 2020 (to 31% from 5% previously in 2019). Sustainable bonds posted a slight increase with a share of 17% (previous year: 16%) and therefore account for the third-largest market share. Sustainability-linked bonds recorded a share of 14% (previous year: 3%) due to the high issuance activity. Overall, they still have the smallest market share, but in general the market for ESG bonds has seen a significant increase in granularity over the past three years.

ESG bonds: global new issues (EURbn)



ESG bonds: relative market shares of new issues



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Public issuers and banks account for the largest new issuance volume globally

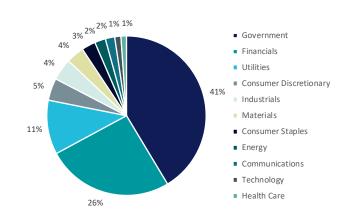
Around 41% of the currently outstanding green, social, sustainable and sustainability-linked bonds are attributable to the "Government" segment, while the "Financials" segment accounts for a share of 27%. Compared with the previous year, there was a substantial increase of +13% in Government and a decrease of -11% in Financials. A glance at the industrial sectors shows that utilities play a dominant role in the universe of sustainable bonds. In 2021, utilities accounted for an outstanding volume of EUR 108bn (previous year: EUR 138bn), ranking third with a share of 11%.



ESG bonds: globally outstanding volume by currency (end of year 2021; EUR bn)

104; 11% 33; 3% 45; 5% 424; 43% • EUR • USD • CNY • GBP • KRW • Other

ESG bonds: globally outstanding volume by sector (end of year 2021)



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

EUR and USD are the most important currencies for sustainable bonds

Slightly less than half of the outstanding volume in the green, social, sustainable and sustainability-linked bonds segments worldwide is denominated in EUR (43%). Around one third is in USD (33%). In Asia, on the other hand, CNY and KRW dominate, although they only account for 8% on a global basis. In Europe, aside from the euro, the most common currency of choice is GBP (5%). We assume that the regulatory pace of the European Commission in the area of sustainability will continue to ensure the euro's supremacy. The USA also aims to halve its greenhouse gas emissions by 2030 compared with 2005 and China has announced its intention to become climate neutral by 2060. However, this announcement has so far not been backed up by a catalogue of concrete measures.

Global outlook 2022: Market expects USD 1tn new issues of green bonds

A new issuance volume of USD 1tn in the green bonds segment by the end of 2022 – this was the result of a market survey carried out by the Climate Bonds Initiative (CBI) dated 28 October 2021. The CBI polled a wide range of market players consisting of asset managers, promotional banks, regulators, rating agencies and other key stakeholders. In the surveyed period from 2022 to 2025, Q4 2022 was identified by most respondents (25%) as the period in which the annual new issuance volume for green bonds was expected to exceed the USD 1tn threshold for the first time (CBI data 2021: USD 500bn; 2020: USD 297bn). Thus, the volume of green bonds newly brought to market would almost double again within one year and correspond to the total volume of all ESG new issues in 2021. Q4 (13%), Q2 (12%) and Q3 (10%) 2023 were the next most frequent responses. At the press conference to present the survey results, Sean Kidney, CEO of the Climate Bonds Initiative, also defined an annual new issuance target of USD 5tn from 2025 for the global green bond market in light of the advancing climate crisis. Consequently, the capital flows into sustainable energies, agriculture, transport and buildings as well as infrastructure would have to amount to several trillion USD each year in future.



COP26 envisages annual volume of USD 100bn for climate protection

After two weeks of intense negotiations, 195 countries ultimately reached a consensus on urgently speeding up climate protection measures at the world climate summit in Glasgow on 12 November 2021. Commitments by governments, financial institutions and corporates were also announced before and after the negotiations. In the end, the signatory nations agreed to review and tighten the current national emissions targets until 2030, known as the Nationally Determined Contributions (NDCs), in 2022. In addition, the industrial nations undertook to double the existing collective volume for financing climate targets to USD 100bn per year in the period 2021-2025 and to work out a joint strategy beyond 2025. With a share of more than a third of the total volume, the EU accounts for the largest commitment.

Looking at the Eurozone: NGEU stimulus package should provide an additional boost for green bonds

Both European sovereign and sub-sovereign issuers are active in the social and green bonds segments. As such, German Laender and promotional banks also rank among issuers of green and social bonds. However, the EU itself has become established as one of the biggest players since 2020. About one third of the NextGenerationEU (NGEU) European Recovery Plan with a volume of EUR 806.9bn (or at 2018 prices EUR 750bn) — roughly 5% of European GDP — will be financed in green bond format up to 2026. This equates to an issuance volume of EUR 250bn.

EU taxonomy forms the bedrock of the European ESG bond market

As early as November 2020, the European Commission underpinned the first two climate goals of the Taxonomy Regulation (EU) 2020/852 (I. Climate change mitigation, II. Climate change adaptation) with technical screening criteria (TSC). These became binding in 2021 for financial market players pursuant to Art. 2 initially and therefore represent an important basis for the further development of the European sustainable bond market. The four environmental targets still outstanding (III. Sustainable use and protection of water and marine resources, IV. Transition to a circular economy, V. Pollution prevention and control, VI. Protection and restoration of biodiversity and ecosystems) and the addition of further economic sectors will follow by the end of 2022. The draft amending Delegated Regulation (EU) 2021/2139 and Delegated Regulation (EU) 2021/2178 adopted by the European Commission at the start of the year on the inclusion of certain gas and nuclear energy activities in the EU taxonomy is also likely to influence the market in the coming years. If no objections are raised by the European Parliament and the Council within six months, such "transitional activities" qualify as EU green bonds from 2023.

First EU taxonomy-related reporting launched for the 2021 financial year

The reporting obligations derived from the EU taxonomy came into force at the beginning of 2022. Non-financial companies that fall under the scope of the <u>CSR Directive</u> must report the share of their sales, capital expenditures (CAPEX) and operating expenditures (OPEX) that can potentially be reported in accordance with the EU taxonomy for the first time for the 2021 financial year. Furthermore, qualitative information such as assumptions and calculation methods must be reported. In principle, the share of turnover, CAPEX and OPEX which contributes to one of the six defined environmental goals and does not materially affect any of the others is eligible for EU taxonomy. In addition, minimum social standards (e.g. pursuant to OECD) must be guaranteed. Financial companies are required to report business model-related indicators (e.g. the green asset ratio).

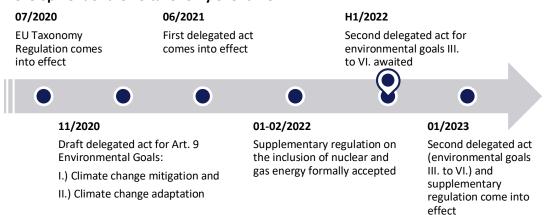


Update: EU taxonomy

EU taxonomy overview

Within the framework of the <u>European Green Deal</u> and the <u>Paris Agreement</u> on climate protection goals, the European Commission introduced a voluntary 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 <u>Action Plan</u> published by the European Commission in March 2018 for financing sustainable growth. Essentially the EU taxonomy is a classification system designed to channel capital flows into environmentally sustainable activities. The creation of a uniform market standard for corresponding financing and investment will also boost defragmentation of the sustainable investment landscape and curb "greenwashing". A relatively easy-to-digest <u>EU Taxonomy Compass</u>, provided by the European Commission since the entry into force of the first delegated act in June 2021, should serve as a guide. Since our last publication (<u>NORD/LB Fixed Income Special – ESG Update February 2021</u>) we would now like to take another look at the status quo of the framework, review its development so far and highlight possible implications for the European market for sustainable bonds as part of an outlook.

Development of the EU taxonomy over time



Source: European Commission, NORD/LB Markets Strategy & Floor Research

Delegated act for four environmental goals not yet implemented expected in the second half of 2022

The technical screening criteria, which serve as a further filter level for EU taxonomy-compliant economic activities, are set out in delegated acts. The first delegated act for the first two environmental goals (I. Climate change mitigation, II. Climate change adaption) already came into effect last year. The screening phase by the European Parliament and the Council ended without any objections being raised, whereupon the Delegated Regulation (EU) 2021/2139 was published in the Official Journal of the EU on 10 December 2021. A second delegated act is expected in the second half of 2022 for the remaining four environmental goals (III. Sustainable use and protection of water and marine resources, IV. Transition to a circular economy, V. Pollution prevention and control, VI. Protection and restoration of biodiversity and ecosystems). The second delegated act is scheduled to come into force on 1 January 2023.



European Commission introduces act for the addition of nuclear and gas energy

Shortly before the turn of the year, the EU Commission adopted a draft to supplement the transitional activities regulated in Article 10 of the Taxonomy Regulation and the reporting requirements in Article 8. Article 10 will in future be extended to include economic activities in the area of nuclear and gas energy, provided that they qualify as "transitional activity" under certain conditions. The consultation process launched at the same time consists of the involvement of the Platform on Sustainable Finance and the Member States Expert Group in a standardised form. They had until 12 January 2022 to submit their contributions. This draft law was approved by the European Commission in principle with effect from 2 February 2022 and will be formally adopted once all the language versions are available. If no objections are raised by the European Parliament or the Council within a period of four months, which can be extended by an additional two months, the act will come into force. In the draft which has now been adopted, a date of 1 January 2023 is mentioned. It is also considered unlikely that objections will be raised due to the EU majority right. In the EU Parliament an absolute majority is required to object, while in the Council at least 20 out of 27 votes are needed to ensure that at least 65% of the EU's total population is represented. European Commission member Mairead McGuinness already emphasised on 26 January 2022 with regard to subsequent amendments to the draft law that the European Commission did not intend to carry out any far-reaching revision of the draft document.

Transition to climate neutrality by 2050 to become easier and fairer

The EU taxonomy is primarily intended to mobilise the private and public investment needed to achieve climate neutrality in the next 30 years and to prevent greenwashing. According to a press release, the European Commission's current approach to extending EU taxonomy-compliant activities to gas and nuclear energy should be seen in the context of the widely varying energy mix among the Member States. While the supply strategy in the Eastern parts of Europe continues to rely heavily on coal and other fossil fuels with high emission levels, there is a strong focus on nuclear and renewable energies in Central and Northern Europe. The extended EU taxonomy is intended to support Member States in the future to move towards climate neutrality from precisely these differing levels. On the basis of scientific opinion and the specific challenges in the individual Member States, the European Commission believes that natural gas and nuclear energy have an important role to play in facilitating the transition to a predominantly renewables-based energy mix across the EU. In the context of an EU taxonomy extension, this would mean that these energy sources would be classified as EU taxonomy-compliant under clear and strict conditions (e.g. from 2035 gas must come from renewable sources or have low emissions), as they contribute to climate neutrality in the form of a "transitional activity". The draft amendment to the existing Taxonomy Regulation introduced in December, which is expected to come into effect from the beginning of the calendar year 2023, defines clear quantitative criteria for gas and nuclear power activities. In addition, as part of the embedded regular evaluation process, the criteria will be scrutinised every three years and adjusted if necessary. In order to ensure a high degree of transparency, the European Commission has also attached ex ante information to the draft amendment on the criteria as to whether and to what extent certain gas or nuclear energy activities qualify.



Which nuclear and gas energy activities are meant?

In the decision-making process, the European Commission relied on the scientific opinions of the Joint Research Centre (JRC) and the recommendations of the expert group established specifically as an advisory body for the development of the EU taxonomy. In addition, issues relating to natural gas and nuclear energy have been discussed in public since 2020, characterised by expert analyses and feedback from stakeholders. Pressure groups have been able to present their positions on nuclear energy and natural gas several times in recent years and months. The European Commission has now put forward a targeted compromise on the basis of this, which was also the subject of the consultation phase. The compromise therefore covers the following nuclear energy activities:

- advanced technologies with a closed fuel cycle (Generation IV technologies) to incentivise research and innovation also in terms of safety standards and minimising waste
- new nuclear power plant projects using the best available existing technologies (Generation III+) will be recognised until 2045 (date of approval of construction permit)
- modifications and upgrades of existing installations for the purpose of lifetime extension will be recognised until 2040 (date of approval)

Natural gas-related economic activities which may qualify for the EU taxonomy are mainly focused on electricity generation and its use in regard to climate systems:

- electricity generation from gaseous fossil fuels
- high-efficiency co-generation of heat/cooling and power from gaseous fossil fuels
- production of heat/cooling from gaseous fossil fuels in an efficient district heating and cooling system

Impact on the green asset ratio as the key ESG reporting indicator

The EU taxonomy supplement draft provides for specific disclosure obligations in relation to natural gas and nuclear energy activities. Article 8 of the Regulation (EU) 2021/2178, which references EU taxonomy-related reporting obligations, has been amended to this end. Article 8 essentially contains requirements for the disclosure of the specific environmental performance of assets and economic activities. In the course of the inclusion of nuclear and gas energy, a green asset ratio (GAR), as the key EU taxonomy-related reporting indicator in connection with the lending business, will be introduced with regard to financing companies. This is defined as the EU taxonomy-compliant share of assets in all on-balance sheet claims with the exception of the trading book and claims on sovereigns. Financing companies should also report a breakdown of GARs with regard to the environmental goals pursued and any distribution between counterparty groups. The European Commission provides a complete overview of the reporting obligations in connection with the supplement draft for both financial and non-financial companies in the FAQs on Article 8.



Green bonds as EU taxonomy-related tool for nuclear and natural gas projects?

Since the EU Commission's plans became known at the turn of the year, a public debate has been conducted essentially by supporters and opponents of nuclear energy. One thing is already clear at this point, namely that the plans will have a significant impact on the financing of the European energy transition. The latest global developments regarding supply security, inflation and steeply rising energy costs in particular may have additionally contributed to the regulators' decision. Following formal approval of the draft on 2 February, an increased financing volume of relevant projects through EU taxonomyrelated instruments can be expected in the coming years. Funds for nuclear and gas energy projects are also available under the NGEU package, which was launched as a development instrument worth EUR 806.9bn (or EUR 750bn at 2018 prices) for a greener and more crisisproof Europe. Gas and nuclear energy would qualify in future for around a third of the callable volume. In particular EU countries that continue to rely on fossil fuels or nuclear energy for their energy strategy could therefore access funds more easily. Overall, the green bonds segment as an obvious EU taxonomy-related financing instrument is likely, in particular, to benefit from the entry into force of the related supplementary legal act on 1 January 2023. In addition, we see the expiry date of new building permits (2045) as having clear implications for the terms of corresponding financing.

To what extent does the EU taxonomy therefore contradict itself?

According to the financing strategy, during the transition to a sustainable domestic economy the declared aim of the European Commission is to make Europe a global pioneer in setting standards for sustainable bonds. The EU taxonomy will spearhead this strategy. Its integrity has so far been discussed mainly in relation to the validity of limit values and qualitative requirements in the context of public consultation processes. With the extension initiated at the beginning of the year to include nuclear energy and natural gas, the primary goal now appears to be contradicted. The de facto parity with solar and wind energy in terms of the available financing instruments could in future absorb part of the capital flows that was originally earmarked for precisely those renewable energies. Market participants aligning their portfolio considerations with climate goals such as the Paris Agreement may ask themselves in future whether they can rely on the EU taxonomy. Issuers will also have to weigh up in future whether it is worth aligning themselves with the already narrowly defined framework and thus with the EU Green Bond Standard if it also requires additional educational work to convince investors of the sustainability of their own bond. As a result, proprietary or third-party analyses would still have to be used in order to ensure the implementation of their own sustainability philosophy. This would mean a step backwards for the defragmentation of the market for ESG bonds in Europe. The viability of the EU taxonomy within and beyond European borders is largely dependent upon the level of integrity that is generally attributed to it by the markets. Should a major loss of confidence become apparent after the complementary delegated act has come into force there could be lasting damage to the attainment of its ultimate objective of channelling capital flows into environmentally sustainable economic activities.



The Platform on Sustainable Finance presents final report on EU social taxonomy

The European Commission's expert group, whose main purpose is to advise on, further develop and implement the EU taxonomy, published a <u>preliminary report</u> on the design of an EU social taxonomy on 12 June 2021 after a consultation phase with over 300 responses. The <u>final report</u> followed on 28 February 2022. The key distinguishing feature compared to the existing EU (environmental) taxonomy, i.e. the oft cited EU taxonomy, relates to where capital flows are to be channelled. While the purpose of the existing counterpart is therefore to channel them into investments in the area of the six formulated environmental goals, the EU social taxonomy will in future channel them into areas which improve living conditions — especially for disadvantaged people. So far private initiatives such as the <u>ICMA Social Bond Principles</u> have been established in the social bond submarket. These and other important frameworks such as the <u>UN Sustainable Development Goals</u> or the <u>OECD Guideline for Multinational Enterprises</u> have been used to develop the EU social taxonomy.

Why is an EU social taxonomy needed now more than ever?

The Platform on Sustainable Finance emphasises in its final report the need for investment in, among other things, social areas such as housing, health and education. The transition process towards a sustainable domestic economy makes additional investment with regard to many population groups necessary from the point of view of social justice. A rapidly growing demand for bonds with an explicit social benefit can also be observed on the bond markets. The lack of a clear and uniform definition or classification system is currently still making it difficult to channel capital flows into social commitments.

Three main social goals correspond to three key stakeholder groups

In line with the EU taxonomy, the platform proposes basing the EU social taxonomy on core objectives. These correspond to the three most important targeted stakeholder groups (I. Employees, II. Consumers, III. Population groups). For example, three main social objectives are currently envisaged, for which there will additionally be a number of sub-objectives to which an activity should contribute. In the next step we expect a concrete draft law from the European Commission in accordance with the EU legislative procedure. An exact timetable has not yet been communicated. In addition, the expert group has conceded that the complexity of the sustainability aspects, for example from an issuer perspective, has recently increased considerably and that, initially, it will take time to align the current regulatory initiatives.

Core and sub-categories of the proposed EU social taxonomy

Main Objectives	Sub-objectives (among others)
I. Decent work (including for value chain workers)	Social dialogue, living wages, health and safety, lifelong learning
II. Adequate living standards and wellbeing for end-users	Consumer protection and the realisation of economic and social rights (right to health, food, housing and education)
III. Inclusive and sustainable communities and societies	Land rights, Indigenous people's rights, human-rights defenders, improving/maintaining the accessibility and availability of basic economic infrastructure and services

Source: European Commission, NORD/LB Markets Strategy & Floor Research

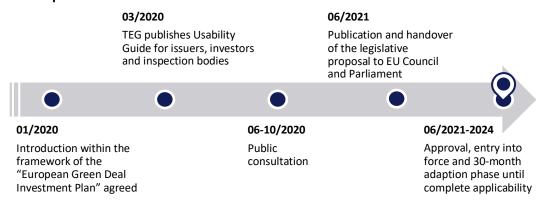


Update: EU Green Bond Standard

European Commission presents legislative proposal for the EU Green Bond Standard

On 6 July 2021, the European Commission published its concrete <u>legislative proposal</u> for a voluntary European Green Bond Standard (EUGBS) together with its new <u>Sustainable Finance Strategy</u>. The first thing that becomes clear from the presented strategy is that the investment volume required to finance the transition to a sustainable European economy is EUR 350bn per year to achieve the 2030 emissions target alone and an additional EUR 130bn to achieve the other climate goals. The legislative proposal follows the "gold standard" for European green bonds included in the <u>action plan</u> "Financing Sustainable Growth" since 2018 and recommended by the expert group. The EUGBS also explicitly claims to be a globally dominant label in the market for green bonds. At present the opinion-forming phase is underway in both the European Parliament's Committee on Economic and Monetary Affairs (ECON) and the Council. Following approval, a 30-month adaption phase begins, which is also envisaged for the development of regulatory standards by the ESMA, which is to be used as a supervisory body. Only at the end of this phase is the way clear for the full applicability of the regulation.

Development of the EU Green Bond Standard over time



Source: European Commission, NORD/LB Markets Strategy & Floor Research

ESMA should generate a high level of confidence as supervisory body

Far-reaching disclosure obligations and a trustworthy external audit are intended to ensure a high level of integrity. The basic structure of the EUGBS is divided into three main features in the draft law. Firstly, issuers commit to using all proceeds from green bonds for sustainable investment opportunities in line with the EU taxonomy. Secondly, they commit to disclosing details of the EUGBS-based financing, in particular its exact alignment with the EU taxonomy. In addition, their own general sustainability strategy must be communicated to investors and made accessible in an uncomplicated way. Thirdly, a supervisory framework will be created to ensure the trustworthiness of the bonds. External auditors appointed for this purpose will in future be supervised by the ESMA. The competent national authorities will also be given their own powers to ensure compliance with the regulations.



Key features of the EUGBS

1	Global application	Target groups are all issuers from the EU and third countries such as companies, sovereigns, financial institutions and issuers of covered bonds and asset-backed securities.
2	Voluntary basis	The EUGBS serves as a standard for all issuers who want to issue their bond as a "European green bond".
3	EU taxonomy conformity	100% of the issue proceeds (current version) must be invested in EU taxonomy-compliant activities until the bond finally matures.
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 five years.
5	External audit	European green bonds are monitored by external auditors registered with the ESMA.
6	Transitional funding	Projects running for up to ten years that enable the transition of an activity to EU taxonomy conformity (in future new: nuclear and gas energy) can be given the EUGBS label.

Source: European Commission, NORD/LB Markets Strategy & Floor Research

Industry associations voice praise and criticism

The main points of the draft met with broad agreement in principle. The fact that the standard is on a voluntary basis and is geared to already established counterparts such as the ICMA Green Bond Principles was emphasised in particular by the German Banking Industry Committee (Deutsche Kreditwirtschaft – DK) in its statement in relation to the consultation phase of the European Commission, which is due to end in September. However, the DK statement also contains a clear demand. For EU green bonds issued in the future, a kind of grandfathering should apply in the event that future changes to the technical screening criteria (as part of the regular evaluation process of the EU taxonomy) could render the label issued in the past ineffective. According to the current wording of the draft, issuers are obliged to comply with the renewed criteria within five years in accordance with Article 7. The associated uncertainties and risks on the part of issuers and investors could pose a serious challenge for the practicability of the EU label. Therefore, the DK proposes that the adaption period of five years should be significantly extended as a reaction to changing requirements. In addition, it is argued that issuers could be forced to restrict themselves to shorter maturities or even continue to use other established standards altogether. Concerns have also been raised about the high administrative requirements involved in ensuring that the investment of emission proceeds complies with EU taxonomy. What is new in the current draft law is that 100% of the issue proceeds of an EU green bond must now be used in line with the EU taxonomy. According to the DK, it can be expected that issuers will be overstretched initially because in practice compliance will have to be laboriously proven for each commitment individually. Also the lack of experience and data, with regard to verifiability of the minimum safeguards (e.g. do no <u>significant harm – DNSH</u>) is an additional complicating factor.



EMF-ECBC: Build-up of required cover assets could take years

In its <u>reaction</u> of 14 September 2021 to the legislative proposal, the European Mortgage Federation - European Covered Bond Council (EMF-ECBC) firstly emphasises the strategic importance of covered bonds on the way to the European Commission's net zero target. Based on this, it joins in the general criticism of the wording of Article 7 of the EUCES. It says that the de facto limited validity of the status of a European green bond for initially five years, after the label has been granted, is a problem. In order to ensure that the EUGBS (and therefore the EU taxonomy) works and actually supports the credit markets, the wording of Article 7 should be amended in line with the original recommendations of the expert group. New issues and outstanding bonds should be based on the version of the framework applicable at the time of issue throughout their life. In line with the DK's criticism, the EMF-ECBC also sees an additional risk and barriers here for EUGBS-based long-term financing. As a second key point – also in line with the DK – the EMF-ECBC points to a necessary degree of flexibility in the EU taxonomy-compliant use of proceeds. To achieve climate targets in the real estate sector, the financial sector should be able to refinance appropriately qualified mortgage loans through EUGBS-compliant covered bonds. The necessary mass of cover assets would first have to be built up over a period of years. It is therefore proposed to set a limit of 80% on the EU taxonomy-compliant use of proceeds for a transitional period of five years.

Insurers primarily see problems with the grandfathering of the "green" status

The German Insurance Association (GDV) also welcomes the EUGBS proposal, but at the same time sees a clear need for improvement. Insurers, as Europe's largest institutional investor group, invest heavily in European bonds and have a keen interest in promoting the European green bond market. A credible and above all practicable standard creates legal certainty on the part of both issuers and investors and therefore forms the foundation of a deep and liquid market. This is particularly important given that, for example, still only about 4% of corporate bonds issued are "green". GDV therefore sees the core points as positive, such as the alignment with already established market standards, the voluntary basis of the standard and the inclusion of transitional financing. The fact that in principle any issuer can use the EUGBS is seen as positive in relation to the expansion of the universe for green bonds in the EU. Key issuers such as countries or the public sector represent a considerable share of the asset allocation in insurance portfolios. The GDV is also concerned about the grandfathering of a bond once it has been issued as an "EU green bond". It should retain its green status until final maturity, even if the EU taxonomy criteria change. The wording in Article 7 of the EUGBS draft currently does not give a clear answer on this. It is unclear what happens if an issuer is no longer able to use all the proceeds in an EU taxonomy-compliant way after five years. As a concrete recommendation, the GDV therefore mentions the deletion of the relevant passages in Article 7. With regard to the use of proceeds, an 80% limit is proposed - in line with the EMF-ECBC - in conjunction with a transitional arrangement. This would give smaller establishments in particular more flexibility in the start-up phase of the issuing activities associated with the EUGBS.



Update: ICMA Bond Principles

New edition of ICMA Bond Principles and Guidelines

In June last year, the International Capital Markets Association (ICMA) published a collective update of its frameworks for sustainable bonds. The latest editions of the Green Bond Principles (GBP), Social Bond Principles (SBP) and Sustainability Bond Guidelines (SBG) were published on the ICMA website in June 2021. These had been expected by market participants for quite a while in some cases. As far as the Green Bond Principles are concerned, this is the first update of the voluntary guidelines for green bond issuance for three years. This also applies to the Sustainability Bond Guidelines, which were last updated in 2018 as guidelines for mixed financing of green and social projects. With regard to social bonds, the unit of the ICMA Bond Principles family with the largest number of issues after green bonds, the 2021 edition replaces the ICMA SBP 2020. While the ICMA frameworks for "use of proceeds" bonds (focus on use of funds) were collectively updated, the revision of the Sustainability-Linked Bond Principles (SLBP) based on Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs) took place over one and a half years ago (SLBP June 2020). Given the massive expansion of this sub-market last year (+989% new issuance volume Y/Y), market participants could have expected a new edition of this as well. In the course of updating the Bond Principles and Guidelines, the ICMA also published or updated a number of accompanying documents, aids and additional information. A Pre-Issuance Checklist for social bonds and other documents is provided in the ICMA Resource Center.

Green Bond Principles: the main changes

By the end of 2018, the year in which the Green Bond Principles were last revised, the CBI still put the cumulative global issuance volume of green bonds at over USD 500bn. By the end of December 2020, this figure had already doubled, while in the following year 2021, the threshold of USD 1tn was even exceeded. The GBP are a voluntary standard for financial market participants for the issuance of green bonds. The issue proceeds – in part or in full - may only be used for the purpose of financing and refinancing projects with environmental benefits. 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), giving the GBP a high degree of integrity in addition to transparency for investors. The 2021 edition of the GBP was mainly supplemented by recommendations on green bond frameworks, external reviews and on the four core components. The new edition focuses on transparency in terms of sustainability strategies and reporting obligations at issuer level. The disclosure of detailed information on the conformity of exposures with regard to official or market-based taxonomies is also an important point. Furthermore, issuers are given guidelines for identifying their own activities to reduce material environmental risks.



Green Project Mapping contrast relevant taxonomies

The current Green Project Mapping provided by the ICMA is intended to enable the contributions of the GBP's project categories to be mapped to the framework's five environmental objectives (I. Climate Change Mitigation, II. Climate Change Adaptation, III. Natural Resource Conservation, IV. Biodiversity Conservation, V. Pollution Prevention and Control). For example, the GBP project category Renewable Energies brings a primary benefit in terms of climate change mitigation. The same applies to projects in the area of energy efficiency and environmentally sustainable real estate. In addition, the Mapping is intended to offer help in comparing other taxonomies (including the EU taxonomy). The ICMA also provides an update of the <u>Guidance Handbook</u> (June 2021), which serves as a reference guide for frequently asked or relevant questions by market participants in the context of the Green Bond Principles.

GBP mapping with regard to other taxonomies

GBP-project categories	Climate Bond Initiative	EU Taxonomy (economic activities below may contribute significantly to one or more of 6 EU environmental objectives)
Renewable energy		Energy
Energy efficiency	Energy generation, transmission and storage	Various activities, including information and communication and professional, scientific and technical activities
Pollution prevention and control	Waste management	Water supply, sewerage, waste management and remediation
Environmentally sustainable management of living natural resources and land use	Agriculture, forestry, land conservation and restoration	Forestry
Terrestrial and aquatic biodiversity conservation		Environmental protection and restoration activities
Clean transportation	Land transport shipping	Transport
Sustainable water and wastewater management	Water infrastructure	Water supply, sewerage, waste management and remediation
Climate change adaptation	Not an activity but one of the environmental objectives	Not an activity but one of the EU environmental objectives
Circular economy adapted products, production technologies and processes and/or certified eco-efficient products	Industry and energy intensive commercial	Manufacturing
Green buildings	Buildings	Construction and real estate activities, professional services related to energy performance of buildings

Source: ICMA Group, Green Project Mapping June 2021, NORD/LB Markets Strategy & Floor Research



Social Bond Principles essentially supplemented by recommendations

After the last extension of the framework in mid-2020 to include two project categories and two target groups, a key stakeholder consultation process was launched by the end of the year. The results were incorporated in the edition of the Social Bond Principles (SBP) published in July 2021. As is the case with the GBP, the framework was mainly supplemented by recommendations on social bond frameworks, external reviews and on the four core components. The SBP are voluntary process guidelines for issuers of bonds for financing social project objectives. The label is intended for broad use by the market. It provides guidance to both issuers and investors on the key components of a credible social bond. The aim is to promote the availability of information on which to base an assessment of the impact of investments in social bonds. Overall, private initiatives such as the ICMA Social Bond Principles have contributed significantly to the growth of the global market for social bonds in recent years. The structure of the SBP is basically identical to the GBP. The difference lies in the thematic focus of the project categories, which concentrate on sustainable social benefits in the case of the SBP. An SBP-aligned issue with transparent sustainability credentials provides an interesting alternative to green bonds for investors. The quantitative sustainability objectives formulated by issuers are externally reviewed on a regular basis with the help of key performance indicators (KPIs) and targets related to sustainability performance.

Social bonds in the SSA/Public Issuers segment: Europe is where the action is

The EU programme SURE (Support to mitigate Unemployment Risks in an Emergency) was essentially set up by the European Commission to save jobs and protect income during the COVID-19 pandemic through measures such as short-time work. Member States applying for funds directly from the European Commission can benefit from the relatively favourable financing conditions through the EU's primary market presence as an issuer. To fund SURE, the European Commission issues social bonds with a total volume of up to EUR 100bn, making the Commission, on behalf of the EU, the world's largest issuer of social bonds in a very short period. In October 2020, the European Commission began its activities on the primary market following the formal adoption of the underlying Social Bond Framework, which in turn is based on the ICMA Social Bond Principles. The first SURE transaction with a volume of EUR 17bn (dual tranche) was already record-breaking and closed with cumulative order books of EUR 233bn, one of the largest order volumes in the history of global bond markets. The resulting bid-to-cover ratio of 14x also reflected a huge interest in the market. Between October 2020 and May 2021 the European Commission issued seven more social bonds with a total volume of EUR 89.6bn. On the recommendation of the European Commission, the Council approved additional financial assistance of EUR 3.7bn for six Member States (Belgium, Greece, Latvia, Lithuania, Malta and Cyprus) in March 2021. The Member States can also continue to apply for funding under SURE, as the total volume is up to EUR 100bn. From the information provided by the European Commission, we understand that of the EUR 89.6bn in funds distributed so far, Italy (EUR 27.4bn) and Spain (EUR 21.3bn) account for the majority, well ahead of other EU countries.



Social bonds related to COVID-19

Besides issuers from the SSA/Public Issuers segment, all issuer groups can in principle issue a social bond in connection with COVID-19. In terms of the ICMA SBP, the four core components of the framework must be observed initially (I. Use of issue proceeds, II. Project evaluation and selection process, III. Management of proceeds and IV. Reporting). However, the key point here is the exclusive use of the proceeds to address or mitigate social problems caused either in whole or in part by the outbreak of the coronavirus crisis. It is not necessary to have already issued social bonds before.

What specific projects are eligible?

Social bonds finance projects that directly aim to solve or mitigate a specific social problem and/or achieve positive social improvements. The global outbreak of the pandemic constitutes a socio-economic problem that threatens the health of the world's population, with the elderly and people with pre-existing health problems being particularly affected. In addition, people around the world are suffering from the economic effects and social isolation that have occurred or will occur due to the pandemic. Concrete examples of social projects with regard to COVID-19-related social bonds are therefore an expansion of capacities in the healthcare sector (such as financing additional medical equipment) or medical research projects. SME loans for preserving and promoting jobs in affected small businesses aimed specifically at preventing and/or alleviating pandemic-related unemployment also constitute other COVID-19-related social bond projects.

Interim conclusions on ICMA Bond Principles

In our view, the further development of the global market for ESG bonds is also reflected in the new edition of the ICMA Principles. This sub-market is becoming increasingly important, especially due to the effects of the pandemic and (supra)national transformation programmes and requires a high degree of transparency and willingness to provide information from issuers. Therefore, the new edition of the ICMA Principles and Guidelines has essentially been supplemented by recommendations for the disclosure of important information by issuers. Owing to the strong market dynamics in the sustainability-linked bond segment and their relevance for transitional financing towards more sustainable business models, we think a new edition of these guidelines, since the last update in 2018, can be expected. In addition, the market for ESG bonds is being subjected to an ever increasing amount of supranational regulation, combined with a steady increase in selection criteria at product level. The ICMA Principles and Guidelines therefore can largely be seen as complementary compared with the EU Taxonomy or, prospectively, the EU Green Bond Standard. In this respect, it is not surprising that the ICMA communicates precisely these points, e.g. in the form of specific recommendations, among other aspects. For the SSA/Public Issuers segment, due to the alignment of the EU Social Bond Framework with the ICMA SBP, we continue to see the latter as an essential basis that also provides a common denominator in relation to other asset classes or issuer groups. We also take a positive overall view of the fact that, although there is still generally heterogeneity in the "sustainable labels" used, the ICMA Bond Principles are making a steadily growing contribution to defragmenting the market.



Rating agencies: market growth despite stumbling blocks

Fitch: unsecured ESG bank bonds preferred

In its study dated 9 December 2021 the rating agency Fitch took a look at the status quo of the market for covered bonds and unsecured bank bonds in ESG format. With reference to the data of the Climate Bond Initiative, which identifies ESG bonds also based on its own Climate Bond Taxonomy, the volume of globally outstanding ESG bonds is estimated to stand at around EUR 1.5tn (as of the end of September 2021). Covered bonds accounted for only 3% (EUR 45bn), while unsecured bank bonds accounted for 15% (EUR 225bn). Overall, issuers already established in this segment make up the bulk of new issues. In terms of unsecured bank bonds, the agency infers a preference for this asset class by banks, essentially due to the scarcity of ESG-eligible cover assets. Although mortgages as an asset class account for the bulk of the covered bond market, the underlying stock of real estate in the EU is relatively old. Coupled with a lack of incentives for a large-scale renovation wave, this exacerbates the shortage of energy-efficient houses that could be used as cover assets. Tough selection criteria apply under EU taxonomy when it comes to eligible collateral for covered bonds: mortgages for recently constructed energy-efficient buildings with a class A or B energy performance certificate (EPC) or belonging to the best (most energy-efficient) 15% in the national building stock. Based on this, the agency sees this factor as the main drag on market growth for ESG covered bonds. As long as neither the condition of the cover assets nor the criteria change significantly, we expect that the gap between the market shares of covered bonds and unsecured bank bonds in the ESG segment will continue to widen.

Standard & Poor's study: the "era" of sustainable covered bonds has begun

S&P also turned its attention to the market for ESG covered bonds at the end of the year (study dated 17 November 2021). According to this, an outstanding volume of EUR 42.4bn was reached in 2021 in regard to ESG covered bonds, with green formats accounting for the majority of this volume at around 74% (EUR 31.2bn). Social covered bonds (EUR 9.1bn, 21%) followed some distance behind in second place. Sustainability covered bonds were in third place with a volume of EUR 2.1bn (5%). S&P observes keen interest on the part of both issuers and investors. The study even says that the era of sustainable covered bonds has begun. The public sector alone cannot procure the necessary financing volume to achieve the climate targets and this is precisely where sustainable covered bonds can play a key role in the transition to a more sustainable economy. With a total of EUR 2.9tn in globally outstanding volume (across all formats and currencies), covered bonds are a fundamentally important financing instrument, especially in the European real estate sector. The agency believes that the market for ESG covered bonds will continue to grow in the coming years. In analogy to Fitch it also sees the problem of a shortage of suitable cover assets. Regulatory efforts – first and foremost the narrowly defined EU taxonomy – are cited as the most significant challenges, owing to the fact that these are likely to exacerbate the shortage of sustainable assets due to strict selection limits – at least in the short term.



Moody's sees increasing divergence of the global taxonomy landscape

In its annual forecast for 2022, the rating agency Moody's refers to a growing divergence of the globally relevant taxonomies, some of which are currently still being developed and may diverge strongly in the future. More and more jurisdictions, such as most recently China, Canada, Singapore and the UK, are driving the development of their own taxonomies. A green or sustainable definition could differ depending on the region. The form they finally take, using EU taxonomy as an example, in relation to selection criteria (technical screening criteria, TSC) and minimum requirements (Do No Significant Harm, DNSH) are likely to have a considerable impact on the relative success of the different taxonomies. This is particularly important in regard to the area of transitional financing, where there is a lack of global consensus anyway, as most recently revealed by the efforts of the European Commission to extend the EU taxonomy to include gas and nuclear power activities. Moody's therefore sees challenges for all market participants when it comes to the development and comparability of sustainable strategies and portfolios. The International Platform on Sustainable Finance, which was founded by the EU Commission in 2019 and currently comprises 17 non-European members, with the project Common Ground Taxonomy. It aims to identify overlaps and differences in the content of the various taxonomies. Although the Common Ground Taxonomy does not have a legal character, it is an important step to check the comparability and interoperability of the different frameworks at global level. An extension of the project to other regions who also put forward their own taxonomy could prospectively play an important role for growth in the global market for ESG bonds.

Scope Ratings: continuing gap between expectations and reality

In its outlook for the current calendar year, Scope Ratings returns to the issue of greenwashing, among other aspects. Given the rapid growth in the market for ESG bonds - across all ESG asset classes and issuer groups - the rating agency sees the relevance of this topic growing at the same pace. Companies and especially issuers are increasingly seeking to establish their environmental and social credibility in order to thereby gain access to ESG refinancing instruments. According to its own data, the relative market share of non-financial companies in the new issuance volume of ESG bonds will rise to around a third in 2022, compared with roughly a quarter last year and only around 8% in 2020. In general, while market supply has been growing for years, premiums continue to be invoked for ESG bonds newly brought to market during the marketing process, although it is often not clear what sustainable contribution the individual bond will actually make. While the use of proceeds can be verified for green bonds, this assessment is considerably more difficult for instruments linked to KPIs and sustainability targets, such as sustainabilitylinked bonds. Scope Ratings often sees a lack of credible ambition in the predefined sustainability targets for this class of ESG bonds. In addition, failure to meet targets often has no monetary consequences. For investors, this will also become a regulatory problem in the future in light of the EU Regulation on the Disclosure of Sustainable Finances (SFDR), which provides for reporting on the environmental impact of the financial instruments in the portfolio from 2023. Overall, Scope Ratings therefore continues to see a need for action by regulators in order to bridge the gap between expectations and reality in the future when defining ESG investment targets.



Outlook: What remains when the flood of regulation subsides?

Whether the EU Taxonomy can deliver on its promises should soon become clear

In 2022, the regulator will once again make important decisions about the ESG bond market. Most notably, the EU Taxonomy is taking shape and attracting attention on the European markets. However, with the draft on the inclusion of certain nuclear and gas energy activities that was surprisingly circulated at the end of last year, it initially met with a lukewarm public reception. A fundamental debate followed on the extent to which a loss of integrity should be accepted and whether the initially successful start in the race for a globally dominant role as a sustainable standard label may therefore have been squandered. From many perspectives, the recently planned EU social taxonomy should in turn provide tailwind for the overall concept, not least because in the context of a series of (supranational) transformation programmes worldwide (COP26) and in the EU (e.g. SURE), large new issuance volumes are likely to be called for in the future. The European Commission is also penetrating the green bond segment with a planned EUR 250bn in additional issues until 2026 as part of the NGEU agenda. The fundamental component for this, the EU Green Bond Standard, which is based on the EU taxonomy, has attracted mixed feelings amongst industry associations and other key stakeholders since the first draft was published in July 2021. The alignment with initiatives already established in the market albeit private - such as the ICMA Bond Principles is seen as a positive factor. In contrast, clear and critical words are found for specific quantitative criteria in the EUGBS draft, which could weaken momentum on the markets for years, especially during the important startup phase. Another key point of criticism is the 100% EU taxonomy-compliant use of proceeds, which already massively limits the universe of eligible cover assets from the outset, for example with regard to covered bonds. A further important subject of discussion is Article 7 within the proposal on the EUGBS, according to which the grandfathering of a label granted in the past (e.g. EU Green Bond) is not guaranteed until the final maturity of the bond. Rating agencies would also see considerably more growth in the sustainable bonds segment for 2022 and beyond if the European regulators were to initially soften the strict criteria somewhat and therefore enable an easier start-up phase. In this context, we would also point to the high receptiveness of the market so far, which is expressed in double-digit oversubscription ratios of sustainable new issues in some cases, which are priced accordingly tightly. We anticipate record-breaking issuance volumes in all ESG submarkets again this year. Also, given the current wave of regulation, which is breaking fresh ground with regard to the first mandatory EU taxonomy-based reporting period, it should soon become clear what role the EU Taxonomy will actually play in the markets.



Appendix Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2021

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

Transparency requirements §28 PfandBG (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide – German Laender 2021

Issuer Guide - Canadian Provinces & Territories 2020

Issuer Guide – Supranationals & Agencies 2019 (update planned for 2022)

Issuer Guide - Down Under 2019

Fixed Income Specials:

Face-saving ECB decision: Hawks have won – for now

ECB decision: PEPP benched for now, APP comes in as Point Guard

ECB holds course, but ups the ante – PEPP running until 2022

ECB launches PEPP (Pandemic Emergency Purchase Programme)



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Additional information

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None

Sources and price details

For the preparation of investment recommendations, we use issuer-specific financial data providers, our own estimates, company information and publicly available media. Unless otherwise stated in the information, price information refers to the closing price of the previous day. Fees and commissions are incurred in connection with securities (purchase, sale, custody), which reduce the return on the investment.

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Neutral: Neutral expectations for the issuer, a bond type or a bond of the issuer.

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Breakdown of recommendations (12 months)

Positive: 37% Neutral: 55% Negative: 8%

Recommendation record (12 months)

For an overview of our overall pension recommendations for the past 12 months, please visit www.nordlb-pib.de/empfehlungsuebersicht_renten. The password is "renten/Liste3".

Issuer / security Date Recommendation Bond type Cause

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