Fixed Income Special – ESG update

NORD/LB Markets Strategy & Floor Research

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Marketing communication (see disclaimer on the last pages)

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The market for ESG bonds

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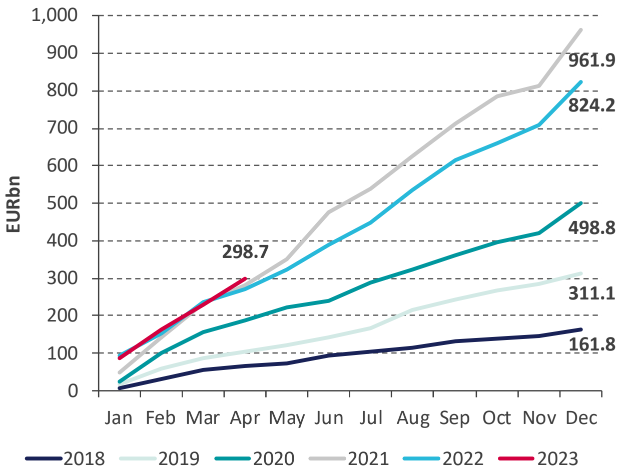
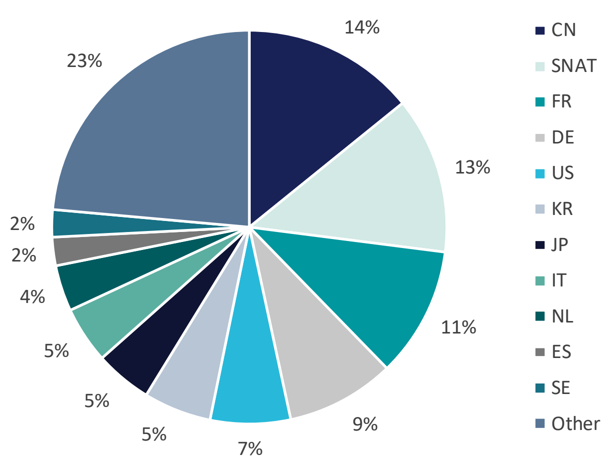
New issues of ESG bonds in 2022 fell short of record 2021 levels

The global market for sustainable bonds – by our definition covering bonds in the green, social, sustainable and sustainability-linked categories – reached a high level by historical standards last year with a new issuance volume equivalent to EUR 824.2bn. Nevertheless, the primary market fell short of expectations, with the volume of new issues still around EUR 961.9bn in 2021 – albeit largely due to one-off effects resulting from the coronavirus crisis. Expectations for 2022 were correspondingly high among many market participants, as the volume of new ESG issues had risen steadily in the past decade. The fact remains that a cumulative volume of around EUR 2,900bn has been issued in the last five years. In 2022, China led the rankings, although 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 aligned completely with the globally established ICMA Bond Principles (previously it was about 70%). Incidentally, for state-owned enterprises, the requirement remains at 50%. Large portions of China's new issues of ESG bonds in 2022 are therefore not on a par with European issuance. With regard to the EU, it has become a major player in the global market for ESG bonds, especially in the social and green segments. Under the SURE programme (Support to Mitigate Unemployment Risks in an Emergency) alone, social bonds with a volume of EUR 98.4bn had been issued by the end of the programme in 2022. With the NGEU (NextGenerationEU) stimulus package – for a sustainable recovery of the Eurozone with a volume of more than EUR 800bn (at current prices, of which up to 30% in green bonds) – the EU is expected to become the largest green bond issuer worldwide by 2026. Among the member states themselves, France in particular stood out, with an 11% share of global new issues of ESG bonds in 2022, followed by Germany with 9%.

Cumulative global new issues of ESG bonds (EURbn)



New issues of ESG bonds by jurisdiction (2022)

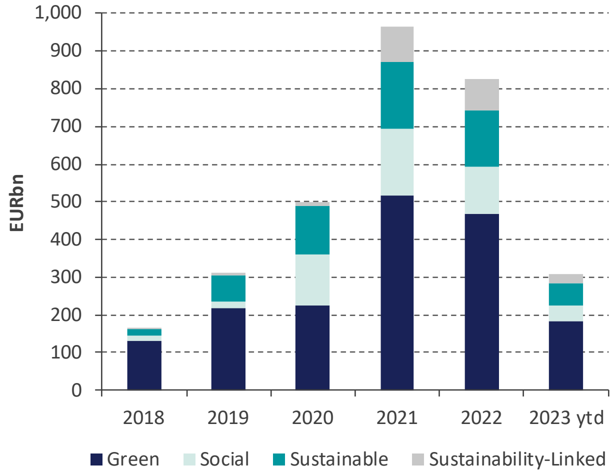


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data as of 28 April 2023 eod

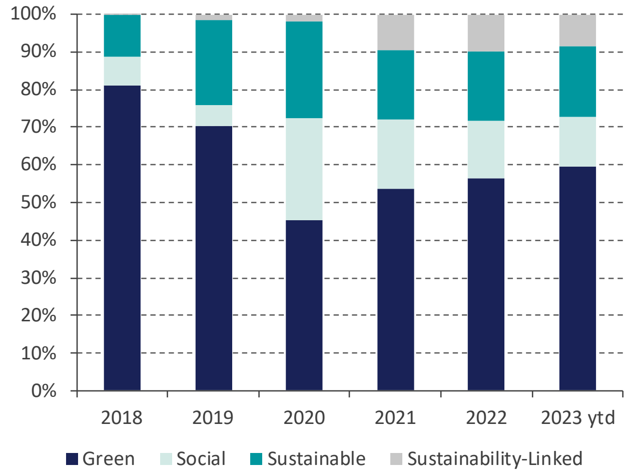
New issues of ESG bonds in 2022: decline in all sub-segments

The volume of new ESG bonds brought to market last year fell short of the previous year's final figure for the first time in the last ten years. According to our definition, this applies to each sub-segment. Nevertheless, green bonds were once again the strongest performers with a new issuance volume of EUR 453.9bn (-11% Y/Y). Sustainable bonds (EUR 149.1bn; -15% Y/Y) ranked second, followed by social bonds (EUR 124.7bn; -29% Y/Y) and sustainability-linked bonds (EUR 81.0bn; -13%). The decline in social bonds, which is largely attributable to the special measures taken by the EU in 2021 in the wake of the coronavirus crisis described above, is particularly striking. Instruments suitable for transition finance (sustainability-linked bonds), which are not linked to the use of proceeds but to environmental performance indicators defined ex ante and are therefore particularly suitable for small issuers, were unable to maintain the momentum of previous years last year, also as a result of the volatile market environment. While there was a tenfold increase in new issues of sustainability-linked bonds in 2021, there was a 13% decline at year-end 2022. As a result of the general issuance activity in the ESG segment, there were also shifts in relative market shares in 2022. At the end of December, green bonds once again accounted for the lion's share (56%). In contrast to the previous year, sustainable bonds (18%) were now in second place, followed by social bonds (15%). Sustainability-linked bonds again had a market share above the 10% mark despite the negative growth rate. Overall, they still make the smallest issuance contribution, but in general the global market for ESG bonds has seen a significant increase in granularity in recent years.

ESG bonds: global new issues (EURbn)



ESG bonds: relative market shares of new issues

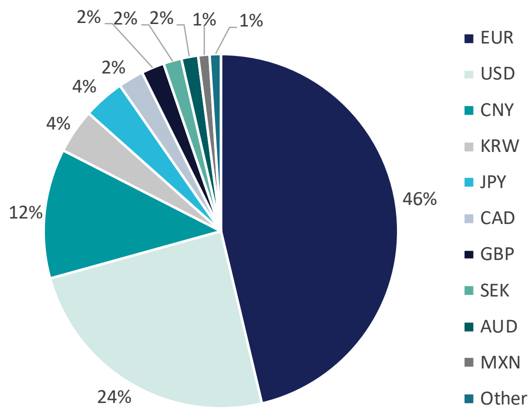


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data as of 28 April 2023 eod

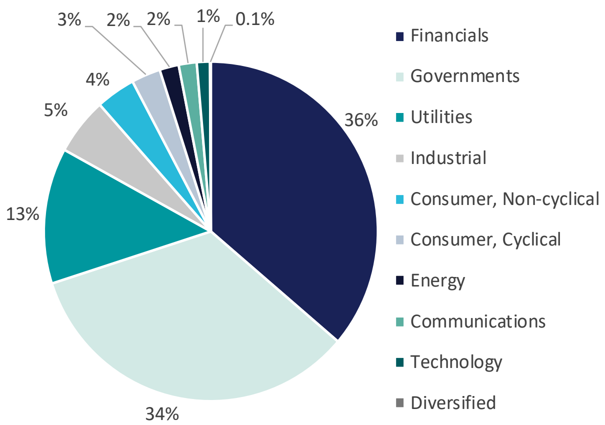
Financials and public issuers account for largest new issuance volume

Around 36% of the green, social, sustainable and sustainability-linked bonds issued in 2022 are attributable to the "Financials" segment and 34% to the "Governments" segment. Compared with the previous year, the rankings here have changed. In 2021, the shares were still 27% (Financials) and 41% (Governments). A glance at the industrial sectors shows that utilities continue to play an important role in the universe of sustainable bonds. In 2022, utilities accounted for a new issuance volume of EUR 103bn (previous year: EUR 108bn), ranking third with a share of 13%.

ESG bonds: distribution of globally outstanding volume by currency (year-end 2022)



ESG bonds: distribution of globally outstanding volume by sector (year-end 2022)



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

EUR and USD remain leading currencies: EUR market share increases; USD loses out

Bonds denominated in euros account for almost half of the outstanding volume worldwide, by our definition (45%, previous year: 43%). USD makes up a quarter (25%), compared with 33% in the previous year. In Asia, on the other hand, CNY (12%) and KRW (4%) continue to dominate, which now add up to 16% (previous year: 8%). In Europe, aside from the single currency, the most common currency of choice is GBP (2%; previous year: 5%) and SEK (2%; previous year: 1%). In our view, the pace of regulation by the EU Commission in the EU taxonomy on the one hand and the accompanying special programmes such as NGEU on the other should continue to secure the euro's supremacy. However, the USA is also aiming to halve its greenhouse gas emissions by 2030 compared with 2005, with a USD 370bn funding programme in place. In September last year, China also announced its intention to become climate-neutral by 2060. However, the world's largest CO_2 emitter has since been under pressure to deliver initial results.

CBI: climate targets require annual green bond issuance of USD 5,000bn

The Climate Bonds Initiative (CBI), as an internationally established non-profit organisation in the ESG bond market, regards annual new issuance volumes from 2025 onwards of USD 5,000bn in the green bond segment alone as necessary to achieve climate goals such as the Paris Agreement and the CO_2 neutrality targets of many countries by mid-century. Sufficient capital is available worldwide for sustainable transformation, as shown by the rapid market growth of recent years. With regard to green bonds, investments to reduce the direct physical impact of climate change (extreme weather events or effects on ecosystems and human beings) will therefore be among the most important drivers of primary market activity in the coming years. According to its own data, the organisation puts the volume of globally issued green bonds by the end of 2022 (cumulatively) at more than USD 2,000bn – the annual new issuance target of USD 5,000bn from 2025 thus still seems a long way off. Looking ahead to the coming years, however, it is considered indicative that demand for ESG bonds continues to exceed primary market supply, in some cases by a wide margin. We also believe that the growing investments in climate resilience (using NGEU as an example) would be warmly received in market terms.

COP27 sets further course for the global sustainable bond market

At the World Climate Conference in Sharm el-Sheikh in November 2022 (COP27), no new progress was made compared to the previous year's climate summit. With regard to efforts to adapt to climate change, the agreement reached in the previous year on an annual investment volume of USD 100bn was merely reaffirmed. One aspect that can be described as ground-breaking, however, is that the "Adaptation Agenda" is the first time that public and private players have rallied behind a joint package of measures to adapt to climate change. In total, funds of up to USD 300bn are to be mobilised for the implementation of 30 concrete steps for around four billion people by 2030. In the area of sustainable transformation of the economy, the UN-backed „Breakthrough Agenda" came into being, with 25 measures specifically targeting economic sectors that are difficult to decarbonise (including energy, transport, steel production). Signatories include the US, China, numerous EU countries, the United Kingdom, and India, with a total of about 50% of global GDP represented. Against the backdrop of the refinancing of this veritable mishmash of measures, many market participants had expected a statement on a potentially common framework (taxonomy), but this failed to materialise. The growing web of (inter)national frameworks, on the other hand, makes it difficult to determine the status quo and constantly measure progress, which continues to create a lack of transparency on the part of investors and makes comparisons more difficult. In short, opinions on the role of, for example, nuclear energy or fossil fuels in the context of energy efficiency were again too divided for a cross-state framework.

Look at the Eurozone: EU Commission presents "Green Deal Industrial Plan"

In early February, the EU Commission announced the new "Green Deal Industrial Plan" to support European competitiveness during the transition to climate neutrality. This was preceded in the USA by the Inflation Reduction Act (IRA), a USD 370bn programme to promote green technologies. At the same time, China's government support of businesses – green or otherwise – has been in the sights of EU and US regulators for years. After the two-day summit, the four key objectives embedded in the EU Green Deal Industrial Plan were presented: I. A predictable and simplified regulatory environment; II. Faster access to finance; III. Improving professional qualifications; and IV. Open trade for resilient supply chains. No specific volume was mentioned and reference was made only to the existing EU programmes REPowerEU, InvestEU and the Innovation Fund. In the medium term, however, the intention is to provide a structural response to the need for investment. A new "European Sovereignty Fund" will be proposed as part of the review of the Multiannual Financial Framework before the summer of 2023.

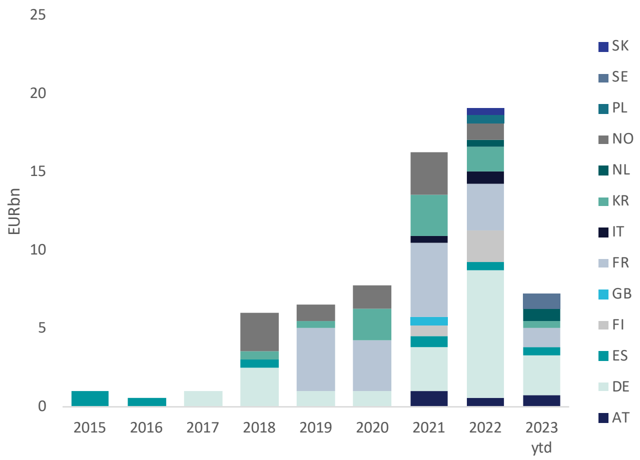
EU taxonomy forms bedrock of European ESG bond market

As early as November 2020, the first two climate targets of the Taxonomy Regulation (EU) 2020/852 (I. Climate change mitigation, II. Climate change adaption) were underpinned by the EU Commission in the Climate Delegated Act with technical screening criteria. These became binding in 2021 (initially for financial market players), setting an important course in the European market for ESG bonds. The four outstanding environmental targets will also be underpinned by screening criteria in a delegated act, which is currently available in draft form with some delay. In June 2022, in the Complementary Delegated Act, these were accompanied by screening criteria for transition activities in the nuclear and fossil gas sectors related to Environmental Goals I. and II.

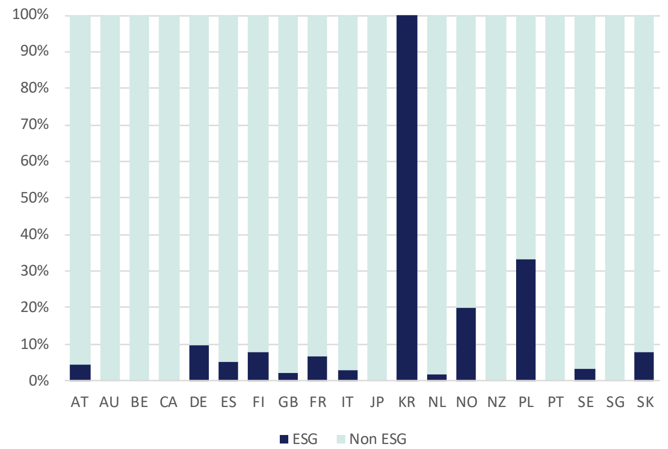
ESG covered bonds: record figure in 2022, 2023 also promising

The year 2022 was another record year for the ESG sub-market in the EUR benchmark segment. Last year, covered bonds in the sustainable formats (Green, Social and Sustainability) with a total volume of EUR 19.1bn (spread over 28 issues) were placed on the market. Although this figure was higher than in the previous year (EUR 16.25bn), it must be put into perspective, given the high volume of issues in 2022. Once again, the most dominant were the green format emissions. The Green segment accounted for EUR 15.75bn (previous year: EUR 10.75bn), while EUR 2.85bn (Social; previous year: EUR 4.8bn) and EUR 0.5bn (Sustainability; previous year: 0.7bn) were attributable to the other two classifications. The continued generic growth of the ESG segment in terms of EUR benchmarks is also demonstrated by the debutants in 2022. Accordingly, Caja Rural de Navarra (EUR 500m; previously: Sustainability), DZ HYP (EUR 1bn) and Banco BPM (EUR 750m) placed their first green covered bonds at the beginning of the year. This was later followed by UniCredit Bank Austria (EUR 500m), Bayern LB (EUR 500m), PKO Bank Hipoteczny (EUR 500m) and Nordea Kiinnitysluottopankki (EUR 1.0bn) with first-time appearances in the green format. Bayern LB's debut was a green Public Pfandbrief focusing on “Green Rail”. The institution's first green mortgage Pfandbrief followed in October 2022 (EUR 500m). The placement by PKO Bank also marked the first EUR benchmark in green format from Poland. Berlin Hyp approached investors with its first social Pfandbrief and placed EUR 750m at the beginning of May. In the current year, the issuance volume up to the end of April was EUR 7.25bn. By jurisdiction, the largest share of this is accounted for by deals from Germany (EUR 2.5bn), followed by France (EUR 1.25bn) and Austria and the Netherlands (EUR 750m each) We expect further market appearances in the course of the year. Even though the regulatory environment for the covered bond segment is becoming more challenging, we remain convinced that there is still considerable catch-up potential in the market for sustainable covered bonds. For the coming years, we therefore expect increased issuance activity in the Green, Social and Sustainability formats. The sub-market of mortgage-backed covered bonds is likely to dominate in the medium to long term. We believe that this can also make a significant contribution to climate change mitigation.

Covered bonds: ESG issuance volume (EUR BMK)



Covered bonds: ESG shares in the market as a whole

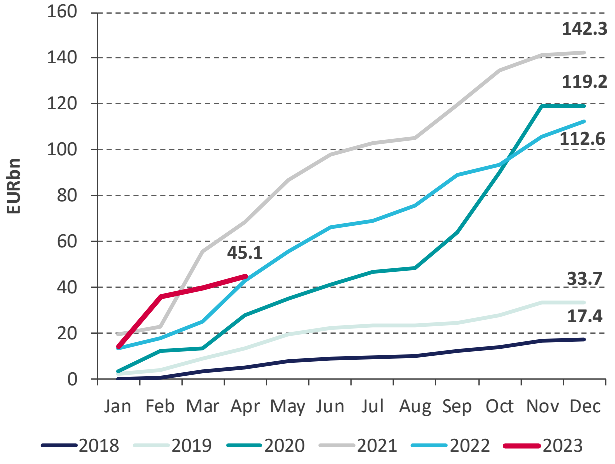


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data as of 28 April 2023 eod

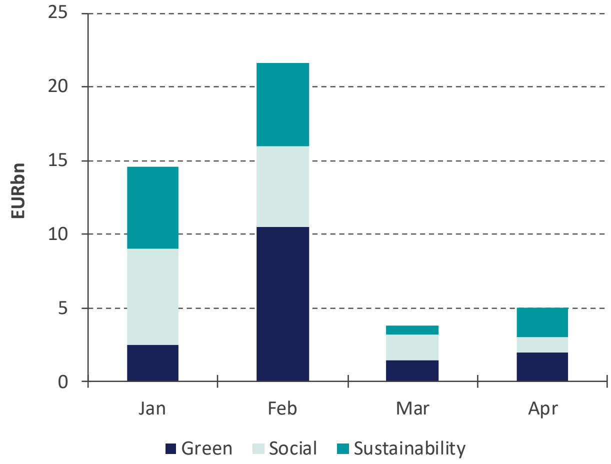
SSA-ESG year 2022 saw no new records, 2023 starts promisingly

As was already the case for the covered bond segment in the previous section, we first look back on an eventful ESG year in 2022 based on our SSA definition (i.e., excluding sovereigns). As of the reporting date of 31 December 2022, we recorded a total EUR BMK new issuance volume in the Green, Social, and Sustainability formats of EUR 112.6bn. When we compare this figure to the issuance trajectories of previous years, it is below the record year of 2021 as well as 2020, but well above 2018 and 2019. A crucial factor in the record year 2021 is that between February and May alone, the European Union issued EUR 46.1bn in social bonds under the SURE programme. EU member states were given financial support through SURE to mitigate the social or societal consequences of the coronavirus pandemic (e.g., in the form of government assistance such as short-time work programmes). With the advent of the SURE agenda, social bonds are no longer playing second fiddle to green bonds. Looking ahead to 2023, February in particular set the bar very high for new issues: At EUR 21.7bn, the issuance volume was more than twice as high as in the second-strongest February in 2020 (EUR 9.0bn). A total of 15 new ESG issues were placed; the largest transaction in terms of volume was carried out by CADES with EUR 4bn, the proceeds of which naturally have a social application due to the business purpose. By contrast, primary market activity in March was significantly lower (EUR 3.8bn). Nonetheless, the current volume of new issues (up to the end of April) amounts to EUR 45.1bn, which is almost equally distributed among the sub-segments under review (Green: 36%, Social: 32%, Sustainability: 32%). The previous year's figure (EUR 43.1bn) has thus been exceeded, but once again falls short of the record year 2021.

Primary market: SSA ESG issuance history (EUR BMK)



Primary market: SSA ESG issues 2023 (EUR BMK)



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data as of 28 April 2023 eod

EU as mega issuer in the green and social bond segments

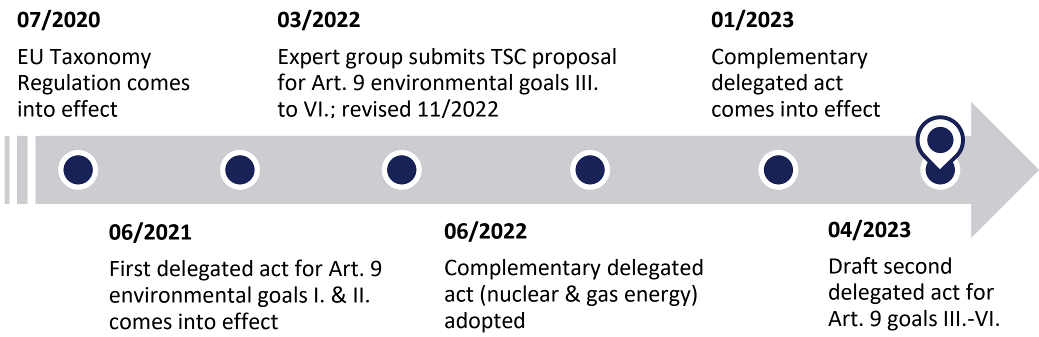
We would like to highlight the European Union separately as an ESG issuer. Under the SURE program, which could have a maximum volume of EUR 100bn, social bonds with a total volume of EUR 98.4bn had been issued by the time the programme ended in 2022. The NextGenerationEU (NGEU) programme is a different story. By the end of 2026, the EU plans an annual average funding target of EUR 150bn for the programme with a total volume of more than EUR 800bn (at current prices). The intention is to use green bonds for up to 30% of the funding. This would make the EU the world's largest issuer of green bonds.

EU taxonomy update

EU taxonomy 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. 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 sustainable financing and investment will also boost fragmentation of the investment landscape in the area of ESG and curb “greenwashing”. A relatively easy-to-digest 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. Following our last publication (NORD/LB Fixed Income Special – ESG Update 2022), we would now like to take another look at the status quo of the framework and shed light on possible implications for the European sustainable bond market.

Development of the EU taxonomy over time



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

Controversial complementary delegated act not withdrawn

In February 2022, the European Commission approved the Complementary Climate Delegated Act to broaden the transition activities regulated in Art. 10 of the Taxonomy Regulation as well as reporting requirements in Art. 8. Last year, we already reviewed the content of the Taxonomy Regulation. Art. 10 has been extended to include economic activities in the nuclear and gas energy sectors, provided they qualify as “transitional” activities under strict conditions. The draft was formally adopted on 9 March 2022. The review period, during which the EU Parliament can veto the bill, ended on 11 July. As a result of the ongoing discussions about the signal given by the inclusion of nuclear and gas energy in the predominant label for sustainable economic activity in the EU, the outcome of the vote was anything but a foregone conclusion – compared to the review phase for the first delegated act. In the end, 278 MEPs voted in favour, 328 against and 33 abstained. The absolute majority of 353 MEPs for a veto was not reached and the Complementary Climate Delegated Act entered into force on 1 January 2023.

Draft second delegated act followed with some delay on 5 April

The Technical Screening Criteria (TSC), which serve as a filter level for EU taxonomy-compliant economic activities, are set out in delegated acts. The first delegated act for the environmental objectives I. Climate Change Mitigation and II. Climate Change Adaptation already entered into force in 2021. For the remaining four environmental objectives (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), a second delegated act has been expected since the second half of 2022. This was scheduled to come into force in January 2023. On 5 April 2023, the EU Commission finally published a corresponding draft of the Environmental Delegated Act. As with the first delegated act, the recommendations of the expert group set up by the European Commission have largely been followed. We would therefore like to outline the lengthy development process.

Expert group presented recommendations for screening criteria back in March 2022

On 30 March 2022, the *Platform on Sustainable Finance* published its final report on the TSC of the EU Taxonomy environmental targets III. to VI. A number of relevant stakeholders (including representatives from industry and academia, environmental experts as well as government agencies) were involved in the 15-month development process. On around 700 pages, a total of 51 relevant economic activities were identified, spread across 11 sectors. These are assigned to the corresponding NACE codes (statistical classification of EU economic activities). A complete list is available in the download section of the EU Taxonomy Compass.

Main content of the final report: sectors and application areas

Sector	Application areas of the TSC (examples)
Agriculture/forestry and fishing	Animal/plant products and fisheries, impact of agriculture on biodiversity and ecosystems
Manufacturing industry	Production of chemicals, packaging, electronics, food and textiles
Energy	Rehabilitation of hydropower plants from an ecological perspective (for example, renaturation measures)
Construction	Maintenance of infrastructure such as roads, waterways, highways, rail network, bridges and tunnels
Buildings	New construction and refurbishment of (non-)residential buildings taking into account life cycle assessments and resource efficiency
Disaster risk management	Emergency health services, disaster response coordination, firefighting and flood risk prevention and protection
Transport	Urban and suburban public transport, passenger and freight air transport
Ecosystem restoration	Sustainable use/protection of (marine) water resources, protection/restoration of biodiversity and ecosystems
Water supply	Operation of the water supply system, abstraction and treatment of surface and groundwater
Wastewater disposal	Construction, expansion, rehabilitation, modernisation and operation of public wastewater infrastructure
Waste management	Hazardous waste recycling and transportation, pollution prevention and control

Source: Platform on Sustainable Finance, European Commission, NORD/LB Markets Strategy & Floor Research

Exclusion of compensation measures should curb greenwashing

The final report of the expert group widely elaborates on the extent to which compensation measures (even if they are already common practice in some industries) are to be considered ineffective in the context of the EU taxonomy. By definition, this is simply compensation for an economic activity that ex ante already does not make a significant contribution to any of the desired environmental goals. In the context of climate protection, this applies, for example, to CO_2 certificates, which are intended to offset previously caused or planned emissions. In terms of biodiversity and ecosystems, this applies to the restoration of a habitat after its previous damage or even destruction.

Environmental Delegated Act to come into force in 2024 after consultation period

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, and now the scope is to be further extended with the draft Environmental Delegated Act. Based on the final report of the expert group, technical screening criteria are defined for economic activities in the fields of manufacturing, water supply, wastewater disposal, waste management, rehabilitation and housing, and information and communication technology, among others. The annexes to the draft at the level of individual activities are organised according to the following system: I. Activity description including NACE code, II. Technical screening criteria, III. Screening of minimum requirements (including Do No Significant Harm, DNSH). Most of the addressed economic activities come under the fourth environmental objective of the EU taxonomy (transition to a circular economy). In addition, the European Commission has included adaptations to the Climate Delegated Act that address, among other things, the technical screening criteria for activities associated with the first and second environmental objectives (climate change mitigation and climate change adaptation). As usual, the draft will be evaluated during a public consultation period, which has been scheduled to end on 3 May 2023. In its final version, the Environmental Delegated Act (according to the draft) is to come into force at the beginning of 2024.

Overview of key milestones of the EU taxonomy

Milestone	Content focus	In force since
Taxonomy Regulation	Cornerstone of EU taxonomy: establishment of the six environmental targets and conditions for making a substantial contribution	12.07.2020
Climate Delegated Act	Technical screening criteria and specification of minimum requirements for the first two environmental objectives of the Taxonomy Regulation	01.01.2022
Disclosures Delegated Act	Determination of specific contents and forms of qualitative as well as quantitative information in EU taxonomy-related reporting	01.01.2022
Complementary Climate Delegated Act	Complementary delegated act for the inclusion of (transitional) nuclear and gas energy activities under strict conditions	01.01.2023
(Draft) Environmental Delegated Act	Technical screening criteria and specification of minimum requirements for the remaining four environmental objectives of the Taxonomy Regulation	01.01.2024 (expected)

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

ESG reporting in the financial sector: first reporting year launched under SFDR

The developments regarding the EU taxonomy that have been worked through before are ultimately – as envisaged by the EU Commission – the cornerstone for reporting obligations such as those that the Sustainable Finance Disclosure Regulation, (SFDR) makes mandatory not only for non-financial companies but also for producers of financial products and financial advice. Its origin goes back to the Action Plan: Financing Sustainable Growth in keeping with the EU taxonomy: measure number nine "Strengthening sustainability disclosure and accounting rule-making" forms the basis for the proposal presented in May 2018 concerning a regulation on the disclosure of information on sustainable investments and sustainability risks. The proposal was adopted as part of the Sustainable Finance Package in April 2021, which included, for example, the first delegated act for the first two environmental objectives of the Taxonomy Regulation. The specific form of the relevant reporting standards based on the SFDR did not take shape until almost one and a half years later in August 2022, with the entry into force of the Delegated Regulation (EU) 2022/1288 introducing the Regulatory Technical Standards (RTS). The SFDR RTS specifically addressed Art. 8 of the EU Taxonomy Regulation, which aims to increase market transparency and ultimately market growth. This is intended 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. From 1 January 2024, reporting must be carried out one year retrospectively in each case (first reporting year: 2023); for non-financial companies, however, the new regulations begin one year earlier. Financial market participants (including asset managers, institutional investors, insurance companies, pension funds) have been required since the beginning of the year at the latest to collect information on the sustainability (as defined by the EU taxonomy) of their (investment) products and services in order to start reporting next year. It also includes qualitative information on how to deal with sustainability risks.

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 taxonomy-compliant 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 key performance indicator. Derivatives, on the other hand, 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 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, insurers/reinsurers), there are partly specified KPIs, which are intended to take account of the respective entrepreneurial activity.

Timeframe and connection to the EU Green Bond Standard

As has proven successful in the past, the EU Commission is also choosing a phase-in approach for the SFDR. Since 1 January 2023 for the reporting period 2022, the delegated act has applied in full to non-financial entities pursuant to Art. 8 of the Taxonomy Regulation. As of 1 January 2024 (for the 2023 reporting period), financial companies will also be subject to the obligation. By the end of June 2024, the underlying act is to be reviewed, in particular with regard to the treatment of risk positions of financial companies vis-à-vis sovereigns. In our eyes, the "twist" will then follow on 1 January 2026. For the 2025 reporting period, the KPIs of credit institutions are also to be applied to the trading book and non-banking services. Looking ahead over the next few years, the steadily growing requirements in the area of ESG reporting are thus intended to complement the ecosystem created by the European Commission consisting of EU taxonomy and the future EU Green Bond Standard. The aim of the SFDR is to enable broad segments of the European business community to credibly communicate their sustainability efforts to financial institutions, corporations, and other stakeholders. On this basis, in turn, climate protection and environmental goals can be incorporated in tangible business strategies, also on the part of climate protection financiers.

Expert group publishes final report on minimum safeguards (DNSH)

The first set of minimum safeguards – following the Do No Significant Harm (DNSH) principle – already became effective in 2020 when the Taxonomy Regulation came into force. Art. 3 and Art. 18 practically referred to internationally recognised guiding principles such as the OECD MNE Guidelines (for multinational enterprises), the UN Guiding Principles on Business and Human Rights (UNGPs) and the International Charter of Human Rights. Compliance with the minimum requirements is to be monitored using key performance indicators in the four core areas of I. Human rights, II. Bribery and corruption, III. Taxation, and IV. Fair competition. Although the final report does not bring with it any innovations in this respect, it does point the way for the future incorporation of minimum requirements into the Corporate Social Sustainability Reporting Directive (CSRD), which comes into force on 5 January 2023, and the announced Corporate Sustainability Due Diligence Directive (CSDDD, known as the EU Supply Chain Directive). Recommendations for monitoring the above-mentioned core areas are also mentioned, which we have summarised below as examples.

Overview of the minimum requirements for companies within the scope of the CSRD

Core area	Requirements not met if at least one criterion applies
Human Rights	I. The appropriate human rights due diligence in accordance with the UN Guiding Principles and the OECD Guidelines is not met. II. There is a conviction for labour law or human rights violations or relevant indicators from the OECD or BHRRC signal misconduct.
Corruption	I. There is no anti-corruption procedure. II. There is a conviction due to corruption.
Taxation	I. Tax governance and compliance are not considered important elements of supervision (no adequate management of tax risks in place). II. There is a conviction for tax violations.
Fair Competition	I. Employee awareness of the importance of applicable competition laws is not promoted. II. There are convictions for violations of competition law.

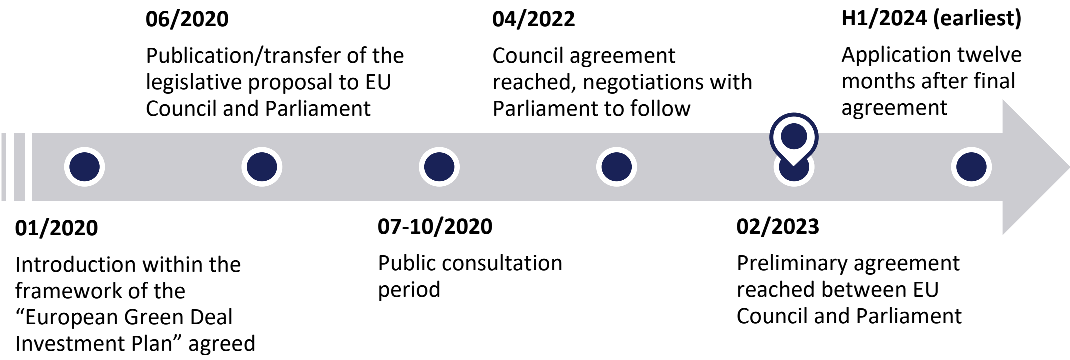
Source: Platform on Sustainable Finance, European Commission, NORD/LB Markets Strategy & Floor Research

EU Green Bond Standard update

EU Green Bond Standard reaches milestone – provisional agreement achieved

On 6 July 2021, the European Commission published its legislative proposal for a voluntary European Green Bond Standard (EUGBS) together with its new Sustainable Finance Strategy. Firstly, it was clear from the presented strategy that the investment volume required to finance the transition to a sustainable European economy would be 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 Financing Sustainable Growth action plan since 2018 and recommended by the expert group. The EUGBS also explicitly claims to become a globally dominant label in the green bond market. This year, a preliminary agreement was reached between the European Parliament and the Council at the end of February on the introduction of European green bonds (EuGBs). The main core elements of the decision are I. A minimum quota 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), II. Uniform reporting standards on the part of issuers and notifications of the effect 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. Following the usual legislative process at EU level, the provisional agreement would still be confirmed by the Council and the European Parliament and adopted by both institutions. After a transitional period of twelve months following its entry into force, the EUGBS will apply, i.e. in the second half of 2024 at the earliest.

Development of the EU Green Bond Standard over time



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

Key features of the EU Green Bond Standard

1	Global application	Target group includes all issuers from 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 must be invested in EU taxonomy-compliant activities until the bond matures (provisional agreement: 85% if still to be specified therein).
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	External and national supervision	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 Markets Strategy & Floor Research

National supervisory competences complement ESMA as (main) 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 in the provisional agreement is divided into three main features – just like in the previous draft law. Firstly, issuers commit to using all proceeds from green bonds for sustainable investment opportunities in line with the EU taxonomy. For financing in economic sectors that are not yet or only partially included in it, a flexibility pocket of 85% currently applies to the compliant use of proceeds. A prerequisite for this is, by definition, a substantial contribution to one of the six environmental goals. Secondly, the use of the EuGB label is linked to far-reaching reporting requirements, where investors have to demonstrate the exact alignment with the EU taxonomy. In addition, sustainability strategies must be communicated to investors and made accessible in an uncomplicated way. Thirdly, it establishes 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.

The struggle for the 15% flexibility reserve
In the negotiations, 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 financing 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 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 EU 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 "straightjacket"
The main points of the draft met with broad agreement in principle in mid-2020. Last year, as part of this study, we evaluated and compared comments received by the EU Commission during the public consultation phase. Since the foundations of the EUGBS continue to exist even in the provisional agreement, the core statements of the industry associations and stakeholders we looked at continue to apply. The German Banking Industry Committee (Deutsche Kreditwirtschaft – DK), for example, welcomed the voluntary basis in its statement, but expressed concerns about grandfathering in the event that future changes to the technical screening criteria (as part of the EU taxonomy's regular evaluation process) could render a label issued in the past ineffective. DK's proposal to extend the adjustment period (grandfathering) of the five years initially stipulated in Art. 7 seems to have been well received by the regulators – since other industry associations also concurred with this particular canon – and currently stands at seven years. The feared overly tight "straightjacket" that issuers would be subject to when aligning with the EUGBS has thus become 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 improvement, for example in cover pools, at the end of this transitional period remains an open question, as the EU taxonomy (and thus the EUGBS) is, as the EU 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 years to finance the ambitious climate targets in the real estate sector. The demanded (basic) 80% limit on the EU taxonomy-compliant use of proceeds for a transitional period of five years has not been (fully) implemented in the provisional agreement on the EUGBS.

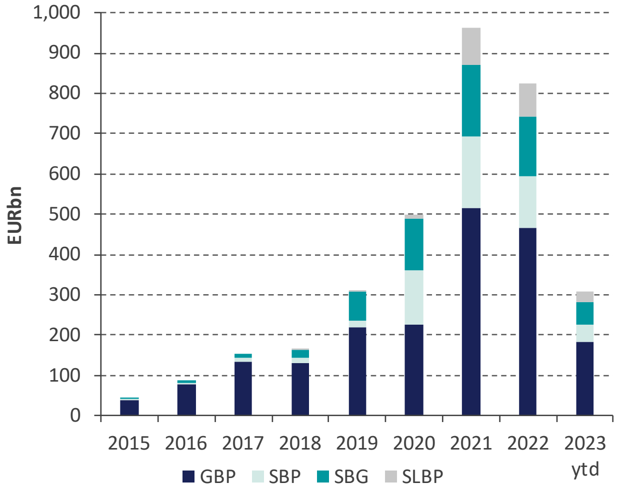
GDV welcomes more scope for issuers and sees EUGBS as an important lever
In view of the current state of negotiations on the EUGBS, the German Insurance Association (Gesamtverband der Versicherer – GDV) particularly welcomes the fact that (future) issuers of EU Green Bonds will now be granted more leeway than was envisaged in the 2021 legislative proposal. "It provides companies with the necessary flexibility to deploy capital according to their needs, while stimulating green growth" – states the commentary on 17 March 2023 regarding the EUGBS draft in relation to the 15% flexibility reserve (for economic activities not yet fully covered by the EU taxonomy). On the basis of the most recent agreement, issuers can be given transparent proof that they are promoting sustainable projects. On the other hand, investors would benefit from a secure information situation. The association sees the planned EU standard for green bonds as an important lever to prevent greenwashing and promote sustainable economic growth in the EU. In the consultation statement, in response to the EUGBS draft 2020, the association emphasised that insurers, as Europe's largest institutional investor group, invest heavily in European bonds and therefore have a keen interest in promoting the European green bond market.

ICMA Bond Principles update

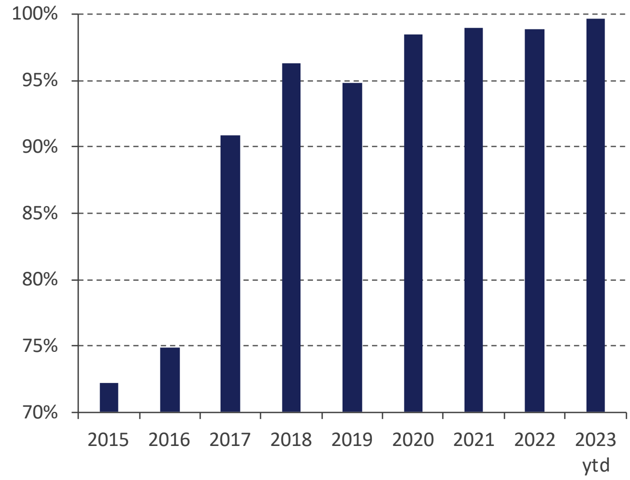
ICMA Bond Principles and Guidelines: adjustments in all frameworks

Having presented the collective update to the International Capital Markets Association (ICMA) Principles and Guidelines last year, we would now like to take a look at the updates to the Green Bond Principles (GBP), Social Bond Principles (SBP), Sustainability Bond Guidelines (SBG), and Sustainability-Linked Bond Principles (SLBP) announced at ICMA's Eighth Annual General Meeting in June 2022. Developments in the area of green covered bonds are a key factor here – but first a few basic points: The GBP are an internationally established voluntary standard for green bonds. The issue proceeds – in part or in full – may only be used for the purpose of financing and refinancing projects with (green) environmental benefits pursuant to the GBP. The core structure is divided into four areas (I. Use of issue proceeds, II. Project evaluation and selection process, III. Management of proceeds, and IV. Reporting). The basic structure of the SBP is generally identical to 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 project selection. The SLBP, on the other hand, 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, over 70% of global new issues of green bonds were already GBP-focused. The market has become much more granular since then and the GBP-related share is over 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 Markets Strategy & Floor Research; data as of 28 April 2023 eod

Green Bond Principles – the main changes

With the continuous further development of the Green Bond Principles, ICMA has been making an important contribution to the integrity and transparency of the sustainable bond market for years. In the latest edition, definitions for collateralised green bonds were announced for the first time following the June 2022 Annual General Meeting. The definitions have been developed by a task force of more than 30 organisations, which was charged in January 2022 with evaluating existing market practices to review the ICMA Principles and develop amendments and additional guidance as necessary. Following the work of the Task Force, the new definitions were added to Appendix 1 of the Green Bond Principles. The scope includes, among others, covered bonds, securitisations, asset-backed commercial papers and other collateralised structures. Thus, a Secured Green Bond is one in which the net proceeds are used solely to finance or refinance the following:

I. The green project(s), which will exclusively secure a specific bond only ("Secured Green Collateral Bond") or

II. The green project(s) of the issuer(s) with which a bond may be fully or partially secured. The "Secured Green Standard Bond" may also be a specific bond class or tranche of a larger transaction.

The extent to which the definition in I. and II. is met in the respective asset class must be clearly stated in the issuer's marketing and reporting documents. To assist in this process, ICMA offers a reference guide. The issues it deals with in regard to interpretation and reporting are also addressed in the accompanying Guidance Handbook, which was also updated in June last year.

Social Bond Principles are supplemented analogously by collateralised structures

Secured structures were also included in the Social Bond Principles. Similar to the definition of Secured Green Bonds above, the net proceeds use for Secured Social Bonds may only relate to those social benefit projects that are put up as collateral. The second point is also structured in the same way, where only "green" has to be replaced with "social". The inflows from the secured social bonds serve as collateral and have priority over other claims.

Sustainability-Linked Bond Principles: New sector classifications for 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 through the targeted use of proceeds for a sustainable corporate purpose measured against ex ante (self-)imposed sustainability performance indicators. In the latest update of the SLBP, the list of performance indicators was therefore expanded to include around 300 different ways of measuring sustainability. Based on input from more than 90 relevant market players, the directory also includes sector classifications and provides details on the so called core and secondary indicators. Issuers are also provided with a reference guide to clarify details and for general advice.

Green Project Mapping contrasts 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 EU taxonomy's six environmental objectives (I. Climate Change Mitigation, II Climate Change Adaptation, III. Natural Resource Conservation, IV. Biodiversity Conservation, V. Pollution Prevention and Control, VI. Protection/Restoration of Biodiversity and Ecosystems). 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 "Pre-issuance Checklist for Green Bonds/Green Bond Programmes", which in particular contains templates and, since June 2022, also detailed recommendations for the development and implementation of sustainability strategies.

GBP mapping with regard to Climate Bond Initiative taxonomy and EU taxonomy

GBP-project categories	Climate Bond Initiative	**EU Taxonomy** (economic activities below may contribute significantly to one or more of six EU environmental objectives)
Renewable energy	Energy generation, transmission and storage	Energy
Energy efficiency		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

Interim conclusions on ICMA Bond Principles and Guidelines

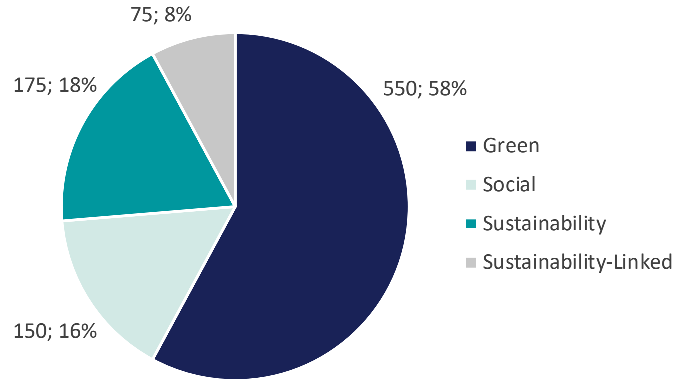
In our view, the further development of the global market for sustainability-related bonds is also reflected in the regular updating and expansion of the ICMA Principles and Guidelines – most recently mainly through the inclusion of a number of collateralised structures in the Green and Social Bond Principles. This submarket is becoming increasingly important, particularly as a result of the ongoing economic impact of the pandemic as well as the Russian war of aggression in Ukraine and, not least, the associated (supra-)national transformation programmes. The volumes called upon to mitigate the currently overlapping crisis situations can be described as immense. It is in this context that we see the latest addition of asset classes or indicators to measure sustainability performance to the ICMA frameworks. In particular with regard to SLBP, due to the growing scientific evidence in the research field of sustainability and the strong market dynamics in the sub-segment of sustainability-linked bonds, and not least their relevance for transformation finance towards more sustainable business models, we believe that further additions can be expected on a regular basis. In addition, the global market for ESG bonds is being subjected to an ever-increasing amount of (supra-)national regulation, which established private initiatives may need to adjust to, so as to avoid counteracting them. 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 Green Covered Bond segment, we see further growth momentum for sustainable formats due to the explicit inclusion of this asset class in the GBP and SBP. We also take a positive overall view of the fact that, although there is still generally heterogeneity among private, national and supranational "sustainable labels", the ICMA frameworks have a long track record and have been making a significant contribution to the defragmentation of the market for sustainable bonds for years thanks to their global success. In 2015 (one year after the initial launch of the ICMA Green Bond Principles), around 72% of global issuance in this ESG sub-segment was already ICMA-oriented; last year, the figure was as high as 98%. Moreover, according to our definition, the figure has not fallen below the 90% mark since 2017.

Rating agencies: market growth despite stumbling blocks

Moody's expects USD 950bn new issues of ESG bonds in 2023

The rating agency Moody's expects the global ESG new issuance volume (green, social, sustainability and sustainability-linked bonds) to recover this year after the setback in 2022. Specifically, following the 18% decline in new issues to a total of USD 862bn (previous record high: USD 1.05tn in 2021), this is expected to recover in 2023 to around USD 950bn (+10% Y/Y). New issues of green bonds (USD 550bn) account for the lion’s share of these estimates, followed by sustainable bonds (USD 175bn), social bonds (USD 150bn) as well as sustainability-linked bonds (USD 75bn). All ESG sub-segments – except social bonds against the backdrop of the reduction in (supra-)national coronavirus aid programmes – are expected to grow in 2023.

Moody's assessment: Breakdown of new issues of ESG bonds in 2023 (USD bn)



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

Public and private sectors seen as key drivers of climate transformation

According to Moody's, in addition to the rise in interest rates and the volatile market environment, general issuing activity in 2022 was also affected by the immensely heightened geopolitical and macroeconomic uncertainty compared with the previous two years, resulting at times in a “dramatic” 27% decline in global new issuance volume. The fact that, by comparison, the reduction in global new issues of ESG bonds was lower at 18% is seen by the risk experts as relative consistency and points to the ongoing reorientation of the capital markets towards sustainability-related bonds. Among the key drivers in 2023 and beyond, it said, is public sector financing for climate transformation. Increasing government spending on transformation programmes has already been seen worldwide. High financing volumes are also expected in the private sector as part of the green transformation. In addition, regulators are providing growth impetus for the ESG bond market, for example by imposing increasing requirements for ESG-related reporting on the part of issuers in a number of EU initiatives. However, the regulatory situation is currently unclear and still in the start-up phase in many areas. Issuers may therefore feel compelled to adopt a wait-and-see approach for the time being and postpone ESG issues until a later date.

Fitch: Economic and geopolitical factors put the brakes on ESG ambitions
Continued challenging economic conditions and volatile markets have brought the importance of ESG aspects for corporate governance and investment decisions further to the forefront, according to the rating agency Fitch. Investors and regulators expect issuers in the ESG segment to increasingly integrate sustainability criteria into corporate processes and corresponding capital market communication. While Fitch's risk experts continue to expect overall market growth, they currently see factors that could significantly slow momentum. These include, above all, economic downturns, inflation and energy policy, which many market participants believe could further complicate sustainable transformation. In view of the subdued economic outlook, investors are faced with the challenge of generating adequate returns. Whether this can continue to be done on the basis of ESG criteria remains to be seen. According to the cited KPMG survey in the US, some corporate boards are already planning to put ESG projects on hold as many of their companies brace for an impending recession. About half of the 1,325 board members surveyed from companies with annual sales of at least USD 500m said they “are pausing or reconsidering their existing or planned ESG efforts over the next six months” with 34% already doing the former. 2023 is therefore seen as a turning point in many respects, not least as a result of the practical implementation of regulatory initiatives in Europe, the USA and China. What is certain is that pressure is mounting on policymakers, businesses and financial markets in regard to initial successes on implementing net-zero climate targets. Fitch expects an emerging divergence as early as 2023 between companies who are trying hard to implement their ESG strategy and those who are sitting tight during the current volatile phase and continuing as before for now.

MSCI: Doubts about the future momentum of new green bond issues
In its ESG Annual Outlook 2023, rating agency MSCI focuses on factors that may significantly influence green bond issuance in the coming years. But first, a look back at the year 2022: Despite the rapidly rising interest rates and high inflation momentum, new supply of green bonds declined by only 1% in the first half of 2022 compared to the second half of 2021. According to MSCI, this could be an early sign that the recent increased scepticism on the market about the continued growth of green bonds is hardening in the face of rising interest rates, dwindling returns compared to conventional counterparts, and ongoing greenwashing concerns (recently exacerbated as a result of new ESG reporting requirements). A green bond study by MSCI published in September 2022 concluded that in a data set of 632 investment grade green bonds (period under review January 2021 to September 2022), about one-fifth already no longer met the criteria of the MSCI Green Bond Index, but were included in the study as “self-labelled green bonds” by market data provider Bloomberg, for example. It is noticeable that the data also included bonds that at least considered themselves green, the proceeds of which were to be used to finance fossil fuel power generation or transmission. In light of this, uniform EU standards, such as the EUGBS, which is about to be introduced, are welcomed in principle. Nevertheless, reference is made to the associated loss of large parts of the flexibility especially required by investors and issuers in the early stages.

S&P: ESG share in new covered bond issues stagnates
While the rating agency S&P was still talking about the start of an “era” of sustainable covered bonds at the beginning of last year, this was largely confirmed in the course of 2022. According to the rating agency, the volume of green and social covered bonds issued last year amounted to almost EUR 20bn, which represents a significant increase of around 43% year on year and corresponds to the previous record (for comparison: in 2021, it was still EUR 14bn). However, the share of issuance volume in the green or social format (EUR benchmark segment) stalled at 12% and was lower than in the previous year. Since 2017, this share had been rising steadily each year, reaching a record level of around 18% at the end of 2021. According to S&P's risk experts, the current developments result primarily from the ongoing lack of suitable cover assets that, on the one hand, meet the criteria of issuers' increasingly stringent ESG bond frameworks and, on the other hand, have to fulfil the eligibility requirements for cover pools. The rating agency therefore believes that follow-up work needs to be done, in particular by regulators, to further drive the growth of the sustainable covered bond market. Among other things, two EU frameworks are expected to play a key role, namely ongoing completion of the EU taxonomy on the one hand and the closely related introduction of the EU Green Bond Standard on the other. The latter is currently with the EU Parliament and Council for finalisation of the first legally binding version and can, in S&P's view, provide the necessary regulatory clarity in the capital markets to a large extent. The constant revision of the Energy Performance of Building Directive (EPBD), with which the European Commission aims to achieve its climate targets in the real estate sector, is also cited as a further factor in the shortage of cover assets. The EPBD introduces EU-wide minimum performance standards to push for the energy retrofit of buildings with the worst energy performance and to make the quality of information in the field of energy efficiency clearer, more reliable and more accessible, especially for financial institutions.

S&P: ESG covered bonds – the most important factors for supply and demand

Issuer´s perspective		Investor´s perspective
• Lack of eligible assets • Considerable upfront costs • Limited pricing differentials compared with vanilla issuance	Challenges	• Limited supply and liquidity • Risk of „greenwashing“ • No segregation of sustainable assets upon issuer insolvency
• Stronger investor demand from a wider investor basis • Reputational considerations • Supportive regulatory framework	Opportunities	• Better ESG credentials • More diversified client base • Limited pricing differentials compared with vanilla issuance

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

The ECB's green monetary policy

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

As we have already mentioned several times in the past in our NORD/LB Fixed Income Special series in the context of the regular ECB meetings, 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 the press release issued on 8 July 2021. The decision follows the conclusion of the 2020/21 strategy review, which discussed the ECB's role in climate change and environmental sustainability. The press release states that while 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. Climate change and the transition to a low-GHG 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. Moreover, the value and risk profile of the assets held on the Eurosystem's balance sheet should be taken into account. A potential accumulation of climate-related financial risks must therefore be avoided. The concrete plan of measures 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. Including climate change considerations in monetary policy areas such as disclosure, risk assessment, collateral framework and corporate sector asset 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 with regards to corporate sector asset purchases. It also announced that in the future it would incorporate climate change criteria in the regulations guiding the allocation of purchases, in line with its mandate. These will include the alignment of issuers with, at a minimum, EU climate goals implementing the Paris agreement or commitments by the issuers to such goals. Furthermore, the ECB will start disclosing the actual impact on the Corporate Sector Purchase Programme (CSPP) by the first quarter of 2023. Along with the action plan, a road map was also presented outlining the schedule for incorporating climate risks into monetary policy considerations in a comparatively easy to digest way.

Further details relating to the CSPP followed in July 2022

A year later, on 4 July 2022, the ECB gave further details of how it would handle climate risks in 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 and reduce their own carbon footprints. However, the timeframe for the ECB's first reporting on the actual impact of including climate risks on 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", affirmed ECB President Christine Lagarde, and went on to say that "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 more steps to align our activities with the goals of the Paris Agreement".

ECB's Executive Board Member Schnabel: need for action in all purchase programmes

The current interest rate environment and high inflation are jeopardising the green transition, which is why the ECB must continue to step up its efforts – Isabel Schnabel warned in a landmark speech at the International Symposium on Central Bank Independence on 10 January 2023, in the context of "green monetary policy". The ECB cannot achieve its climate goals by decarbonising its bond portfolio if it only focuses on reinvestment (so-called "flow-based approach"). We therefore need to actively intervene in the portfolios and, if necessary, exchange bonds before maturity in favour of a better carbon footprint ("stock-based approach"). Against the backdrop of the reduction in holdings heralded at the regular ECB meeting on 15 December 2022, Schnabel points to the weakening effect of green reinvestment in the future. The Member of the ECB's Executive Board also suggested applying the same approach to holdings of covered bonds and asset-backed securities (under CBPP3 and ABSPP, respectively). At the same time, she said, the ECB should not divest itself completely, at least not initially, of issuers whose actions are particularly important in managing the green transition, but rather foster incentives for them to reduce CO_2 emissions further. In addition to bonds from the corporate sector, Schnabel also attributes a major role to the public sector, which accounted for roughly half of the Eurosystem's balance sheet (as of the end of January 2023). However, it is more difficult to improve the carbon footprint of these holdings because purchases of sovereign bonds are guided by 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 Paris climate change targets (reminder: the EU taxonomy also has so far excluded sovereign bonds). In the supranational issuers segment, on the other hand, where a large proportion is already issued in sustainable formats, both an active exchange of bonds before maturity and reinvestments can be carried out in the same way as for corporate bonds. "In line with our mandate, we stand ready to further intensify our efforts to support the fight against climate change, building on the achievements of our climate change action plan" – Schnabel emphasised in her closing remarks.

ECB meeting on 2 February 2023 – "merely" more sustainable corporate bonds
At its regular meeting on 2 February 2023, the ECB confirmed in its further reinvestment roadmap (see NORD/LB Fixed Income Special) that in the Eurosystem's corporate bond purchases, the amounts remaining for reinvestment will be tilted more towards issuers with better climate performance. To the extent that this can be done without prejudice to the ECB's price stability objective, this approach will support the gradual decarbonisation of the Eurosystem's corporate bond holdings in line with the goals of the Paris Agreement. The need for action outlined by Isabel Schnabel, Member of the ECB's Executive Board, two weeks earlier (and which clearly went further) – for example with regard to expanding covered bond and asset-backed security holdings as well as the decarbonization of public sector bond holdings – was therefore not yet reflected in the joint statement at that time.

First sustainability-related ECB reporting appeared in March 2023
As announced two years earlier, on 23 March 2023, the ECB presented, for the first time, key figures on its own carbon footprint related to corporate bond holdings in the CSPP and PEPP. The methodological approach essentially focuses on an issuer-level scoring approach, which is used to determine individual climate performance. The measurement is based on three pillars:

I. Emission intensity (in Scope 1 and Scope 2)

I. Level of ambition of targets related to greenhouse gas reductions

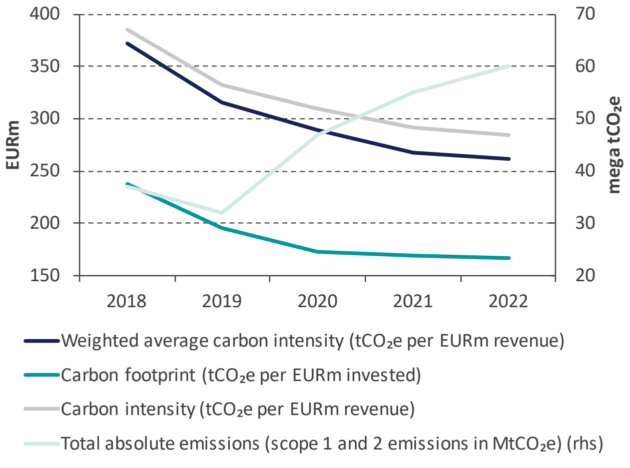
II. Quality of climate-related reporting

In turn, four key performance indicators are derived from the available data on CO_2 emissions at emitter and sector level. These key figures form the basis for the annual reporting on the carbon footprint of corporate bond holdings. In addition to the nominal carbon intensity, the weighted average carbon intensity (WACI) is also measured in the unit "CO_2 equivalent in metric tons per EUR 1 million in sales". The WACI is thus intended to serve as a measure of a portfolio's exposure to climate risks. The absolute CO_2 emissions (Scope 1 and 2 Total Absolute Emissions) and the carbon footprint of a portfolio, on the other hand, indicate the contribution to global warming. The carbon footprint is also defined as a standardised measure, so that comparability between the portfolios is established – it is measured analogously to the WACI in the unit "CO_2 equivalent in metric tons per EUR 1 million invested". The data used to measure the individual greenhouse gas emissions of (bond) issuers currently covers Scope 1 and Scope 2 according to the definitions of the Greenhouse Gas Protocol. Scope 3 emissions are currently not relevant due to a lack of data, but could become so in the future according to the ECB climate report. In terms of the gradual tilting of the Eurosystem balance sheet towards better climate performance, the focus is also on purchasing limits, thus giving preference to issuers with a better climate performance. In addition, maturity restrictions will be used for bonds from issuers with high climate risk – initially in the long-maturity segment, according to the report (there are no more precise details on this). The ECB's approach to measuring and assessing carbon footprints will be evaluated and, if necessary, adjusted as part of the annual document update.

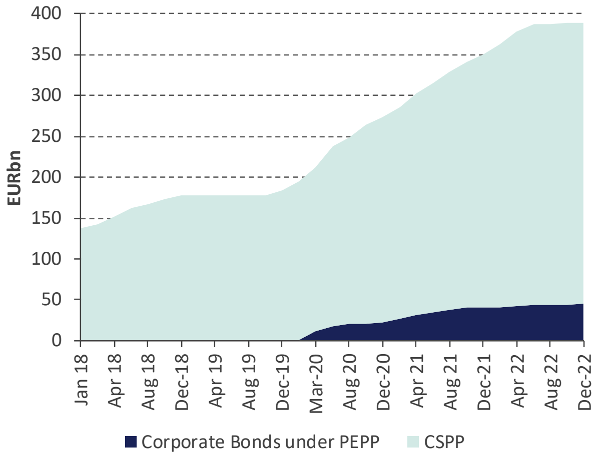
Corporate reinvestments in Q4 2022 already 65% less CO_2-intensive

Isabel Schnabel, Member of the ECB Executive Board, began her presentation of the first ECB Climate Report on corporate bond holdings in the CSPP and PEPP on 24 March with the words "central banks do not make climate policy, but we do have a clear role to play. Climate change affects the core of our mandate – price stability – through its effect on the economy and inflation". As part of its expansionary monetary policy, the Eurosystem had purchased significant quantities of corporate bonds between 2018 and 2022, resulting in a growth rate of +123% over this period. An important factor here is the absolute CO_2 emission values, which increased by only +62% (and thus by only about half) in the four years under consideration. According to the report, the driving forces behind increased carbon efficiency, are a growing focus on decarbonisation on the corporate side and advances in sustainability-related reporting. This development was not least also due to the mere announcement by the Eurosystem that it would take climate aspects into account in its own balance sheet. Overall, the carbon intensity of corporate bond holdings actually gradually decreased by around 26% from 2018 to 2022. An even more pronounced development was seen in the course of 2022: Reinvestments in Q4 2022 were more than 65% less carbon-intensive than in other quarters. Looking ahead to future portfolio reductions under the QT, Schnabel points (as she did in January) to the diminishing impact of the Eurosystem's more sustainable reinvestments. Therefore, the ECB would have to align itself even more closely with its own climate targets in the future. Additionally, the climate report again mentions public sector bonds (which account for roughly half its total balance sheet), but makes no specific announcements. However, she did say they "might" want to be more ambitious in this area. With regard to the inclusion of government bonds, we also see nothing new in the report. "We will improve the quality of our disclosures and broaden their scope to include further portfolios" – said Schnabel. When interpreting the data, it is also important to bear in mind that the average coverage ratio of the outstanding nominal values in the balance sheet and the actually reported CO_2 measured values in the period under review is only 47%.

Corporate bond holdings: Development of climate-related key figures 2018 to 2022



Corporate bond holdings: portfolio development under the CSPP and PEPP 2018-2022



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

Outlook: Issuance momentum influenced by regulation, economic and geopolitical uncertainty

Momentum weakened recently, can 2023 flick back the switch?

This year, several regulators will once again make important decisions about the ESG bond market. Most notably, the EU taxonomy is taking shape and generally attracting a lot of attention on the markets – approval on the one hand, but also partial scepticism on the other. The draft for the completion of the remaining four environmental targets, which was expected in the second half of 2022 and finally published with some delay at the beginning of April 2023, is intended to further extend the scope of action in the Eurozone as of the beginning of 2024. The recent preliminary agreement of the co-legislators on the first legally applicable version of the EU Green Bond Standard has been received positively by the market on the basis of the standardisation aspect of the ESG investment landscape alone, which continues to be fragmented. At the same time, however, the draft highlights the ongoing need for discussion by the EU Commission on details such as grandfathering rules relating, for example, to cover pools of covered bonds, the 15% flexibility reserve for the use of proceeds and the generally dynamic adjustment option. Since 2021, the market for ESG bonds in the EU has also received impetus from the ECB. Announced two years ago, the ECB's first climate-related reporting last March showed how the reduction of CO_2 emissions in the Eurosystem's balance sheet has affected corporate bond holdings in the (so far) PSPP and PEPP. Beyond “tilting” reinvestment towards corporate issuers with a better climate performance, Isabel Schnabel, Member of the ECB’s Executive Board, sees a need for further action in all purchasing programmes to still meet Paris climate targets in the face of declining reinvestment. It would not be enough to simply replace maturing bonds with less CO_2-intensive ones; active intervention in the portfolios before final maturity must also be considered. However, this approach has not yet been communicated by the ECB President herself or in a joint statement by the ECB. In terms of global ESG new issuance volume, last year failed to match the record level in 2021. On the one hand, this was due to the lessening one-off economic effects as a result of the coronavirus crisis (above all the EU's SURE agenda); on the other hand, economic and geopolitical uncertainty worsened as a result of persistently high inflation and the Russian war of aggression on Ukraine. In terms of the future growth path, (supra-)national sustainable transition programmes worldwide (COP27) are coming onto the agenda in addition to regulatory stimuli. The European Commission, for example, is pushing its way into the green bond segment with planned issues of up to EUR 250bn by 2026 under NGEU, which would make it the world's largest green bond issuer. Rating agencies are also predicting a recovery in issuance momentum in 2023, with Moody's even forecasting a new issuance volume of USD 950bn, more than half of which is to be accounted for by green bonds. It remains to be seen whether and to what extent momentum can return to the level of previous years given the current mix of regulatory initiatives and economic factors.

Appendix
Publication overview

Covered Bonds:

- Issuer Guide Covered Bonds 2022
- Covered Bond Directive: Impact on risk weights and LCR levels
- Risk weights and LCR levels of covered bonds (updated semi-annually)
- Transparency requirements §28 PfandBG Q4/2022 (quarterly update)
- Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

- Issuer Guide – German Laender 2022
- Issuer Guide – German Agencies 2022
- Issuer Guide – Dutch Agencies 2022
- Issuer Guide – European Supranationals 2023
- Issuer Guide – French Agencies 2023
- Beyond Bundeslaender: Belgium
- Beyond Bundeslaender: Greater Paris (IDF/VDP)
- Spotlight on Spanish regions (Update planned in 2023)

Fixed Income Specials:

- ESG-Update 2022
- ECB interest rate decision: Backbone in times of turmoil?!
- ECB interest rate decision: Roadmap to QT
- ECB: The Wishing-Table, the Gold-Ass, and the Cudgel in the Sack

Appendix
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