

Relentless growth in green bonds

A market overview

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More sustainability in the bond market

The bond market can no longer be imagined without green bonds: In the time period 2015-19, global issuance volume grew more than fivefold, reaching more than EUR 210bn in 2019. Brisk issuance activity is evident this year as well: Until mid-October 2020, more than EUR 170bn in green bonds have already been issued. We expect placements to reach a new record high in 2020 as a whole.

The volume of green bonds outstanding worldwide (expressed in EUR terms) amounted to EUR 675bn as of mid-October 2020, 25% more than at the beginning of the year. The euro continued to gain in importance in relation to the previous year and is now clearly the dominant currency with a share of 50%, ahead of the US dollar with a 23% share. Europe and the euro remain market leaders in sustainable investment products.

From the CEE region, Hungary placed its debut green bond in 2020. In Austria just a small number of banks and non-financial companies are so far counted among the green bond pioneers.

Strong demand for sustainable investment opportunities is also evident in the growth of assets under management at sustainable funds: More than 3,400 sustainability funds currently manage more than USD 1,060bn. Europe is clearly leading with more than 80% of this volume. In the first half of 2020 alone more than 200 new sustainable funds were launched there.

Not even COVID-19 could undermine the boom in the green bond market: On the contrary, investors are increasingly paying heed to environmental, social and corporate governance risks (ESG – Environment, Social, Governance). Apart from green bonds, 'social' bonds and bonds linked to the sustainability of issuers are therefore increasingly placed. This is not least due to growing regulatory pressures in the EU, which are primarily aimed at the realization of climate protection objectives. In addition, around one third of the EU recovery plan is to be financed through green bonds.

With its green bond standard and the taxonomy, the EU is taking additional regulatory steps toward greater transparency and the standardization of sustainable investments. The European 'climate law' planned for this year could provide an additional boost to the green bond market.

In this report we provide an update on the green bond market and the associated regulations in Europe; see also our special report [Green Bonds – Sustainable Potential](#) published in February 2020.

Note: Past performance is not necessarily indicative of future results.

EU regulations for green bonds in implementation

Green Bond Standard offers EU-wide standard for green bonds

Currently no uniform definition of 'green'

Green bonds are debentures the issuance proceeds of which are used exclusively for funding or refinancing new or existing projects with environmental benefits. There are currently no uniform rules defining which projects are 'green'; the green bond market currently relies on various market standards and voluntary commitments by issuers.

Green bond standard intended to change current state of affairs

In order to improve the effectiveness, transparency, comparability and credibility of the green bond market and to encourage market participants to increase issuance of and/or investment in green bonds of all asset classes, the expert group TEG¹ published the following two documents on behalf of the European Commission:

- Report on the EU Green Bond Standard (June 2019)²: In this document, the creation of a voluntary, non-statutory EU-wide standard for green bonds is proposed. The proposal is based on the Green Bond Principles of the International Capital Market Association, the currently dominant market standard.
- Usability Guide for the EU Green Bond Standard (March 2020)³: This document provides information to market participants on applying the TEG recommendations of June 2019. It inter alia contains details on the individual core components of the proposed EU green bond standard and their implementation, examples for green projects and/or how these can be identified in alignment with the EU taxonomy (see next page), as well as answers to frequently asked question in connection with the EU Green Bond Standard.

Both documents⁴ were derived from the EU Action Plan on Financing Sustainable Growth of March 2018. In addition, it is recommended to establish short and long term incentives for market participants in order to promote development and growth of the green bond market.

Based on the results of public consultations and bilateral stakeholder dialogues, the European Commission is now studying the possibility of a legislative initiative for a EU green bond standard. A decision on this is still to be taken in 4Q 2020. Alternatively it will be decided in what form the issue is to be advanced; e.g. via the Platform for Sustainable Finance⁵, a recently established advisory council of the Commission consisting of 50 selected members and 10 observers.

¹ TEG: The Technical Expert Group on Sustainable Finance supports the European Commission in the implementation of the Action Plan for Sustainable Growth of March 2018. The TEG consists of 35 members from civil society, academia, business and the financial sector as well as additional members and observers from EU and international public bodies. The TEG started its work in July 2018. After two extensions its mandate expired in September 2020. Further development of the thematic items worked out by the TEG is to take place in the Platform for Sustainable Finance.

² Original source: [Report on the EU Green Bond Standard](#).

³ Original source: [Usability Guide - EU Green Bond Standard](#).

⁴ We discussed this in detail in [Credit Markets Weekly of 14 May 2020](#).

⁵ https://ec.europa.eu/info/publications/sustainable-finance-platform_en.

EU-wide classification of environmentally sustainable investments

EU taxonomy classifies sustainable investments

In the framework of the EU Action Plan on Financing Sustainable Growth of March 2018, the EU taxonomy was developed as well, a classification system for sustainable investments. In March 2020, the TEG published its final report on this, including a technical annex⁶. On the one hand the report contains recommendations relating to the overarching design and application of the taxonomy, and on the other hand guidance for financial market participants on the disclosure of taxonomy-relevant information⁷.

The legal basis is provided by the taxonomy regulation of December 2019. The regulation sets out the framework for the development of such a classification system with respect to six environmental objectives. These objectives comprise:

1. Mitigation of climate change
2. Adaptation to climate change
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Prevention and control of environmental pollution
6. Protection and restoration of biodiversity and ecosystems

The European Parliament passed the taxonomy regulation on 18 June 2020. This followed on the heels of the adoption by the EU Council on 10 June 2020 and represents the final endorsement of the taxonomy compromise document agreed on by the legislative bodies in the context of the political agreement reached in December 2019.

A regulation is a binding legislative act, which immediately comes into force in all EU member nations, i.e., contrary to a directive it does not require transposition into national law. The taxonomy regulation was published in the Official Journal of the European Union on 22 June 2020 and became effective in its entirety 20 days later, on 12 July 2020.

European Commission currently drafting delegated legislative acts on the taxonomy

Now it is the European Commission's turn: It is currently drafting delegated legislative acts, which will in the future provide mandatory criteria for the classification of environmentally sustainable investments throughout the EU. With respect to the first two (of the six) environmental objectives mentioned above, such a delegated legislative act is to be adopted by the end of 2020, after taking into account feedback from consultations with interest groups, and to become effective at the end of 2021. With respect to the remaining four environmental objectives a legislative act is to be adopted by the end of 2021 and come into force at the end of 2022.

Further development of the EU taxonomy is to take place via the above-mentioned Platform for Sustainable Finance. The first corporate reports and disclosures for investors applying the EU taxonomy are due to be released at the beginning of 2022.

Beyond this, the Commission will adopt a delegated legislative act until June 2021 that will stipulate for companies falling under the directive on non-financial reporting what information they must disclose with respect to how and to what extent their activities are conforming to environmentally sustainable activities in alignment with the EU taxonomy.

⁶ Original sources: [Final Report](#), Technical Annex (in [PDF](#) and [Excel](#) format).

⁷ We reported on this in detail in [Credit Markets Weekly of 30 April 2020](#).

Uniform terminology for 'green economic activities' created

With the taxonomy regulation the world's first-ever 'green list' of economic activities has been created, a classification system with a uniform terminology for environmentally sustainable activities. This is intended to facilitate investment into companies, projects and technologies with a favorable impact on the climate and the environment. By promoting private investment in green and sustainable activities, the taxonomy regulation also makes a substantial contribution to the European Green Deal of December 2019.

European 'climate law' still planned for 2020

EU 'climate law' could generate additional growth

The European 'climate law' scheduled for adoption later this year could provide an additional boost to the green bond market. This regulation stipulates the objective of achieving climate neutrality by 2050 as well as the target of a greenhouse gas reduction of -55% vs. 1990 by 2030 (up until now -40% was planned) in the form of legal requirements. The 'climate law' also ensures that all policy measures taken by the EU are contributing to the climate neutrality objective and that all sectors provide their contributions. The Commission will examine all relevant policy tools until 2021 and propose revisions as necessary, in order to make achieving additional emissions reductions until 2030 possible. These revisions would of course require additional investment spending and would therefore also generate additional funding requirements.

Market overview

Most green bonds are EUR-denominated and IG-rated

EUR 675bn in green bonds outstanding

The volume of green bonds outstanding worldwide in EUR terms amounted to EUR 675bn as of mid-October 2020, which was over 25% more than at the beginning of the year.

EUR and USD the most important green bond currencies

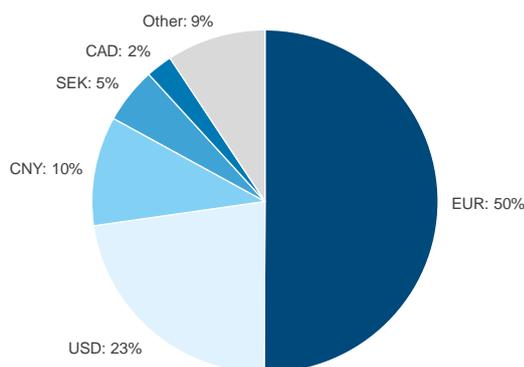
Half of this volume is denominated in EUR, clearly the dominant currency. Beyond this, almost one quarter is denominated in USD, 10% in CNY, 5% in SEK, and 2% in CAD. The share of EUR has gained ground since the previous year; back then it amounted to 'just' 47% of the outstanding aggregate volume. The second-most important currency USD may become more relevant over the medium term, as president-elect Joe Biden emphasized environmental issues and green financing in his campaign.

Investment grade ratings predominate in green bond segment

Looking at rating categories, three quarters of outstanding green bonds have an investment grade rating. Green bonds in the high-yield segment currently account just for a small proportion of the overall market, namely 4%. Around one-fifth of the global green bond universe is therefore unrated. With a clear definition of green investment opportunities after the adoption of the EU taxonomy and the green bond standard, a greater number of companies outside of the dominant utilities sector should increasingly issue green bonds as well; these may then include more high-yield issuers.

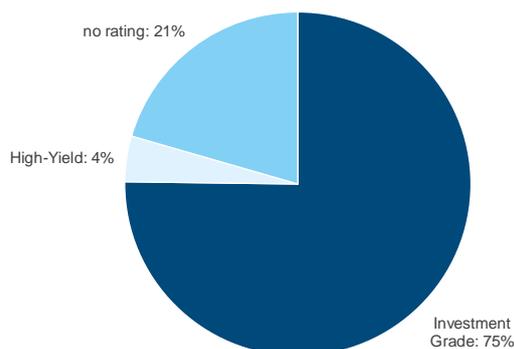
EUR the dominant green bond currency

Green bond volume outstanding worldwide in EUR terms, by currency



Most green bonds in investment grade category

Green bond volume outstanding worldwide in EUR terms, by rating category



As of mid-October 2020

Source: Bloomberg, Erste Group Research (own calculations)

Rapidly growing primary market for green bonds

Strong momentum in primary market seems set to continue

The global primary market for green bonds recorded remarkable growth in recent years: In the time period 2015-2019 global issuance volume in EUR terms increased more than fivefold and as of 2019 it amounted to more than EUR 210bn. The strongest momentum could be observed in 2019 with a growth rate of 50% y/y. Strong issuance activity is evident in the current year as well: As of mid-October 2020 more than EUR 170bn in green bonds have been issued. We expect to see a new record high in placements in 2020 as a whole and believe that this growth trend is poised to continue in coming years.

Regional developments in primary markets quite disparate

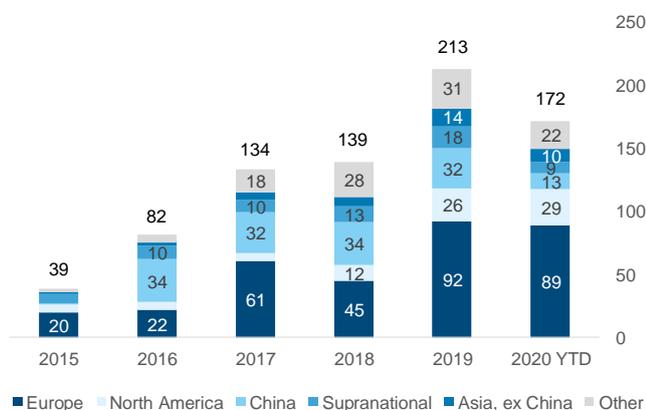
From a regional perspective the strongest increase in green bond issuance volume has taken place in Europe in recent years. By mid-October 2020, it had already reached the level of the entire previous year, around EUR 90bn. Placements by US-based issuers also increased significantly, but in absolute terms they represented a mere 30% of European issuance volume. In the time period 2016-19, China's primary market for green bonds exhibited quite steady issuance volume, averaging EUR 33bn per year, but it declined noticeably in 2020. At the same time, other Asian countries caught up, albeit at a lower level.

Sovereigns and SSAs issue almost half of all green bonds

In terms of individual groups of issuers, over the past three years the largest proportion – namely around 45% – of global annual green bond issuance volumes were attributable to sovereigns, as well as supra-national institutions, sub-sovereigns and agencies (SSAs). Financial and non-financial corporates accounted for around one quarter each. However, the latter exhibited far stronger momentum: In 2019 their issuance volume grew by 130% y/y to EUR 55bn. We expect that this amount will be exceeded by the end of 2020. Less momentum was evident in the covered bond segment.

European issuers dominate primary market activity in green bonds

Global issuance volume by region, in EUR bn



Non-financial corporates exhibit strongest issuance momentum

Global issuance volume by issuer group, in EUR bn



As of mid-October 2020

Source: Bloomberg, Erste Group Research (own calculations)

Sovereigns, SSAs and corporate issuers dominate market for EUR-denominated green bonds

EUR-denominated green bond market has attained a size of EUR 335bn

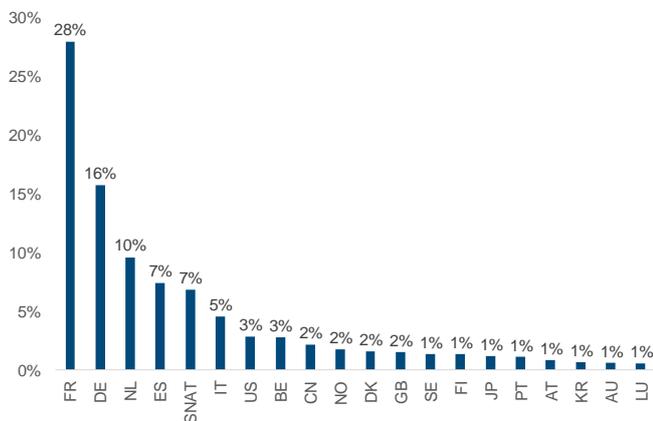
If one focuses exclusively on the EUR-denominated portion of the green bond market, its aggregate volume outstanding as of mid-October 2020 stood at EUR 335bn. At the end of 2019 it amounted to EUR 245bn.

In terms of countries, French issuers account for the largest share of 28%, followed by German (16%) and Dutch (10%) issuers. A mere 1% of the outstanding volume of EUR-denominated green bonds is attributable to Austria. With a 45% share of the EUR-denominated green bond market, sovereigns and SSAs represent the largest issuer group. One third is attributable to non-financial corporates, 18% to financials (for the first time segmented into senior unsecured and subordinated bonds) as well as 4% to the covered bond segment.

A detailed analysis of these issuer groups follows below.

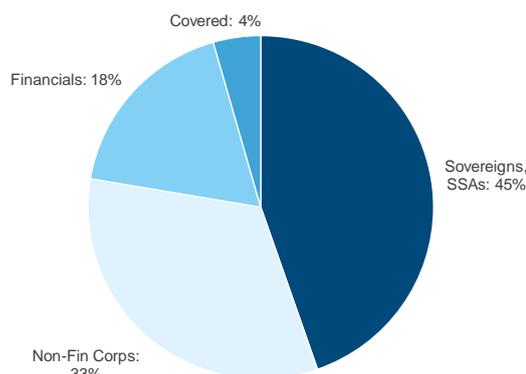
FR, DE, NL hold 45% of EUR green bond volume

Outstanding volume of EUR-denominated green bonds, by issuing country



Sovereigns, SSAs are the most active issuers

Outstanding volume of EUR-denominated green bonds, by issuer group



As of mid-October 2020

Source: Bloomberg, Erste Group Research (own calculations)

Sovereigns, Sub-Sovereigns & Agencies

SSA primary market: new issuance record for green and sustainable bonds

With around EUR 38bn of green bonds issued in the SSA primary market year-to-date in the course of 36 placements, the issuance volume of 2019 as a whole has already been exceeded in October of 2020. The main driver of this trend is the strong growth in agency offerings. By contrast, growth among sovereign and supra-national issuers has not continued. Instead there were new market entrants: Germany and Hungary were active in the green bond segment for the first time. Thus agencies and development banks continue to be dominant among established issuers. On the other hand, the sustainable bond segment is largely dominated by regional issuers. In this segment new issuance volume of nearly EUR 17bn actually exceeds the level of 2019 as a whole already by 40%.

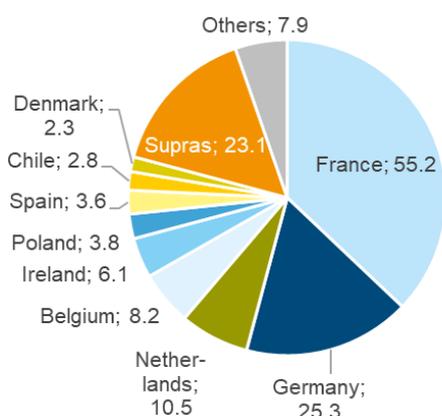
Germany issues debut green bond

In September mainly the debut issue of a 10-year green bond by Germany (Aaa/AAA/AAA) was in the spotlight. With a volume of EUR 6.5bn it was by far the largest single placement. Demand reached more than EUR 33bn, which resulted in the spread of zero over the outstanding conventional 'twin bond' of equivalent maturity⁸ being reduced by one basis point. The German Finance Agency plans to issue a total of EUR 11.5bn in 2020. In the future, the Federal Government plans to offer twin bonds with terms to maturity of 2, 5, 10 and 30 years, so as to create a 'green Bund yield curve'.

France continues to be very active thanks to its railway agencies

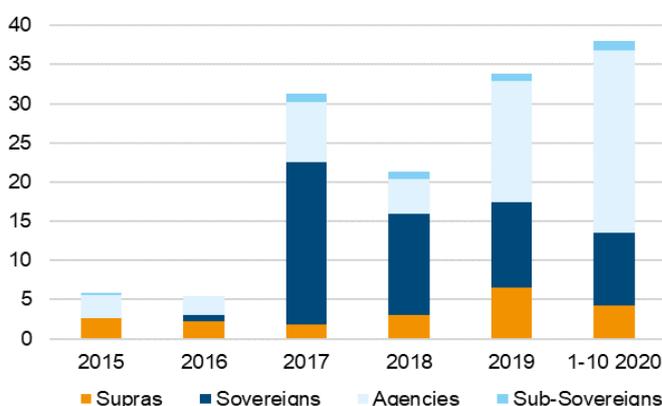
France (Aa2/AA/AA) nevertheless remains the dominant issuer country in the SSA segment with around 37% of the outstanding volume (EUR 55bn). This year primarily the railway agencies took center stage with respect to new issues. The most active issuer was state-owned Société du Grand Paris (Aa2/AA) with new offerings totaling almost EUR 11.6bn in the course of six transactions. The railway construction company has been conducting green bond placements since 2018 already. However, the bond with the longest term to maturity was offered by another state-owned French railway company, namely SNCF (Aa3/AA-/A+), which placed a EUR 50mn 100-year green bond.

Outstanding SSA EUR bond volume By countries and supra-nationals, in EUR billion



As of mid-October 2020
 Source: Market data providers, Erste Group Research (own calculations)

SSA green bond issues Issuance volume by segments, in EUR billion



⁸ The bonds will be issued under the 'twin concept' concurrently with placements or taps of conventional bonds. Additional information: [German Finance Agency](#).

Hungary: First green bond

From the Central and Eastern European region, Hungary (Baa3/BBB/BBB) placed its first green benchmark bond in June 2020 with a volume of EUR 1.5bn and a term to maturity of 15 years. The order book was closed with bids totaling more than EUR 7.5bn. Allotment took place at an issuance spread of +190 bps over mid-swaps or a yield of 1.957%. In terms of outstanding volume, Poland (A2/A-/A-) continues to be in the lead. With the very first sovereign green bond issue worldwide at the end of 2016, Poland is one of the trailblazers. After the most recent placement in 2019, four maturities are in the meantime outstanding.

OeKB: Sole Austrian issuer in the guaranteed segment

Among Austrian SSA issuers, Oesterreichische Kontrollbank (OeKB, Aa1/AA+) is the premier port of call for guaranteed sustainability bonds. In October 2019 the development bank issued its inaugural sustainability bond. In 2020 other issuers from the Austrian SSA segment have to date neither placed a new sustainability bond nor a green bond.

Green and sustainability bonds in Central and Eastern Europe

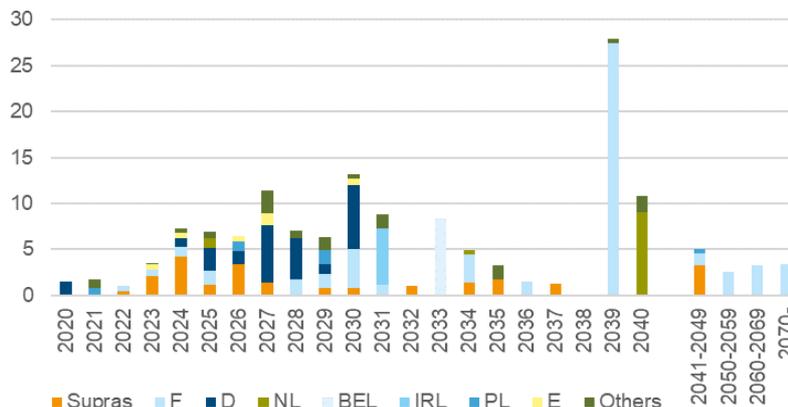
Issuer	ISIN	Date of issue	Maturity	Volume (EUR mn)	Coupon (%)
Poland (A2/A-/A-)	XS1536786939	20.12.2016	20.12.2021	750	0.50
	XS1766612672	07.02.2018	07.08.2026	1,000	1.13
	XS1960361720	07.03.2019	08.03.2049	500	2.00
	XS1958534528	07.03.2019	07.03.2029	1,500	1.00
Lithuania (A3/A+/A)	LT0000610305	03.05.2018	03.05.2028	68	0.01
Hungary (Baa3/BBB/BBB)	XS2181689659	05.06.2020	05.06.2035	1,500	1.75
OeKB (Aa1/AA+)	XS2062986422	08.10.2019	08.10.2026	500	0.00
SID Bank (AA-)	XS1921553803	12.12.2018	12.12.2023	75	0.01
Russian Rail (RZD, Baa2/BBB-)	XS1843437036	23.05.2019	23.05.2027	500	2.20

Source: Issuers, market data providers, Erste Group Research

Thus there are around EUR 149bn of green bonds outstanding in SSA secondary markets. The range of maturities is quite broad. A peak year in the maturity profile is 2039 when the EUR 27.4bn French sovereign bond issued in 2017 is coming due for redemption. In the strongly growing sustainability bond segment outstanding volume in secondary markets has increased to around EUR 48bn. This segment is primarily dominated by regional issuers and development banks.

Bond maturities by countries

In EUR billion



Source: Issuers, market data providers, Erste Group Research (own calculations)

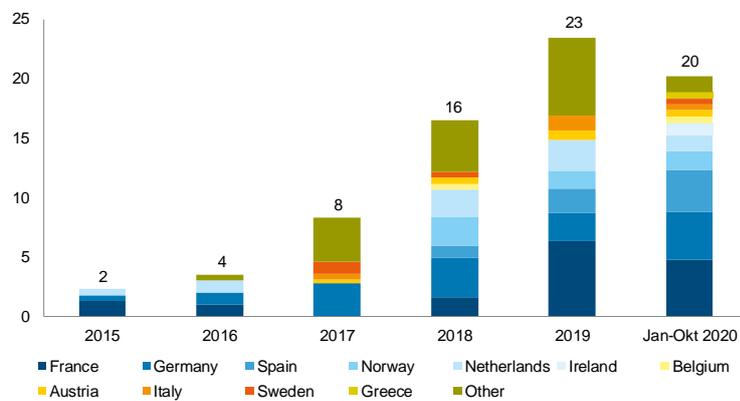
Financials & Covered Bonds

Growth trend in banking segment continues

The trend of growing issuance volume in the banking segment continued in 2020. In mid-October 2020, the volume of newly issued green bonds in Europe amounted to EUR 20bn, an increase of 3% year-on-year. The volume of green bonds outstanding has increased by more than a third since the end of 2019 to around EUR 75bn. The number of banks active in the primary market since the beginning of the year increased to 39 from 37 in 2019.

French and German banks dominate primary market activity

Green bond issuance volume in EUR mn



As of mid-October 2020

Source: Market data providers, Erste Group Research (own calculations)

Spanish banks expand market share

As in previous years, French and German banks dominated the primary market with a combined market share of 44%. However, it is noteworthy that Spanish banks expanded their issuance activity significantly this year and attained a market share of 17%. The major banks BBVA, Banco Santander and Banco Sabadell were leading the way. Spanish issuers are mainly focused on funding projects in the renewable energy sector.

Subordinated green bonds issued for the first time

Senior bonds represent the lion's share of the green bond market

The lion's share of green bond placements consists of senior bonds. In the reporting period senior bonds represented a 63% share of total issuance volume. 25% of issuance volume took the form of covered bonds. Primarily banks based in France, Norway and Germany were active in this segment. From the perspective of issuers it can make sense to mainly issue green bonds in unsecured format. In view of stronger investor demand for green bonds, banks can achieve a greater reduction in funding costs in this format than in covered bonds, which already traded at exceedingly low risk premiums due to their better ratings.

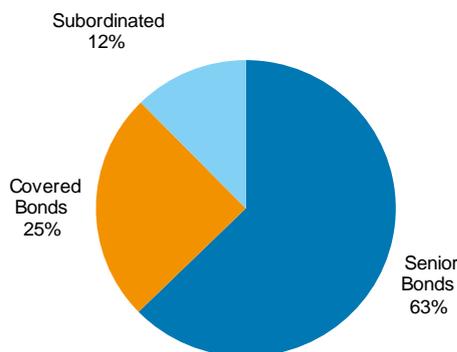
Subordinated green bonds issued for the first time

In this context the first placements of subordinated green bonds are also worth mentioning. In the reporting period subordinated green bonds with a volume of EUR 2.5bn were placed, which corresponds to 12% of total

issuance volume. The issuers of these subordinated bonds are based in Ireland, Spain and the Netherlands. In addition, National Bank of Greece placed an inaugural green bond in the sub-investment grade segment in 2020. We expect that the trend toward greater diversification of issuance activity across a wider spectrum of ratings will continue. Issuers will be able to lower their funding costs, while investors with a more pronounced risk appetite will receive access to the green bond segment.

Senior bonds dominate issuance volume

Green bond issuance volume 2020 by seniority ranking



As of mid-October 2020

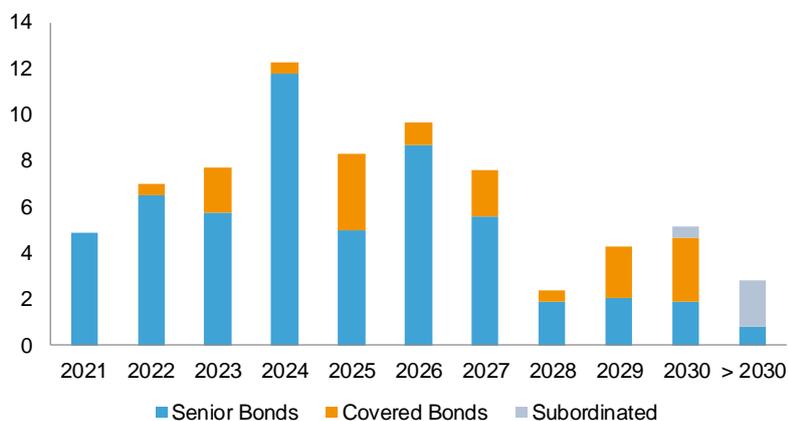
Source: Market data providers, Erste Group Research (own calculations)

Growth potential primarily provided by new issuers

We expect that along with a growing number of issuers in the green bond segment, issuance volumes will also continue to grow in coming years. Loans for the construction or renovation of energy-efficient buildings will likely continue to play a major role in the development of the green bond market in the banking sector. Funding of renewable energy projects could also add to the market's growth potential. As the market increasingly matures, rolling over of bonds coming due for repayment will also contribute to an increase in issuance volumes.

Redemptions reach a peak in 2024

Redemptions by collateral type in EUR bn



As of mid-October 2020

Source: Market data providers, Erste Group Research (own calculations)

Green bonds in Austria

New market entrant joins issuers in 2020

In the Austrian market a new entrant joined issuers in 2020. In June the provincial bank of Lower Austria, HYPO NOE Group placed a debut green bond (EUR 500mn). A major focus of the bank is the financing of energy-efficient buildings. However, the funds raised by issuing green bonds can also be used to fund projects in the areas of renewable energy, sustainable agriculture and forestry, clean transportation or water and sewage management.

RBI continues to be the largest issuer of green bonds

With an outstanding volume of EUR 1.3bn, Raiffeisen Bank International AG continues to be Austria's largest issuer of green bonds. Hypo Vorarlberg AG has a sub-benchmark bond with a volume of EUR 300mn outstanding, while BKS Bank AG has several small-scale issues outstanding. We expect that the number of Austrian issuers in the green bond segment will rise further in coming months.

Green bonds in the CEE region

Poland continues to lead the way

In the CEE region Poland continues to lead the way with respect to developing a green bond market. With PKO Bank Hipoteczny and ING Bank Hipoteczny there are two active issuers in Poland. Both banks are credit institutions specialized in mortgage lending and have so far issued green bonds in the covered bond format. To date green bonds were exclusively placed in the local currency PLN. However, there has been no new placement of green bonds year-to-date. Both issuers use the proceeds from green bond placements to finance energy-efficient buildings and apartments.

We continue to see substantial growth potential for green bonds in the CEE region. In coming years funding of energy-efficient housing in particular, also with a view toward the EU's regulatory efforts, is apt to contribute to an increase of green bond issuance in the banking sector.

Corporate Bonds

Strong momentum in corporate green bond issuance

New record high in corporate green bond issuance in 2020

The popularity of corporate green bonds is undiminished. Issuance volume has grown substantially in recent years. In 2019 EUR 32bn in corporate green bonds were issued, which was more than twice as much than in the previous year. This year, the same level was reached after just ten months; in 2020 as a whole, aggregate issuance volume should be close to EUR 35bn and thus reach a new record high.

Accelerating uptrend

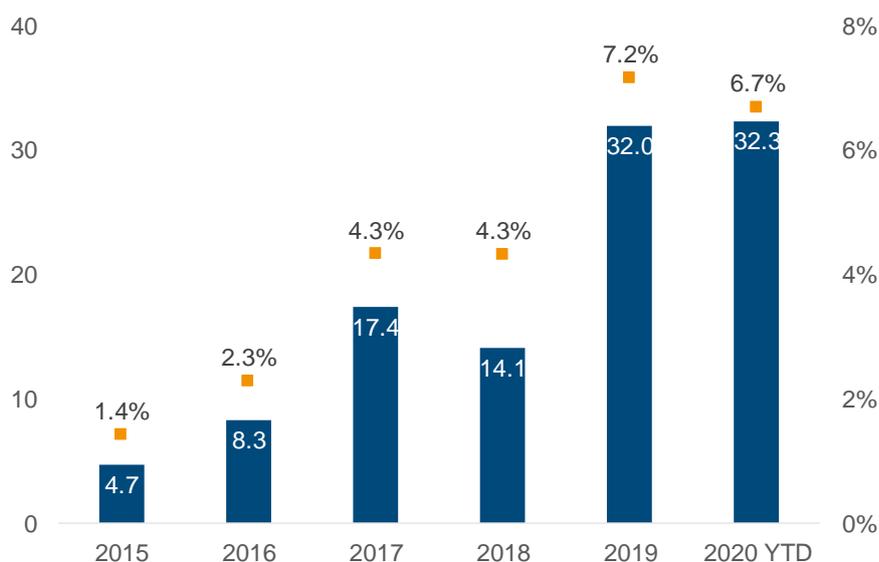
Corporate green bonds already accounted for around 7% of the overall primary market for EUR-denominated corporate bonds in 2019 and 2020, compared to just 4% in the preceding two years. We expect this growth momentum to be maintained: both absolute green bond issuance volume and the segment's share of the overall corporate primary market should continue to gain ground.

Demand for green bonds stronger than for conventional bonds

Green bonds are not only gaining in importance among issuers for the (re-)financing of green or sustainable projects. Investors who can use them to incorporate specific ecological aspects into their investment decisions are showing strong interest as well: EUR-denominated corporate green bonds placed in 2020 were on average four times oversubscribed; conventional bond issues were 'merely' three times oversubscribed.

Corporate green bonds increasingly popular

Issuance volume of corporate green bonds in EUR bn (lhs) and their share of the overall corporate bond market in % (rhs)



As of mid-October 2020

Source: Bloomberg, Erste Group Research (own calculations)

Growing diversity in the corporate green bond market

Around one third of the EUR green bond universe attributable to the corporate sector

EUR 110bn or around one third of the entire EUR-denominated green bond universe (outstanding as of mid-October 2020) is attributable to the corporate sector (non-financial companies).

Segmented by countries of domicile, French issuers account for the largest market share with 20%, followed by Spanish (14%), Dutch (13%), German (12%) and Italian (10%) companies. Companies domiciled outside of the Eurozone that placed the largest issuance volumes were based in the US (8%), the United Kingdom (3%) and China (2%).

Austrian and CEE-based companies active in the primary market for green bonds

From the Austrian corporate sector, Verbund (A3/A) in 2014 issued the first – and up until recently only – green bond, with a principal amount of EUR 500mn. It took until 2020 for two more companies to follow this example: CA Immo (Baa2) issued EUR 350mn, EVN (A1/A) EUR 100mn.

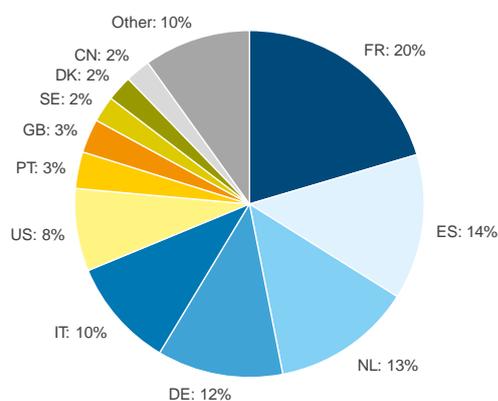
The largest issuers from the CEE region include CPI Property (Baa2/BBB) from the Czech Republic with total issuance volume of EUR 1.5bn, AB Ignitis (BBB+) from Lithuania with EUR 600mn and DTEK Renewables (B-/B-) from Ukraine with EUR 325mn. Romanian companies actually conducted two debut green bond placements in 2020: NE Property (BBB) raised EUR 500mn, while Globalworth (Baa3/BBB-/BBB-) raised EUR 400mn.

Diversity of green primary market increases

Interestingly, over the years the number of countries of origin and thus the diversity of issuers has increased spectacularly: In 2016, green bonds were issued from just six countries, while by 2020 this had already increased to more than 20 countries. Also noteworthy is that while France, Spain, the Netherlands and Italy were for years among the most active countries of origin of corporate green bonds, Germany only caught up in 2020 – however, it did so at such a rapid pace that it managed to join the ranks of the top 5 countries with the largest outstanding corporate green bond volumes for the first time.

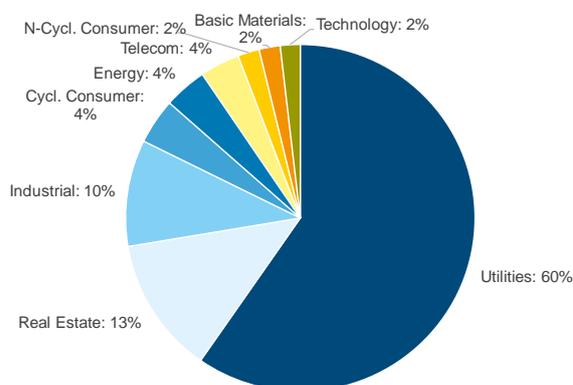
European issuers dominate the EUR-denominated green bond market

Outstanding EUR-denominated corporate green bonds, by country of origin



Utilities by far are the most active green bond issuers

Outstanding EUR-denominated corporate green bonds, by sectors



As of mid-October 2020

Source: Bloomberg, Erste Group Research (own calculations)

Dominance of the utilities sector continues, but is gradually declining

Among corporate sectors, utilities are by far the most active issuers: They account for 60% of the outstanding volume of EUR-denominated corporate green bonds. While the dominance of the utilities sector is a traditional market feature, it has gradually declined in recent years: In 2016, utilities placed 88% of green bond issuance volumes. Their market share steadily declined in subsequent years and stood at just 47% in 2020.

The list of the largest issuers reflects this trend with a lag. Eight European utilities remain among the top 10 issuers. A quarter of total issuance volume is attributable to the three most active utilities alone, namely Engie (A3/BBB+/A), Iberdrola (Baa1/BBB+/BBB+) and TenneT (A3/A-). A mere two non-utilities, real estate group Digital Dutch (Baa2/BBB) and technology giant Apple (Aa1/AA+) have managed to join the ranks of the ten largest issuers, but are lagging far behind.

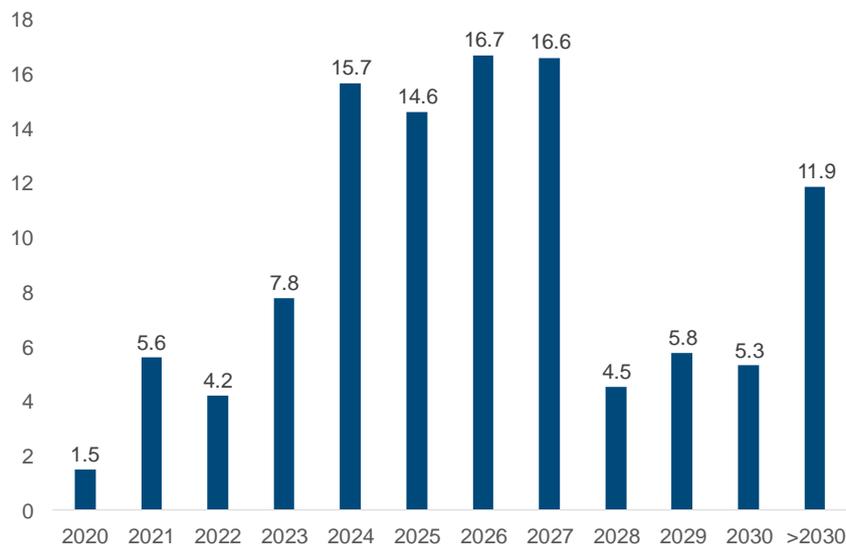
Issuance boom expected in 2024-27

Redemptions and issuance momentum should exert a double effect in 2024-27

Almost 60% of corporate green bonds outstanding as of mid-October 2020 will mature in the time period 2024-27 or have their next call date. We expect refinancing volumes to reach a peak in these years in addition to the anyway growing primary market activity. From today's perspective, the largest aggregate issuance volumes should therefore be recorded in these years.

Largest green bond rollovers expected in 2024-27

Maturity profile of outstanding corporate green bonds, in EUR bn



As of mid-October 2020
 Source: Bloomberg, Erste Group Research (own calculations)

The key role of the investment fund industry

Sustainable assets under management exceed USD 1,000bn for the first time

With 3,432 open-ended ESG funds worldwide⁹, the investment fund industry is a major driver of the strong increase in the demand for green or sustainable assets. At the same time it has taken on a key role in the financing of the transformation process in the sphere of private capital. Assets invested in sustainable strategies have once again reached a new record high of USD 1,062bn this year. Even in the first two quarters of 2020 that were dominated by COVID-19, large net inflows were recorded.

Sustainable funds worldwide

Data as of the 2nd quarter 2020

Region	Q2 2020 Flows		Assets		Funds	
	USD bn	Share %	USD bn	Share %	Number	Share %
Europe	61.4	86.4%	870.3	82.0%	2,703	78.8%
United States	10.4	14.6%	158.9	15.0%	315	9.2%
Japan	0.0	0.0%	4.8	0.5%	116	3.4%
Australia/New Zeal.	0.1	0.1%	12.6	1.2%	108	3.1%
Canada	0.1	0.1%	6.5	0.6%	91	2.7%
Asia excl. Japan	-0.9	-1.3%	8.5	0.8%	99	2.9%
Total	71.1		1,061.5		3,432	

Source: Morningstar, Erste Group Research

82% of all sustainable funds based in Europe

With 2,702 funds and assets under management of USD 870bn (around EUR 750bn) which represents a share of 82% of worldwide sustainable AUM, Europe is clearly in the lead. In the first half of 2020 alone 213 new funds were launched here. Equity funds continue to dominate: of the 107 new ESG funds launched in the second quarter, 61 were pure equity funds and only 18 pure bond funds, the rest were mixed and/or other funds.

ESG increasingly becomes the standard

Evidence that ESG is transforming from a niche segment into a mainstream segment is provided by the large number of funds opting for reorientation: In the second quarter of 2020 alone 40 conventional funds in Europe were repurposed into ESG funds based on incorporating ESG criteria. In the past ten years altogether 586 funds have been repurposed into ESG funds.

Q2 2020: EUR 55bn of net inflows into ESG funds

Measured against Europe-wide managed equity fund assets of around EUR 4.8trn, bond fund assets of around EUR 4.1trn and mixed fund assets of around EUR 3.6trn¹⁰, approximately 6% of investment assets are therefore already invested in accordance with ESG criteria. And their share is bound to increase markedly further: in the second quarter sustainable funds received around one third, ie EUR 55bn of all fund inflows.

DACH region: Very high ESG share in Switzerland

In Germany the share of sustainable funds and mandates amounts to more than 5%, in Austria to more than 15% and in Switzerland even to more than

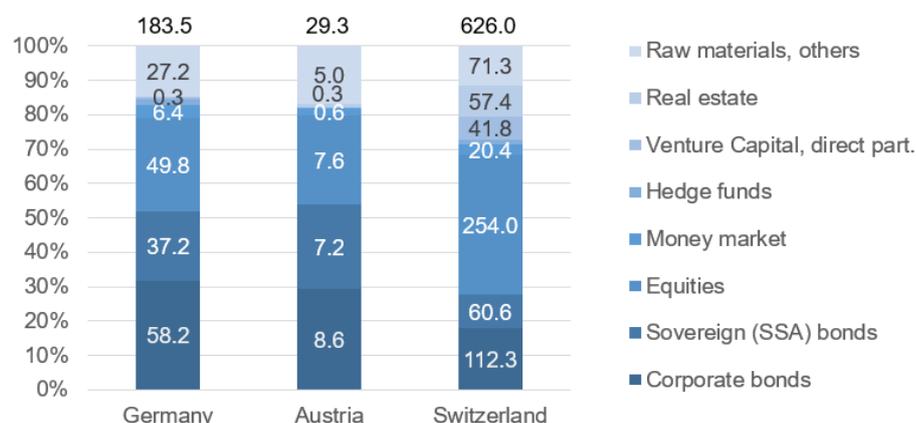
⁹ As of end-June 2020. The sustainable funds segment contains no funds that use only limited exclusionary criteria without a more in-depth consideration of ESG criteria as well as funds that take ESG criteria only formally into account rather than as a determinant factor in their securities selection process. Source: Morningstar.

¹⁰ As of end-June 2020. Source: EFAMA, Trends in the European Investment Fund Industry, Sept. 2020.

35%¹¹. Thus the proportion of sustainable investment assets¹² is exceptionally large in the DACH region. Relative to the overall volume of assets under management as of the end of 2019, the amount of sustainable investment assets in Switzerland of around EUR 626bn is the highest by far, well ahead of Germany with EUR 184bn and Austria with EUR 29bn. The share of bonds is particularly high in Germany and Austria with 52% and 54% respectively, while it stands at just 28% in Switzerland. In the Confederation the share of equity assets stands at more than 40%, while in Germany and Austria only 26-27% of assets are invested in sustainable equities.

Sustainable investments in the DACH region

Sustainable funds and mandates, customer deposits of specialist banks and sustainably invested proprietary portfolios as of Dec. 2019, in EUR bn



Source: Forum Nachhaltiger Geldanlagen (Sustainable Investment Forum), Erste Group Research

ETFs are also entering the ESG segment

In the rapidly growing index fund (ETF) segment, ESG investments are quickly gaining in importance with the share of ESG ETFs in the meantime totaling 5.9%. In the third quarter of 2020 around 29% of all ETF inflows were actually allocated to the ESG segment.

US ESG funds gaining momentum driven by ETFs

The relative crisis resilience and outperformance qualities of ESG funds are increasingly attracting attention in US markets as well, which are still lagging behind. As a result, inflows have recently accelerated strongly and amounted to USD 10.4bn in Q2 2020. ESG ETFs captured a large share of 62%, compared with 80% in Q1. ESG index funds already account for 20% of US-listed ETFs. With respect to asset classes, equities are clearly dominant. But the debate over sustainable investment is broadening outside the investment fund industry as well ("stakeholder capitalism"): a number of large US banks and fund managers have launched initiatives on ESG themes and are increasing pressure on companies they invest in with regard to ESG transparency.

¹¹ Source: Forum Nachhaltige Geldanlagen, Market Report 2020.

¹² Sustainable funds and mandates, customer deposits of specialist banks and sustainably invested proprietary portfolios.

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Published by:

Erste Group Bank AG
Group Research
1100 Vienna, Austria, Am Belvedere 1
Head Office: Wien
Commercial Register No: FN 33209m
Commercial Court of Vienna

Erste Group Homepage: www.erstegroup.com