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Financials



Green bank bonds

How the EU green bond standard will shape future issuance

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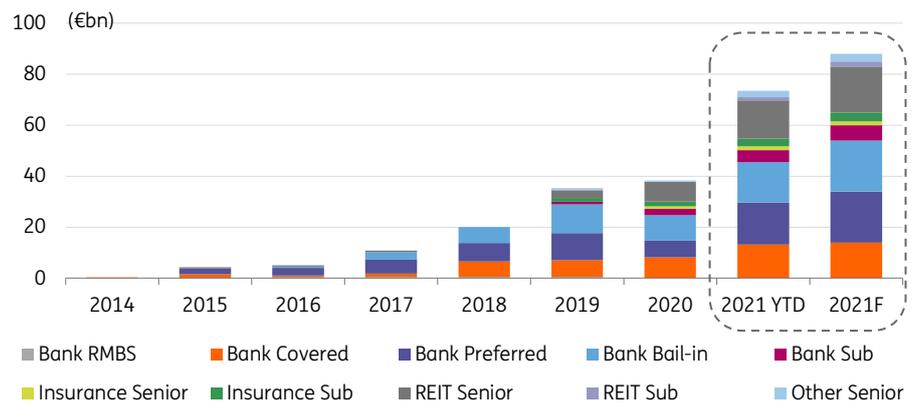
The EU green bond standard

2021 is setting new records where it comes to the issuance of sustainable bonds by financial institutions. Regulatory developments remain a key driver to this growth. The climate delegated act published in June provided issuers and investors with clarity on the first technical screening criteria accompanying the EU taxonomy regulation. Besides, the publication of the draft regulation on European green bonds in July made the ideas of the European Commission on the voluntary standard for high quality green bonds more concrete. The green bond standard will in our view become the most important standard for investors buying green bonds. The regulation will likely guide issuer and investor preference towards EU green bonds with maturities not stretching much beyond eight years. As covered bank bonds typically have a longer maturity focus than non-covered bank bonds, we may particularly see this segment save the shorter maturity buckets for green issuance.

Green supply booms as regulators fill in some blanks

The issuance of sustainable bonds by companies in the financial sector has gained pace rapidly this year. When zooming in on bank bond products alone, we find that 17% of the covered bond print from January to September was issued in sustainable format. This share rises to 26% for bail-in senior unsecured instruments, while 34% of the preferred senior unsecured issuance had a dedicated sustainable use of proceeds during the first nine months of this year. Bank T2 issuance was even comprised for 37% of sustainable supply.

Fig 1 Financials sustainable bond issuance by bond type



* EUR sustainable bonds issued by the financial sector (size ≥€250m)
Source: ING

“Green issuance is seeing the strongest rise this year in comparison to 2020”

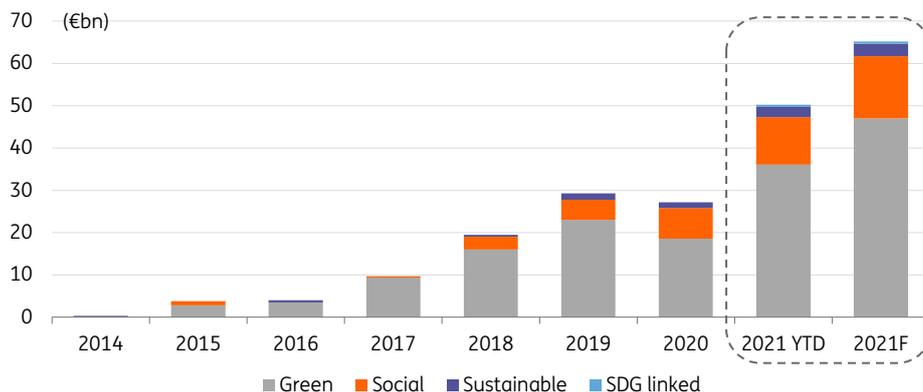
With an aggregate of €50bn by the end of September, sustainable bank bond supply is already running over €20bn ahead of the full year print in 2020. Green issuance is

comfortably taking the lead again this year, making up 72% of the total sustainable bank bond print, versus 68% last year. In our view, the final clarity gained in June this year on the technical screening criteria for the EU taxonomy’s climate change mitigation and climate change adaptation objectives has removed an important ‘wait and see’ obstacle to green issuance.¹ These technical screening criteria and the related

¹ The EU taxonomy climate delegated act was adopted by the European Commission on 4 June 2021, but the European Parliament and Council are still in the process of concluding their evaluation of the act.

do no significant harm considerations do give issuers definite guidance to what extent the activities financed by their green bonds can in fact be advertised as environmentally sustainable per 1 January 2022.

Fig 2 Bank sustainable bond issuance by use of proceeds type



*Covered and non-covered EUR sustainable bonds issued by banks (size ≥€250m)
Source: ING

Furthermore, on 6 July 2021 the European Commission published its draft proposals on European green bonds, giving issuers insight in the criteria they would have to meet to be able to use the voluntary designation “EU green bond” (EuGB). While the EU green bond regulation still has to be approved by the European Parliament and Council, some green bond issuers may already make a start in considering the criteria proposed.

The European green bonds regulation has three overarching objectives:

- **Improve the ability** of investors to identify and trust high quality green bonds;
- **Facilitate the issuance** of high quality green bonds by clarifying definitions of green economic activities and reducing reputational risk for issuers in transitional sectors;
- **Standardise the practice of external review** and improve the trust in external reviewers by introducing a voluntary registration and supervisory regime.

Issuers willing to use the European green bond standard (EuGBS) designation need to meet at least (1) the bond related requirements and (2) the transparency and external review requirements set by the draft legislation (see Appendices 1 and 2). Compliance with the taxonomy regulation and its delegated acts is the most important bond regulated requirement, forming a further incentive for issuers to ensure full taxonomy alignment of their green bonds. This, however, will continue to come with challenges.

The key takes on the green bond standard proposals

Taxonomy compliance remains the name of the game

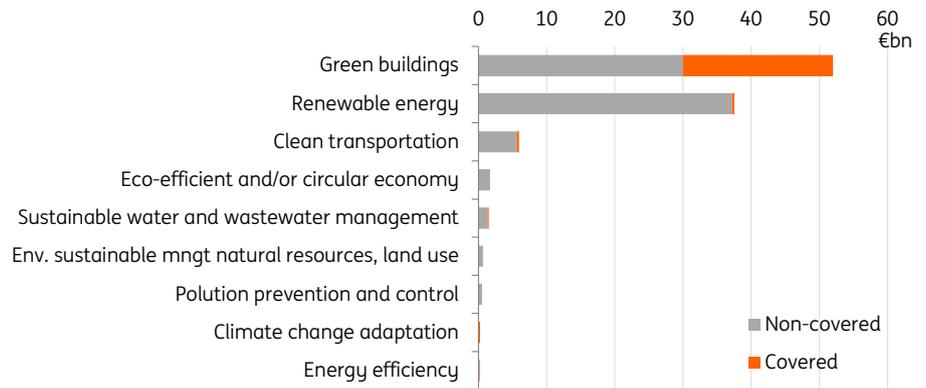
Green bond issuers commonly use the ICMA’s green bond principles (GBP) as the market standard for their green bond issues. As such green bond proceeds are often allocated to one or more categories of eligible green projects identified by the GBP.

“Green bank bonds primarily allocate proceeds towards green buildings and renewable energy projects”

Figure 3 gives an overview of the green asset categories bank bond proceeds are most often allocated to. The chart confirms that green bank bonds primarily fund financial assets such as loans financing green buildings and

renewable energy projects, which comprise 90% of the proceed allocations of these bonds. These statistics include non-EU green bond issuers, which can also use the EU green bond standard if the assets financed by the bonds are fully taxonomy compliant.

Fig 3 Green buildings and renewable energy mostly financed by green bank bonds



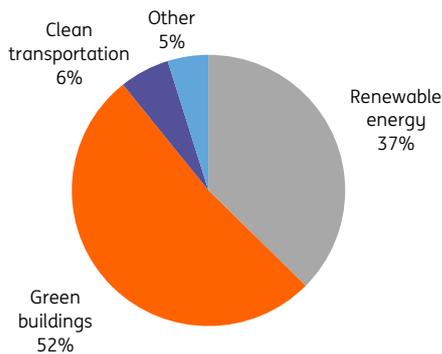
*Covered and non-covered EUR green bonds issued by banks (size ≥€250m)
Source: ING

“Meeting the TSC set for energy and construction & real estate activities is most important for green bank bonds”

However, in comparison to the green bond principles, the EU green bond standard proposals do raise the bar where it comes to eligible proceed allocations. Namely, **EU green bonds can solely finance assets** related to

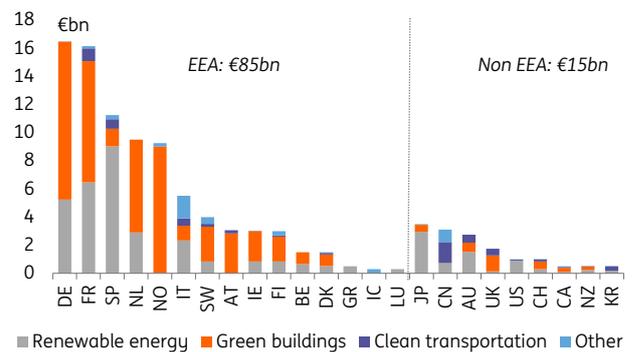
economic activities **that are fully taxonomy compliant**. Hence, banks willing to issue EU green bonds would have to comply with the taxonomy’s technical screening criteria (TSC) and do no significant harm (DNSH) criteria, such as those set by the June climate delegated act. Considering the dominance of green buildings and renewable energy projects as use of proceed categories, particularly the technical screening criteria set for energy and construction and real estate activities are of relevance to banks. (See Appendix 3 for details on the ICMA’s green projects’ mapping versus the taxonomy).

Fig 4 Use of proceed shares of green bank bonds



*EUR green bonds issued by banks (size ≥€250m). Only issuers included with known proceed allocations. Source: ING

Fig 5 Use of proceeds green bank bonds per country



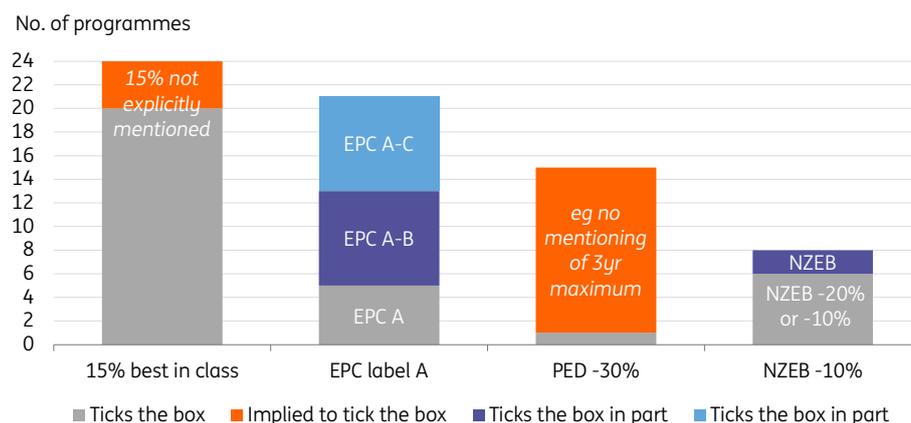
*EUR green bonds issued by banks (size ≥€250m). Only issuers included with known proceed allocations. Source: ING

We already see banks increasingly seeking to align their green asset portfolios towards the technical screening criteria set by the climate delegated act. For green bank bonds financing green building loans, this primarily comes down to proving that the buildings financed by these loans are 15% best in class in terms of energy performance.

Figure 6 shows for example that most frameworks supporting the issuance of green covered bonds already make an explicit reference to the fact that mortgage loans originated before the end of 2020 and financed by the green bond do meet the top 15% best in class criterion. Some of the more recently established green bond frameworks also often narrow the EPC label criterion down to class A. However, there are still some frameworks where the proceeds are allocated to buildings that either meet the 15%

best in class criterion or have an EPC label of A, B or C. In this case, accompanying evidence is needed that an EPC label of B or C would meet the 15% best in class criterion.

Fig 6 Green covered bonds financing green buildings meet the TSC on the top 15%



*Green EUR covered bonds with a use of proceeds towards green buildings (size \geq €250m)
Source: Issuer information, ING

Covered bonds and taxonomy compliance:

What if part of the taxonomy eligible assets financed are not part of the cover pool?

In its most recent green bond reporting of July 2021, NORD/LB took some first steps in sharing the indicative taxonomy alignment of its green asset portfolio. According to the bank, assets in the green portfolio located in foreign markets (37% of the portfolio) were probably 54% taxonomy compliant, whereas assets located in the German market (63% of the portfolio) were indicated to be 66% taxonomy compliant. This equates to 61.5% for the total green asset portfolio.

The estimated taxonomy compliant assets in the full green portfolio (€2.198bn) do cover all green debt outstanding after the bank's most recent green covered bond (€1.888bn). However, of the total €3.57bn green building portfolio, €2.142bn was part of NORD/LB's cover pool. A pro-rata application of the ratio of taxonomy compliance to the green loans in the cover pool equates to an estimated €1.319bn in taxonomy aligned assets, which would be less than the €1.5bn in green covered bonds outstanding following the bank's most recent green covered bond.

In light of the EU green bond standard proposals, this would raise an interesting question. Namely, can a green covered bond in fact be seen as taxonomy compliant, based upon sufficient coverage on a total green portfolio level, but with insufficient taxonomy eligible green loans being part of the cover pool? Our answer would in principle be yes. The EuGBS proposals are not explicit on such a green asset coverage requirement on a cover pool level for covered bonds. Besides, while in minority, there are several examples of sustainable covered bonds that in fact already partially finance sustainable assets that are not part of the cover pool.

Particularly where taxonomy eligible green assets would have lower probabilities of default, green covered bond investors would likely have a preference for sufficient coverage by taxonomy compliant assets on the level of the cover pool. This despite the pari passu preferential claim to those assets with vanilla covered bondholders. That said, taxonomy alignment of the green covered bond will still likely be viewed as most important by investors when it comes to buying the green covered bond.

However, being fully taxonomy aligned comes with more challenges than meeting the technical screening criteria alone. Even if an economic activity contributes significantly

to the climate change mitigation objective, it still has to avoid doing significant harm to any of the other environmental objectives. To name an example, the generic DNSH criteria for climate change adaptation therefore require a climate risk and vulnerability assessment (CRVA) to identify physical climate risks, such as wildfires or floods, that could affect the performance of the economic activity during its lifetime. To reduce the most important material physical climate risks identified, an adaptation solutions plan has to be drawn up to reduce these risks over a period up to five years. It might as such be tempting to leave for instance properties exposed to high physical climate risks out of a green bond portfolio.

Besides, to claim taxonomy compliance it has to be ensured that the minimum safeguards stipulated in the taxonomy regulation are met. This in fact comes down to making sure that counterparties carrying out the economic activity have proper procedures in place to ensure the alignment with the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation (ILO) on Fundamental Principles and Rights at Work and the International Bill of Human Rights. Banks may be able to report compliance with these safeguards on their own entity level, but may find it more challenging to gain certainty on such compliance from their commercial counterparties.

“Advertising taxonomy alignment of green portfolio allocations seem to focus at this stage primarily on meeting the technical screening criteria”

Hence at this point, the advertising by issuers of the taxonomy alignment of their green bond frameworks appears to be focussing primarily on the compliance with the technical screening criteria. However, providing insight in how the DNSH criteria and minimum safeguards are

met remains another hurdle many issuers would still have to take to be able to claim that their green bonds would indeed qualify as EU green bond.

In light thereof it is supportive that the European green bond standard proposals do offer issuers the possibility to issue European green bonds that are not taxonomy compliant yet at the time of issuance, but will be so within a period of maximum five to ten years as defined in a taxonomy alignment plan. This does give issuers certain flexibility in terms of ensuring the full taxonomy compliance of their green bonds in time. That said, investors may still have a preference for European green bonds that (re)finance an existing portfolio of green assets that is in fact already taxonomy compliant, rather than finding comfort in a taxonomy alignment plan ensuring future taxonomy compliance.

Amendments of the TSC: what it will mean for EU green bonds?

The EU green bond proposals require banks allocating bond proceeds towards debt instruments such as loans, to apply the technical screening criteria and do no significant harm criteria applicable at the time the debt was created. When no delegated acts setting these criteria were in force at that time, issuers can apply the first delegated acts that were adopted. This means that EU green bond proceeds can be allocated to eligible loans originated ahead of the first climate delegated act of 6 June 2021 and the yet to be established environmental delegated act, as long as the criteria defined in these delegated acts are met.

“Issuers have five years to reallocate their proceeds after amendments of the TSC”

That said, once these delegated acts are amended following the creation of the debt, issuers have to allocate the bond proceeds to the debt conform the amended delegated acts

within five years after they apply. This five year use of proceeds reallocation period granted to issuers after an amendment of the TSC and DNSH provisions, could become an important consideration for issuers and investors when issuing or buying an EU green

bond. After all, once an issuer would fail to reallocate its proceeds in time to a green asset portfolio meeting the new technical screening criteria and do no significant harm standards, the bond will no longer keep its EU green bond designation. Investors can in that case no longer claim they are holding a bond that is fully taxonomy compliant, which will have some impact on their disclosures on the taxonomy alignment of their investments.

“The TSC for transitional activities contributing to the CCM objective have to be reviewed at least every three years”

Article 19(5) of the EU taxonomy regulation stipulates that the European Commission has to review the technical screening criteria regularly and where appropriate amend the relevant delegated acts in line with scientific

and technological development. The taxonomy regulation recognizes three types of environmentally sustainable activities: 1. activities that in and of themselves contribute substantially to one of the taxonomy's six environmental objectives, 2. transition activities and 3. enabling activities.² The taxonomy regulation is only explicit on the review term for transition activities. Namely, transitional activities offering substantial contribution to the climate change mitigation objective have to be reviewed at least every three years to ensure that these activities remain on a credible transition pathway consistent with a climate-neutral economy.

This means for instance that the technical screening criteria applicable to green real estate assets for the renovation of existing buildings will in any event have to be reviewed every three years, possibly resulting in stricter technical screening criteria. The same holds for the technical screening criteria applicable to green energy loans related to a) the transmission and distribution of electricity, b) the storage of electricity, c) the storage of thermal energy and d) the storage of hydrogen. These criteria have to be reviewed and possibly amended by 1 January 2025 at the latest, meaning that bonds maturing after 2029 may per January 2030 have to comply with these stricter criteria if they are allocating proceeds related to these respective economic activities.

“Issuers may wish to issue their EU green bonds in shorter maturity buckets less likely to face a change in the TSC”

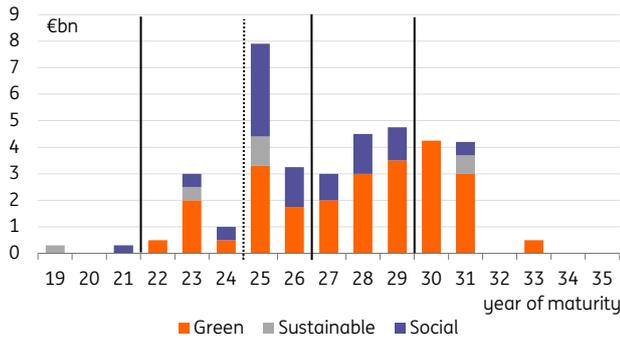
If we would assume this three year term to be a common review period, also for the other activities, this could potentially impact the green bond market and especially the official EuGB labelled bonds in two ways. First off all,

this could result in issuers of green bonds focusing more on a shorter horizon for their green bond issuance (ie within a term of 5yr to 8yr) to make sure their bonds will keep the status EU green bond until maturity. Investors, in turn, may also be more inclined to buy EU green bonds that will not run the risk of losing its EU green bond status ahead of maturity.

Looking at the current market for **green covered bonds**, we find that, of all the bonds outstanding at the end of September 2021, 32% expires after 2029. Hence this is the part that could in theory have higher a chance of being exposed to stricter future technical screening criteria, that is assuming they would qualify as EU green bonds under the current requirements (Figures 7 and 8).

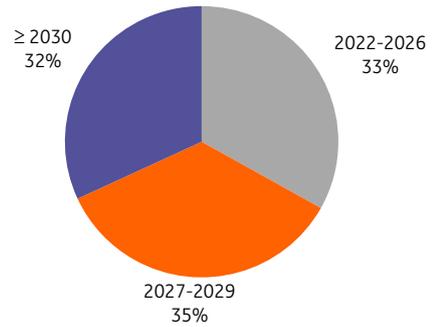
² **Transition activities** are activities for which there are no technologically and economically feasible low-carbon alternatives, but that support the transition to a climate-neutral economy in a manner that is consistent with a pathway to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels, for example by phasing out greenhouse gas emissions. **Enabling activities** are activities that enable other activities to make a substantial contribution to one or more of the objectives, and where that activity a) does not lead to a lock-in in assets that undermine long-term environmental goals, considering the economic lifetime of those assets, b) has a substantial positive environmental impact on the basis of lifecycle considerations.

Fig 7 Sustainable bond redemptions by year (EUR sustainable covered bonds)



*Covered EUR sustainable bonds issued by banks (size ≥€250m)
Source: ING

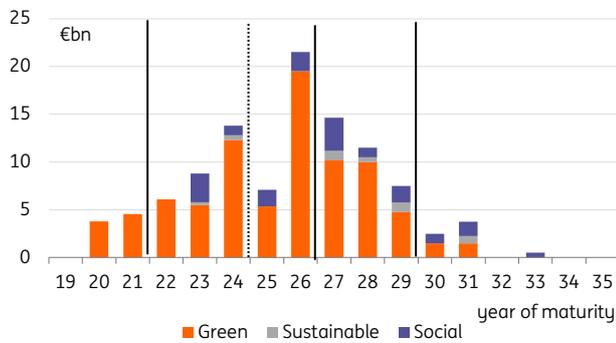
Fig 8 Share of bonds maturing per TCS relevant bucket (EUR green covered bonds)



*Non-covered EUR green bonds issued by banks (size ≥€250m)
Source: ING

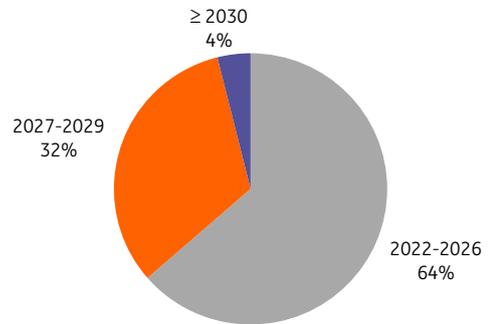
The share of bonds maturing after 2029 is significantly lower for **non-covered bank bonds** at 4% (Figures 9 and 10). This also demonstrates that particularly the covered bond market may start seeing a stronger focus on the somewhat shorter maturity buckets where it comes to the issuance of green bonds. The vanilla format instead may be saved for issuance in the longer maturity buckets.

Fig 9 Sustainable bond redemptions by year (EUR sustainable non-covered bank bonds)



*Non-covered EUR sustainable bonds issued by banks (size ≥€250m)
Source: ING

Fig 10 Share of bonds maturing per TCS relevant bucket (EUR green non-covered bank bonds)

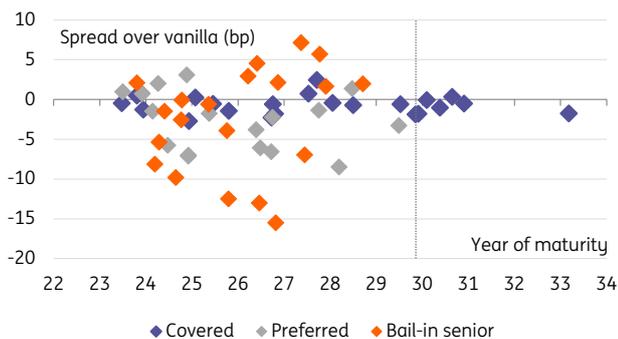


*Non-covered EUR green bonds issued by banks (size ≥€250m)
Source: ING

“The impact of maturities on the size of the greenium is rather limited at current tight spread levels”

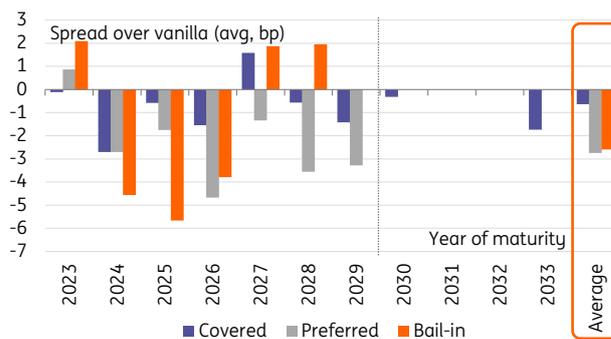
Figures 11 and 12 confirm that, at this stage, there is no visible impact of maturities on the greenium of bank bonds. Traditionally, the greenium tends to be higher for bonds offering more spread, such as for bail-in senior bonds in comparison to covered bonds. Normally, this logic would also apply to bonds located further out the curve in comparison to tighter spreads bonds located at the front end of the curve. However, due to the generally compressed spread levels, we do not observe this particular pattern at this stage for bank bonds.

Fig 11 Greeniums too dispersed to show maturity impact



* EUR green bonds issued by banks (size ≥€250m)
Source: Markit iBoxx, ING

Fig 12 No visible maturity impact on average greeniums



*EUR green bonds issued by banks (size ≥€250m)
Source: Markit iBoxx, ING

To what extent the forthcoming EU green bond standard will have an impact on spreads remains yet to be seen as a) the EU green bond regulation has yet to be approved, and b) it will remain work in progress for issuers to confirm the taxonomy alignment of their green bonds. It is fair to assume however, that investor demand will indeed be best for bonds that, via their EU green bond designation, can confirm to be fully taxonomy compliant. Bonds least at risk of losing their EU green bond designation due to a potential change in the technical screening criteria will likely be best supported by the ESG investor base. This, in our view, could see both supply and demand focus more on the somewhat shorter end of the curve (up to the 8yr area).

The EuGBs will have a broader scope than the initial disclosure rules

The proposed EU green bond standard can in principle be used by all green bond issuers, including private and public sector entities, and financial and non-financial undertakings, whether located within or outside of the EU. Hence the framework is broader than the initial coverage range of the European Commission’s green asset ratio (GAR) proposals.³

The delegated act (2021/4987) on disclosures under the NFRD on environmentally sustainable economic activities, adopted by the European Commission on 6 July 2021, explicitly excludes exposures to central governments, central banks and supranational issuers from the calculation of the numerator and denominator of the key performance indicators for financial undertakings, ie the green asset ratio for banks.

“Central governments can issue EU green bonds, but these bonds will not count towards the green asset ratios of banks”

Our understanding of the adopted NFRD disclosure rules for financial undertakings is that EU green bonds issued by central governments or supranational issuers can (at first) not count towards the green asset ratio,

not even if the bond is allowed to use the designation EU green bond.⁴ To our interpretation the same will hold (fully or partially) for exposures to EU green bonds that (fully or partially) (re)finance loans to central governments or supranational entities for taxonomy eligible economic activities. Investments in sovereign entities are under the draft NFRD disclosure rules also excluded from the KPIs set for asset managers.

“An EuGB designation may also not be enough for all corporate bonds for a full recognition in the NFRD’s taxonomy KPIs ”

EU green bonds issued by some corporates, may also not count towards the disclosures on exposures towards taxonomy eligible activities under the NFRD, not even if they are allowed to use the EuGB designation. Under the European

³ [taxonomy-regulation-delegated-act-2021-4987_en.pdf \(europa.eu\)](https://ec.europa.eu/economy_finance/taxonomy-regulation-delegated-act-2021-4987_en.pdf)
[taxonomy-regulation-delegated-act-2021-4987-annex-1-5_en.pdf \(europa.eu\)](https://ec.europa.eu/economy_finance/taxonomy-regulation-delegated-act-2021-4987-annex-1-5_en.pdf)
⁴ Article 7(4) of the draft delegated regulation on disclosures under the NFRD

Commission's delegated act on disclosures under the NFRD, exposures to undertakings that are not obliged to publish non-financial information are excluded from the numerator of the key performance indicators of financial undertakings. The disclosure requirements under the NFRD currently only apply to large public-interest companies with more than 500 employees. However, the proposals for a corporate sustainability reporting directive (CSRD) aim to extend the NFRD disclosure requirements to all large corporates and all companies listed on regulated markets (except listed micro-enterprises).⁵ This would include EU subsidiaries of non-EU companies, as well as any non-EU company with transferable securities listed on an EU regulated market. Large companies would already have to make the requested disclosures per 1 January 2023, while SMEs would start disclosing per 1 January 2026. As such the number of corporate issuers of EU green bonds not in scope of the NFRD may ultimately prove to be limited.

“Investors may have a preference for EuGB that fully count towards the taxonomy related KPIs under the NFRD”

We do note that financial undertakings only have to start disclosing their taxonomy related key performance indicators per 1 January 2024. However, from 1 January 2022 until 31 December 2023 they would already have to

disclose the proportion of their exposures towards taxonomy-eligible and non-eligible economic activities. Hence on the demand side, investors including banks, may still be selective in their investment processes, even towards EU green bonds, as not every single bond marketed as such may count 100% towards the taxonomy related KPI disclosures under the NFRD.

The EuGBS tightens the thumbscrews on external reviews

Also where it comes to the transparency and external review requirements, the proposed European green bond standard has followed market best practices such as those related to the green bond principles. As such, the European green bond standard requires issuers to prepare a green bond factsheet ahead of issuance, subject to a pre-issuance review. The main difference with the information currently provided in the green bond frameworks of issuers is the focus of the green bond factsheet on taxonomy compliance. For instance, where it comes to the allocation of proceeds, issuers have to describe (a) the process by which they determine that projects meet the taxonomy requirements and (b) which technical screening criteria have been considered.

“The green bond fact sheet should give comfort on the process ensuring taxonomy alignment of the assets”

As such the EU green bond factsheet will request far more detail, specifically taxonomy related, in comparison to what currently is provided by green bond issuers. Besides, the pre-issuance review of the green bond

factsheet is also mandatory for EU green bond standard purposes and not voluntary such as the second party opinions currently often obtained related to green bond frameworks. This, in our view, should give investors more comfort that all the requirements from the taxonomy regulation and the EuGBS are in fact fully met.

Until the green bond proceeds have been fully allocated, issuers of EU green bonds also have to publish allocation reports on an annual basis. Once the bond proceeds have been allocated in full, issuers have to prepare a post-issuance allocation report subject to a post-issuance review. For banks that allocate proceeds from several European green bonds to a portfolio of financial assets, every annual post-issuance allocation report has to be reviewed by an external reviewer. While some issuers already obtain such post issuance verification, mostly via an external auditor, not all issuers do so and also often not on an annual basis. As such this requirement will likely lead to a more uniform

⁵ [Corporate sustainability reporting | European Commission \(europa.eu\)](https://ec.europa.eu/euro-pressroom/content/corporate-sustainability-reporting)

verification approach among issuers. Besides, the post issuance review requirements will ensure investors in green bank bonds that the proceeds of the still outstanding European green bank bonds remain fully allocated to a sufficiently large portfolio of taxonomy aligned assets over the life of the outstanding bonds.

“Impact reporting will become more detailed for EuGB purposes”

Issuers are also required to publish at least one environmental impact report after the full allocation of the bond proceeds. This impact report should give insight in both the positive

and adverse environmental impacts of the bond proceeds. Under the current practice issuers often only provide information on the positive impacts of their green bond issues, such as on the energy savings or CO₂ emission avoidance related to the bonds. However, with the EU green bond standard, impact reporting will become more detailed. Not only should issuers also give an impression of the potential adverse environmental impacts related to the bond, they also have to provide information on the methodology and assumptions that were used to calculate all impacts. This is already best practice even though not all issuers do make this information available.

The current market practices of external assessment

Green bond issuers already often obtain an external assessment of their green bond process. The ICMA identifies four types of such bond related reviews:

- Second party opinion (SPO);
- Verification;
- Certification;
- Green, social, sustainability and SLB scoring/rating.

Ahead of issuance, sustainable bond issuers often rely on a **second party opinion** of the applicable sustainable bond framework. This means that an independent institution assesses the quality of the framework and verifies whether the green/social or sustainability bond is aligned with the relevant green/social or sustainability bond principles. Sustainalytics provides the second party opinion for most green bank frameworks, together with ISS ESG, Vigeo Eiris and Cicero.

The post-issuance **verification** of the proceed allocations is often performed by an external auditor. In other cases, the appointed SPO provider gives an update of the second party opinion as part of the verification process.

Issuers can also obtain a **certification** of their green bonds or frameworks against a recognized external green standard or label. As such, several green bank bonds are climate bond certified on behalf of the Climate Bond Initiative (CBI) as an assurance of their consistency with the global warming goals of the Paris agreement.

Green bonds often do not have distinct **sustainable bond ratings**. Imug is one of the rating agencies that provides such ratings for instance to a number of sustainable covered bonds. ISS ESG also provides sustainability bond ratings, but has done so only for a few bonds thus far. Moody's also gave green bond assessments, but withdrew all its green bond assessments in October 2020 for business reasons.

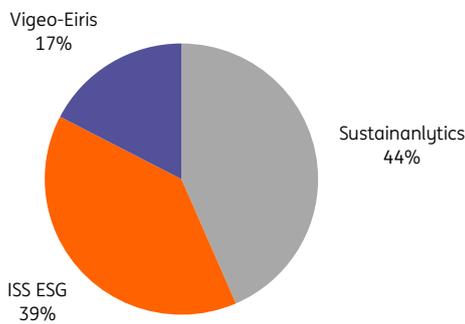
There are also institutions that assign **company level sustainability scores or ratings** to issuers. Sustainalytics, ISS ESG, MSCI, Imug, S&P SAM and Vigeo Eiris are the institutions that most commonly assign such ESG ratings or scores.

Besides, the European Commission is of the opinion that there is currently insufficient standardisation, transparency and supervision of external reviewers that provide assurances to issuers and investors on the greenness of their investments. As such the European green bond regulation also outlines **a registration and supervision framework for external reviewers**, which need to be accredited. External reviewers registered with the ESMA have to comply with the stipulated organisational requirements on qualifications, experience, internal procedures, record keeping and conflict of management. The external reviewers also have to publish their pre-issuance and post-issuance reviews on the website.

“Issuers of EU green bond can only use external reviewers that are registered by the ESMA”

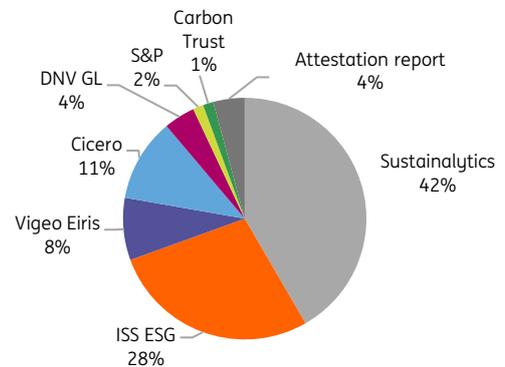
Issuers of European green bonds are only allowed to make use of accredited external reviewers, ie that have been registered and are subject to ongoing supervision by the ESMA. This can also include external reviewers from third countries. Hence issuers intending to issue European green bonds also have to wait for assurance that the external reviewers they wish to employ for the assessment of their green bond process, have in fact been registered with the ESMA. This may take time even after the EU green bond standard regulation has already entered into force.

Fig 13 Share SPO providers in green covered bank bonds



*SPO providers EUR green covered bonds (size ≥€250m). Source: Issuer information, ING

Fig 14 Share SPO providers/others in green non-covered



*SPO providers EUR non-covered bonds issued by banks (size ≥€250m). Source: Issuer information, ING

Appendix 1

Bond related requirements

Proceed allocations have to be taxonomy compliant

The EU green bond proposal provides a framework for all green bond issuers, including private sector and public sector entities, and financial and non-financial undertakings, whether located within or outside of the EU.

Before the maturity of the bond, the proceeds of European green bonds have to be fully allocated (without cost deductions) to:

- **Fixed assets**, including those of households, that are not financial assets;
- **Capital expenditures**, including those of households⁶;
- **Operating expenditures** that were incurred more recently than three years prior to the issuance of the European green bond⁷;
- **Financial assets**, such as debt or equity instruments, for which the proceeds have been allocated to fixed assets that are not financial assets, capital expenditures, or operational expenditures as referred to in the aforementioned three bullets. By way of derogation, financial assets may be allocated to other financial assets, subject to the condition that the proceeds of these financial assets have been allocated to aforementioned non-financial assets.

“EU green bond proceeds always have to be allocated in full ahead of maturity”

As such, European green bonds can be used to finance environmentally sustainable activities *directly*, via the allocation of proceeds towards qualifying assets and expenditures, or *indirectly*

via financial assets that finance such qualifying assets and expenditures. Banks will in principle solely allocate their proceeds to financial assets such as loans. European green bonds can also be refinanced by issuing a new European green bond. However, to our interpretation this would not release a maturing green bond from the full allocation of proceeds obligation ahead of its maturity.

⁶ **Capital expenditures** are defined as additions to fixed tangible and fixed intangible assets during the financial year considered, before depreciation, amortisation and re-measurements such as additions from revaluations and impairments, and excluding fair value or any additions resulting from business combinations.

⁷ **Operating expenditures** are defined as direct non-capitalised costs related to research and development, education and training, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of fixed tangible or fixed intangible assets of property, plant and equipment that are necessary to ensure the continued and effective functioning of these assets.

⁸ The three years' term prior to issuance for operational expenditures also matches the criteria for building renovations set in the climate delegated act. Namely one of the requirements for building renovations is that it leads to a reduction of primary energy demand (PED) of at least 30%. The 30% improvement can among others be achieved via a succession of measures within a period of three years.

Sovereign proceed allocations

Sovereigns may also allocate the proceeds of European green bonds to the following assets identified in Regulation 549/2013 on the European system of national and regional accounts in the European Union:

- **Fixed assets** (ie produced non-financial assets, such as eg fixed assets repeatedly used in production for more than one year);
- **Non-produced non-financial assets** (eg natural assets, contract leases, licences, permits, and goodwill and marketing assets);
- **Tax relief** that was granted more recently than three years prior to the issuance of a European green bond (eg tax allowance, exemption, or deduction, or tax credit);
- **Subsidies** that were granted more recently than three years prior to the issuance of the European green bond (eg subsidies on products, such as import subsidies, or on production);
- **Capital expenditures** (eg capital transfers and investment expenditures).

The **use of proceeds of European green bonds** have to relate to environmentally sustainable economic activities, which are defined as economic activities that **meet the taxonomy requirements**, or that otherwise will meet the taxonomy requirements within a period of time defined in a taxonomy alignment plan. This period should not exceed five years from bond issuance, or ten years at most if this would be justified by the specific features of the applicable economic activities. However, this does not release issuers from the obligation to always make sure that the proceeds have been allocated in full ahead of the maturity date of the European green bond.

“EU green bonds can also refinance assets that are not fully taxonomy aligned yet at the moment that the bond is issued”

Hence, European green bonds can also (re)finance assets that are not taxonomy compliant yet at the time of issuance. The main purpose here is to also offer support to issuers in transition. After all, European green

bonds can be used to finance longer-term projects that will make an economic activity aligned with the EU taxonomy regulation. The five to ten years' time to comply gives issuers in general certain flexibility in the timing of their European green bond issuance vis-à-vis the establishment of and proceed allocations towards a green asset portfolio that fully meets the criteria stipulated by the EU taxonomy regulation.

The idea is that the **taxonomy alignment plan** should describe the actions and expenditures necessary for the economic activity to actually meet the taxonomy requirements with the specified period of time. For proceed allocations via financial assets to capital or operating expenditures, the defined period of time will start from the moment that the financial asset was created. This implies for bank loans financing capital or operational expenditures related to the acquisition or upgrade of green buildings, that the loan origination date should count as the starting date under the potential taxonomy alignment plan.

Applying the technical screening criteria

“EU green bond proceeds can only be allocated to assets that meet the TSC and DNSH conditions applicable at issuance”

For bond proceed allocations towards **fixed assets, capital and operational expenditures, and equity**, the technical screening criteria and do no significant harm criteria applicable at the time the bond was issued have to be applied.

However, when the delegated acts setting these criteria are amended after the issuance of the bond, the issuer has to allocate the bond proceeds by applying the amended technical screening criteria and do no significant harm criteria within five years after their entry into application.

For bond proceed allocations towards **debt**, the technical screening criteria and do no significant harm criteria at the time the debt was created have to be applied. When no delegated acts setting these criteria are in force at that time, issuers can apply the first delegated acts that were adopted. This means that EU green bond proceeds can be allocated to aligned loans originated ahead of the application dates of the first climate delegated act of 4 June 2021 and the yet to be established environmental delegated act, as long as the criteria defined in these delegated acts are met. That said, once these delegated acts are amended following the creation of the debt, issuers have to allocate the bond proceeds to the debt conform the amended delegated acts within five years after they apply.

Appendix 2

Transparency and external review requirements

In order to ensure that investors have the necessary information to evaluate the environmental impact of European green bonds, and to compare these bonds, the proposed European green bond regulation requires issuers to offer transparency on how they intend to allocate bond proceeds to aligned assets (pre-issuance transparency requirements) and on how the proceeds have actually been allocated (post-issuance transparency requirements).

Pre-issuance requirements

- European green bond factsheet
- Pre-issuance review green bond factsheet

Prior to issuance, European green bond issuers have to complete a European **green bond factsheet**, which may relate to one or several bond issuances.

Fig 15 European Green Bond Factsheet

1	General information
	<p>Date of publication</p> <p>The legal name of the issuer and contact details</p> <p>The name of the bond assigned, incl. the ISIN if available</p> <p>The identity and contact details of the external reviewer</p>
2	Statement of adherence to the requirements of the EU green bonds regulation (confirming voluntary adherence to the requirements)
3	Environmental strategy and rationale
	<p>Information on how the bond aligns with the broader environmental strategy of the issuer</p> <p>The environmental objectives of the EU Taxonomy regulation pursued by the bond</p>
4	Intended allocation of bond proceeds
4.1	Estimated time until full allocation of proceeds
	<p>The period within which the proceeds are expected to be allocated</p> <p>The date by which the proceeds are expected to be fully allocated</p> <p>If the date is more than five years after issuance, a justification for the longer period</p>
4.2	Process for selecting green projects and estimated environmental impact
	<p>A description of the process by which the issuer will determine how projects align with the taxonomy requirements</p> <p>A description of the relevant technical screening criteria, and a specification of which taxonomy delegated acts are considered</p> <p>Where available: information on the methodology and assumptions to be used for the calculation of key impact metrics (TSC & DNSH), and for any additional impact metrics (justification if not available)</p> <p>Where available: information on any related standardisation or certification process in project selection</p> <p>Where available: an estimation of expected positive and adverse environmental impacts in aggregated form (justification if not available)</p>
4.3	Intended qualifying green projects
	<p><u>Information to be provided at project level (or if not possible aggregate level):</u></p> <ul style="list-style-type: none"> - Their environmental objectives (taxonomy regulation Article 9) - Their types, sectors and the respective NACE codes - Their countries - The respective amount to be allocated from bond proceeds, and the percentage of proceeds to be allocated respectively to projects financed after bond issuance and projects financed before bond issuance - Where the issuer is a sovereign, and bond proceeds are planned to be allocated to the tax relief referred to in Article 4(2)(c), an estimation of the expected volume of revenue loss associated with the tax relief - Where a bond co-finances intended qualifying projects, and indication of the proportion financed by the bond - Links to websites with relevant information (if available) - Links to public documents with more detailed information (if available)
4.4	Unallocated proceeds
	<p>Information on how the temporary use of unallocated proceeds will not affect the delivery of the environmental objectives</p>
5	Information on reporting
	<p>Link to the website where allocation reports and impact reports will be published</p> <p>Indication of whether allocation reports will include project-by-project information on amounts disbursed and the expected positive and negative environmental impacts</p>
6	Other relevant information

Source: European Commission, ING

The green bond factsheet should, among other things, confirm whether the issuer voluntarily adheres to the requirements from the European green bonds regulation. Besides, the factsheet should include information on which of the six environmental objectives identified by the EU taxonomy regulation are pursued by the bond. The description of the process for selecting green projects furthermore has to clarify how issuers will determine the alignment of projects with the taxonomy requirements, and which relevant technical screening criteria are taken into account.

“The pre-issuance review of the green bond factsheet should give comfort that a bond complies with the EuGB regulation”

European green bond issuers also have to make sure that the completed European green bond factsheet has been subject to a pre-issuance review with a positive opinion by an external reviewer. The **pre-issuance review of**

the green bond factsheet has to confirm that the green bond factsheet complies with the use of proceeds and taxonomy alignment requirements from the EU green bonds regulation. It also has to confirm that the factsheet has been completed in line with the requirements related thereto. In addition, the pre-issuance review itself has to meet the content requirements stipulated by the EU green bonds regulation for pre-issuance and post-issuance review.

Post issuance requirements

- Allocation report
- Post issuance review allocation report
- European green bond impact report

Issuers of European green bonds have to prepare every year and until the full allocation of proceeds of the European green bond, a **European green bond allocation report**. This European green bond allocation report may relate to one or several European green bond issues. The report should prove that, from the issue date until the end of the year the allocation report refers to, the proceeds of the European green bond have been allocated in accordance with the European green bond regulation. One of the pieces of information issuers for example have to provide relates to the delegated acts that were used to determine the taxonomy technical screening criteria and their application dates.

The reporting template is a bit different for financial undertakings that allocate the proceeds from several European green bonds to a portfolio of financial assets, which would typically be the reporting convention applicable to European green bonds issued by banks. The allocation reporting template should in that case for instance give a comparison of the value of outstanding European green bonds and the total amortised value of aligned financial assets the bond proceeds have been allocated to, with the latter being at least equal to or higher than the former. The yearly average of quarter-end values should be the reference for this comparison.

The **post-issuance allocation report** prepared after full allocation of the proceeds of the European green bond has to be reviewed by an external reviewer. This allocation report has to be provided to the external reviewer within 30 days following the end of year to which the allocation reports refer. The post-issuance review must be made public within 90 days following the receipt of the allocation report, and has to include the following:

- An assessment of whether the issuer has allocated the proceeds of the bond in compliance with the use of proceeds and taxonomy alignment requirements of the European green bond regulation based on the information provided to the external reviewer;
- An assessment of whether the issuer has complied with the intended use of proceeds set out in the green bond factsheet based on the information provided to the external reviewer;

- The content requirements stipulated by the EU green bonds regulation for pre-issuance and post-issuance review.

Fig 16 European Green Bond Annual Allocation Report

1 General information
Date of publication The legal name of the issuer and contact details The name of the bond assigned, incl. the ISIN if available The identity and contact details of the external reviewer, where the allocation report has been subject to post-issuance review
2 Statement of adherence to the requirements of the EU green bonds regulation (confirming proceed allocations in line with requirements)
3 Allocation of bond proceeds
A Issuers other than the financial undertakings referred to in B <u>Information to be provided at project level (or if not possible aggregate level):</u>
<ul style="list-style-type: none"> - Their environmental objectives (taxonomy regulation Article 9) - Their types, sectors and the respective NACE codes - The countries where the bond proceeds have been allocated - The respective amount allocated from bond proceeds, and the percentage of proceeds allocated respectively to projects financed after bond issuance and projects financed before bond issuance - Where the issuer is a sovereign, and bond proceeds are allocated to tax relief referred to in Article 4(2)(c), an estimation of the expected volume of revenue loss associated with the tax relief - Where a bond co-finances qualifying projects, and indication of the proportion financed by the bond - For assets that are concerned by a taxonomy alignment plan: the progress the implementation of the plan during the reporting period, and the estimated date of completion - Confirmation of compliance with the taxonomy regulation's minimum safeguards - An indication of which delegated acts were used to determine the taxonomy technical screening criteria and their application dates
B Issuers that are financial undertakings that allocate proceeds from several European green bonds to a portfolio of financial assets <u>Information to be provided:</u>
<ul style="list-style-type: none"> - An overview of all outstanding European green bonds, including their individual and combined value - An overview of the eligible financial assets (equity, debt per Article 5) on the issuer's balance sheet indicating: <ul style="list-style-type: none"> (a) Their amortization value; (b) The environmental objectives (taxonomy regulation Article 9) (c) The types, sectors and countries (d) Where a bond co-finances qualifying projects, an indication of the proportion financed by the bond (where available) (e) An indication of which delegated acts were used to determine the taxonomy technical screening criteria, at least at sector and country level, and where applicable, at individual asset level (f) Where relevant the value of each asset, or group of assets - A comparison of the value of outstanding European green bonds and the total amortised value of eligible financial assets (Article 5). The comparison shall show that the latter is either equal to or higher than the former. - For the purposes of the above comparison, the total value of European green bonds shall be based on the yearly average of quarter-end values of such bonds issued by that issuer, and the total amortised value of the final assets shall be based on the yearly average of quarter-end values of such assets on the issuer's balance sheet
4 Environmental impact of bond proceeds
5 Other relevant information

Source: European Commission, ING

For bond proceeds allocated to tax relief or subsidies, the post-issuance review only has to assess compliance with the use of proceeds and taxonomy alignment requirements of the terms and conditions under which the expenditures and transfers have been paid.

If following the publication of the allocation report on the website, the allocation of proceeds is corrected, the European green bond issuer has to amend the allocation report and obtain a post-issuance review of the amended allocation report. In the case of financial undertakings that allocate proceeds from several European green bonds to a portfolio of financial assets, every annual post-issuance allocation report has to be reviewed by an external reviewer. Importantly, issuers should in that case demonstrate that the amount of environmentally sustainable financial assets in the green asset portfolio do at least match the amount of European green bonds still outstanding.

Issuers of European green bonds have to prepare a European **green bond impact report** after the full allocation of proceeds and at least once during the lifetime of the bond. The green bond impact report gives insight in the positive and adverse environmental impacts of the use of the bond proceeds.

Fig 17 European Green Bond Impact Report

1 General information
Date of publication The legal name of the issuer and contact details The name of the bond assigned, incl. the ISIN if available The identity and contact details of the external reviewer, where the impact report was assessed by an external reviewer
2 Environmental strategy and rationale
Information on how the bond aligns with the broader environmental strategy of the issuer as set out in the factsheet Where applicable an explanation of any changes to the broader environmental strategy of the issuer since publication of the factsheet The environmental objectives pursued by the bond (taxonomy regulation Article 9)
3 Allocation of bond proceeds
<u>Information to be provided at project level (or if not possible aggregate level):</u> - Their environmental objectives (taxonomy regulation Article 9) - Their types and sectors of projects, and countries where bond proceeds have been allocated - The respective amount allocated from bond proceeds, and the percentage of proceeds allocated respectively to projects financed after bond issuance and projects financed before bond issuance - Where a bond co-finances qualifying projects, and indication of the proportion financed by the bond - Where applicable an indication of those assets that were concerned by a taxonomy alignment plan, the duration of each plan, and the date of completion of each asset - Confirmation of compliance with the taxonomy regulation's minimum safeguards - An indication of which delegated acts were used to determine the taxonomy technical screening criteria and their application dates
4 Environmental impact of bond proceeds
An estimation of the positive and adverse environmental impacts in aggregated form Information on the methodology and assumptions used to evaluate the impacts of projects, where the European green bond factsheet of the bond did not include this information Information about the projects' positive and negative environmental impacts, and where applicable, related metrics (justification if the information is not available at a project level)
5 Other relevant information

Source: European Commission, ING

Furthermore if a **prospectus** is published, this prospectus should clearly state that the European green bond is issued in accordance with the European green bonds regulation. The prospectus should also mention the information included in the European green bond factsheet.

Issuers have to publish the following documents on their website:

- The completed European green bond factsheet;
- The pre-issuance review related to the European green bond factsheet;
- The European green bond allocation report, every year until the full allocation of the proceeds of the European green bond, no later than three months following the end of the year it refers to;
- The post-issuance reviews of the European green bond allocation report;
- The European green bond impact report.

National competent authorities should be notified about the publication of these documents without undue delay, while the ESMA has to be notified by the issuer about their publication within 30 days.

Fig 18 Contents of pre-issuance and post-issuance reviews

1 General information
<p>Date of publication</p> <p>The legal name of the issuer</p> <p>The name of the bond assigned, incl. the ISIN if available</p> <p>The identity and contact details of the external reviewer, including website address</p> <p>The name and job title of the lead analyst in a given assessment activity</p> <p>The name and position of the person primarily responsible for approving the pre-issuance review or post-issuance review</p> <p>The date on which the pre-issuance or post-issuance review was first released for distribution, and when it was last updated</p>
2 Introductory statements
<p>Pre-issuance reviews</p> <p>A statement that the external reviewer has assessed the completed European green bond factsheet</p> <p>A statement that the pre-issuance review represents an independent opinion of the external reviewer</p> <p>A statement that the independent opinion of the external reviewer is to be relied upon only to a limited degree</p> <p>Post-issuance reviews</p> <p>A statement that the external reviewer has assessed the completed allocation report</p> <p>A statement that the post-issuance review represents an independent opinion of the external reviewer</p> <p>A statement that the independent opinion of the external reviewer is to be relied upon only to a limited degree</p>
3 Statements on the compliance with the European green bond regulation
<p>(a) Where the opinion expressed by the independent reviewer is positive, a statement that the bond meets the requirements of the European green bonds regulation and that the designation 'European green bond' can be applied to that bond.</p> <p>(b) Where the opinion expressed by the independent reviewer is negative, a statement that the bond does not meet the requirements of the European green bond regulation and that the designation 'European green bond' cannot be applied to that bond.</p> <p>(c) Where the opinion expressed by the independent reviewer indicates that the issuer does not intend to comply with the bond related requirements from the European green bonds regulation, or will not be able to do so, a statement that the designation 'European green bond' can only be used from the bond in question if the necessary steps have been taken to ensure that the bond complies with the requirements from the European green bonds regulation.</p>
4 Sources, assessment methodologies and key assumptions
<p>Information about the sources relied upon to prepare the pre-issuance review or the post-issuance review, including links to measurement data and the methodology applied (when available).</p> <p>An explanation of the assessment methodologies and key assumptions.</p> <p>An explanation of the assumptions and taxonomy requirements used, of the limits and uncertainties surrounding the methodologies used and a clear statement that the external reviewer considers the quality of information provided by the issuer or related third party as sufficient to perform the pre-issuance review or the post-issuance review and the extent to which the external reviewer has attempted to verify the information provided.</p>
5 Assessment and opinion
<p>Pre-issuance reviews</p> <p>A detailed assessment of whether the completed green bond factsheet complies with the bond related requirements (Article 4-7). The opinion of the external reviewer on the above assessment.</p> <p>Post-issuance reviews</p> <p>A detailed assessment of whether the issuer has allocated the proceeds of the bond in compliance with the bond related requirements (Article 4 to 7 of the European green bonds regulation), based on the information provided to the external reviewer.</p> <p>An assessment of whether the issuer has complied with the intended use of proceeds set out in the green bond factsheet, based on the information provided to the external reviewer.</p> <p>The opinion of the external reviewer on the two assessments above.</p>
6 Any other information

Source: European Commission, ING

Appendix 3

Comparing the ICMA’s GBP with the taxonomy’s TSC

The European green bond proposals build on existing market best practices. As such, they share several similarities with the ICMA’s green bond principals (GBS), which are the most commonly used voluntary guidelines for green bond issuances. The ICMA distinguishes **four components of alignment** with the green bond principles:

- Use of proceeds;
- Process of project evaluation and selection;
- Management of proceeds;
- Reporting.

In addition, the ICMA makes **two recommendations for heightened transparency**:

- Green bond frameworks;
- External reviews.

Fig 19 Environmental objectives identified by the GBP and EU taxonomy regulation

	GBP five high level environmental objectives		Taxonomy six environmental objectives
1	Climate change mitigation	1	Climate change mitigation
2	Climate change adaptation	2	Climate change adaptation
3	Natural resource conservation	3	Sustainable use and protection of water and marine resources
		4	Transition to a circular economy, waste prevention and recycling
4	Pollution prevention and control	5	Pollution prevention and control
5	Biodiversity conservation	6	Protection and restoration of biodiversity and ecosystems

Source: ICMA, European Commission, ING

The green bond principles recognize several categories of eligible green projects that contribute to a subset high level environmental objectives. The latter are largely comparable to the six environmental objectives distinguished by the European taxonomy regulation (see Figure 19), with climate change mitigation being the environmental objective most often contributed to by green bank bonds.

“The EuGBS goes further than the GBP by requiring full taxonomy alignment”

The ten categories of green bond projects identified by the GBP are commonly used by issuers of green bonds to identify their bond use of proceed categories. The European green

bond proposals do not make such an explicit distinction for project categories, but do go much further than the GBP where it comes to the minimum requirements that the allocated EU green bond proceeds have to meet. After all, EU green bonds should solely finance assets related to economic activities that are full taxonomy compliant.

In its Green Project Mapping report of June 2021 the ICMA provides a comparison of the GBP’s green project classifications versus the different economic activities identified for the purpose of the EU taxonomy (Figure 20).⁹ These match the nine categories of economic activities covered by the technical screening criteria developed under the climate delegated act for the purpose of the climate change mitigation objective.

⁹ [Green-Project-Mapping-June-2021-100621.pdf](#)

Fig 20 Use of proceeds: GBP green project categories and their mapping against the EU taxonomy

Eligible green projects categories GBP		The related TSC and DNSH from the climate delegated act	
1	Renewable energy	4	Energy
2	Energy efficiency	8, 9	Various activities, including information and communication, and professional, scientific and technical activities
3	Pollution prevention and control	5	Water supply, sewerage, waste management and remediation
4	Environmentally sustainable management of living natural resources and land use	1	Forestry
5	Terrestrial and aquatic biodiversity	2	Environmental protection and restoration activities
6	Clean transportation	6	Transport
7	Sustainable water and wastewater management	5	Water supply, sewerage, waste management and remediation
8	Climate change adaptation projects	<i>Not an activity but one of the EU environmental objectives</i>	
9	Eco-efficient and/or circular economy adapted products, production technologies and processes	3	Manufacturing
10	Green buildings	7 9.3	Construction and real estate activities, and professional services related to energy performance of buildings

Source: ICMA, European Commission, ING

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