CHAPTER 1 - KEY THEMES OF THE YEAR

1.1 SUSTAINABLE COVERED BONDS: MARKET OVERVIEW

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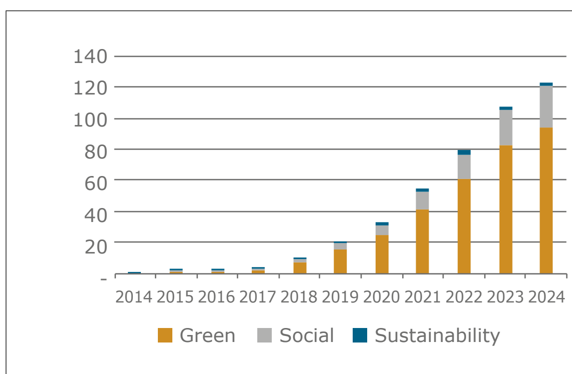
The market for sustainable covered bonds

The covered bond market welcomed the first sustainable covered bond in 2014, followed by an inaugural green euro benchmark covered bond in 2015. Furthermore, the first social covered bond was also issued in 2015. The market of sustainable covered bonds has continued to expand ever since, breaching the EUR 100 bn mark in 2023. By the end of June 2024, the volume of outstanding sustainable covered bonds was slightly more than EUR 120 bn. The increasing size of the market of sustainable covered bonds will be discussed in this key theme chapter, which will provide an overview of the market and its different flavours, new supply, investor base, use of proceeds and central bank policy related to climate risk.

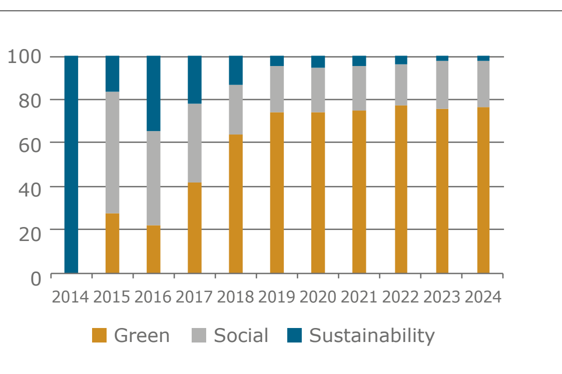
Size of the sustainable covered bond market

Sustainable covered bonds have been issued in different formats, ranging from green, social, and sustainability covered bonds. The different flavours reflect the different use of proceeds of the bonds (please see for more details below as well as the chapter 1.2 and 1.3 of the fact book). In short, green covered bonds are mostly aligned with the ICMA's Green Bond Principles, and sometimes also already with the EU Taxonomy with the proceeds of the bonds being used to (re)finance green projects. In case of covered bonds these are often linked to energy-efficient buildings. Social covered bonds are mostly aligned with the ICMA's Social Bond Principles. The proceeds of the bonds are used to (re)finance social projects, which in case of covered bonds is largely related to affordable housing or public lending, such as hospitals. Finally, sustainable covered bonds are aligned with the ICMA's Sustainability Bond Guidelines, which tends to be a mix of green and social projects, for instance, energy-efficiency as well as affordable housing. Green covered bonds form the majority of outstanding sustainable covered bonds, as they had a 76% share in the total sustainable covered bonds outstanding by the end of June 2024. Social covered bonds had a share of 22% and sustainability covered bonds 2% (see graph below right). The share between the different labels has remained fairly stable since 2019.

> Figure 1: Outstanding amount of sustainable covered bonds, EUR bn



> Figure 2: Share of green, social and sustainable covered bonds in total, %



Source: ECBC, ABN AMRO, Bloomberg, 2024 data covers H1

New issuance of sustainable covered bonds gaining momentum

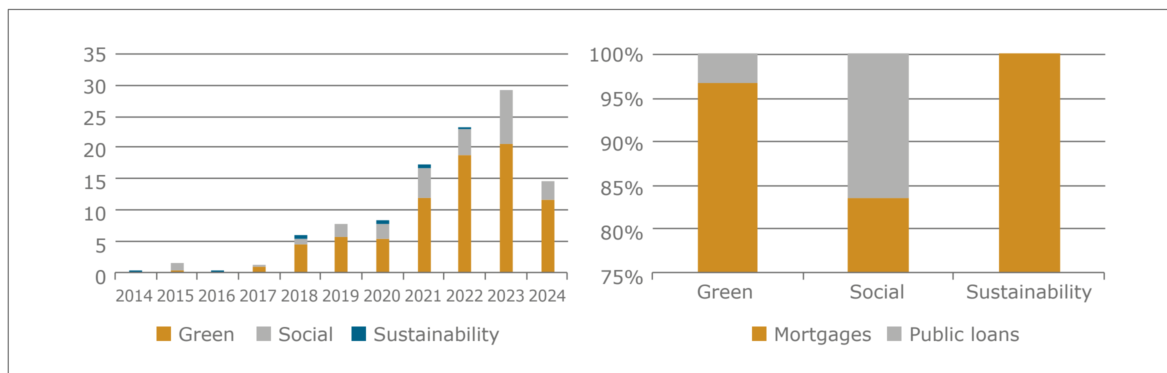
The sustainable footprint of the covered bond market has grown over the years, with new supply having gained real momentum since 2018, setting new records every year. In 2023, new supply of sustainable covered bonds across different currencies almost reached a volume of EUR 30 bn, which was another record. In the first half of 2024, issuance of sustainable covered bonds is already half of the total amount issued in 2023, implying

that the market continued to expand at a solid pace in H1 2024, probably recording a new record in terms of issuance in 2024.

A breakdown by covered bond type shows that the majority of sustainable covered bonds is backed by mortgages (94% of the amount outstanding), with the remaining 6% backed by public sector loans. This mirrors the fact that most sustainable covered bonds are green bonds, financing energy-efficient buildings. Indeed, the graph below right shows that 97% of green covered bonds is backed by mortgages. This share drops to 84% for social covered bonds, which reflects that public loans tend to have more often a social character. Finally, regarding currencies, the euro accounts for around 75% of total outstanding sustainable covered bonds, while there are also AUD, CHF, DKK, GBP, HUF, NOK, PLN, SEK, and USD denominated sustainable covered bonds.

> Figure 3: New issuance of sustainable covered bonds, EUR bn

> Figure 4: Sustainable covered bonds by collateral type



Source: ECBC, ABN AMRO, Bloomberg, 2024 data covers H1

Focusing on the iBoxx euro benchmark covered bond index and taking the June composition, the total amount of sustainable covered bonds in the index grew by EUR 20 bn between June 2023 and June 2024 to EUR 85 bn. This is 8.9% of the total index, which is up from 7.2% a year ago, and more than triple the share three years ago. Of these, EUR 62.4 bn were green covered bonds (6.6% of total index). The share of sustainable euro covered bonds seems on a path to reach 10% in the total index in the not-too-distant future, confirming that sustainable covered bonds are becoming less of a niche product, and also underlining the important role that covered bonds can play in financing the energy transition. Indeed, the share of sustainable covered bonds in total issuance of euro benchmark covered bonds was just above 10% in H1 2024. The clarity about what can be classified as energy-efficient buildings within the EU taxonomy, is likely to further support issuance of sustainable covered bonds in the coming years.

SUSTAINABLE COVERED BONDS FINANCE A BROAD VARIETY OF ASSETS

Sustainable covered bonds are mostly issued conform the four pillars of the ICMA's Green Bond Principles (GBP), Social Bond Principles (SBP) or Sustainability Bond Guidelines (SBG), with a dedicated environmentally sustainable and/or a social use of proceeds. Sustainability linked bonds (SLB) are still scarce in the banking segment and have so far not been issued in covered bond format.

> Figure 5: Sustainable covered bonds seek alignment with the GBP, SBP and SBG

Four components of alignment					
I	**Use of proceeds**				
	Green			***Social***	
1	Renewable energy	√	1	Affordable basic infrastructure	√
2	Energy efficiency	√	2	Access to essential services	√
3	Pollution prevention and control	√	**3**	**Affordable housing**	**√**
4	Environmentally sustainable management of living natural resources and land use	√	4	Employment generation, and programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, including through the potential effect of SME financing and microfinance	√
5	Terrestrial and aquatic biodiversity	√	5	Food security and sustainable food systems	√
6	Clean transportation	√	6	Socioeconomic advancement and empowerment	√
7	Sustainable water and wastewater management	√			
8	Climate change adaptation	√			
9	Circular economy adapted products, production technologies and processes, and/or certified eco-efficient products	√			
10	**Green buildings**	**√**			
II	**Process for project evaluation and selection**				
III	**Management of proceeds**				
IV	**Reporting**				
Key recommendations for heightened transparency					
i	Green, social or sustainability bond frameworks				
ii	External reviews				

Source: ICMA, ING

A key feature of use of proceeds bonds is that they (re)finance an earmarked portfolio of new or existing eligible green and/or social assets. This portfolio may have an overlap with assets that are eligible as cover pool assets but does not necessarily have to.

The ICMA Principles make a clear distinction between secured green/social bonds where the net proceeds are used to (re)finance sustainable assets that exclusively secure the green/social bonds only (**secured green/social collateral bonds**) versus those where the (re)financed sustainable assets may or may not secure the specific bond in whole or in part (**secured green/social standard bonds**).

There are two examples of sustainable covered bonds that meet the definition of secured green/social collateral bond. These include the one single Luxembourgish renewable energy covered bond, and the social covered bonds issued by one of the South Korean covered bond issuers. All other sustainable covered bonds outstanding would fit into the category secured green/social standard bond.

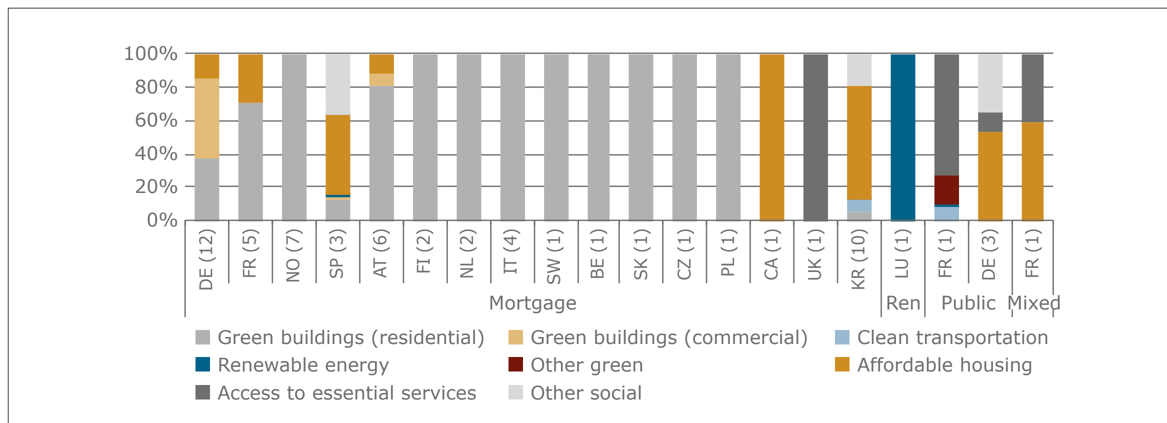
Within the latter category of bonds, there are sustainable covered bonds that allocate proceeds to a portfolio of sustainable loans that are not part of the cover pool. Separate from their use of proceeds, these sustainable covered bonds are secured by sufficient cover assets meeting the asset eligibility criteria stipulated by law and/or the bond programme documentation.

However, most sustainable "standard" covered bond issuers would generally strive to have sufficient eligible green and/or social loans in the cover pool to at least match the amount of sustainable covered bonds outstanding. For that reason, these loans not only have to meet the criteria stipulated in the sustainable bond framework, but also the asset eligibility criteria under the respective covered bond legislation or programme documentation. It is important to bear in mind that sustainable and vanilla covered bonds issued against one cover pool do have the same preferential claim on both the sustainable and non-sustainable assets that are part of the cover pool.

Some banks issue both green and social covered bonds against the same cover pool, either under one single sustainability bond framework, or via separate green and social frameworks. In turn, there is also an example of a covered bond issuer that issues both social public sector covered bonds and social mortgage covered bonds

via the same social bond framework. Moreover, proceeds can be assigned to a distinct portfolio of assets per bond, or to a broader portfolio of sustainable assets (re)financed by multiple sustainable (covered) bonds.

> Figure 6: Use of proceeds sustainable EUR covered bonds*



* Shares of the sustainable proceed allocations as available by end June 2024. The amounts outstanding per country are in bold above the bars. Only EUR denominated covered bonds with a minimum EUR 250 mn size are included. The number of issuers per country are in brackets.
Source: Issuer information, ING

Green **mortgage covered bonds** primarily finance energy-efficient commercial or residential buildings (69% of all use of proceeds), with green residential real estate loans being the most important use of proceeds category (56%). Banks with mortgage cover pools (partly) comprised of social housing loans often issue social or sustainability mortgage covered bonds. Affordable housing loans represent 17% of the sustainable covered bond use of proceeds aggregate.

Access to essential services is the most important use of proceeds category for sustainable **public sector covered bonds** (6% of all use of proceeds). Public sector covered bonds were at first solely issued in social format to finance community projects in areas of healthcare and education. However, there are nowadays also a few public sector covered bonds outstanding with a green use of proceeds, (re)financing among others clean transportation projects (2% of all use of proceeds).

The one single **renewable energy covered bond** issued under the Luxembourg covered bond law in 2020, remains up until today the one single example of a sustainable covered bond issued under a dedicated legal framework for the issuance of green covered bonds. It is also the only sustainable EUR covered bond printed outside the traditional mortgage and public sector segments.

Matching the use of proceeds with the sustainable development goals

Sustainable covered bonds generally aim to contribute to the achievement of the sustainable development goals (SDG) drafted by the United Nations in 2015. Bonds with a green use of proceeds have a somewhat narrower range of SDGs they support than bonds promoting social purposes. Sustainable cities and communities (SDG 11) is the best sponsored sustainable development goal.

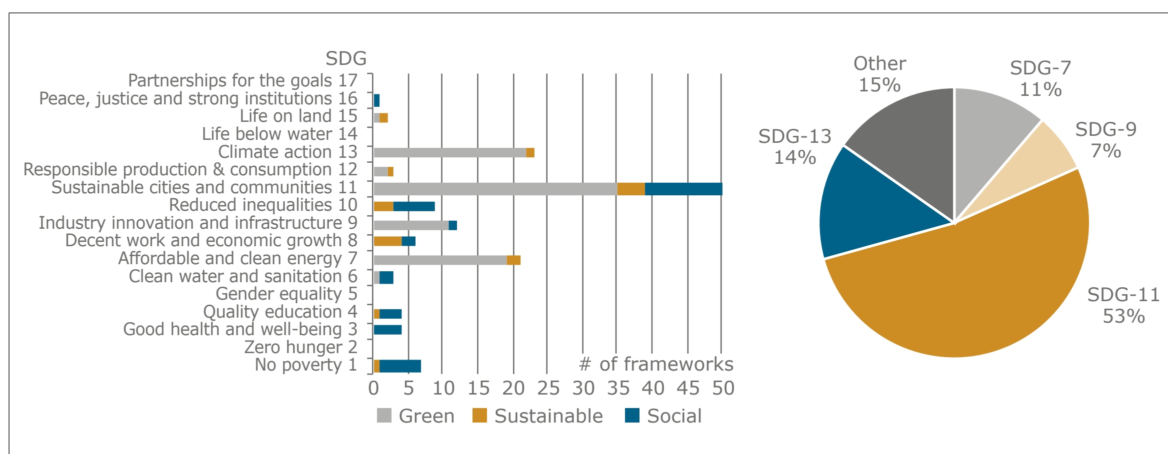
While most sustainable bond frameworks do give an indication of the SDGs they support per use of proceeds category, only few banks would report the exact bond proceed allocations to the dedicated SDGs. We tried to quantify the sustainable covered bond proceed distributions to the different SDGs by matching (pro-rata) the reported allocations per use of proceeds category with the different SDGs listed for the specific use of proceeds. This leads to the indicative conclusion that 53% of all sustainable covered bond proceeds is concentrated on the support of SDG 11, followed with a substantial margin by SDG 13 – climate action (14%), SDG 7 – affordable

clean energy (11%), and SDG 9 – industry innovation and infrastructure (7%). The remaining 15% is spread across the other SDGs, except for SDG 2 – zero hunger, SDG 5 – gender equality, SDG 14 – life below water and SDG 17 – properties for the goods.

Which SDGs are in fact promoted by the different use of proceeds categories is open to debate. Some second party opinion (SPO) providers, such as Sustainalytics and ISS ESG, give an indication of the SDGs they believe are sponsored via the green, social or sustainability bonds frameworks they review. Sometimes these SPO providers do come to a slightly different conclusion on the SDGs supported than the issuer itself in its sustainability bond framework.

> Figure 7: SDGs contributed to by sustainable covered bonds

> Figure 8: Share of proceed allocations to different SDGs



* Only for sustainable EUR covered bonds
Source: Issuer information, SPO providers, ING

Use of proceeds and the environmental Taxonomy objectives

Covered bonds with an environmentally sustainable use of proceeds also often strive to contribute to at least one of the six environmental objectives set by the EU Taxonomy regulation, with the climate change mitigation objective remaining by far the most important one.

Investor demand

To date, sustainable covered bonds have generally been significantly oversubscribed in the primary market. Bankers report that a more diverse investor base is looking at these instruments, with both sustainability focused funds (e.g. SFDR Article 8 and 9 funds) and traditional covered bond investors placing orders.

This incremental demand has not yet consistently translated into a lower cost of funding for issuers – the so-called "greenium", but several market participants believe that this wider investor base could support sustainable issuance, for example during a market correction or the current high interest rate environment. Even traditional covered bond investors generally view sustainable issuance favorably. Most have introduced qualitative or quantitative sustainability considerations into their investment policies, and green or social covered bonds tend to meet more of their sustainability objectives.

Many investors focus mainly on the issuer's ESG credentials, rather than on ESG credentials specific to the covered bond. Most sustainable covered bond issuers have received second party opinions on the alignment of their sustainability frameworks with the International Capital Market Association's (ICMA) green, social,

and/or sustainability bond principles, while it remains to be seen if the EU Green Bond Standard will be widely adopted in this market.

Investors identify three main sources of concern with respect to the sustainability characteristics of these covered bond programmes. The first is the lack of asset segregation, because upon issuer insolvency, eligible green or social assets will be mixed with other non-green assets in the cover pool. This resembles what would happen to investors in a standard green use of proceeds bond, as they would have the same claims against the issuer's insolvency estate as non-green investors. Given most sustainable bond cover pools do not comprise solely eligible green or social assets, they would qualify for secured standard bonds under the ICMA principles and not secured collateral bonds.

The second is a lack of liquidity: sustainable covered bonds are generally easy to sell but very difficult to buy. Third is the complexity of disclosure standards relating to sustainability and/or climate-related issues. While the structural issue of asset segregation will probably not be addressed until we see more exclusively sustainable assets covered bond programmes (i.e. secured collateral bonds), increased issuance volumes could assuage the second concern. New rules and disclosure standards which aim to enhance transparency and consistency on sustainability-related issues may help with the third.

Central banks and climate change

Climate change and the transition to net zero can affect the economy and raise financial risks that are attracting the attention of central banks globally. Over 130 central banks and financial supervisors have joined the "Network for Greening the Financial System" (NGFS), a network focused on managing climate-related risk and mobilizing mainstream finance to support the transition toward a sustainable economy.

Central banks have looked at climate risks from three areas of focus:

i) **Financial stability**: how climate risks may affect banking soundness and present systemic risk for the overall financial system,

ii) **Research**: understanding how climate change may affect macroeconomic dynamics such as economic growth and inflation, and

iii) **Monetary policy**: addressing whether central banks should help to mitigate climate change through their policies and how to do so.

Climate-related risks could affect the financial system in two ways. First, the increasing frequency and severity of physical risks, such as wildfires, floods, or hurricanes, may increase losses for banks and insurers. Second, transition risks linked to policies and demand shifts to decarbonize the economy, can be costly for firms or create "stranded" assets – for example by making reserves of fossil fuels unusable, resulting in loan losses for financial institutions.

For financial stability purposes, some regulators are using scenario analysis, climate stress tests (CSTs), and other tools to assess the financial sector's vulnerability to climate change, foster higher disclosure, and encourage banks to embed climate risks in their strategy and risk management. Supervisors' CSTs help identify the main sectors and geographies generating climate transition and physical risks for banks' assets and seek to quantify their exposure to these risks. In July 2022, the ECB published the results of its "bottom-up" CST, where the banks themselves formulated the projections, using their own credit and market risk models under scenarios set by the ECB.

The ECB's stress test is part of a broader supervisory push to move climate risks higher up the risk management agenda for European banks and a wider regulatory push to incorporate climate risks into the three pillars of the Basel prudential framework. Its results broadly resemble the results reported by the Bank of England (BoE) in its Climate Biennial Exploratory Scenario, also conducted in 2022. In both cases, supervisors are using

some of the long-term scenarios developed by the NGFS and seek to assess the business model transformations likely to be triggered under different climate change pathways, in addition to the potential credit losses. Both the ECB and the BoE announced that they will not impose additional capital requirements on the back of these stress tests. Nevertheless, regulators will likely use the results to inform their day-to-day supervision, particularly where they identify outlying banks that are particularly unprepared or have poor risk management or data capabilities.

In April 2023 the ECB published its third assessment of European banks' climate and environmental disclosure progress. The ECB believes that further improvements are urgently needed. Indeed, although banks have increased their published information, the report shows that the quality of their disclosures is still too poor to meet supervisory's expectations. Ongoing initiatives to improve sustainability-related disclosures will likely enhance the quality and the comparability of climate-related information.

In January 2024 the ECB has also released its assessment of the alignment of the European banking sector with the EU climate objectives. The report revealed a significant misalignment, which exposes banks to elevated reputational and litigation risk.

Finally, the ECB has announced its Single Supervisory Mechanism (SSM) priorities for 2024-2026, which reflect ECB Banking Supervision's medium-term strategy for the next three years, and which outlined as a key priority the remediation of climate-related and environmental risk shortcomings. It includes the need to accelerate remedial actions of governance shortcomings and management of such risks.

Climate change and the transition to net zero are also likely to directly affect macroeconomic dynamics such as economic growth and inflation and thus monetary policy. First, a financial system weakening because of physical risk or stranded asset-related losses could impair monetary policy transmission. Second, transition to a hotter planet or a greener economy are likely to impact economic supply and demand and thus price dynamics. Physical risks are likely to weigh on potential output, via capital destruction or heatwave-related productivity shocks. These sudden supply-side shocks can increase the volatility of the business cycles and prices, as it is hard for central banks to forecast the timing of these shocks and thus fine-tune their policy accordingly. Transition risks are more likely to lead to within sector reallocation of resources from the more to the least polluting firms. On aggregate, green innovation could also have some long-term positive productivity effects – although this is not clear-cut. But they could also redefine economies' external competitiveness (especially for large energy exporters). Meanwhile, the more abrupt the transition to net zero, the more likely it becomes that green input demand – like critical minerals, outpaces supply, resulting in "greenflation".

Central banks may consider more active policies to foster the net zero transition, such as "green quantitative easing", "green targeted lending operations", or "green collateral", which would involve giving more advantageous terms to "greener" beneficiaries of bond-buying or bank liquidity programmes.

In July 2022 the ECB announced further climate change considerations in its corporate bond purchases, collateral framework, disclosure requirements and risk management, in line with its climate action plan. The ECB decided to tilt its corporate bond holdings toward issuers with better climate performance, to limit the share of assets issued by entities with a high carbon footprint that can be pledged as collateral under its collateral framework, to accept only collateral from companies and debtors that comply with the Corporate Sustainability Reporting Directive, and to further enhance its risk assessment tools and capabilities to better include climate-related risks.

In March 2023 it published its first climate-related financial disclosures, which provide information on its portfolios' carbon footprint and exposure to climate risks, as well as on climate-related governance, strategy, and risk management. The disclosures show that the corporate bonds held under the asset purchase programmes are on a "decarbonization" path. This is partly because the companies in its portfolio have lowered their emis-

sions for every million euro of revenue they earn, reflecting their carbon emission and efficiency efforts, but also the ECB's decision to tilt its holdings toward issuers with a better climate performance.

Central banks can significantly affect the covered bond market, mainly as buyers, but also by setting standards for collateral eligibility and by providing banks funding on favorable terms. The ECB started purchasing covered bonds under its third covered bond purchase programme (CBPP3) in October 2014, as part of a package of non-standard monetary policy measures that also included targeted long-term refinancing operations (TLTRO). At the peak, CBPP3 holdings reached just above EUR 300 bn – more than one-third of the eligible outstanding covered bond universe, and more than EUR 700 bn of covered bonds issuance was registered as collateral when TLTRO III borrowings peaked.

CBPP3 is now phasing out and TLTROs unwinding. However, the ECB finalized in March 2024 the review of its operational framework, announcing that it will introduce long-term structural refinancing operations, and that it will consider a structural bond portfolio, probably once the current asset purchase programme and pandemic emergency purchase programme portfolios have run to maturity, after 2026. While the ECB has not announced the details of these initiatives, it will have the tools to significantly affect the sustainable covered bond market, if it decides to do so.