

Sustainable covered bonds

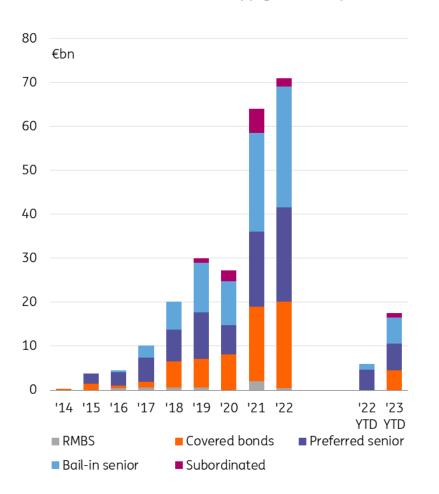
In the cross fire of ESG regulation

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Financing sustainable growth

Regulatory developments will continue to shape green bond market supply prospects



Sustainable EUR bank bond supply doubled per 2021

80 €bn 70 60 50 40 30 20 10 0 '14 '15 '16 '17 '18 '19 '20 '21 '22 '22 '23 YTD YTD ■ Green ■ Social ■ Sustainable ■ Sustainability linked

The green use of proceeds remains dominant to supply



EU Taxonomy

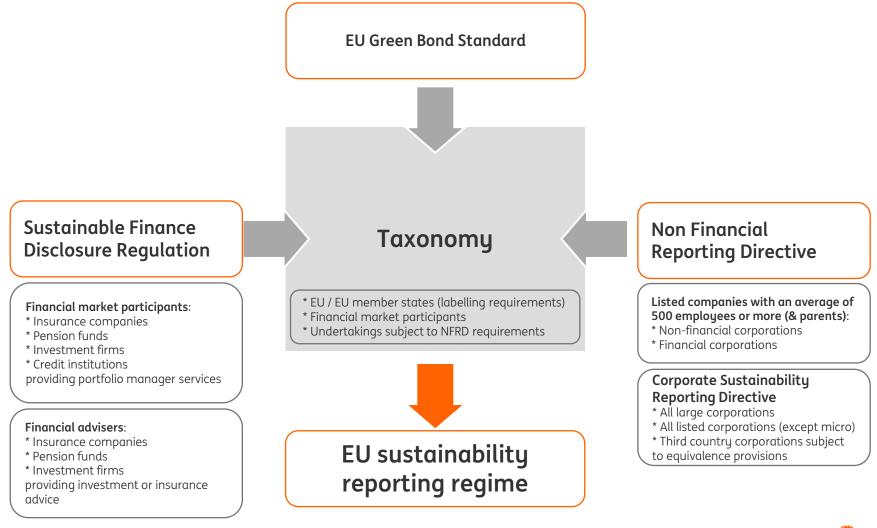
Verifying taxonomy compliance is a huge task

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Communicating vessels to sustainability reporting

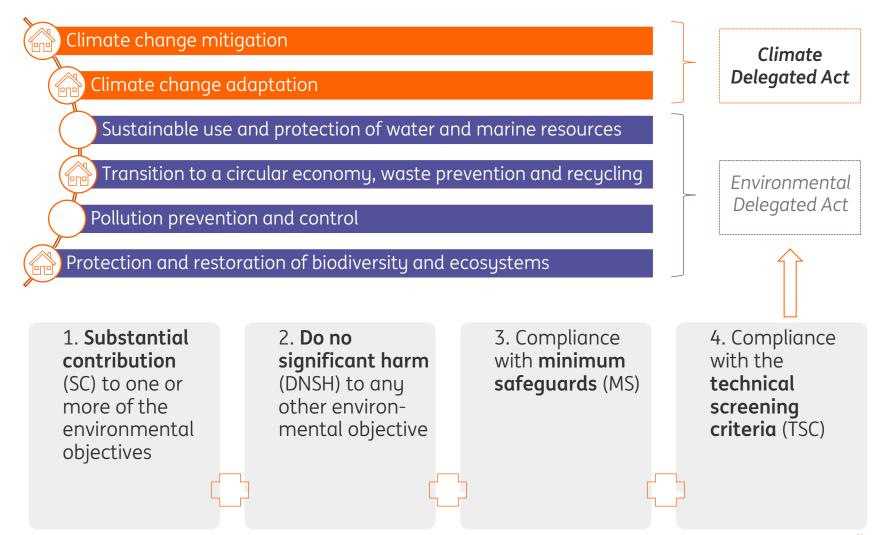
EU requirements will impact financial and non-financial corporations in and outside the EU





The EU taxonomy regulation

The identified six environmental objectives & eligibility criteria





The technical screening criteria for buildings

The activities that in and of themselves contribute substantially and transition activities



Low carbon activities

Construction new buildings per 2021: The **primary energy demand** (PED) defining the energy performance of the building resulting from the new construction is **at least 10% lower** than the threshold set for the **nearly zero-energy building (NZEB) requirements**. Energy performance is certified using an as built energy performance certificate (EPC).



Buildings acquired before 31 December 2020: Building has **at least Energy Performance Certificate (EPC) class A**. As an **alternative**, the building is **within the top 15%** of the national or regional building stock expressed as operational PED and demonstrated by adequate evidence, which at least compares its performance vs the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings.



Transitional activity

The **building renovation** complies with the applicable requirements for major renovations stipulated by the EPBD. The energy performance of the building or the renovated part that is upgraded must meet EPBD's cost-optimal minimum energy requirements. Alternatively, the renovation leads to **a reduction of PED of at least 30%,** based upon a building survey or energy audit

Climate change mitigation

Enabling activities

Installation, maintenance and repair:

- * Energy-efficient equipment
- * Charging station electric vehicles

* Instruments for regulation of energy performance of buildings

* Renewable energy technologies



The "do no significant harm" assessment

Climate change mitigation – construction of new buildings

(2) Adaptation

Identification of physical climate risks (eg wildfires, flooding, etc.) material to the activity by
performing a robust climate risk and vulnerability assessment (CRVA), proportionate to the scale of
the activity and its expected lifespan. Implement adaptation solutions.

(3) Water

• Confirmation installed water appliances in accordance with applicable technical specifications. Wash hand basin taps and kitchen taps max water flow of 6 litres/min, showers max 8 litres/min, etc.

(4) Circular economy

- \geq 70% of non-hazardous construction and demolition waste re-used/recycled
- Operators limit waste generation in processes related to demolition and construction
- Building designs and construction techniques support circularity

(5) Pollution

• No manufacture, placing on the market, or use of: persistent organic polluting substances; mercury and mercury compounds; substances that deplete the ozone layer, etc.

(6) Ecosystems

- Completion Environmental Impact Assessment (EIA) or screening; mitigation measures
- Appropriate assessment for sites near biodiversity-sensitive areas (eg UNESCO world heritage sites)



Minimum safeguards

"The procedures implemented by an undertaking that is carrying out an economic activity 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** on Fundamental Principles and Rights at Work and the International Bill of Human Rights"

The International Labour Organisation's (ILO) eight fundamental conventions



Freedom of association and right to organise



Right to organise and of collective bargaining



Right not to be subjected to forced or compulsory labour



Abolition of forced and compulsory labour



Minimum age: right not to be subjected to child labour



Elimination of the worst forms of child labour



Equal remuneration for men and women workers



Non-discrimination with respect to employment and occupation





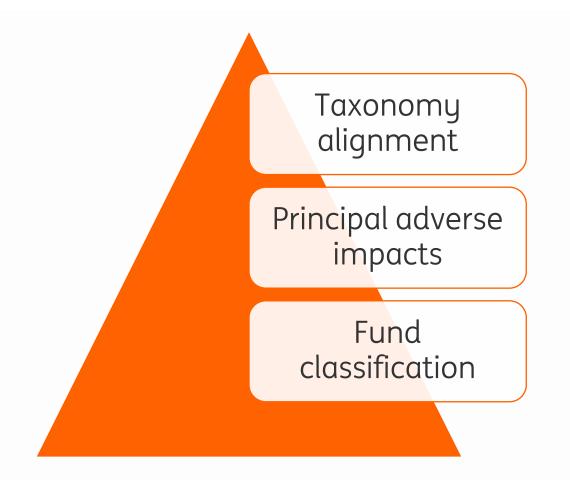
SFDR disclosures

A three-layer transparency path towards darker green bond markets

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The SFDR provides for three disclosure layers





SFDR disclosures for financial market participants

Entity level	Product level 1. Non-green, 2. Light green and 3. Dark green 3. Dark green 4. Integration sustainability risks into investments decisions & impacts sustainability risks on product returns Additional info	
1. Sustainable risk policies (Article 3) Integration sustainability risks investments decision proces		
Statement due diligence polices with respect to impacts Reasons why not, and info whether and when intended to be considered 2. Adverse sustainability impacts (Article 4) Adverse impact on sustainability factors considered?	Light green (Article 8): Information on how environmental or social characteristics are metDark green (Article 9): 	
	b. Explanation on consideration of principal adverse impac on sustainability factors (or reason why not considered) (Article 7)	
3. Renumeration policies (Article 5) How are these consistent with integration sustainability risks?	2. Periodic reports (eg annual reports) (Article 11) Light green (Article 8): Extent to which environmental or social characteristics are met Dark green (Article 9): The sustainability related impact of the product via sustainability indicators. Index used: comparison with the impace of the index and the broad market inder	



Three types of products

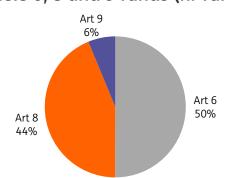
Fund classifications in the early days of the SFDR

Article 6 Non-green

• Do not promote environmental or social characteristics.

• Do not invest in economic activities that contribute to an environmental/social objective.

• Only pre-contractual disclosures required.



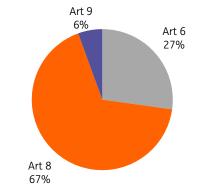
Article 6, 8 and 9 funds (nr funds)

Article 8 Light green

• Financial products that promote environmental or social characteristics.

- Additional information required on how the environmental and social characteristics are met.
- Where applicable, whether and how the index designated as reference benchmark is consistent with those characteristics.





Article 9 Dark green

- Financial products that **invest in an economic activity that contributes to an environmental or social objective**, provided that these investments do no significant harm to any of these objectives and that the investee companies do follow good governance practices.
- Explain how the environmental/social objectives are accomplished (active or passive investment strategy).
- If reducing carbon emissions is the objective: information on objective of low carbon emissions in light of Paris agreement.

Source: 18 asset managers, info available by end of April 2021





Principal adverse impacts

	Environmental	Social	Total
Universal mandatory	12	6	18
Investee companies	9	5	14
Sovereigns & supras	1	1	2
Real estate assets	2		2
Opt-in additional	22	24	46
Investee companies	16	17	33
Sovereigns & supras	1	7	8
Real estate assets	5		5



Financial market participants have to describe the adverse impacts for all mandatory indicators, but only for at least one of the additional climate related indicators and at least one of the additional social indicators

Source: EC Delegated Regulation on the various RTS required under the SFDR of 6 April 2022



Principal adverse impacts real estate assets

Only environmental impacts are applicable to investments in real estate assets

Mandatory (environmental)

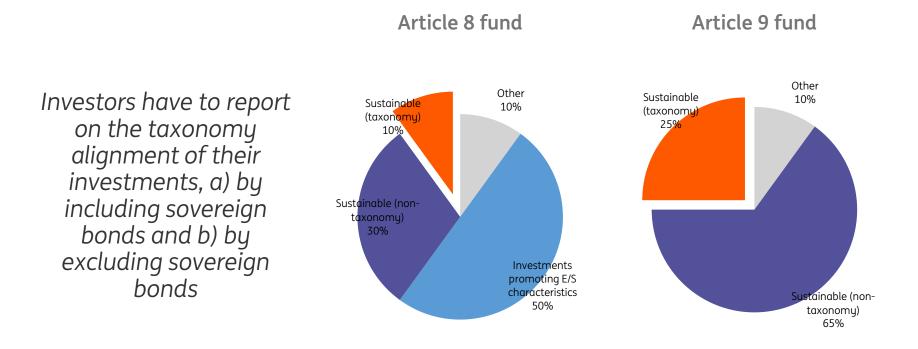
- Exposure to fossil fuels through real estate assets: share of investments in real estate assets involved in the extraction, storage, transport, manufacture of fossil fuels
- 2. Exposure to energy-inefficient real estate assets: share of real estate asset built before 31/12/2020 with EPC label of C or below plus real estate assets built after 31/12/2020 with PED below NZEB, versus real estate assets required to abide by EPC and NZEB rules

Additional (environmental)

- 1. GHG Emissions (Scope 1, 2, 3 and total)
- 2. Energy consumption intensity
- 3. Waste production in operations
- 4. Raw materials consumption for new construction and major renovations
- 5. Land artificialisation



Example of reporting on taxonomy compliance

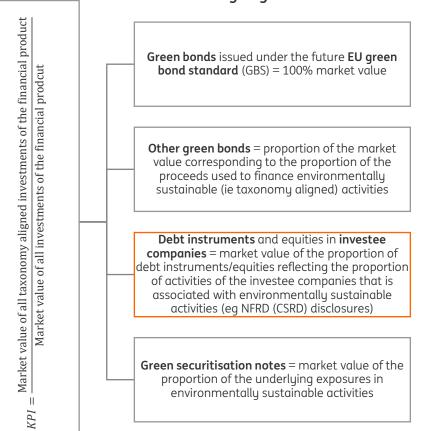


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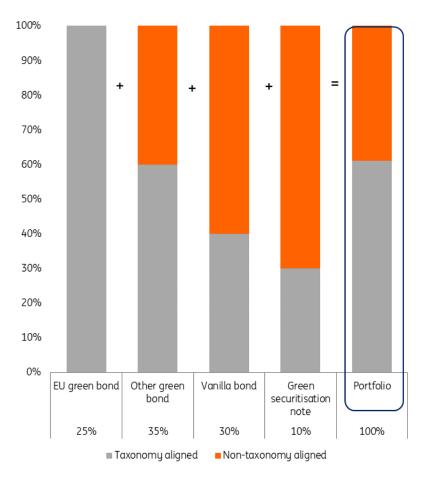
Taxonomy KPI under the SFDR

A simple illustration why higher taxonomy alignment by banks and their green bonds matters



Taxonomy aligned investments

Indicative investment portfolio



Based on European Commission, regulatory technical standards, adopted on 6 April 2022



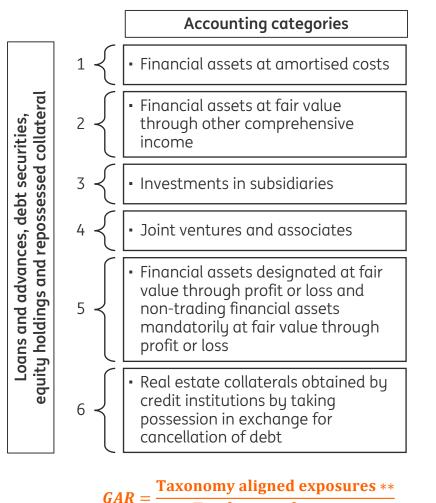


Green asset ratios

EU Taxonomy Article 8 disclosures for NFRD(CSRD) undertakings, per Disclosures DA

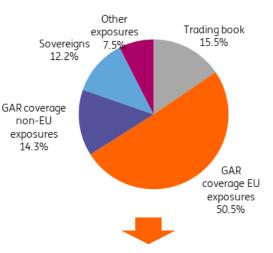


Green asset ratios for on balance sheet exposures

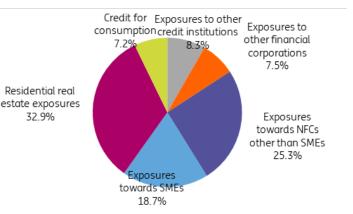


Total covered assets *

Coverage of KPIs (share total financial assets)



GAR on EU exposures (share total financial assets)



* Excludes: exposures to central governments and central banks

** Excludes: 1) exposures to central governments and central banks, 2) financial assets held for trading, 3) on-demand interbank loans, 4) exposures to non-NFRD undertakings

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Source: EBA, European Commission

Green asset ratio's for credit institutions

1. Exposures to non-financial corporations

- GAR loans and advances (GAR L&A)
- GAR debt securities (GAR DS)
- GAR equity holdings (GAR EH) •

2. Exposures to financial undertakings

- Exposures other credit institutions •
- Exposures to other investment firms •
- Exposures to asset managers •
- Exposures to insurance and reinsurance companies •

3. Retail exposures

- Residential real estate lending
- Credit for consumption car loans ٠

4. Undertakings not subject to NFRD disclosures

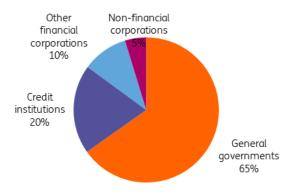
- Exposures non-financial undertakings (non-NFRD) Loans & advances collateralized by immovable commercial property and/or building renovation loans
 - Debt securities and other loans and advances • and equity instruments contributing to an environmental objective
- Exposures to financial undertakings (non-NFRD) ٠

5. Public housing

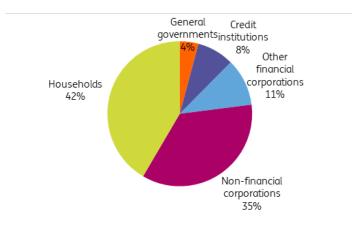
6. Repossessed collateral

Source: EBA, European Commission

Distribution of FU bank debt securities



Distribution of EU bank loans & advances

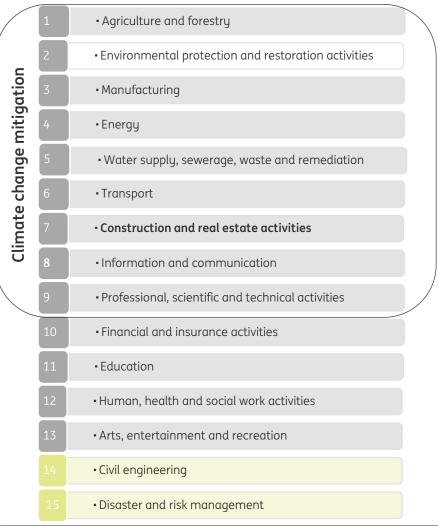




The technical screening criteria identified sectors

Activities identified as contributing substantially to the first two environmental objectives

Climate change adaptation



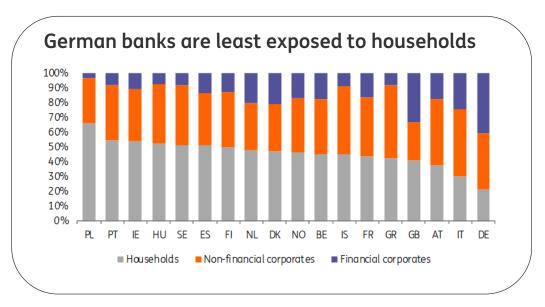
🔿 Not a NACE economic activity

NACE economic activities left out of scope

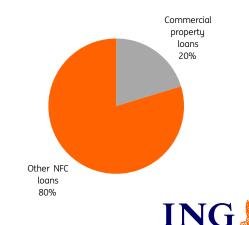
- 1. Mining and quarrying
- 2. Wholesale and retail trade
- 3. Accommodation and food service activities
- 4. Administrative and service activities
- 5. Public administration and defense, compulsory social security
- 6. Other services



Loans to households are quite crucial to the GAR





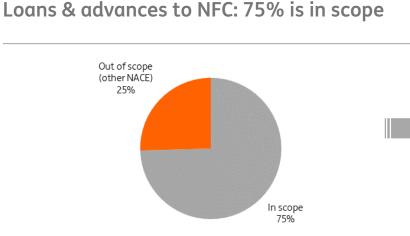


We estimate that the criteria for real estate and construction will affect the GAR calculations for 45%:

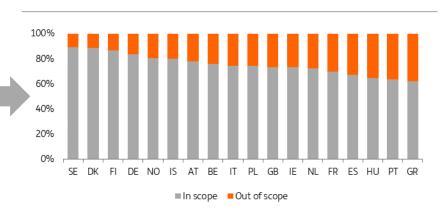
- Household residential real estate assets;
- SME commercial real estate assets;
- Corporate sector exposures to construction and real estate activities;
- Loans and advances financing public housing;
- Repossessed real estate collateral.

Source: EBA statistics

75% of sector exposures are taxonomy in scope



Nordic banks seem best covered by sectors



Nordic & BNLX banks most taxonomy eligible

Exposures non-NFRD companies differ highly

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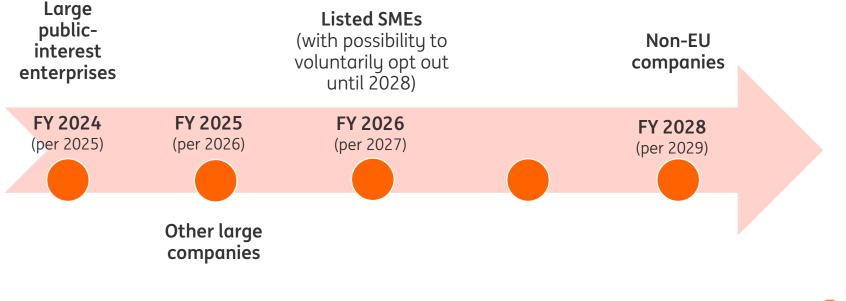
Source: EBA statistics and issuer information

Corporate Sustainability Reporting Directive (CSRD)

More than reporting on taxonomy compliance alone

On 5 January 2023, the **Corporate Sustainability Reporting Directive (CSRD)** of 14 December 2022 entered into force. The Directive amends the Non-Financial Reporting Directive (NFRD) (through Directive 2013/34/EU), the Transparency Directive (Directive 2004/109/EC), the Statutory Audit Directive (Directive 2006/43/EC) and the Audit Regulation (Regulation 537/2014) with regards to corporate sustainability reporting, strengthening the rules on the **social** and **environmental information** companies have to report.

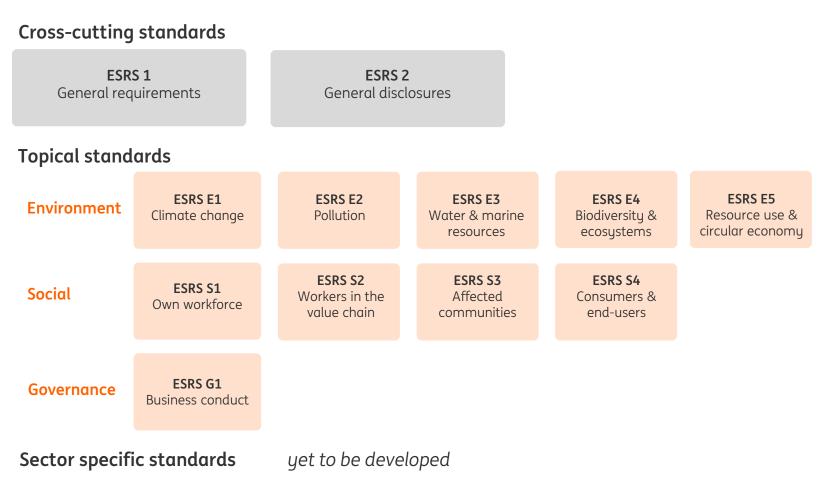
One of the key changes introduced by the CSRD is that it expands the NFRD reporting requirements to all large companies and listed SMEs, with the exception of micro-enterprises. CSRD companies will have to report according to the **European Sustainability Reporting Standards (ESRS)**, for which a draft version has been developed by European Financial Reporting Advisory Group (EFRAG) in November 2022. The European Commission is expected to adopt the first set of standards by mid-2023.





European Sustainability Reporting Standards (ESRS)

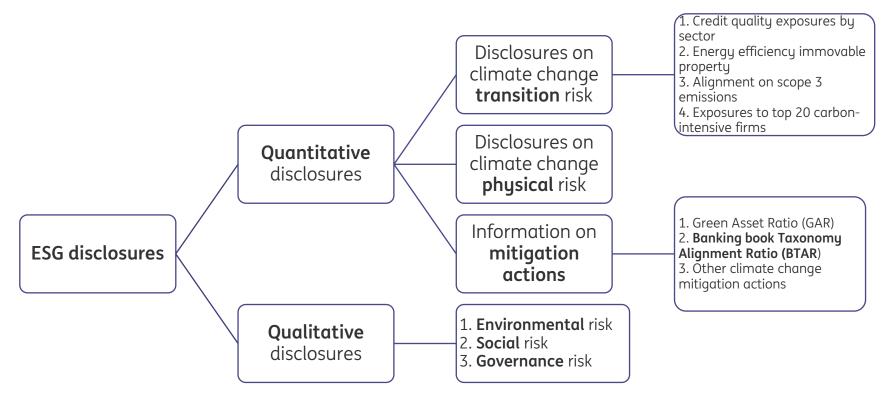
EFRAG published the first set of 12 ESRS in November 2022





CRR disclosures on climate change and ESG risks

EBA final draft implementing technical standards (ITS) on CRR Article 449a disclosures



Who: Large institutions with securities traded on a regulated market in any of the EU member states **When:** From 28 June 2022: first disclosures early 2023 for FY2022, and semi-annually thereafter

Unlike the GAR (January 2024), the **BTAR** (June 2024) **includes exposures to non-financial corporations not subject to NFRD disclosure requirements (eg SMEs and other non-NRFD companies)**. Banks have flexibility to disclose on a best efforts basis. They can collect information on bilateral basis through lending process, use estimates or use EPC labels/top 15% metric for commercial real estate.

The GAR is anticipated to remain leading to performance.

Based on EBA final draft implementing technical standards on prudential disclosures on ESG risks in accordance with CRR Article 449a, January 2022



Green bank bonds How the EU green bond standard will shape future issuance

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European Green Bond regulation

Three 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 risks 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

The main points



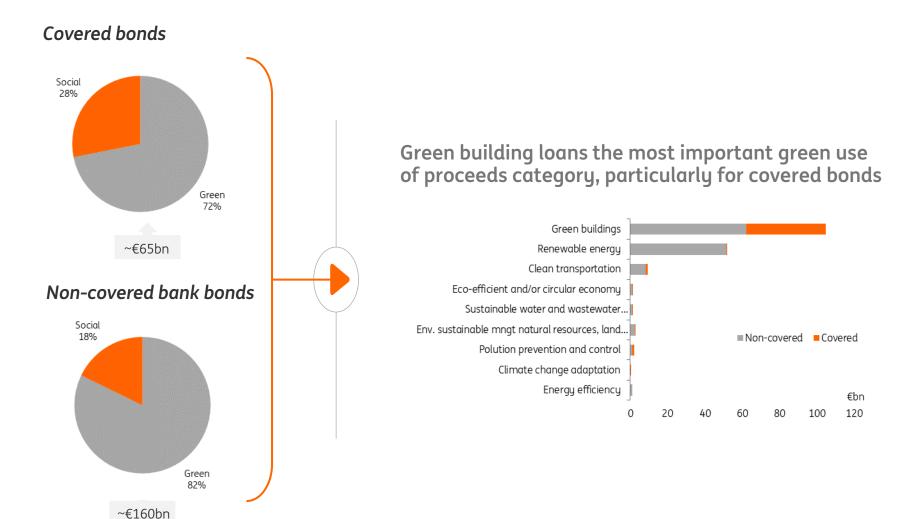
- Issuers willing to use the EuGBS
- designation need to meet:
 - a) the bond related requirements, and
 - b) the transparency and external review requirements

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EuGBS can be used by all green bond issuers, including private and public entities, and financial and non-financial undertakings within our outside the EU



Green bank bonds (€) per use of proceeds type





EuGBS raises the bar versus ICMA requirements

Eligible green projects GBP

1. Renewable energy

2. Energy efficiency

3. Pollution prevention and control

4. Living natural resources and land use

5. Terrestrial and aquatic biodiversity

6. Clean transportation

7. Sustainable water and wastewater managemnt

8. Climate change adaptation projects

9. Eco-efficient and/or

circular economy

10. Green buildings

Related TSC and DNSH

4 Energy 8, 9 Various activities, incl info & communication 5 Water supply, sewerage, waste mngt 1 Forestru 2 Environmental protection & restoration 6 Transport 5 Water supply, sewerage, waste mngt EU environmental objective 3 Manufacturing 7 Construction and real estate activities, & 9, 3

The key use of proceeds criteria

The **EU Green Bond Standard** will raise the bar versus the ICMA's Green Bond Principles where it comes to the use of proceeds. The bonds can solely be used to finance assets related to **economic activities that are taxonomy compliant**. Meeting the technical screening criteria for substantial contribution and doing no significant harm is therefore crucial.

The use of proceeds are allocated to economic activities that meet the taxonomy requirements or will meet the taxonomy requirements within a defined period of time as set out in a **taxonomy alignment (CapEx) plan.** This period shall not exceed five years from bond issuance, unless a longer of up to ten years period is justified. The-Parliament proposes that CapEx plans relating to transitional activities (such as building renovations) should meet the taxonomy requirements in two years.

The council proposed a **"flexibility pocket"**, where maximum 20% of the proceeds of the European green bonds could be allocated to economic activities that comply with the taxonomy requirements, with the exception of the technical screening criteria, for instance if no technical screening criteria were in force at the issuance date (non-taxonomy aligned activities).



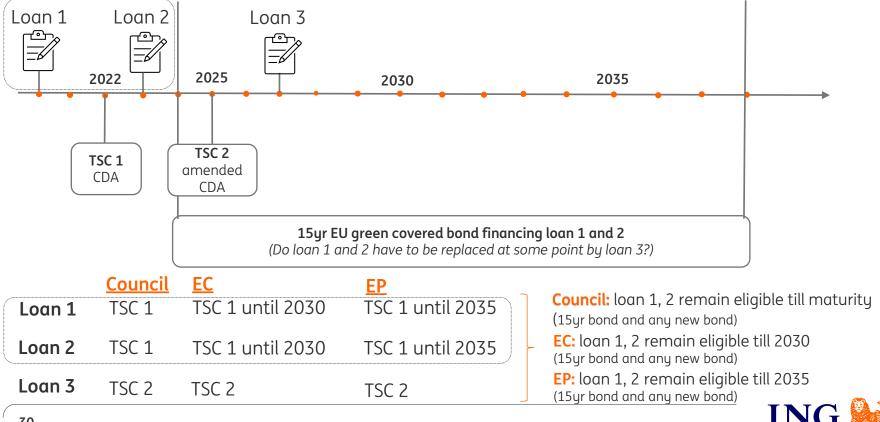
Source: ICMA, European Commission

Different wordings on application revised TSC

EC: Allocation proceeds -> apply TSC applicable at the time debt was created. When TSC are amended after creation of debt, apply new TSC within five years time.

Council: Allocation proceeds -> apply TSC applicable at the time debt was created.

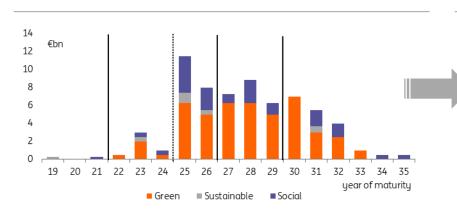
EP: Allocation proceeds -> apply TSC applicable at the time financial claim was created. When TSC are amended after creation of financial claim, apply new TSC within ten years time (instead of 5yr, and for financial claims without making explicit that previously allocated proceeds do not have to be reallocated).



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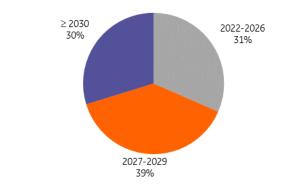
Will the EuGBS trigger a shift to shorter maturities?

Under the original EC proposal banks have 5yr to apply the new criteria after a revision of the TSC



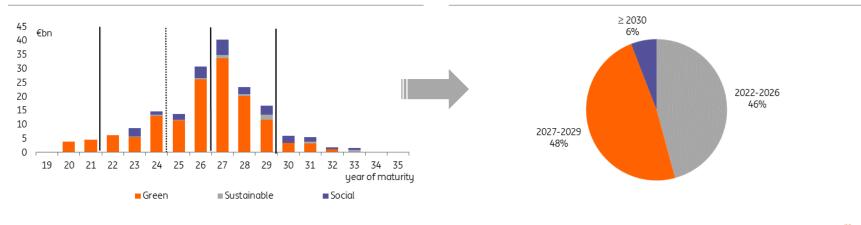
Redemptions (EUR sustainable covered)

Maturities per TSC relevant bucket (EUR green)



Redemptions (EUR sustainable non-covered)

Maturities per TSC relevant bucket (EUR green)





Transparency and external review requirements

A registration and supervision framework for external reviewers

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

European Parliament requires additional disclosures

- 1. Before issuing an EuGB or SLB, issuers subject to create transition plans per NFRD(CSRD), should have received a **positive opinion** by an auditor on the alignment of the transaction plan with the climate neutrality objective by 2050
- 2. Issuers of bonds marketed in the EU as environmentally sustainable and SLBs to publish **due diligence statement** with respect to principal adverse impacts of investment decisions.
- 3. Issuers of bonds marketed as environmentally sustainable that do **not** the **EuGBS** designation should still **disclose** eg the environmental objectives that are pursued, intended use of proceeds, taxonomy alignment of use of proceeds, allocation of proceeds





Developments on green securitisations What they could mean for covered bonds

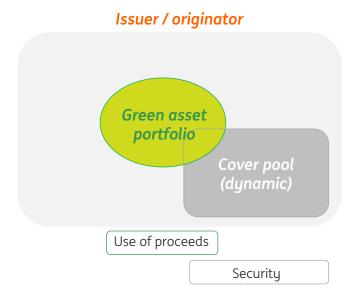
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Developments on sustainable securitisations

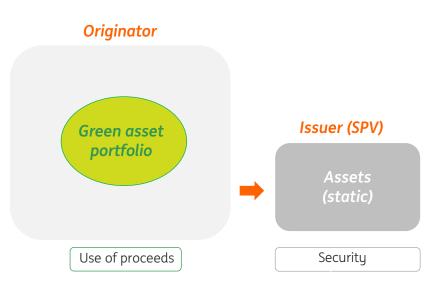
EU GBS: Use of proceeds approach, no collateral-based approach in the transition phase

Green covered bonds



Certain proposals for (green) securitisation notes may also have future disclosure implications for (green) covered bonds

Based on EBA Report - Developing a framework for sustainable securitization, March 2022



Green securitization notes (true sale)



Use of proceeds as well as the disclosures and sanctions should apply at the originator level and not at the level of the SPPE. This should be of relevance to all types of bonds issued through an SPV, including **covered bonds**.

Additional EU GBS disclosure requirements for green securitisations (disclosure GAR and BTAR of originator and securitised exposures in EuGB factsheet for all EuGB asset backed securities and not for securitisations alone)



Disclosures on Principal Adverse Impacts (PAI)

Voluntary PAI disclosures for all securitisations, to become mandatory medium term

Mandatory indicator	s (all)	Residential	Commercial
Energy efficiency	Exposure to fossil fuels through real estate assets		\checkmark
	Exposure to energy-inefficient real estate assets	\checkmark	\checkmark
Non-green exposures (100%-GAR)	Proportion of loans to households secured by residentic immovable property that is not contributing to the climate change mitigation objective as per 7.2-7.7 CDA	\checkmark	
Additional environmental indicators (at least one)		Residential	Commercial
GHG emissions	Scope 1, 2, 3 and total GHG emissions real estate	\checkmark	\checkmark
Energy consumption	Energy consumption real estate assets in GWh/m2	\checkmark	\checkmark
Waste	Real estate assets without waste sorting/recycling	\checkmark	\checkmark
Resource consumption	Share raw materials/total building materials used	\checkmark	\checkmark
Biodiversity	Share non-vegetated surface area/total surface area	\checkmark	\checkmark

Securitisations are **no "Financial Product" under the SFDR**. With the adoption of the Capital Markets Recovery Package (CMRP) it was decided that originators of **simple, transparent and standardised** (**STS**) securitisations should have the option to voluntarily disclose information on the consideration of adverse impacts on sustainability factors.

The EBA concluded in its report on a framework for sustainable securitization that the **voluntary Principal Adverse Impact (PAI)** disclosures should apply to **all securitisations**, not only STS securitisations, and should become **mandatory** in the **medium term**.

No additional mandatory disclosures yet, pending the finalization of the disclosure regulations for EU taxonomy aligned products and uncertainty of missing data points for securitization once these regulations are implemented.

Based on ESAs Joint Consultation Paper on STS securitizations-related sustainability disclosures (May 2022) and EBA Report – Developing a framework for sustainable securitization (March 2022)

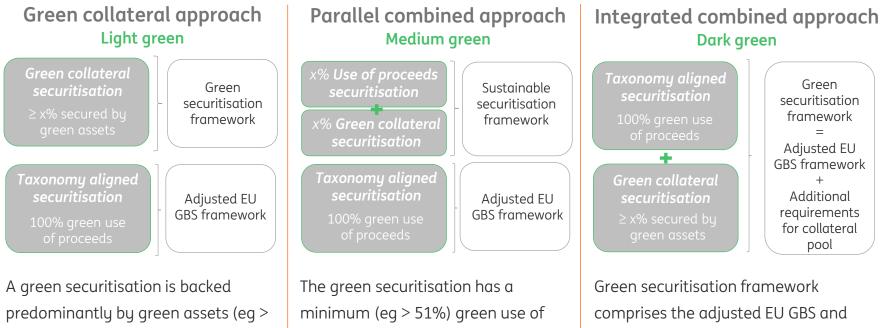


Development of a green securitisation framework

A dedicated framework for green securitisations complementing the EU GBS

The EBA is of the opinion that a holistic view must be gained on a green framework for all asset backed securities, including green covered bonds, before establishing a specific framework for green securitization alone.

As the current priority is on financing new green assets, rather than refinancing existing green assets, the EBA reckons a parallel framework (fully or partially collateral-based), is not consistent with this priority.



predominantly by green assets (eg > 2/3rd), while securitisations that do not have sufficient green assets may instead meet the adjusted EU GBS

The green securitisation has a minimum (eg > 51%) green use of proceeds and a minimum share of green assets (eg > 50%) in the underlying portfolio

Green securitisation framework comprises the adjusted EU GBS and additional requirements on the collateral pool



Based on EBA Report - Developing a framework for sustainable securitization, March 2022

ICMA's Green & Social Bond Principles

A comparison with the ICMA's definitions for secured green/social/sustainability bonds

Secured Green/Social Collateral Bond

"Net proceeds will be exclusively applied to (re)finance green and/or social projects securing the specific bond only" Secured Green/Social Standard Bond

"Green and/or social projects of the issuer, originator or sponsor, where such green and/or social projects may or may not be securing the specific bond in whole or in part"



A Secured Green/Social Standard Bond may be a specific class or tranche of a larger transaction

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Based on Appendix 1 (June 2022) of the ICMA's voluntary guidelines



Energy Performance of Buildings Directive

An opportunity or threat?

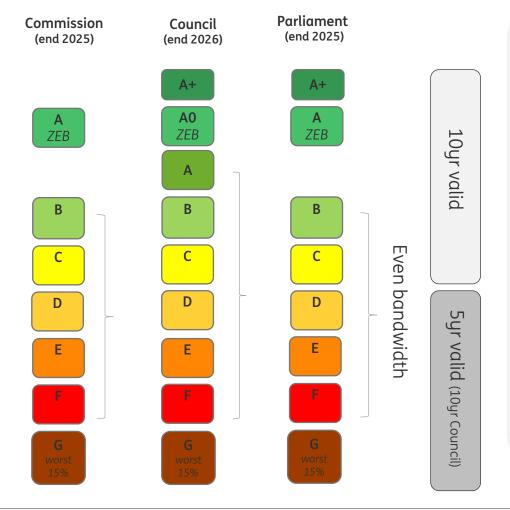
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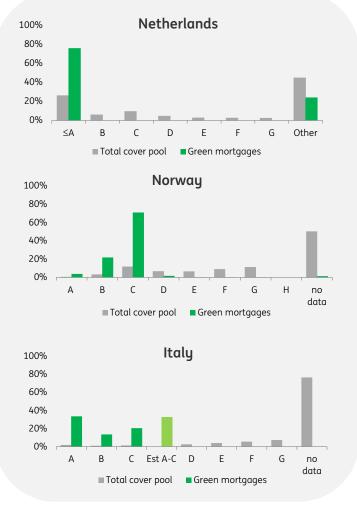


EPBD – harmonising energy performance classes

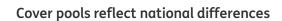
* Harmonisation of EPC label scales supports consistency and comparability

* Creation of national databases will improve the availability of EPC labels





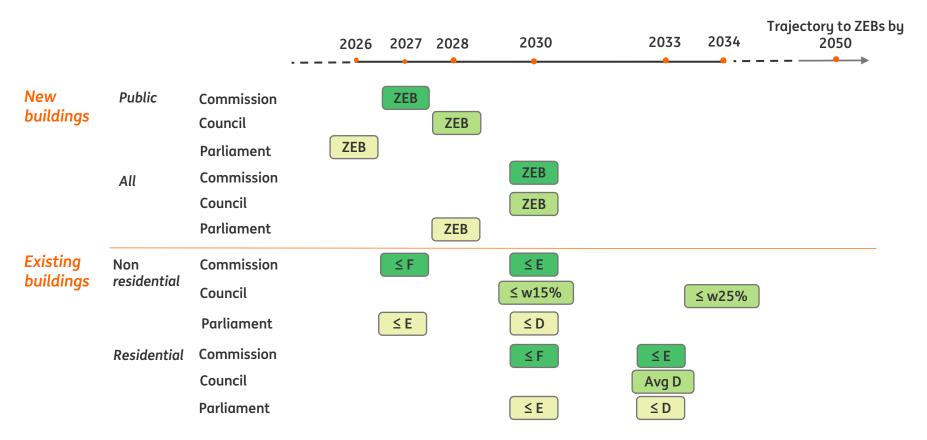
Source: Issuer HTT information



EPBD – moving forward on building renovations

* Minimum energy performance standards will incentivise building renovations

* National building renovation plans should support that countries to realise their national renovation ambitions



Green covered bonds could play a role in financing energy efficient mortgages granted by banks for certified energy efficient building renovations. Quality of the loans in the cover pool may be impacted.





Expansion of the taxonomy

New possibilities to finance sustainable goals

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Expansion of the Taxonomy regulation will give broader opportunities to highlight ESG efforts

Significantly harmful (SH) activities

Classification of activities:

Green: Sustainable significant contribution (SC) level **Amber:** Sustainable (if improving) intermediate performance level **Red:** Unsustainable significant harm performance level: a) transition or b) exit

Banks will be better able to show the transition away from harmful activities.

Criteria for harmful activities derived from DNSH criteria

Low environmental impact (LEnvl) activities

No significant impact (NSI):

a: no potential of making a substantial contribution (except climate adaptation); &
b: are not causing significant harm to any of the six EU environmental objectives; &
c: meet minimum safeguards

This allows bank to report also their no harmful activities

The Platform of Sustainable Finance proposes to maybe include these activities later into the environmental taxonomy

Social taxonomy

1. Social objectives a) Decent work (*workers*); b) Adequate living standards and wellbeing for end users (*end users*) c) inclusive and sustainable communities and societies (*communities*)

2. Types of substantial contribution a) Inherent social benefits of the activity itself; b) Avoiding and addressing negative impacts; c) Enabling activities.

> 3. DNSH criteria 4. Minimum Safeguards 5. Socially harmful activities Governance

The social taxonomy will supports the direction of capital to

sustainable purposes The **impact of the social taxonomy** will **also depend on how it is integrated** alongside the environmental taxonomy

DNSH climate change mitigation objective: Real estate assets involved in the extraction, storage, transport or manufacture of fossil fuels. Buildings built after 31 December 2020: PED does not meet the threshold for NZEB. Buildings built before 31 December 2020: EPC of D or lower or not belonging to the top 30% most energy efficient buildings. (Differs from PAI definition of 'inefficient real estate assets' of an EPC of C or below, without a top (30%) performance boundary).

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