

FROM RETAIL-ACCESSIBLE TO RETAIL-FACING: GREEN FINANCE FOR EU HOUSEHOLDS

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SUMMARY

The EU has built a sophisticated sustainable-finance framework and a large market for labelled sustainable bonds. However, this has not yet translated into a similarly developed market for products designed around household needs. The challenge is therefore not a lack of sustainable instruments, but converting existing supply into products that citizens can find, understand, trust, compare and access through ordinary saving and investment channels. Green use-of-proceeds bonds provide the most developed supply base, but much of this market remains primarily structured for institutional rather than retail investors.

A key distinction is between instruments that are merely retail-accessible and those that are genuinely retail-facing. Achieving scale requires more than legal availability: products need repeatable issuance, credible sustainability claims, manageable entry thresholds, clear risk and return characteristics, effective distribution and compatibility with national tax and savings frameworks. Household participation also depends on trust, comprehension, familiarity and visibility alongside environmental preferences. Experience outside the EU further suggests that retail scale is easier to achieve when sustainable products build on financial institutions, distribution channels and savings arrangements that households already use.

Priorities include developing a common retail-facing product architecture, providing concise and decision-useful sustainability information, integrating suitable products into mainstream distribution channels, reducing fixed issuance costs, improving compatibility with national savings frameworks, strengthening supervisory convergence and monitoring participation breadth alongside capital mobilised. The objective is to enable credible green and sustainability-linked products to compete effectively within ordinary household saving and investment choices.



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Executive Summary

The EU has developed one of the world's most advanced sustainable-finance frameworks and is a key market for labelled sustainable bonds. However, this has not led to the emergence of a similarly developed market for green and sustainability-linked products tailored to the needs of households. The key challenge is thus not the absence of sustainable financial instruments but the adaptation of the supply of existing sustainable finance into products that households can discover, understand, trust, compare and access via their normal saving and investment avenues.

A key distinction is to be made between products that are merely retail-accessible and products that are truly retail-facing. The former may be available to households legally or technically via a broker or a secondary market but are not necessarily designed for the household segment. Retail-facing products take into account the realities in which non-professional investors operate. Their financial terms, sustainability proposition, entry threshold, liquidity or redemption conditions, communication and distribution are all designed around the conditions under which non-professional investors invest and save.

The relevance of this distinction cuts across three EU policy agendas: financing the climate transition, deepening European capital markets and increasing the share of households' savings in productive investment. The Savings and Investments Union (SIU) offers an opportunity to bring the EU's sustainable-finance architecture closer to the levers through which households deploy their savings. This study focuses on green retail bonds, retail-accessible sustainability-linked bonds and green or sustainability-linked savings products. It combines market and household data, regulatory and policy analysis, product and Member State mapping, international examples and seven semi-structured stakeholder interviews.

Main findings

The EU already has an established sustainable finance supply base. Green use-of-proceeds bonds in particular have developed most notably, with sovereign, public-sector, financial and corporate issuers and extensive infrastructure of frameworks, external review and reporting. The starting point is therefore not necessarily one of creating a sustainable debt market from scratch.

Retail-facing supply remains very much narrower than the universe of sustainable instruments that households can access technically. Many labelled bonds remain predominantly wholesale products, while dedicated retail subscription products and savings-like products are more seamlessly integrated into the distribution channels to households. Retail relevance depends on product and distribution architecture – not just on the sustainability label.

Scalable retail supply relies on repeatability, credibility and distribution capacity. Issuance is skewed towards a smaller set of programme-like issuers who are more able to distribute documentation, verification and reporting costs and to facilitate recurrent investor communication. Sustainability credibility is also higher pre-issuance than post-issuance: post-issuance reporting and verification are not always available, despite being critical to maintaining trust over the life of the product.

The hurdles to scale compound along the value chain from issuance to household distribution. Cross-border legal availability does not ensure retail portability in practice: language, marketing, product governance, distributor onboarding, tax and national savings arrangements can all hinder replication. Conduct requirements dictate how products are incorporated into retail channels; regulator uncertainty can cloud sustainability communication; and distributor economics ultimately decide whether technically available products are truly visible to households.

International experience highlights the likelihood of retail scale if sustainability products leverage existing financial infrastructure at the household level. The UK experience highlights the potential of an established public savings infrastructure, Hong Kong demonstrates the opportunity of combining retail bond distribution with support for issuance and verification costs, and the US municipal market shows the value of familiar financial instruments and tax treatment. These examples are not directly transferable but demonstrate the potential of trusted distribution channels, acceptable fixed costs and competitive financial propositions.

Household adoption requires an attractive financial proposition that goes beyond that of environmental considerations. Products need to compete against deposits, funds, government securities and other familiar instruments on the grounds of safety, liquidity, yield, ease of use and familiarity. Trust requires attributable responsibility, verification and reporting; information has to be actionable rather than technically complete; and entry thresholds need to be accessible, risk and protection regimes understandable, redemption terms clear and net returns transparent. Distribution is just as important: products that do not fit into mainstream banking, saving and investment interfaces will remain outside the effective choice set of households. Participation could be fragmented across income groups, ages, digital capabilities and Member States despite increasing volumes.

Policy recommendations

The EU does not need another sustainability label or separate retail green finance regime. Most of the required infrastructure is already in place. What is required is to enhance the linkages to household product design, information and distribution, consistent with investor protection and the integrity of sustainability claims.

Build a common retail-facing green product architecture. Voluntary blueprint specifying financial, sustainability and distribution characteristics generic across credible bonds-like and savings-like instruments which enable them to function effectively as retail products without generating another label.

Create a short, standardised summary of the sustainability of your retail business. Technical documentation should be accompanied by a brief description to explain the sustainability proposition, its evidence chain, and the relevant financial characteristics in a manner understandable to non-professional investors.

Integrate retail products, where appropriate, into mainstream distribution channels. Products that can be seen along with equivalent traditional alternatives in retail bank applications, savings, and investment menus and in advisor processes and broker platforms, with the objective of visibility and comparison, not preference.

Reduce fixed costs and enable sustainable issuance of retail bonds. Reusable documentation, standard reporting, shared technical support, and focused support around frameworks, external review, and reporting could enhance the economics of high-integrity issuance, especially for smaller and less frequent issuers.

Ensure that the new product is made compatible with national tax and savings-wrapper regimes. Given national authority in the field of taxes and savings architecture, compatibility and portability should prevail over a new EU green tax privilege, and have no adverse comparative implications as compared with similar conventional products.

Enhance convergence in supervisory practice in relation to sustainability claims made by retailers. Guidance is needed as to how such claims can be derived from different propositions in simple, consistent ways without undermining the evidence needed or giving rise to misleading impressions.

Monitor breadth of participation and capital raised. Monitoring should cover both issuance and subscription volumes, as well as the profile of participants, investment sizes, use of digital and assisted channels, repeat participation and geographic coverage.

In combination, these recommendations move away from expanding the supply of sustainable instruments and towards turning plausible sustainable finance infrastructure

into marketable products to households. The goal is not to promote households into sustainable investments regardless of their preferences, risk profiles or financial circumstances, but to facilitate competing credible green and sustainability-linked products into the mainstream options of saving and investing.

1. INTRODUCTION

The European Green Deal and the EU's 2050 climate-neutrality objective require large-scale investment across energy efficiency, clean mobility, grid modernisation, climate-resilient infrastructure and other transition priorities. Public finance and institutional capital will remain central, but they will not be sufficient on their own. Household savings represent a large pool of potential capital, and their mobilisation can also strengthen the social ownership of the transition.

This report examines how green bonds, sustainability-linked bonds and green or sustainability-linked savings products can be made more genuinely retail-facing. The central question is not whether such products can be issued or made legally available to households, but whether they can be designed, distributed and communicated in ways that citizens can find, understand, trust, compare and access through ordinary savings and investment channels.

1.1. WHY RETAIL-FACING GREEN FINANCE MATTERS NOW

Retail-facing green finance matters now as it connects three policy agendas which are currently often treated separately: financing the climate transition, deepening the EU capital markets, and promoting household participation in productive investment. Mobilising citizen capital is thus not only a financing question, but also one of legitimacy, inclusion and financial-market development. Research on climate-policy support shows that public acceptance is driven not only by environmental concern, but also by perceived fairness, effectiveness and trust in policy design (Carattini *et al*., 2018; Dechezleprêtre *et al*., 2025).

The EU household balance sheet is only weakly connected to identifiable transition assets, with a large share of household financial wealth held in deposits, insurance products and pension claims, while participation in capital-market instruments is uneven across Member States. Household-finance literature shows that market participation is affected by participation costs, wealth, information, financial sophistication and institutions (Haliassos and Bertaut, 1995; Vissing-Jørgensen, 2002; Ampudia and Ehrmann, 2017). Where households participate, exposure is often through funds, insurance-based investment products or other intermediated structures which can provide diversification, professional management and lower information costs, but not necessarily a clear and visible link to transition-related assets (Allen and Santomero, 1998; Gennaioli *et al*., 2015).

This is a structural constraint, as citizen capital exists in significant scale, but is not channelled into trusted and understandable instruments that can credibly demonstrate environmental contribution. Green and sustainable instruments are available in capital

markets, but are not designed as household savings propositions, even though they may be retail-accessible in a legal/technical sense, while not being retail-facing in terms of design, distribution and trust.

The policy context is in a changing environment which makes this issue more actionable than in the past. The Capital Markets Union (CMU) agenda has long been aware of the need to integrate deeper and more integrated capital markets, including deeper retail participation. The Savings and Investments Union (SIU) puts the household dimension at the forefront of the policy debate by focusing on how savings can be channelled into productive investment, creating an opportunity to link the sustainable finance agenda to the mechanism through which households actually save and invest.

The distinction is also important for sustainable finance, as the EU has developed a comprehensive sustainable finance framework. However, this is built on disclosure, classification and institutional-market integrity, which are necessary but do not automatically lead to products that households will choose. If green finance is to be largely institutional, technical and disclosure-based, household participation will be limited. If instead, credible green and transition-linked instruments can be embedded in familiar savings and investment channels, they can become part of everyday household behaviour. Research on individual investors suggests that sustainability preferences exist, but that green financial engagement is conditional on financial literacy, information barriers and presentation of investment options (Bauer *et al*., 2021; Anderson and Robinson, 2021).

There is also a competitiveness dimension, as a more developed retail-facing green finance market would have a broader base of investors for transition-related issuance, supporting domestic funding capacity and reducing reliance on a smaller set of institutional investors. Citizen capital should thus be seen as an additional layer of Europe's financial resilience, capital-market depth and transition financing capacity.

This study starts from a practical proposition: if the EU wants to align household savings more closely to the transition it needs to transform, it needs to pay attention to instruments that are simple enough to understand, credible enough to be trusted and accessible enough to be used by ordinary savers. Green retail bonds, retail-accessible sustainability-linked bonds and green or sustainability-linked savings products are among the most relevant candidates provided such instruments can be scaled beyond ad hoc national initiatives and be created around retail preferences, distribution realities and integrity safeguards.

1.2. REGULATORY AND LEGISLATIVE FRAMEWORK

Retail-facing green finance does not exist within a single regulatory regime in the EU but is governed by a number of areas of legislation, supervision and national market architecture that interact with sustainable finance: sustainable-finance integrity rules, securities issuance law, retail investor-protection rules, savings and account frameworks, tax treatment and the wider SIU agenda. This matters because a product might well be credible in terms of sustainability and availability to households – legally – but might fail to scale because of issuance costs or complexity, lack of effective distribution channels, poor comparability or unattractive post-tax features.

The first layer that applies to this space is the EU sustainable-finance framework. The EU Taxonomy, the Sustainable Finance Disclosure Regulation (SFDR) and related disclosure rules have provided a common vocabulary for sustainable economic activities and sustainability-related product disclosures. For green bonds, Regulation (EU) 2023/2631 has created the voluntary European Green Bond Standard – a framework for external reviewers and optional disclosure templates for environmentally sustainable and sustainability-linked bonds. This layer is crucial for integrity and comparability but does not, on its own, solve the retail layer of product-design and distribution challenges.

The second layer is securities issuance law. Green retail bonds and retail-accessible sustainability-linked bonds still fall under the Prospectus Regulation, public-offer exemptions, language rules, admission requirements and passporting arrangements for securities offers. Listing Act changes are relevant to this layer too, as they amend certain areas of the EU prospectus framework (including treatment of public offers and listing-related documentation). These rules will determine the extent to which issuers can create repeatable retail offerings on a cost-effective basis and whether legal availability can be effectively delivered to the household investor.

The third layer is retail distribution and investor protection. The Market in Financial Instruments Directive II (MiFID II) product governance, suitability and appropriateness requirements place parameters around how investment firms can classify, approve and distribute products to retail clients. Sustainability considerations have also been embedded into MiFID II conduct requirements, which will impact the way advisers and distributors engage with clients around sustainable products. The packaged retail and insurance-based investment products (PRIIPs) rules may also be relevant in this layer if products are packaged or structured in ways that require a key information document: important for investor protection but also determining engagement with mainstream channels for simple green or transition-linked instruments.

The final layer is national savings, tax and account architecture. Green savings products, regulated savings accounts, tax-advantaged investment accounts and deposit-like

instruments are largely governed by domestic law: tax treatment, withholding rules, deposit protection, account eligibility and domestic saving habits can determine whether a product is attractive to households.

Finally, the SIU sets the policy context for this work, placing household savings and retail participation at the heart of the EU's capital-market agenda and providing an opportunity to connect sustainable finance policy with the mechanisms through which citizens actually save and invest. For this study, the key take-home message is that retail-facing green finance should be considered a cross-cutting issue in terms of policy: it impacts on matters of sustainability integrity, securities issuance, investor protection, product distribution, tax and savings at the same time. Table 1 shows the various regulatory layers that are relevant to retail-facing green finance and explains why these products fall under multiple EU and national frameworks.

Table 1. Regulatory layers relevant to retail-facing green finance

Regulatory layer	Main relevance
Sustainable-finance integrity	EU Taxonomy, SFDR, European Green Bond Standard, optional templates for environmentally sustainable bonds and sustainability-linked bonds
Securities issuance	Prospectus Regulation, Listing Act changes, public-offer exemptions, admission to trading and passporting
Retail distribution and investor protection	MiFID II product governance, suitability and appropriateness, sustainability preferences, PRIIPs key information documents
Savings, deposit and account architecture	National savings wrappers, tax treatment, withholding rules, deposit protection and regulated savings accounts
SIU policy agenda	Household participation, savings and investment accounts, retail investment channels and productive investment

Source: Authors' elaboration.

This regulatory map prepares the analysis that follows. Retail-facing green finance therefore needs to be considered across the interaction of sustainable-finance rules, securities issuance, investor protection, distribution, taxation and national savings architecture.

1.3. FROM SUSTAINABLE FINANCE DISCLOSURES TO RETAIL PRODUCT ARCHITECTURE

The EU sustainable finance framework has made significant progress in terms of transparency, classification and market integrity, creating a common language of environmental objectives, raising expectations of sustainability claims and ensuring comparability of products and issuers. These developments are essential. Without credible definitions, reporting and verification, retail-facing green finance would be exposed to greenwashing and lack trust.

A disclosure-centric approach, however, has limitations given the policy objective of mobilising large numbers of households. Retail investors do not invest in disclosures as such, but rather in product characteristics, via trusted distribution channels, and with clear risk-return information and credible explanation as to what the money finances or what sustainability commitment is being made. A product can comply with sustainability disclosure requirements and fail as a retail proposition if it is not easy to find, compare, explain or attract compared with familiar savings alternatives. This is consistent with wider evidence that disclosure can fail where investors face limited attention, information overload or complex decision settings (Hirshleifer and Teoh, 2003; Paredes, 2003; Ben-Shahar and Schneider, 2014).

The relevant gap is therefore not only a disclosure gap, but a retail product-architecture gap. This refers to the absence of coherent design principles, scalable distribution models and minimum integrity features that would allow green and transition-linked instruments to become usable household products. Retail-facing green finance therefore requires sustainability-integrity requirements to be translated into product terms, information and distribution arrangements that work under retail decision conditions.

This distinction is important because the EU sustainable finance framework has largely developed around institutional markets and intermediary obligations. Institutional investors can process frameworks, taxonomy references, allocation reports, key performance indicator (KPI) documentation and external reviews. Evidence from the green bond market also indicates that investors place considerable weight on climate impact, credible green credentials, accountability and clear allocation processes, while demand can reflect both financial and non-pecuniary motivations (Almeida *et al*., 2019; Boermans, 2023). Households generally have fewer resources and ability to process this type of technical information and need shorter and more decision-useful explanations: what the product is, what happens to their money, what risk they take, what return they receive and what evidence they will see over time.

Shifting from a disclosure to a product architecture approach does not seek to weaken transparency or investor protection requirements, but rather to translate these into formats that work under retail decision conditions. A retail-facing product should be

credible enough to meet sustainability-integrity expectations, but also simple enough to be understood and comparable at the point of choice. This is the central policy challenge addressed in the report: how to convert sustainable finance supply into products that citizens can find, understand, trust, compare and access.

1.4. Scope and definitions

This study focuses on green and transition instruments that could plausibly mobilise household savings for the climate transition at scale. The scope is pragmatic: products that can be accessed by non-professional investors through viable distribution channels, that are simple enough for ordinary savers to understand and compare, and that can underpin credible sustainability claims through clear allocation or performance commitments.

A key distinction in the report is between instruments that are retail-accessible and instruments that are retail-facing. While retail-accessible instruments can, in principle, be bought by households (e.g. via brokers, trading platforms, or secondary markets), they are not necessarily designed, marketed or communicated as household products. Retail-facing instruments go further: designed around the conditions under which households do actually save and invest – low-friction access, clear financial terms, understandable sustainability claims, visible evidence, appropriate investor-protection safeguards, and distribution through familiar channels.

The analysis does not treat legal accessibility as sufficient: even though a bond may be admitted to trading and technically accessible to retail investors, this would not necessarily involve any engagement with the product beyond active search and would not be designed to meet the needs of ordinary savers. Conversely, a product can be retail-facing if it is designed from the outset as a household proposition, even though the underlying funding mechanism may remain in the form of a bond, savings account, or intermediated allocation of capital.

To make the scope operational, the report distinguishes between two dimensions: the nature of the sustainability proposition underpinning the instrument and the product format in which the household experiences the instrument. The former includes instruments based on a use-of-proceeds commitment (i.e. funds are earmarked for eligible green activities or projects) or a performance-linked commitment (i.e. financial or product terms are linked to the achievement of predefined sustainability targets). The latter includes products that are bond-like (involving direct or retail-accessible issuance of fixed-income instruments) or savings-like (involving a deposit, savings account or savings wrapper, distributed through mainstream saving channels). Table 2 summarises the product taxonomy used in the report.

Table 2. Retail-facing green instruments in scope: taxonomy

	Bond-like	Savings-like
Use-of-proceeds/green	Green retail bonds (sovereign/sub-sovereign; corporate where retail-accessible)	Green savings products (green deposits, green savings accounts where allocation is reported)
Performance-linked/sustainability-linked	Retail-accessible sustainability-linked bonds (SLBs) (bond terms linked to sustainability targets, where retail access is feasible)	Sustainability-linked savings products (savings/deposit products with features linked to sustainability metrics or allocation targets)

Source: Authors' elaboration.

Across all categories, analysis focuses on products for which retail access is legally and practically possible but distinguishing between those that are merely retail-accessible and those designed around the needs and capabilities of non-professional investors. Particular attention is given to products that can be bought, held and understood without reliance on institutional-only distribution arrangement or specialist investment expertise, and to the conditions under which instruments can move from being merely retail-accessible to genuinely retail-facing.

Generic environmental, social, and governance (ESG) funds and standard retail investment funds are not treated as core objects of analysis except to the extent that they provide useful benchmark context, such as on fee structures, labelling, distribution incentives, or substitution effects. Complex or leveraged structured products aimed primarily at sophisticated investors are also excluded; focus is on simpler instruments that can plausibly become part of ordinary household saving and investment behaviour.

The report is written for three overlapping audiences: EU and national policymakers working on the SIU, CMU and sustainable finance files; supervisors and regulators concerned with investor protection, greenwashing risk and market integrity; and market actors, including issuers and distributors, who will determine whether retail-facing green instruments can be brought to scale.

The study is also informed by seven semi-structured stakeholder interviews conducted during the research process. The interviews covered a financial institution active in capital markets and retail distribution, a market-infrastructure operator, a retail-investor association, EU- and national-level securities supervisors, and two EU-level policy teams working respectively on sustainable finance and SIU coordination. They were used to

complement the desk research and market-data analysis with practitioner, supervisory and policy perspectives on retail demand, distribution and access, investor understanding and trust, sustainability claims, regulatory and supervisory frictions, and the conditions for scaling retail-facing products. Stakeholder views are used throughout the report in anonymised form and attributed only by stakeholder type. They should be interpreted as qualitative evidence rather than as representative survey findings.

1.5. Structure of the report

The remainder of the report proceeds as follows. Chapter 2 sets out the analytical framework for scaling retail-facing green finance. It introduces the interaction between supply, distribution, demand and trust, identifies the product dimensions relevant to retail-facing design, and establishes the criteria used to assess instruments, market models and policy options. Chapter 3 maps the EU landscape of green bonds, sustainability-linked bonds and savings-like products relevant to retail investors. It examines market scale, issuer capacity and credibility infrastructure, public-sector frameworks, distribution models and product characteristics, while distinguishing between instruments that are merely retail-accessible and those that are genuinely retail-facing.

Chapter 4 examines the barriers that prevent retail-facing green finance from scaling across the EU. It focuses on legal and regulatory fragmentation, conduct and suitability requirements, tax and savings-regime heterogeneity, supervisory expectations and market-structure constraint. Chapter 5 draws lessons from selected non-EU experiences. The cases are not treated as models for direct transplantation, but as examples of design levers addressing particular barriers, including trusted savings infrastructure, retail bond distribution, support for fixed issuance and verification costs, and tax treatment.

Chapter 6 examines the household adoption conditions that determine whether products are likely to be chosen in practice. It focuses on household balance sheets, product-market fit, trust and credibility, comprehension and communication, product-design features, distribution and choice architecture, and participation inclusion. Chapter 7 brings the analysis together and sets out policy recommendations for moving from retail-accessible to genuinely retail-facing green finance. The recommendations address common retail-facing product architecture, decision-useful sustainability information, mainstream distribution, the fixed costs and repeatability of retail issuance, compatibility with national tax and savings frameworks, supervisory convergence and the monitoring of participation breadth.

2. A FRAMEWORK FOR SCALING RETAIL-FACING GREEN FINANCE

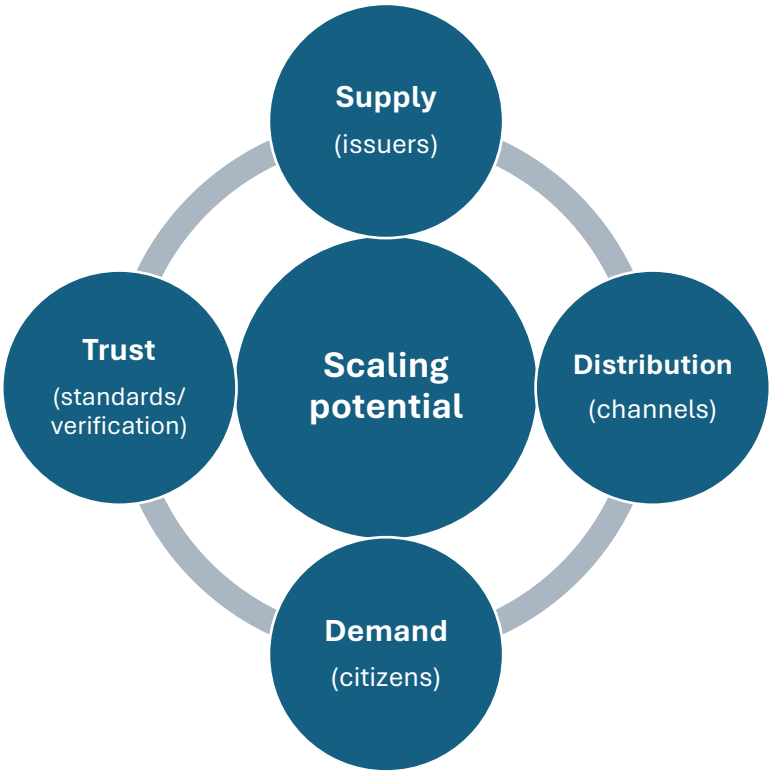
Scaling retail-facing green finance is not only a matter of labelling more instruments or improving disclosure. It depends on whether credible supply, effective distribution, household demand and trust mechanisms reinforce one another.

This chapter sets out the analytical framework used throughout the report to examine why some sustainable instruments remain merely retail-accessible while others can become genuinely retail-facing. It combines a four-part scaling model with a common set of product dimensions and assessment criteria, which are applied in the chapters that follow.

2.1. SCALING MODEL – SUPPLY, DISTRIBUTION, DEMAND AND TRUST

Scaling is treated as the interaction of four factors: the ability of issuers to supply credible instruments, the ability of distributors to place them at scale, the willingness of households to participate, and the robustness of trust mechanisms such as standards, verification and reporting (see Figure 1).

Figure 1. Scaling model for retail-facing green finance



Source: Authors' elaboration.

The value of the model is diagnostic rather than mathematical. Retail mobilisation is a weak-link problem. Strong supply will not scale if products are not visible in household

savings channels. Good product design will not compensate for weak trust. Demand will remain latent if citizens must actively search for products that are difficult to compare. The model therefore identifies where the chain from sustainable issuance to household participation breaks down.

Supply refers to the capacity to issue credible and repeatable products. For sovereigns, sub-sovereigns and public-sector issuers, this includes defining eligible expenditure, allocating proceeds, reporting over time and, where relevant, adapting issuance to retail subscription channels. For corporates and financial institutions, supply also depends on whether retail issuance is commercially worthwhile and whether the issuer can absorb documentation and verification costs.

Distribution is the conduit between market instruments and products encountered by households. A bond may be legally or technically accessible by retail investors but invisible at the practical level if not available in bank apps, adviser processes, broker interfaces or savings menus. Distribution is dependent on product governance, compliance costs, incentives, platform design and ability to explain and compare the product.

Demand should be viewed as a set of consumer constraints and compromises as opposed to a preference for green offerings. Consumers may accept climate goals but continue to perceive capital safety, liquidity, simplicity, net return and familiarity as key concerns in personal finance. The willingness to participate hence depends on the extent to which a product is compatible with existing saving and investing priorities, can be comprehended and compared to familiar products and does not involve excessively high search and decision costs. Demand-side conditions are discussed in detail in Chapter 6.

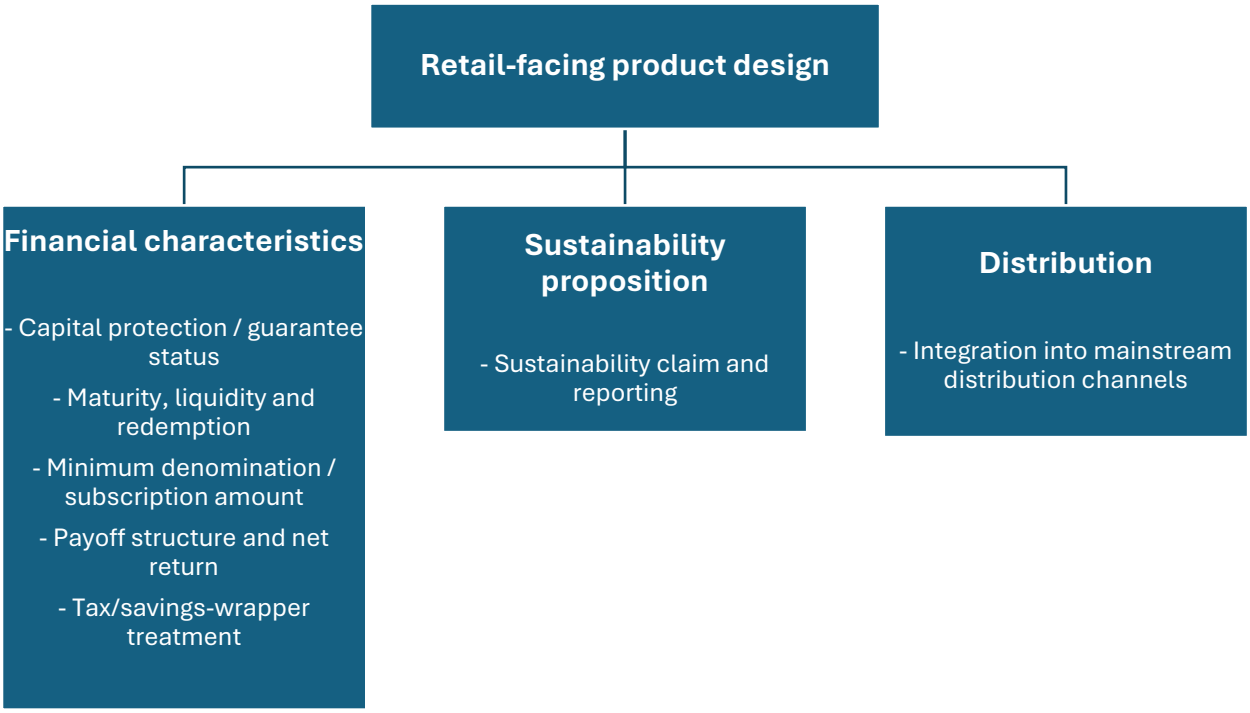
Trust is an adoption and durability condition. Retail investors cannot directly confirm sustainability claims at the time of purchase. They have to rely on issuer's reputation and distributor credibility, external review, reporting and, where applicable, clear consequences if commitments are not met.

2.2. Product dimensions considered in the analysis

Taking into account the product taxonomy that has been developed in Section 1.4, the analysis explores the nature of the sustainability proposition and the way the product is experienced by the household. These are important factors since the different instruments require different financial, distribution and integrity requirements to be satisfied. A use-of-proceeds bond, for instance, requires evidence on allocation and impact while a performance-linked instrument needs credible KPIs, targets, monitoring and consequences. The savings-like products create similar issues around capital protection, withdrawal conditions and the link with household deposits and the assets or activities financed.

Across these categories, the report assesses products through a common set of product dimensions: capital protection or guarantee status; maturity, liquidity and redemption structure; minimum denomination or subscription amount; payoff structure and net return; tax or wrapper treatment; sustainability claim and reporting; and integration into mainstream distribution channels (see Figure 2).

Figure 2. Product dimensions shaping retail-facing design



Source: Authors' elaboration.

These dimensions interact in practice and are therefore considered jointly when assessing the retail characteristics of different product models. They are applied throughout the report: Chapter 3 uses them to examine the EU market landscape; Chapter 4 considers the regulatory and structural constraints surrounding them; Chapter 5 examines how selected non-EU models address them; and Chapter 6 assesses their relevance for household adoption.

2.3. ASSESSMENT CRITERIA

The four-part scaling model identifies where constraints to retail mobilisation can arise. To assess particular instruments, product and market models, and policy options, the study uses four complementary criteria: accessibility, attractiveness, integrity and contribution to transition financing. These criteria are analytical rather than a mechanical scoring framework.

Accessibility reflects the degree to which non-professional investors can realistically find, buy and hold the instrument via mainstream channels. Key factors relating to this criterion are distribution breadth, onboarding friction, minimum investment amounts and the practical effort needed to participate.

Attractiveness reflects the ability of the product to compete against comparable home market alternatives in terms of risk, return, liquidity, simplicity and after cost or after-tax outcomes.

Integrity reflects the credibility and verifiability of the sustainability proposition, including the consistency between marketing and substance, the quality of reporting and verification and clarity of the claim made to retail investors.

Contribution to transition financing is approached with caution. The report does not presume that labelled instruments automatically generate incremental climate impact. Rather, it considers whether and through what mechanisms they can plausibly contribute to transition financing, including with regard to enhanced funding capacity, increased earmarking discipline or improved transparency of capital allocation.

These four criteria can be used to supply a common ground for the comparison between product models and the evaluation of the policy options developed in Chapter 7. They enable the analysis to look at not only whether a given instrument can reach households but also if it can supply a viable financial proposition, credible sustainability claim and plausible contribution to transition financing.

3. EU LANDSCAPE MAPPING – WHAT EXISTS TODAY

Key findings

- **There is a significant supply of sustainable bonds in the EU, with the bloc accounting for a considerable share of total labelled sustainable bonds issued globally**. There is also a wide variety of sovereign, public sector, financial and corporate issuers in the EU.
- **Green use-of-proceeds bonds are the most developed segment in terms of potential for scaling up issuance for retail investors**. They comprise the largest part of EU sustainable bonds and have a less complex sustainability component than sustainability-linked bonds. The latter typically require deeper understanding of key performance indicators, targets, and the consequences of missing them.
- **The capacity for issuance is unevenly distributed across countries and individual issuers**. Bonds issuance is skewed towards a small set of Member States, and among companies, repeat and programme issuers account for most labelled bonds issued in the EU. These tend to be the most appropriate issuers of bonds for standard retail offerings, with an attractive sustainability profile on a recurring basis.
- **The market has developed a strong ecosystem of frameworks, process reviews and third-party assurance, but these are applied mostly at the issuer level and before issuance**. There is less consistency in post-issuance reporting and ongoing verification of continued compliance with the initial sustainability goals throughout the lifetime of the bonds.
- **Retail-facing supply remains much narrower than the universe of retail-accessible sustainable instruments**. Many bonds can technically be bought by households but remain structured and distributed primarily through wholesale channels. Dedicated retail subscription programmes and savings-like products are more closely integrated into ordinary household distribution channels.
- **Retail relevance depends on product and distribution architecture, not on the sustainability label alone**. Entry thresholds, liquidity and redemption arrangements, payoff and protection features, access routes and understandable sustainability evidence determine whether an instrument can move from being merely retail-accessible to genuinely retail-facing.

This chapter maps the EU landscape of sustainable debt and savings products relevant to retail mobilisation. It examines the scale and composition of sustainable bond issuance, issuer capacity and reporting infrastructure, Member State patterns, distribution models and the product characteristics relevant to retail access. The purpose is to establish the market base from which genuinely retail-facing products could develop.

3.1. Instrument universe and classification

This section identifies the sustainable debt and savings products most relevant to retail mobilisation in the EU. The mapping does not cover the full sustainable investment universe. It focuses on instruments that can allocate capital to green or sustainability-related objectives, can in principle be accessed by non-professional investors, and have product features that could support retail expansion.

The first category includes use-of-proceeds labelled bonds, among which are green, social, and sustainability (GSS) bonds. In this report, green bonds are prioritised since their sustainability label can be justified by the allocation of proceeds to eligible projects or activities through the application of frameworks, external reviews, allocation reporting, and impact reporting. Social and sustainability bonds are also mentioned when their discussion contributes to an enhanced understanding of market practices, issuer tendencies, or reporting peculiarities.

The second category consists of sustainability-linked bonds. Since these bonds employ sustainability-linked performance targets, their discussion is primarily based on the analysis of the link between performance targets and issue terms. The focus is on explaining how linked bonds utilise KPIs and sustainability performance targets (SPTs) to access capital markets. At the same time, the analysis highlights the challenges for investors who have to evaluate the target, the baseline, the degree of ambition, the date of observation, and the consequences for the issuer.

The third category comprises various savings-like products, such as green savings accounts, green deposits, and sustainability-linked savings or deposit products. These instruments are primarily governed by savings-related regulations, tax advantages, deposit guarantees, and banking intermediation. Savings-like products are included because they appear to be closer to the retail client in terms of their nature. Table 3 summarises the main instrument categories, as well as market configurations in which instruments can be found that are relevant to retail investors.

Table 3. Instrument categories, market configurations and retail relevance

Instrument/market configuration	Sustainability logic	Typical issuer/provider	Retail relevance
Green, social, and sustainability bonds	Use of proceeds allocated to eligible projects or activities	Sovereigns, sub-sovereigns, supranationals, corporates, financial institutions	Relevant where denomination, distribution and reporting make them retail-facing or retail-accessible
Sustainability-linked bonds	Performance linked to KPIs and sustainability performance targets	Mainly corporates and financial institutions, with limited sovereign use	Potentially relevant, but more complex because the claim depends on target design and monitoring
Sovereign and public-sector retail programmes	Public borrowing linked to green expenditure or broader retail bond programmes	Governments, debt management offices, regional authorities, public utilities	Highly relevant where explicitly marketed to households through subscription windows, banks or digital channels
Corporate and financial retail-accessible bonds	Bond-like instruments issued under green or sustainability frameworks	Corporates, banks, utilities, infrastructure companies	Relevant where available to retail investors, but often retail-accessible rather than retail-facing
Green savings and deposit products	Savings products where funds are allocated to eligible green assets or portfolios	Banks, savings institutions, public savings providers	Highly relevant because they fit existing household savings behaviour, but often remain national and wrapper-dependent
Sustainability-linked savings products	Savings products where pricing, features or claims are linked to sustainability metrics or targets	Banks and other financial intermediaries	Potentially relevant if the performance link is clear, credible and verifiable

Notes: The categories are not mutually exclusive. 'Sovereign and public-sector retail programmes' and 'corporate and financial retail-accessible bonds' describe issuer and distribution configurations that may overlap with the labelled bond categories above.
Source: Authors' elaboration.

For the bond categories in Table 3, classification and credibility are shaped by recognised market principles, EU standards and, in some cases, certification schemes. These frameworks help substantiate sustainability claims, but they do not determine whether an instrument is suitable for retail investors. Box 1 summarises the main standards used to structure and assess labelled sustainable bonds.

Box 1. Standards used to classify and assess labelled sustainable bonds

Issuers of green, social, sustainability and sustainability-linked bonds often refer to internationally recognised principles, standards and certification schemes to design their instruments and support the credibility of their sustainability claims. These reference points are relevant because they help define how the sustainability claim is structured, what information should be disclosed and what evidence is needed to assess credibility.

The most widely used market reference points are the voluntary principles developed by the International Capital Market Association (ICMA), including the Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines and Sustainability-Linked Bond Principles. For GSS bonds, the ICMA principles follow a use-of-proceeds logic. They focus on eligible projects, project evaluation and selection, management of proceeds, allocation reporting and impact reporting. For sustainability-linked bonds, the ICMA principles follow a performance-linked logic. They focus on KPI selection, calibration of sustainability performance targets, bond characteristics, regular reporting and independent verification.

The European Green Bonds Regulation creates a separate voluntary standard for issuers that choose to use the European Green Bond label. Once used, the standard entails legally binding requirements. In particular, proceeds must be allocated in line with the EU Taxonomy, and issuers must comply with specific factsheet, allocation report, impact report and external review requirements. The Regulation applies to green bonds and also provides optional disclosure templates for other environmentally sustainable bonds and sustainability-linked bonds.

Other schemes, such as Climate Bonds Initiative certification, can also support credibility by assessing whether bonds labelled under the scheme comply with specified climate-related criteria. None of these principles, standards or schemes guarantees that an instrument is suitable for retail investors. Their relevance for this report is that they help substantiate sustainability claims, which is a necessary but not sufficient condition for retail-facing design.

The remainder of the chapter therefore assesses not only whether these instruments exist, but whether their issuance patterns, distribution channels, product features and reporting arrangements make them capable of becoming retail-facing.

3.2. MARKET SCALE, ISSUER CAPACITY AND CREDIBILITY INFRASTRUCTURE

The sustainable bond market has grown into a large and diversified segment of global capital markets. This matters for retail-facing green finance because it shows that the supply-side infrastructure already exists – issuers, frameworks, external reviews, allocation reports, impact reports and specialised data providers are now part of the market architecture. The challenge is therefore not to create a sustainable debt market from scratch, but to assess which parts of that market can realistically be converted into instruments that households can access, understand and trust.

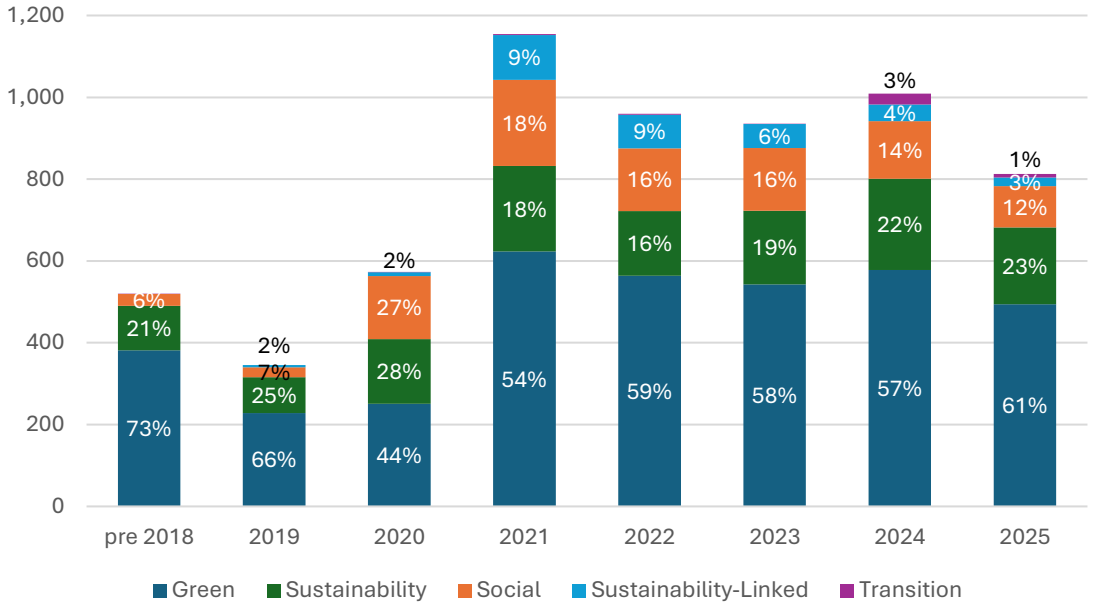
The analysis relies primarily on LGX DataHub data on labelled sustainable bonds. A caveat is necessary: LGX records issuance, issuer characteristics and documentation, but it does not measure household participation. Retail uptake is therefore assessed indirectly through indicators relevant to retail scaling, including issuer repeatability, concentration, reporting and external-review coverage, issue-size patterns and retail-accessibility characteristics[1].

3.2.1. Market scale by bond type

Figure 3 shows the rapid expansion of labelled sustainable bond issuance over the past decade, followed by a more uneven period after the 2021 peak. Global issuance rose sharply in 2020 and 2021, reaching EUR 1 154 billion in 2021. It then declined in 2022 and remained broadly stable in 2023, before recovering in 2024 and falling again to EUR 813 billion in 2025.

[1] The LGX DataHub is a data platform developed by the Luxembourg Green Exchange (LGX), a sustainable finance initiative launched in 2016 by the Luxembourg Stock Exchange (LuxSE). It provides structured information on sustainable bonds, including post-issuance data on allocation, impact, EU Taxonomy alignment and sustainable development goals (SDG) contributions.

Figure 3. Global sustainable bond issuance by bond type (EUR billion, 2018-25)



Notes: 'Pre-2018' groups all sustainable bonds issued up to and including 31 December 2018 into a single category. The total sample covers 114 issuing countries.
Source: Authors' elaboration based on data from the Luxembourg Green Exchange (LGX) DataHub.

Green bonds continue to dominate the period ahead, representing between 54 % and 61 % of annual issuance since 2021. Sustainability bonds have gained prominence, reaching 23 % of issuance in 2025, while social bond issuance has dropped from its pandemic-era peak. Sustainability-linked bonds have contracted more steeply, falling below 3 % of annual issuance in 2025.

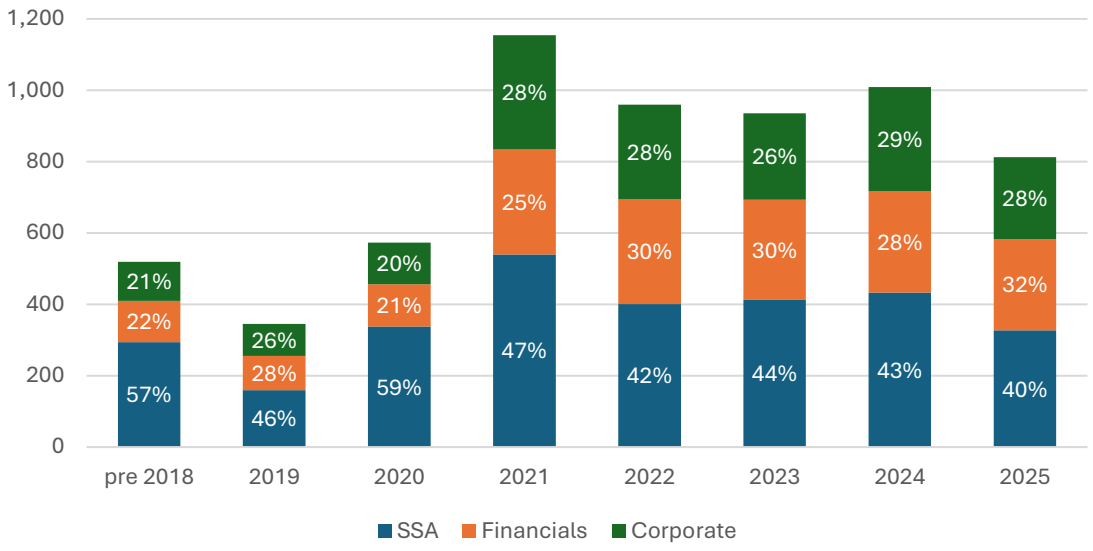
For retail-facing green finance, the mix of the market is critically important since use-of-proceeds green bonds present a relatively mature supply base plus a comparatively simple sustainability proposition: proceeds are applied to eligible activities and can be tracked through allocation and impact reporting. Sustainability-linked bonds remain attractive in principle, but their smaller market presence and performance-linked structure requires that investors understand the selected KPI, target, baseline, measurement date and consequence mechanism. The existing supply base is therefore strongest in green use-of-proceeds instruments, albeit without market size necessarily indicating retail accessibility or uptake. Annex 1 complements this issuance-based picture with data on the stock of sustainable bonds still outstanding at end-2025, including its composition by bond and issuer type in the EU.

3.2.2. Issuer type and supply capacity

Issuer type matters because retail-facing green finance requires more than a label. It requires credibility, repeatability, reporting capacity and the ability to connect issuance to retail distribution channels. Sovereign, supranational, agency and sub-sovereign issuers are especially relevant because they can provide scale, public-sector credibility and repeat issuance. Corporate and financial issuers expand the investment universe, but their retail relevance depends more heavily on distribution incentives, product governance and sustainability communication.

Figure 4 indicates that the SSA issuers have been the most significant issuer category in the labelled sustainable bonds market, even though their market share fell from 57 % prior to 2018 to 40 % by 2025. Financial institutions have seen their relative significance grow to take up 32 % of the issuance in 2025 while corporate issuers have remained relatively unchanged in terms of market share at 26-29 %.

Figure 4. Global sustainable bond issuance by issuer type (EUR billion, 2018-25)



Notes: 'Pre-2018' groups all sustainable bonds issued up to and including 31 December 2018 into a single category. 'SSA' includes sovereigns, quasi-sovereigns, supranationals and agencies. The total sample covers 114 issuing countries.
Source: Authors' elaboration based on data from the LGX DataHub.

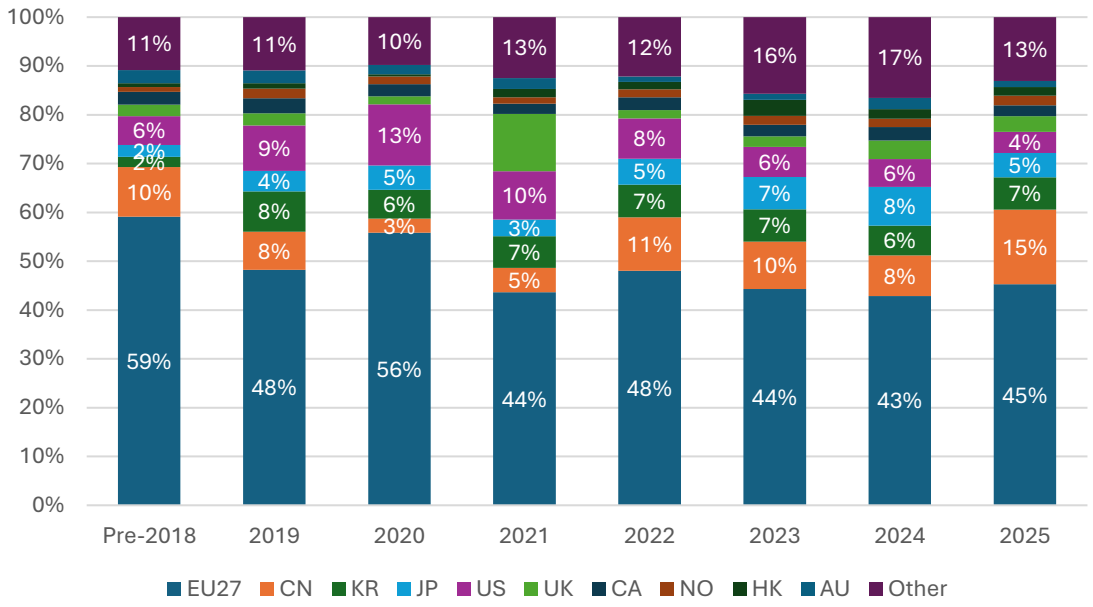
The retail relevance of this pattern is twofold. First, the continuing importance of sovereigns, supranationals and agencies (SSA) issuers suggests that a significant part of the sustainable bond market is supplied by institutions with the credibility, scale and repeat issuance capacity needed to support retail-facing programmes. These issuers may be better placed to standardise documentation, reporting and communication across multiple transactions.

Second, the increasing importance of financial institutions and the continuing role of corporate issuers expand the potential investment universe, but they do not automatically create retail-facing supply. Their instruments may be available through brokers or platforms, but they are likely to remain retail-accessible rather than retail-facing unless supported by appropriate denominations, distribution channels, reporting and communication.

3.2.3. Geographic concentration of EU issuance

The EU27 remains one of the main centres of labelled sustainable bond issuance globally (see Figure 5). Its share is above 40 % in most years shown and remains around 45 % in 2025, confirming that the EU is not only an early mover but also a continuing anchor of labelled sustainable bond issuance. Other jurisdictions show more variable patterns. China's share increases strongly in 2025, while the US share is lower than in the early 2020s. Japan, Korea, the UK, Canada, Norway, Hong Kong and Australia account for smaller but still relevant shares, while the residual 'Other' category remains sizeable across the period.

Figure 5. Share of global sustainable bond issuance by issuer country/region (%, 2018-25)

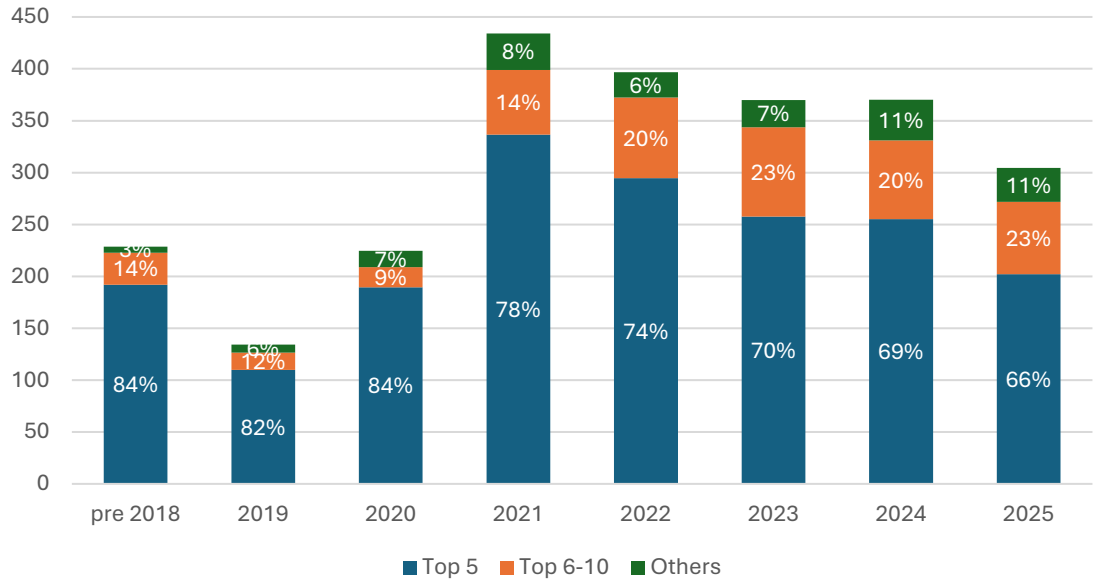


Notes: 'Pre-2018' groups all sustainable bonds issued up to and including 31 December 2018 into a single category. The total sample covers 114 issuing countries.
Source: Authors' elaboration based on data from the LGX DataHub.

Within the EU, issuance remains concentrated in a relatively small group of Member States (see Figure 6). France, Germany, the Netherlands, Spain and Sweden account for the majority of issuance in every period shown, although their combined share declines from around 84 % before 2018 and in 2020 to 66 % in 2025. This points to gradual

broadening, but diversification remains limited: even in 2025, around two-thirds of issuance is still concentrated in the five largest issuing Member States, while the remaining EU countries account for only 11 %.

Figure 6. Concentration of sustainable bond issuance in EU27 (EUR billion, 2018-25)

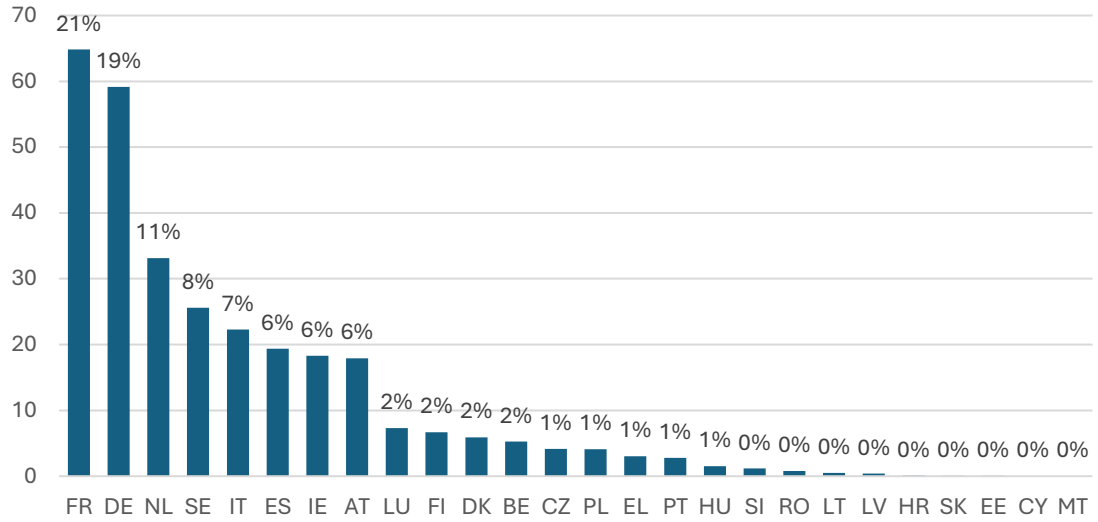


Notes: 'Pre-2018' groups all sustainable bonds issued up to and including 31 December 2018 into a single category. 'Top 5' includes France, Germany, the Netherlands, Spain and Sweden. 'Top 6-10' includes Austria, Belgium, Denmark, Ireland and Italy. 'Others' includes the remaining EU27 Member States. Data for Bulgaria are not available.
Source: Authors' elaboration based on data from the LGX DataHub.

This concentration matters for retail mobilisation. Member States with larger and more regular sustainable bond issuance may have better preconditions for repeat issuance, standardised reporting, issuer familiarity and retail communication. However, issuance volume should not be treated as a proxy for retail accessibility. A large sustainable bond market does not necessarily mean that households have simple access to retail-facing products.

The 2025 cross-section confirms this unevenness (see Figure 7). France and Germany alone account for around 40 % of EU27 sustainable bond issuance, while many Member States account for only marginal shares. The Member State mapping should therefore be read not only as a ranking of issuance volumes, but also as an indication of where sustainable bond supply, public-sector frameworks and distribution capacity could plausibly be connected to retail mobilisation.

Figure 7. Sustainable bond issuance across EU27 (EUR billion, 2025)



Notes: Data for Bulgaria are not available.
Source: Authors' elaboration based on data from the LGX DataHub.

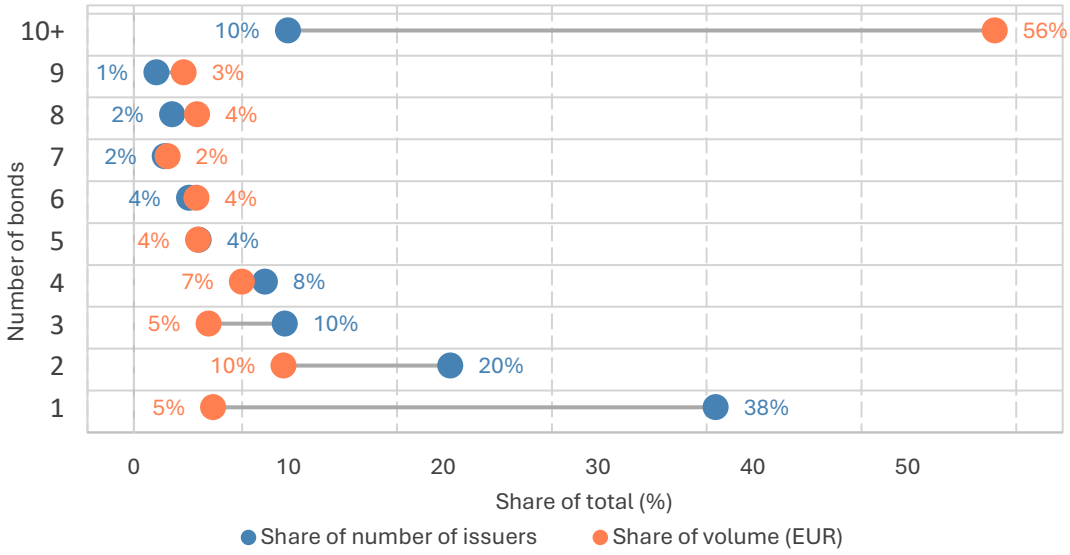
3.2.4. Repeat issuance and market concentration

Retail uptake is rarely observable in a harmonised way in sustainable bond datasets. Bond databases generally record who issues the instrument, its size, label, documentation and reporting status, but not who ultimately buys or holds it. For this reason, uptake cannot be measured directly. Instead, the analysis uses repeat issuance as a proxy for scalable supply and issuer capacity.

Repeat issuance matters because retail-facing green finance is easier to build around recurring programmes than isolated transactions. An issuer that returns regularly to the market with labelled instruments is more likely to have the internal capacity to maintain a sustainable finance framework, track allocation of proceeds or targets, prepare reporting, work with external reviewers and communicate consistently with investors. This is especially relevant for sovereign, sub-sovereign, public-sector and large financial issuers, where repeated issuance can support standardised documentation and recognisable investor communication.

Figure 8 shows how issuers are distributed according to the number of labelled bonds they have issued, and how each issuer group contributes to total issuance volume. One-off issuers are the largest group by number of issuers, accounting for 38 % of the issuer base, but they represent only 5 % of total labelled bond volume. By contrast, issuers with ten or more labelled bonds account for only 10 % of issuers, but represent 56 % of total issuance volume. Overall, repeat issuers account for almost all of the labelled bond activity.

Figure 8. Distribution of labelled bond issuance by issuer activity



Source: Authors' elaboration based on data from the LGX DataHub.

These findings have direct implications for retail scaling. The sustainable bond market is split between many occasional issuers and a smaller group of programme-like issuers that account for most issuance volumes. The latter are more relevant for retail distribution because retail-facing products require regularity, recognisable communication, reporting routines and operational capacity.

Occasional issuers can still support local or thematic investment opportunities, but they are unlikely to enable mass retail mobilisation unless fixed costs of issuance, verification and distribution are reduced through templates, shared infrastructure or standardised retail-offer formats. Repeat issuer capacity is therefore a critical prerequisite for retail scale. Annex 1 provides additional evidence on issuance cadence, examining whether repeat issuance is distributed over time or concentrated in a small number of quarters.

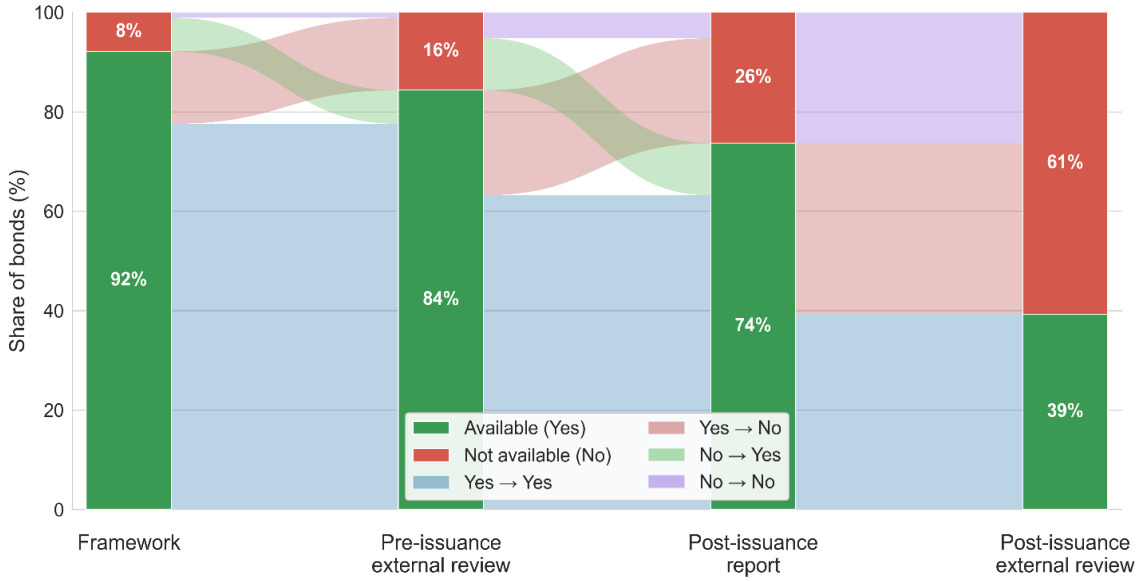
3.2.5. Reporting, external review and credibility

Reporting and external review are a second proxy for retail-scaling potential. They do not measure investor participation, but they do indicate whether issuers provide the information needed to maintain credibility over time. This is particularly relevant for retail investors, who cannot verify sustainability claims themselves and must rely on issuer credibility, frameworks, external review and post-issuance reporting.

For use-of-proceeds bonds, reporting helps verify whether proceeds have been allocated according to the framework and what impact has been reported. For sustainability-linked bonds, reporting tracks issuer performance against KPIs and sustainability performance targets, and whether any financial or contractual consequence has been triggered.

Figure 9 shows that the sustainable bond market has a well-developed pre-issuance credibility infrastructure. In the dataset, 92 % of labelled bonds are issued under a framework, while 84 % receive a pre-issuance external review[2]. The picture changes in the post-issuance phase. While 74 % of labelled bonds have a post-issuance report, 39 % of them have a post-issuance external review[3]. This indicates that transparent and externally reviewed information becomes less common after the bond has been issued and proceeds have been raised. From a retail perspective, this matters because households need to know not only that a product was credible at issuance, but what happened afterwards.

Figure 9. Coverage of reporting and external review



Source: Authors' elaboration based on data from the LGX DataHub.

The data therefore point to a stronger credibility infrastructure at the pre-issuance than the post-issuance stage. While frameworks and external review are widespread at issuance, the availability of post-issuance reporting and external verification is less consistent. This matters for the durability of the sustainability claim over the life of the instrument and is examined further in Section 3.5.2. Annex 1 provides additional evidence for the outstanding EU bond stock, including post-issuance reporting and external-verification coverage.

[2] External review is voluntary for most labelled sustainable bonds issued under market-based standards. It becomes mandatory where an issuer chooses to use the European Green Bond (EuGB) designation under Regulation (EU) 2023/2631.

[3] For bonds issued under the EuGB designation, annual allocation reporting is mandatory until full allocation of proceeds. A post-issuance external review is required for the allocation report drawn up after full allocation, while impact reporting is also mandatory at least once during the bond's lifetime. External review of the impact report is optional.

3.3. PUBLIC-SECTOR FRAMEWORKS AND RETAIL RELEVANCE

The uneven distribution of sustainable bond issuance across Member States is also reflected in the development of sovereign and public-sector sustainable bond frameworks. These frameworks matter because they support repeat issuance, define eligible expenditure categories, set out governance arrangements and establish reporting commitments. They are therefore relevant for credibility and supply capacity. However, they should not be confused with retail product architecture.

Across the EU, sovereign and public-sector sustainable bond frameworks are relatively widespread, but they remain uneven in type and retail relevance. Green frameworks are the dominant model. Social, sustainability and sustainability-linked frameworks are much less common, and sovereign sustainability-linked issuance remains rare. This matters because the most developed public-sector route for retail-facing green finance is currently use-of-proceeds green issuance, where the sustainability claim can be explained through eligible expenditure, allocation reporting and impact reporting. Table 4 summarises the public-sector framework landscape. The full Member State mapping is provided in Annex 2.

Table 4. Public-sector framework landscape and retail relevance

Framework feature	Main finding	Retail implication
Sovereign green frameworks	Relatively widespread across the EU, but uneven	Useful supply base, not retail architecture
Social and sustainability frameworks	Less common than green frameworks	Mainly public-market relevance
Sovereign sustainability-linked frameworks	Rare	More complex sustainability proposition
Dedicated retail-facing public programmes	Limited	Most relevant where linked to household subscription channels

Notes: 'Retail-accessible' and 'retail-facing' are used as defined in Section 1.4. 'Public-market/mainly institutional' refers to frameworks and issuances primarily structured for sovereign or public-sector debt-market funding, without clear evidence of dedicated retail distribution.
Source: Authors' compilation based on national debt management office (DMO), Ministry of Finance and issuer documentation.

The main finding is that public-sector sustainable bond frameworks provide a credible supply base, but only part of the retail-scaling equation. Most sovereign green bonds are issued through wholesale market channels and are, at most, retail-accessible through brokers or secondary markets. They become retail-facing only where issuance is

deliberately connected to household distribution channels, subscription windows, low minimum tickets and communication formats designed for non-professional investors.

Overall, the Member State and issuer landscape shows that the EU has a growing base of sovereign and public-sector sustainable finance frameworks, but not yet a coherent retail-facing public green savings market. The next section therefore turns from issuer frameworks to distribution models.

3.4. Distribution models observed in practice

The previous sections show that labelled sustainable bonds are issued at scale and that the EU has a growing base of sovereign, public-sector, corporate and financial issuers. However, issuance does not automatically translate into household participation. The key distinction is between instruments that exist in the market, instruments that households can legally buy, and instruments that are actually designed and distributed as part of a retail savings or investment journey.

Stakeholder input from market infrastructure and retail-investor representatives supports this distinction. Retail exposure to sustainable fixed income remains predominantly intermediated through banks, advisers, online brokers, funds, exchange-traded funds (ETFs), notes or savings products, while direct household participation in individual green bonds remains limited. Minimum denominations, liquidity considerations, broker search frictions, product complexity and the need for product-specific knowledge mean that many sustainable bonds are technically accessible but practically invisible to ordinary households. Selected product examples illustrating how entry thresholds and access routes interact with different forms of retail distribution are provided in Annex 4.

Five distribution models are visible in practice.

Dedicated retail subscription programmes are the clearest retail-facing model. They do not merely make an instrument available to households; they design and promote it for households. This is done through defined subscription windows, bank or online-banking distribution, low minimum amounts, simplified communication and domestic campaigns. This model is most common in sovereign or public-sector borrowing programmes, but it can also be used by public utilities or other trusted issuers. Italy's retail government bond distribution architecture is an important comparator, even where the instrument itself is not green, because it shows how familiar subscription channels and predictable issuance periods can mobilise domestic savers. The Belgian utility company Fluvius provides a concrete example of this distinction (see Box 2).

Box 2. Fluvius retail bond and Belgium's Green OLO (Obligations Linéaires / Lineaire Obligaties)

The June 2023 issue of Fluvius green retail bond can be considered an example of retail-facing approach. Fluvius describes its instrument as a retail bond intended for private investors in Belgium and promotes and distributes it in line with the retail-facing logic, including allocation and impact reports, which are easy to understand.

By contrast, many sovereign green bonds in the euro area are issued through auction or syndication channels primarily designed for capital-market investors. While these bonds could be tradable and therefore accessible for households through brokers or secondary markets, they are not promoted or distributed in a way that would make them suitable for mass retail. Belgium's Green OLO programme is an example of this kind of issuance logic – it involves green sovereign issuance with allocation and impact reporting yet does not represent a retail-facing subscription programme.

Bank-mediated distribution is likely to be the most important route for mass-market uptake. Households tend to be exposed to savings and investment products via bank branch networks, online banking, mobile apps, adviser networks and product interfaces, rather than through direct engagement with wholesale bond markets. Banks have established customer bases with well-established onboarding processes, payment infrastructure, suitability frameworks and trusted interfaces through which to surface products. The banks' product gatekeeping role, and the commercial, operational and regulatory considerations influencing their product surfacing decisions, are discussed in Section 4.5.

Broker and platform access will be key to self-directed investors and households with existing securities accounts seeking to invest in a broad universe of listed GSS bonds and SLBs, including cross-border instruments. It is unlikely to be a route to mass mobilisation because of the active engagement required by investors who will need to compare instruments, understand pricing, bond yields, credit risk, and sustainability credentials. Broker access will contribute to retail accessibility but is unlikely to result in retail-facing scale.

Savings-like products tend to take a different route to market, embedding the green or sustainability claim into familiar saving products such as green savings accounts, green deposits, regulated savings products or sustainability-linked deposits. They are likely to be easier to adopt within the mass market since they can be embedded within familiar interfaces and products. Their limitation is that they tend to be fragmented across jurisdictions since these products tend to reflect national savings regimes, taxation considerations, deposit guarantee communication expectations and banks' balance sheet

policies. The sustainability credentials of such deposits need to be clear, particularly where deposits are linked to green lending, eligible assets or portfolio allocations.

Local, cooperative and community-based channels can be effective at connecting retail finance with tangible transition projects (local energy infrastructure, public transport, renovation or renewable energy). Their value proposition is rooted in proximity and trust; households may be more receptive to an investment product offering that is tied to a familiar issuer or one that directly supports a local project in which they may have a personal interest. Their limitation is that they tend to be smaller in scale and more bespoke, requiring stronger issuer capabilities in marketing, distribution and reporting to achieve broader adoption. Table 5 summarises the key distribution channels, together with their limitations in terms of scale.

Table 5. Distribution model typology

Distribution model	Typical instruments	Main channel	Retail strength	Scaling constraint
Dedicated retail subscription programme	Sovereign/public retail bonds, utility green bonds	Banks, online banking, issuer or debt-management office windows	Designed for households, visible and easy to communicate	Domestic, event-based, dependent on national infrastructure
Bank-mediated distribution	Green bonds, deposits, savings products, structured offers	Branches, advisers, apps, online banking	Highest reach through existing household interfaces	Suitability, product governance, incentives and liability
Broker and platform access	Listed GSS bonds and SLBs	Brokers, platforms, secondary markets	Broad access, including cross-border instruments	Requires active search and financial literacy
Savings-like products	Green savings accounts, green deposits, sustainability-linked deposits	Bank accounts and savings menus	Closest to existing saving behaviour	National, wrapper-dependent, needs credible allocation/reporting
Local, cooperative or community channel	Municipal bonds, cooperative products, public utility offers	Local banks, cooperatives, municipal/issuer channels	High trust and visible local impact	Small scale, bespoke structures, high fixed costs

Source: Authors' elaboration.

3.5. PRODUCT CHARACTERISTICS OBSERVED IN THE MARKET

This section looks at the financial and sustainability characteristics of the products identified in the mapping. It considers the dimensions outlined in Chapter 2, including entry threshold, maturity and redemption arrangements, payoff structure, protection or guarantee status and evidence to support different sustainability claims, and distinguishes between products structured for retail distribution and those remaining primarily at wholesale level.

3.5.1. Core financial design features

The mapping incorporates four financial design features relevant to the practical shape of retail-accessible and retail-facing product: entry threshold, liquidity and redemption structure, payoff and net-return structure and capital-protection or guarantee status.

Entry threshold is defined principally by the minimum denomination and minimum subscription. These should be differentiated from overall issue size: a large benchmark issue can have a high denomination or be channelled primarily into wholesale distribution, whereas a smaller issue might be structured with lower denominations and retail focus. Issue size cannot therefore be used as a proxy for retail accessibility; evidence to support the patterns shown in issue sizes by bond type, issuer and geography is provided in Annex 3.

Liquidity and redemption structure differ significantly between bond-like and savings-like products. Instruments akin to bonds have a designated maturity point and may be subject to secondary-market trading, although selling prior to maturity involves the investor in price fluctuations, execution costs and bid-ask spreads; savings-like instruments are distinguished by withdrawal rights, notice periods, early-withdrawal penalties, limits on accounts and, if applicable, deposit protection arrangements.

Payoff and net-return structure also varies across product types. Relevant features include fixed or variable coupons or interest rates, step-up mechanisms, loyalty bonuses, fees, tax treatment, early-redemption provisions and, for sustainability-linked products, any financial consequences attached to sustainability-performance outcomes. These elements determine the financial proposition ultimately presented to the retail investor.

Capital-protection or guarantee status differs by product format. Eligible bank deposits may benefit from deposit-guarantee protection, whereas ordinary bonds remain subject to issuer credit risk and, where sold before maturity, market-price risk. Government or public-sector issuer status should likewise be distinguished from a formal guarantee or capital-protection mechanism.

Selected examples of retail-facing and retail-accessible products illustrating these financial design dimensions are provided in Annex 4.

3.5.2. Sustainability claim and reporting

Building on the distinctions set out in Sections 1.4 and 2.2, different product types rely on different sustainability claims and supporting evidence. Use-of-proceeds instruments rely primarily on allocation and impact evidence, while performance-linked instruments rely on the credibility and monitoring of KPIs, targets and associated consequences. Savings-like products require evidence on how deposits or savings are linked to green lending, assets or sustainability metrics.

The European Green Bond Regulation creates a more standardised claim for bonds using the European Green Bond or EuGB designation. Issuers must publish allocation reports until proceeds are fully allocated and must publish an impact report after full allocation and at least once during the bond's lifetime. External review is mandatory for the allocation report drawn up after full allocation, while external review of the impact report is optional. Table 6 summarises the main evidence chain by product type and translates each claim into the core question that a retail investor needs answering.

Table 6. Sustainability claim and reporting logic by product type

Product type	Evidence chain	Retail question
Green/social/sustainability bond	Allocation → impact → review	What does my money finance?
Sustainability-linked bond	KPI → target → observation date → verification → consequence	What commitment is being made, and what happens if it is missed?
European Green Bond/EuGB	Taxonomy alignment → EuGB factsheet → allocation report → impact report → review	What does taxonomy alignment mean for this product?
Green savings/deposit product	Deposit pool → green lending/assets → portfolio reporting	How is my deposit linked to green assets?
Sustainability-linked savings product	Metric → monitoring → product feature/consequence	What changes if the metric is or is not met?

Source: Authors' compilation based on ICMA principles, the European Green Bond Regulation and public product documentation.

The table shows that the supporting evidence differs materially across product types. Use-of-proceeds instruments rely on allocation and impact reporting; sustainability-linked products depend on target design, monitoring, verification and consequences; and

savings-like products require evidence linking the account or deposit to green lending, assets, portfolios or sustainability metrics. As shown in Figure 9, this evidence infrastructure is more developed at the pre-issuance stage than after issuance, resulting in less consistent availability of observable information over the life of some instruments.

3.6. KEY TAKEAWAYS FROM THE MAPPING

The mapping shows that the EU already has a substantial and increasingly mature sustainable finance supply base. Labelled sustainable bond issuance has grown significantly, green use-of-proceeds bonds remain the most mature segment, and many sovereign, public-sector, financial and corporate issuers have developed frameworks, external-review practices and reporting infrastructure. From a supply perspective, the absence of sustainable instruments is therefore not the issue.

Retail-facing supply remains much narrower than general labelled issuance. Many sustainable bonds are available through banks, brokers or secondary markets but remain primarily wholesale instruments rather than products designed around dedicated retail distribution. By contrast, dedicated retail bond programmes and savings-like products are more closely integrated into household distribution channels through lower entry thresholds, subscription arrangements and familiar banking or savings interfaces.

The mapping therefore identifies a conversion challenge rather than a simple supply shortage: existing sustainable-finance infrastructure needs to be connected more systematically to retail-oriented product formats and distribution models. Chapter 4 examines the regulatory and market barriers that impede that conversion.

4. Barriers to scale: legal, regulatory, market and supervisory frictions

Key findings

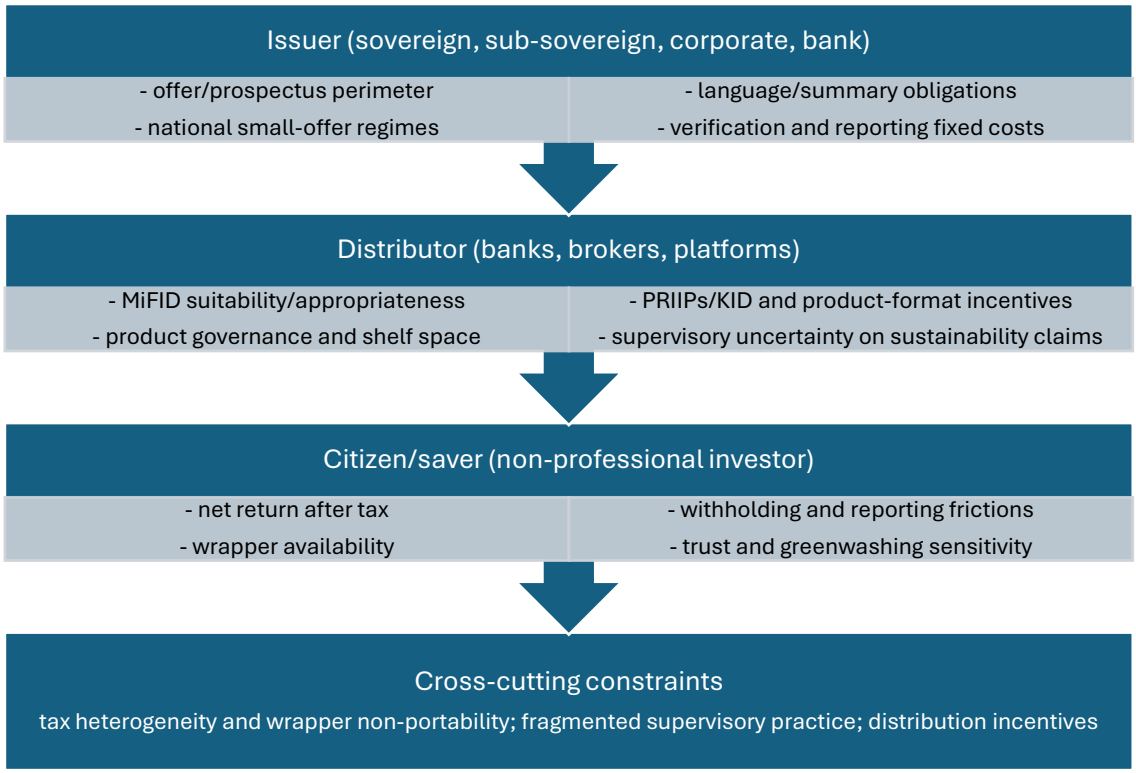
- **Cross-border availability is not a guarantee for portability at retail**. National requirements, language, tax regimes and distribution practices are barriers to replication across Member States.
- **Conduct requirements have an impact on costs and processes related to distribution**. Suitability, appropriateness and product-governance requirements may make some products more challenging to incorporate in a retail setting.
- **Tax and savings regimes impact significantly on attractiveness to households**. National wrappers, incentives and withholding-tax regimes have an impact on net returns and portability of products.
- **Supervisory clarity has an impact on the way in which sustainability is communicated**. Firms have to develop ways of simplifying what they want to say to retail investors without rendering something incomplete or misleading.
- **Market structure impacts significantly on visibility**. Distributor incentives, onboarding costs and fixed costs around sustainability can create barriers to bringing technically accessible products into mainstream channels of distribution.
- **The barriers accumulate across the product journey**. Scaling depends on the full chain working effectively, from issuance and replication to distribution, visibility and household uptake.

The previous chapter showed that the EU already has a substantial sustainable finance supply base, but that only part of this supply is currently translated into retail-facing products. The main challenge is not therefore whether green bonds, sustainability-linked bonds or savings-like green products can exist; it is whether they can be issued, distributed and understood repeatedly, at low friction, across Member States and retail channels.

This chapter identifies the main constraints that prevent replication and scaling. It distinguishes between barriers that are primarily regulatory, supervisory, fiscal or market-based, and shows how they accumulate along the retail journey from issuance to

household uptake. Figure 10 summarises the main points at which barriers arise along the chain from issuer to distributor to citizen.

Figure 10. Barrier points along the retail-facing green finance chain



Note: KID stands for Key Information Document.
Source: Authors' elaboration.

4.1. REGULATORY FRAGMENTATION AND CROSS-BORDER FRICTIONS

Regulatory fragmentation, the first barrier to scaling retail-facing green finance across the EU, does not necessarily prevent green bonds or savings-like products from being issued, but may affect the extent to which such instruments are replicable beyond the domestic market – the interplay between the legal availability across borders and the practical portability at retail level.

This factor is particularly salient in the context of a product designed to be repeatable across several Member States. While the security and the prospectus may be tradable across borders, the overall retail proposition will be less easily portable, as the language, marketing rules, supervisory expectations, product-governance processes, distributor onboarding, tax treatment and domestic distribution infrastructure will determine the extent to which the instrument will reach household-facing channels in practice.

Retail-facing instruments thus tend to emerge as domestic propositions, with national subscription channels, language, investor communication, savings habits and tax

treatment. It should not be inferred that the underlying instrument is intrinsically national, but rather that the retail-side distribution process is integrated with domestic legal, fiscal and business infrastructure. The Fluvius green retail bond discussed in Chapter 3, while clearly a retail-facing product, illustrates this dynamic: the product's retail arrangement was embedded in the Belgian market, whereas sovereign green bonds that are offered through brokers or secondary markets and are on the whole not designed as mass-retail products can be seen as retail-accessible instruments in principle.

Prospectus reform, however, addresses one component of issuance costs but not the standardised format of a retail offering at EU level. Even if no prospectus is required, national rules may require information documents, warning language, filings or other investor protection-related materials. Language requirements, advertising rules and distributor due-diligence processes will thus continue to make sub-threshold offerings more easily organised domestically than cross-border.

Nor will the passporting of a prospectus imply the presence of any distribution: while making the bond legally available across borders, the product must be made operational in the host Member State, requiring the creation of marketing material and subscription processes, explanation of sustainability features, risk warnings and post-issuance reporting that are comprehensible to the local audience. Local banks, advisers, brokers and platforms will need to onboard the product, classify it, understand the target market and judge whether the product meets their commercial and compliance risk appetite. Legal availability thus does not necessarily translate into visibility. Annex 5 provides further details on prospectus exemptions, the revised thresholds for smaller public offers, passporting and documentation relevant to investor-facing retail offers across borders.

The question of portability applies to savings-like products even more acutely, as green savings accounts, deposits and sustainability-linked savings products are integrated in national banking, tax, account and deposit-guarantee frameworks.

The suggestion is that regulatory fragmentation thus acts as a conversion barrier, not necessarily preventing the issuance of sustainable instruments, but perhaps impeding the conversion of labelled market instruments into retail-facing instruments across Member States.

4.2. CONDUCT, DISCLOSURE AND SUITABILITY

Conduct and disclosure rules are designed to protect retail investors and support informed decision-making. They also influence which products distributors are willing and able to offer at scale. This is particularly relevant as the EU seeks both to strengthen retail investor protection and, through the SIU, to increase household participation in capital markets.

For bond-like instruments, the main considerations arise from the MiFID II suitability, appropriateness and product-governance framework. Depending on the distribution model, firms may need to assess whether a product is suitable or appropriate for the client, while product-governance requirements require manufacturers and distributors to identify and periodically review the relevant target market. These requirements do not prevent individual bonds from being distributed to retail investors, but they affect the processes through which products are onboarded, classified and made available through retail channels. Further detail on the applicable conduct and disclosure framework, including suitability, appropriateness, product governance, sustainability preferences and the treatment of different product categories, is provided in Annex 6.

This matters because distribution is not only determined by the characteristics of the instrument. Banks, advisers, brokers and platforms must also be able to integrate a product into their compliance and operating systems. An individual green bond may have a relatively straightforward financial structure, but distributors still need to determine its target market, incorporate it into the relevant suitability or appropriateness processes and manage the associated investor communications. Products that can be processed through established and repeatable distribution arrangements may therefore be easier to offer at scale than individual instruments requiring additional onboarding and assessment.

A sustainability dimension introduces a further matching requirement. Since 2022, MiFID II suitability rules have required firms that provide investment advice or portfolio management to take clients' sustainability preferences into account. The aim is to enable these clients to be matched with appropriate products, but this requires distributors to translate regulatory concepts into questions that investors can understand, and that can in turn be matched to product characteristics. The European Securities and Markets Authority (ESMA) itself requires firms to explain the relevant concepts clearly and without technical language. Stakeholder consultations conducted for this study also pointed to difficulties in making these concepts understandable to retail clients, and in matching expressed preferences to available products.

A related issue is that of disclosure usability. Stakeholder input received for this study indicated that requirements stemming from different pieces of legislation can lead to information that is comprehensive from a regulatory point of view but hard for retail

investors to compare and interpret. This suggests that consistency and simplification of this information need not come at the expense of investor protection. For green products targeted at retail investors, the relevant question is one of enabling households to understand both the financial characteristics of a product and what its sustainability proposition entails.

The regulatory position differs for savings-like products. Ordinary deposits are not subject to the MiFID II framework, while structured deposits and certain packaged or insurance-based investment products are subject to different conduct and disclosure rules, including, where applicable, the PRIIPs framework. The distinction is relevant, since there is no single conduct and disclosure regime covering the range of products that households can use to direct savings towards green or transition-related activities. A green deposit and a green investment product may thus present a similar sustainability proposition to a customer while being subject to different regulatory and distribution rules.

The Retail Investment Strategy is of relevance in this context. The Council and Parliament reached a provisional political agreement on the package in December 2025 and in June 2026 the Council confirmed the final compromise texts with a view to agreement. The package modifies elements of the retail investor-protection framework, including disclosure, suitability and appropriateness, product governance, inducements, costs and charges and the PRIIPs framework. Its implications for the retail distribution space will depend not only on the Level 1 provisions but also on subsequent implementation and application.

The broader issue is therefore not whether conduct requirements should be relaxed for green products. It is whether retail-facing products can satisfy investor-protection requirements through processes and information that are proportionate to their characteristics and usable by households. For relatively simple products, unnecessary complexity in onboarding, product classification or investor communication can become an additional distribution friction. Conversely, greater standardisation and clearer investor-facing information could make it easier for distributors to integrate such products into existing retail channels without weakening the protections that the conduct framework is intended to provide.

4.3. Tax and savings regime heterogeneity

The national treatment of tax and savings regimes represents important factors concerning the scalability of retail-facing financial products. As also pointed out in stakeholder interviews, fiscal incentives can significantly influence household participation by modifying the net returns and comparative attractiveness of various investment and savings vehicles. Fiscal taxation, however, unlike product disclosure

standards or sustainability standards, remains primarily a Member State competence. Consequently, an instrument which can potentially be deployed across the EU may face substantially different terms of competition in the different national markets.

The first element concerns the tax treatment of rival household products. Retail investors find themselves within national systems which may promote particular accounts, wrappers or asset classes. France's Livret de développement durable et solidaire (LDDS), the Netherlands' tax treatment of qualifying green investments, Sweden's Investeringssparkonto (ISK) and the preferential taxation of Italian government securities represent a range of varying national fiscal measures which shape the domestic environment for savings. While these differ in detail both in terms of objective and instrument, they illustrate the same principle: the attractiveness of a new retail-facing product is partly determined by its relative tax treatment compared with those that already exist within a country[4].

Savings wrappers also constitute part of the infrastructure within which households invest, determining the investment products that can be housed within specific accounts, the manner in which returns can be reported and taxed, and the integration of investments into familiar customer journeys of banks, brokers and other intermediaries. A product that fits within a pre-existing national wrapper can benefit from the existing operational and distribution infrastructure, while those that do not, may have to operate within a different customer journey and potentially a different tax framework. This explains why even products based on harmonised financial instruments can become nationally embedded at the retail level.

A related barrier is represented by cross-border taxation and administration. Investors in securities issued in another Member State may find themselves faced with issues relating to withholding taxes, refund claims and differences in tax reporting. While these are by no means specific to green investments, they are relevant to attempts to make green bonds or other securities straightforward retail propositions across borders. Furthermore, existing research also points to taxation and administrative complexity in cross-border investment as factors contributing to investor home bias (Banu *et al*., 2026). For relatively small household investments, such complexity can reduce the practical desirability of cross-border ownership and represent additional service requirements for intermediaries.

[4] This is consistent with the broader evidence on household investment behaviour: tax treatment and account design can materially affect whether households participate in financial markets, and which instruments they hold (Bernheim, 2002). For retail-facing green finance, the implication is that the sustainability label competes within an existing fiscal architecture, rather than outside it.

The EU has taken steps to address some of these elements of the problem. The FASTER Directive introduces a more standardised framework for withholding tax relief, including a common digital tax residence certificate and more rapid clearance procedures for relief and refunds. Once applicable, this is expected to reduce some of the administrative frictions involved in cross-border investment, though it does not introduce harmonisation of tax rates or portable national savings wrappers. The Commission's 2025 Recommendation on Savings and Investment Accounts similarly promotes Member States developing accessible accounts with simple tax treatment and a broad range of eligible investments. As a Recommendation, this promotes convergence rather than harmonisation of national tax incentives or account structures. Annex 7 provides further information on selected national tax and savings arrangements, the role of savings wrappers, cross-border withholding tax frictions, FASTER and the Commission Recommendation on Savings and Investment Accounts.

Tax and savings regime homogeneity should therefore be considered as a portability constraint rather than an obstacle to issuance. A green bond or other investment instrument may be available legally across Member States, but its after-tax attractiveness and potential to fit within existing household savings channels can vary significantly between these. EU-level product standards can facilitate comparability and integrity, while initiatives such as FASTER can reduce administrative frictions, but cannot by themselves render the wider national savings architecture portable, and this is why retail-facing green finance can remain entrenched within domestic savings and distribution systems even where the underlying financial instrument is capable of circulation across the single market.

4.4. Supervisory expectations and inconsistencies

Supervisory expectations can affect the scalability of retail-facing green products, even where the underlying EU rules are harmonised. Issuers and distributors need to understand not only the applicable legal requirements but also how to assess sustainability claims, marketing communication and investor-facing information in practice. Where supervisory expectations are unclear or perceived to be inconsistent across markets, firms may face extra costs in adapting products and communications or may take a more conservative approach to retail distribution.

This issue is particularly relevant to sustainable finance, as sustainability claims have been the focus of recent supervisory attention. ESMA's work on greenwashing identifies risks across the sustainable-investment value chain, emphasising the need for sustainability-related claims to be true, justified, accessible and aligned with the characteristics of the underlying product. Recent supervisory work also highlights the need for sustainability

claims to be clear, fair and not misleading, and to be presented in a way that is appropriate to the target audience.

For retail-facing products, this creates a particular challenge around simplification. Information needs to be sufficiently accessible for non-professional investors while remaining sufficiently precise and substantiated to avoid creating a misleading impression. A use-of-proceeds green bond, for example, needs to communicate what the proceeds finance and how allocation and impact are reported. A sustainability-linked instrument requires a different explanation because its sustainability characteristics depend on the issuer's performance against specified targets rather than on the allocation of proceeds, with the credibility of the proposition depending on factors such as the choice of KPIs, baselines and the ambition of the targets (Haq and Doumbia, 2022; Auzepy *et al*., 2023). Green deposits and savings products raise a further question of how the connection between household savings and the activities financed by the bank is explained. The appropriate form of retail communication therefore depends on the underlying sustainability proposition.

Stakeholder input gathered for this study suggests that this interaction between regulatory completeness and retail usability remains challenging. In particular, sustainability information can be formally compliant while still being difficult for retail investors to interpret, and firms must determine how far complex sustainability concepts can be simplified without becoming incomplete or potentially misleading. This is particularly relevant for broad claims such as 'green', 'climate-aligned' or 'transition-linked', which need to be supported by an appropriate evidence base (Saravade *et al*., 2025). The resulting uncertainty can affect both product communication and distributors' willingness to promote products whose sustainability proposition requires significant explanation. This matters because products must pass through distributors' internal approval and governance processes before they are actively incorporated into retail channels, including product classification, sustainability categorisation and review of investor-facing communications.

Supervisory convergence is relevant in this context. ESMA and national competent authorities use tools such as Common Supervisory Actions to promote more consistent application of EU requirements, including in areas relating to sustainability disclosures and MiFID II sustainability requirements. Such convergence measures are designed to promote greater consistency in supervisory practice. Nevertheless, if firms are still uncertain about how particular claims or communications will be handled, cross-border replication can require additional legal review, adaptation of the marketing material, or changes to distribution processes.

These effects may be particularly relevant for smaller or less frequent issuers. Public utilities, municipalities, sub-sovereign entities and medium-sized companies may be able to link an issuance to relatively tangible green projects, but the fixed costs of product-specific legal review, sustainability-claim evaluation and distributor engagement can weigh more heavily on smaller retail programmes. The issue is therefore not so much that sustainability claims should receive less scrutiny, but whether sufficiently clear and consistent supervisory expectations enable credible claims to be conveyed to households without unnecessary complexity.

For retail-facing green finance, supervisory convergence is therefore one element of the conditions for scalability. Clearer expectations about the substantiation and retail communication of sustainability claims can simultaneously support investor protection while reducing uncertainty for issuers and distributors. This is particularly important for products intended to be simple and repeatable: their ability to scale depends not only on harmonised rules, but also on firms being able to apply those rules with reasonable confidence across different retail markets.

4.5. Constraints of market structure

Market structure provides a further explanation for the gap between the supply of sustainable financial instruments and the availability of products designed for households. The regulatory barriers discussed in the preceding sections affect whether products can be issued and distributed efficiently. But even where an instrument is compliant, credible and technically accessible to retail investors, it still needs to fit the commercial and operational structures through which retail financial products are distributed.

Retail distribution is selective. Banks, brokers, advisers and platforms decide which products to onboard, maintain, present and actively promote. These decisions reflect expected client demand and commercial considerations as well as the operational costs associated with incorporating a product into existing systems and customer journeys. This distinction is particularly relevant for individual bonds and other products that are relatively small, occasional or bespoke. A product can therefore be available to a retail investor without becoming a genuinely retail-facing proposition.

The economics of issuance can create a similar constraint on the supply side. Stakeholder input from a market-infrastructure operator indicated that issuers may already be able to satisfy their financing needs through institutional markets and may therefore have limited commercial reason to incur additional costs associated with a dedicated retail offer. The absence of retail-facing issuance should consequently not be interpreted automatically as evidence about household demand: it can also reflect the economics and established structure of the issuance process.

Repeatability is important on both the buy and sell sides. An occasional product may require product-specific analysis and operational onboarding prior to its inclusion in a distributor's retail products. In contrast, products that can be distributed using repeatable and existing distribution methods can spread the cost of setup and operations over a larger transaction size or customer base. This does not necessarily suggest a preference for any particular legal form but can make products that can be integrated into an existing distribution infrastructure easier to distribute at scale than products requiring bespoke handling.

A related distinction exists between access and visibility. Retail investors encounter financial products through curated environments such as banking applications, broker platforms, adviser recommendations and savings or investment menus. A security may be technically purchasable through a broker or searchable by an investor without being actively presented alongside mainstream savings and investment options. Its practical retail reach therefore depends partly on whether it is incorporated into the channels through which households normally discover and compare products.

Product features and distribution models therefore cannot be considered separately. Distributors are more likely to incorporate products that are compatible with existing governance, sales and servicing processes and whose essential characteristics can be presented through established fields and interfaces. Digital platforms, comparison tools and adviser processes generally organise products around a limited set of characteristics, such as risk, return, maturity, liquidity, costs and, increasingly, sustainability features. Products that are more complex, legally uncertain or difficult to compare may consequently remain technically accessible but receive limited visibility in retail channels. This is relevant in advised distribution, where product governance, suitability and sustainability-preference requirements affect how products are classified and matched to clients, and in execution-only channels, where products need to be sufficiently standardised and intelligible to fit existing platform and search structures.

The economics of sustainability-related integrity requirements create an additional consideration. Green frameworks, eligibility criteria, processes for tracking proceeds, external review and allocation or impact reporting can strengthen the credibility of sustainable instruments, but they also involve costs that are at least partly fixed at product or issuer level. Large or frequent issuers may be able to spread these costs across larger transactions or repeated issuance. For municipalities, public utilities, medium-sized companies and other less frequent issuers, the same requirements can represent a larger share of the economics of a relatively small transaction.

This matters for retail-facing issuance because a dedicated retail proposition can introduce additional setup, communication and distribution requirements without

necessarily increasing the amount raised sufficiently to offset those costs. The problem is potentially more pronounced for occasional issues linked to local or visible projects: such projects may provide a relatively tangible sustainability proposition for households, while the issuers concerned may have less scope to spread product-development and reporting costs across a large issuance programme. Table 7 summarises the principal market-structure mechanisms affecting the conversion of sustainable issuance into retail-facing products.

Table 7. Market-structure constraints in retail-facing green finance

Constraint	Mechanism	Potential effect
Distributor economics	Onboarding and servicing costs	Smaller or bespoke offers may receive limited promotion
Limited visibility	Selective product presentation	Availability does not ensure household visibility
Distribution compatibility	Need to fit existing retail channels	Bespoke products may be harder to integrate
Fixed integrity costs	Frameworks, review and reporting	Greater relative burden for smaller issuers
Limited repeatability	Product-specific setup for occasional offers	Weaker economics for one-off retail offers

Source: Authors' elaboration.

Market structure should therefore be understood as a conversion constraint between issuance and household distribution. A growing stock of sustainable securities does not automatically produce a corresponding supply of retail-facing products. Whether it does so depends on the economics of issuance, the repeatability of product structures, their compatibility with established distribution infrastructure and their visibility within the channels through which households invest.

4.6. Synthesis: the barrier stack

This chapter shows that the barriers to retail-facing green finance accumulate across the chain from issuer to distributor to household. A green bond, sustainability-linked bond or savings-like green product may be legally possible, credible in sustainability terms and technically accessible to retail investors but still fail to scale if one or more layers of the chain does not work.

The result is a barrier stack. Each layer affects a different stage of the retail-facing product journey. Regulatory fragmentation affects how easily a product can be replicated across markets. Conduct and product-governance requirements determine whether it can be distributed. Tax and savings regimes determine whether it is attractive relative to national alternatives. Supervisory expectations determine whether issuers and distributors feel confident using sustainability claims in retail channels. Market-structure constraints determine whether the product is actually surfaced to households. Table 8 summarises these layers.

Table 8. The barrier stack for retail-facing green finance

Stage	Barrier	Effect
Issuance and replication	Regulatory fragmentation	Higher costs of cross-border replication
Distribution	Conduct and disclosure requirements	Additional requirements for retail distribution
Household attractiveness	Tax and savings regimes	Uneven net returns and limited portability
Sustainability communication	Supervisory expectations	Uncertainty around claims and communication
Visibility	Market structure	Technical access does not ensure visibility

Source: Authors' elaboration.

This synthesis suggests a key point for consideration. Increasing the supply of sustainable financial instruments is not sufficient, by itself, to expand retail-facing green finance. The question is also how suitable instruments can be converted into propositions that households can access, understand and use. This requires consideration not only of issuance conditions, but also of distribution, supervisory expectations, national tax and savings arrangements and the economics of integrating products into retail channels.

The challenge for retail-facing green finance is therefore not a choice between investor protection and retail participation. Investor protection and the integrity of sustainability claims remain essential, but the analysis in this chapter shows that scalability also depends on how efficiently products can move through the different stages between issuance and household distribution. The next chapter considers the conditions under which these barriers could be reduced, and retail-facing green finance could develop at greater scale.

5. International perspective: design lessons for retail-facing green finance

Key findings

- **Retail scale is easier to build on existing household financial infrastructure**. Familiar savings institutions and retail distribution channels reduce the need for households to navigate new investment processes.
- **A sustainability label does not create retail demand on its own**. Product familiarity, access, financial terms and distribution remain central to household participation.
- **Public infrastructure can support both distribution and issuance economics**. The Hong Kong case shows how established retail channels and support for issuance and verification costs can operate together.
- **Tax treatment can materially strengthen the retail proposition**. The US municipal-bond experience shows how after-tax attractiveness can support household participation even without an EU-style sustainable-finance framework.
- **There is no single model for scaling retail-facing green finance**. The transferable lessons concern the underlying design levers – trusted distribution, manageable fixed costs and competitive tax or savings arrangements – rather than the replication of particular national institutions.

The earlier chapters mapped the EU landscape and identified the main barriers to scaling retail-facing green finance. This chapter complements that analysis through three non-EU case studies, selected because they illustrate different design levers relevant to the barriers identified in Chapter 4: the UK, Hong Kong and the US. The cases are presented now as models for direct transplantation to the EU, but as examples of how existing savings institutions, retail distribution infrastructure, support for fixed issuance costs and tax treatment can shape retail participation.

5.1. The UK: a retail green product built into an existing savings institution

Since 2021, the UK government has operated a Green Financing Programme built around two complementary instruments that share a common Green Financing Framework. Wholesale market financing is carried out through Green Gilts issued by the Debt Management Office, while the retail-facing channel is provided through National Savings

and Investments (NS&I), the government-backed savings institution, via Green Savings Bonds. The important design feature is that the retail product is not a tradable green bond sold to households through capital markets. It is a fixed-term savings product distributed through an existing public savings institution.

The green product is deliberately simple in its design. Green Savings Bonds are fixed rate, three-year savings products with a minimum investment of GBP 100 and a maximum holding of GBP 100 000 per person per issue. The bonds are managed online, the funds invested are blocked for the duration of the three years, and the interest on them is taxable and qualifies towards the Personal Savings Allowance. All of that is typical for a savings product, and the point is exactly that. The financial instrument is not supposed to behave like a tradable bond. It behaves like any other product offered by the NS&I.

The architectural lesson is that instead of building a whole new retail green bond market, the UK has chosen to add a green element to a pre-existing savings institution with a strong national customer base and sovereign guarantee behind it. NS&I describes itself as supported by HM Treasury and servicing more than 24 million customers. The institutional background here is crucial as the household does not have to learn a completely new access route to the bond market, open a brokerage account and evaluate secondary market liquidity. The green component gets added to an existing savings process.

The same framework allows linking the retail product to the sovereign green finance programme. According to the original 2021 Green Financing Framework, the revenues were to be allocated to six eligible categories: clean transport, renewable energy, energy efficiency, pollution prevention and control, living and natural resources, and climate change adaptation. The HM Treasury publishes reports on allocation and impact of the Green Financing Programme for both Green Gilts and Green Savings Bonds. In other words, the retail instrument acquires credibility and reporting discipline of the sovereign programme without obliging the household to learn the bond mechanics.

The framework was revised in November 2025 and now identifies seven eligible categories. It also includes expenditures related to nuclear energy, according to certain conditions and exclusions in the framework. NS&I says that the Green Savings Bonds bought after 8 April 2026 will work under the new Green Financing Framework. This is an important point from the perspective of governance of the household-facing products because the boundary of what counts as eligible expenditure on ‘green’ is at least partly a policy decision and could change over time. Such changes need to be clearly communicated to retail customers, because the trust in the claims needs not only the presence of the framework but also its consistency and clarity.

Lesson for the EU. The UK case demonstrates that developing green finance in the retail segment is easier if it is integrated into a trusted savings institution and presented to households as a component of the savings process. The transposable lesson is not the model of NS&I itself, which is obviously country specific. The broader lesson about the design of the green retail products is that they need the distribution infrastructure, credible product design and credible public sector reporting. Some Member States may be better positioned to implement such a model owing to the availability of public savings institutions or existing national savings products.

5.2. Hong Kong: a retail green bond programme and targeted cost subsidies

Hong Kong offers a quite different example that combines a retail government green bond channel with an extended government subsidy scheme, reducing costs associated with sustainable debt issuance and external review. The relevance for the EU lies not in copying Hong Kong's market structure, but in addressing two identified barriers: distribution infrastructure and fixed-cost integrity requirements.

The Hong Kong government launched two batches of retail green bonds in 2022 and 2023 within its Government Sustainable Bond Programme. Retail investors were able to participate in government green financing directly while relying on an existing retail distribution infrastructure. Applications could be filed via placing banks, the Hong Kong Securities Clearing Company (HKSCC) or securities brokers, and the bonds were traded on the Hong Kong Stock Exchange, although listing does not guarantee liquidity or strong secondary-market pricing.

This infrastructure matters. Hong Kong did not only rely on the availability of a green label and secondary-market access. Instead, it relied on an existing model of a retail government bond distribution infrastructure, which was familiar to both households and financial intermediaries. In this way, the Hong Kong retail green bonds resemble the British case: the green financing proposition was built atop an existing public retail channel and not a new standalone product.

Hong Kong's second relevant design feature is its Green and Sustainable Finance Grant Scheme. The scheme was launched in May 2021 to subsidise eligible bond issuers and loan borrowers for part of their bond issuance and external review expenses[5]. It was

[5] Detailed information on the share of the costs covered and the eligibility criteria are available at the 'Guideline on the GSF Grant Scheme' by the Hong Kong Monetary Authority: https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/bond-market-development/tax-concessions-and-incentive-schemes/.

extended by three years from 2024 to 2027, with its scope expanded to cover transition bonds and loans, and it is administered by the Hong Kong Monetary Authority (HKMA).

This is relevant because fixed costs are a recurring barrier in retail-facing green finance. External review, framework preparation, allocation reporting and impact reporting improve credibility and reduce greenwashing risk, but they also create upfront and recurring costs. These costs are easier for large sovereign or corporate issuers to absorb than for smaller issuers, municipalities, utilities or repeatable retail-facing programmes. A public grant scheme does not remove the need for integrity mechanisms. It reduces the cost of using them.

Singapore provides a useful comparator rather than a separate case. The Monetary Authority of Singapore's Sustainable Bond Grant Scheme offsets part of the costs of external reviews for eligible green, social, sustainability, sustainability-linked and transition bonds. This confirms that cost support for external review has become a recognised policy tool in some Asian sustainable-finance hubs[6].

Lesson for the EU. Hong Kong suggests that retail-facing sustainable debt products benefit from two types of public infrastructures: the retail bond distribution channel, which the participants of the market are already familiar with, and the cost-sharing mechanism to reduce the fixed costs of high-integrity sustainable debt issuance. While Hong Kong's specific model of such infrastructure cannot be simply replicated by the EU, it demonstrates a design principle. For the EU, the case therefore highlights reusable documentation and cost-sharing mechanisms as potential ways of addressing the fixed costs associated with high-integrity sustainable issuance, particularly for smaller or less frequent issuers.

5.3. THE US: SCALE WITHOUT AN EU-STYLE SUSTAINABLE-FINANCE FRAMEWORK

A good contrast case comes from the US. It has no federal sustainable-finance taxonomy like the EU Taxonomy, federal green bond standard like the European Green Bond Standard, sovereign green-bond programme or retail green savings product. The lesson here is not regulatory architecture. It is the importance of tax and market structure in producing one of the world's biggest retail-facing fixed-income markets.

The process is simple. Under Section 103 of the Internal Revenue Code, interest income on state and local bonds is generally exempt from federal gross income, subject to certain exceptions. Municipal bond interest is also exempt from state and occasionally local income taxes when the investor is resident in the issuing state. As a consequence,

[6] Monetary Authority of Singapore, *Sustainable Bond Grant Scheme*, https://www.mas.gov.sg/schemes-and-initiatives/sustainable-bond-grant-scheme.

municipal bonds have an inherent appeal for taxable individual investors, especially high marginal rate investors.

The result is a municipal bond market with a strong retail orientation. According to the Municipal Securities Rulemaking Board (MSRB), individual investors hold nearly 70 % of outstanding US municipal securities, with 48 % held directly by households and approximately 21 % held through mutual funds. The MSRB also links individual investor demand to the tax exemption and the historically low default rates of municipal securities.

In this context, the green label operates as an overlay on a familiar tax-advantaged instrument structure. A green municipal bond may finance environmental, water, clean-energy or climate-related projects, but the retail appeal of the underlying instrument is not created by the green label alone. It is created by the combination of tax treatment, familiarity, local public-sector issuance and an established municipal securities market. The green label can add reputational value and signal the use of proceeds, but it is not the core mechanism that makes the instrument retail-relevant.

The comparison with the EU is instructive. The EU has developed a sophisticated regulatory framework for sustainable finance, covering topics from classification to verification and disclosure. Yet the EU has not combined the framework with a uniform household-level tax wrapper that could make green retail instruments structurally attractive relative to existing national savings options. In previous chapters, it was shown that tax is a crucial factor in the retail competition. The US experience illustrates this point from a different direction: the retail scale can exist without an EU-style sustainable finance rulebook if the underlying instrument is familiar, tax-advantaged and part of household portfolios.

It does not mean that the regulation is unnecessary. On the contrary, the US example shows that the market structure can have problems without an adequate sustainable finance framework. In green or ESG-labelled municipal bonds, there is heavy reliance on issuer disclosures, voluntary frameworks, external review and due diligence by investors. The MSRB materials about ESG investing in municipal bonds highlight the problems of labels and frameworks, external review and verification, investor risks and considerations. The EU sustainable finance framework aims precisely to reduce such uncertainties and increase the market integrity. The conclusion is thus not that the labels and the regulation do not matter, but that the labels and the regulation alone do not guarantee the retail scale.

Lesson for the EU. The experience of the US market shows that tax treatment can support retail scale without any sustainable finance framework. For the EU, the point is not to replicate the municipal bond market and reflect the specifics of the US federal structure

and tax code. It is to recognise that green labels, disclosure requirements and external review will have limited retail effect if the products do not compete based on after-tax return, and are familiar structures for investors.

5.4. CROSS-COMPARATIVE LESSONS FOR THE EU

The three cases point to a common conclusion: sustainable-finance rules are only one component of a retail-facing market. In each case, household participation is supported by an additional institutional mechanism that sits between the financial instrument and the retail investor. In the UK, this is an established public savings institution; in Hong Kong, an existing retail bond distribution architecture combined with support for issuance and verification costs; and in the US, the tax treatment and established market structure of municipal securities.

The mechanisms differ, but they address three of the barriers identified in Chapter 4: distribution infrastructure, fixed costs and the after-tax attractiveness of products. They also illustrate a broader point: retail scale is more likely where sustainable instruments can make use of existing household financial infrastructure rather than requiring investors, issuers and distributors to adopt entirely new processes. Table 9 summarises the comparison.

Table 9. International design lessons for the EU

Jurisdiction	Design lever	What it addresses	Lesson for the EU
UK	Public savings institution	Trust and household access	Embed green products in familiar savings journeys
Hong Kong	Retail bond channel and grant scheme	Distribution and fixed-cost barriers	Support repeatable issuance and verification
US	Tax-favoured municipal bonds	After-tax attractiveness	Labels need tax and wrapper competitiveness

Source: Authors' elaboration.

Taken together, the cases suggest that there is no single institutional model for scaling retail-facing green finance. What matters is the presence of mechanisms that connect sustainable instruments to household financial behaviour: familiar distribution channels, manageable issuance and verification costs, and financial terms that allow products to compete with established savings and investment alternatives.

None of the three models can be transferred literally to the EU. The UK model depends on NS&I and its particular role in the national savings system; Hong Kong relies on

established retail government-bond channels and targeted public support; and the US municipal bond market reflects the specific characteristics of federal tax law and sub-sovereign finance. Their relevance for the EU therefore lies in the underlying design levers rather than in the institutional models themselves: trusted distribution infrastructure, mechanisms for addressing fixed costs, and tax or savings-wrapper arrangements that affect the attractiveness of retail participation.

These cases provide the international counterpart to the barriers identified in Chapter 4. The following chapter turns from the institutional conditions for supply and distribution to the household side of the market, examining the conditions under which retail investors are likely to adopt such products in practice.

6. FROM AVAILABILITY TO ADOPTION: WHAT MAKES CITIZENS ACT

Key findings

- **Significant variation in household starting positions across the EU**. Direct ownership of bonds is low across most Member States, with considerable levels of indirect exposure through funds and other products.
- **Sustainable products must compete on the basis of established savings and investment benchmarks**. Perceived safety, liquidity, yield and simplicity as well as familiarity are therefore key factors.
- **Trust is based on demonstrable and credible sustainability evidence**. Issuer recognition, verification and reporting as well as accountability aspects are critical retail confidence drivers.
- **Increased disclosure does not automatically lead to higher understanding**. Sustainability data must be relevant, comparable and applicable at the point of decision rather than just technically complete.
- **Product design can play a key role in lowering barriers to participation**. Easily accessible thresholds, clearly defined risk and protection regimes, easily understood liquidity and redemption rules, transparent net return profiles and a compelling sustainability narrative all matter.
- **Distribution defines the opportunity to reach households' effective choice set**. Mainstream availability can lower search and attention costs, while digital access, minimum investments and Member State differences can influence the breadth of participation.

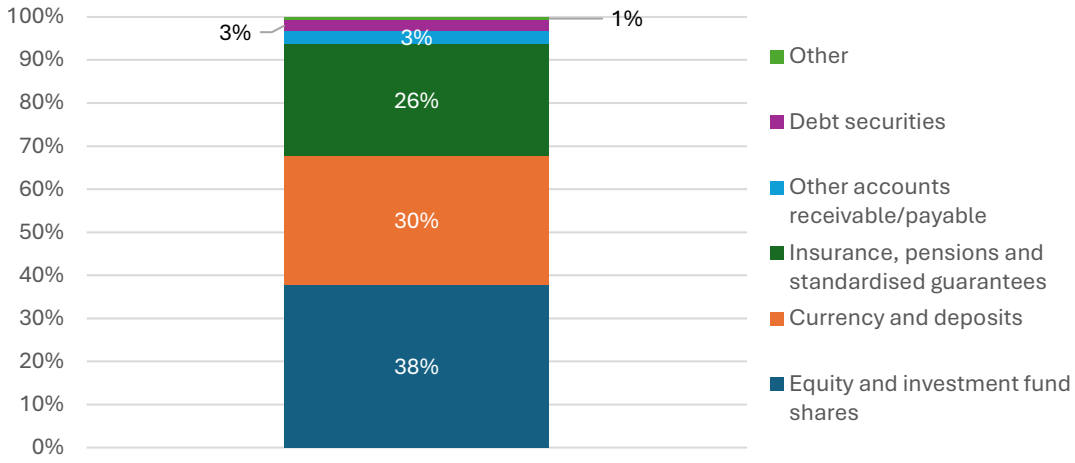
Environmental preferences can influence households' interest in sustainable investment, but they are not sufficient to generate participation. Financial decisions are also shaped by liquidity, risk, return, familiarity, trust and the effort required to understand and access a product. Retail adoption therefore depends on whether sustainable products can fit within established saving and investment practices and compete with the alternatives households already use.

This chapter develops the demand side of the scaling framework introduced in Chapter 2. It examines how household financial behaviour, trust and comprehension, product design and distribution affect whether sustainable products move from availability to actual adoption, and whether participation can extend beyond households already active in financial markets.

6.1. Household starting point: savings habits and limited direct bond participation

Household participation in green finance starts from the structure of household balance sheets. At EU level, household financial assets are concentrated in a small number of categories (see Figure 11). Equity and investment fund shares account for the largest share (38 %) of total household financial assets, followed by currency and deposits (30 %), and insurance and pension funds (26 %). By contrast, debt securities account for only 3 % of the aggregate household portfolio. This matters for retail-facing green finance because, for many households, the relevant choice is not between a green bond and a conventional bond, but between a green product and familiar alternatives such as deposits, investment funds, insurance-based savings products, pension-linked products or government-backed savings instruments.

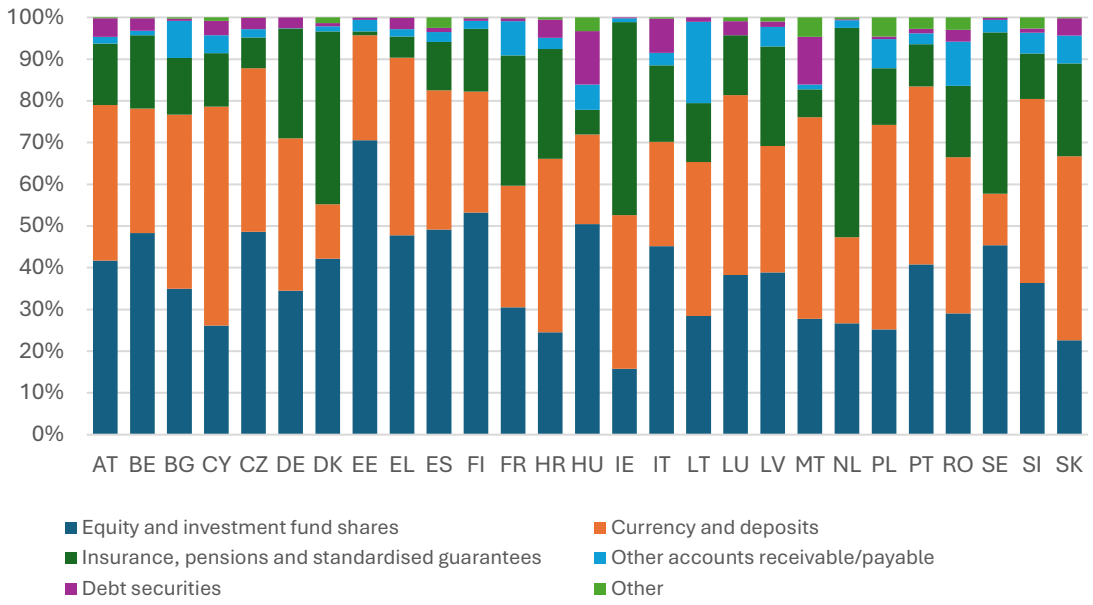
Figure 11. Allocation of household financial assets in the EU27 (% of total financial assets, 2025)



Note: 'Other' includes both loans and financial derivatives and employee stock options.
Source: Authors' elaboration based on Eurostat data.

There are, however, substantial differences across Member States (see Figure 12). In some countries, household portfolios are more deposit-oriented (e.g. Cyprus, Malta and Poland); in others, equity and investment fund shares (e.g. Estonia, Finland and Hungary) or insurance and pension products (e.g. Denmark, Ireland and the Netherlands) account for a larger share of household financial assets. Debt securities are more visible in some countries (e.g. Hungary, Italy and Malta) but remain a relatively small category in most household portfolios. This heterogeneity matters because the same retail-facing green product will not compete against the same household benchmark in every Member State. In one market, it may compete mainly with deposits; in another, with investment funds, pension-linked products, insurance-based products or domestic government securities.

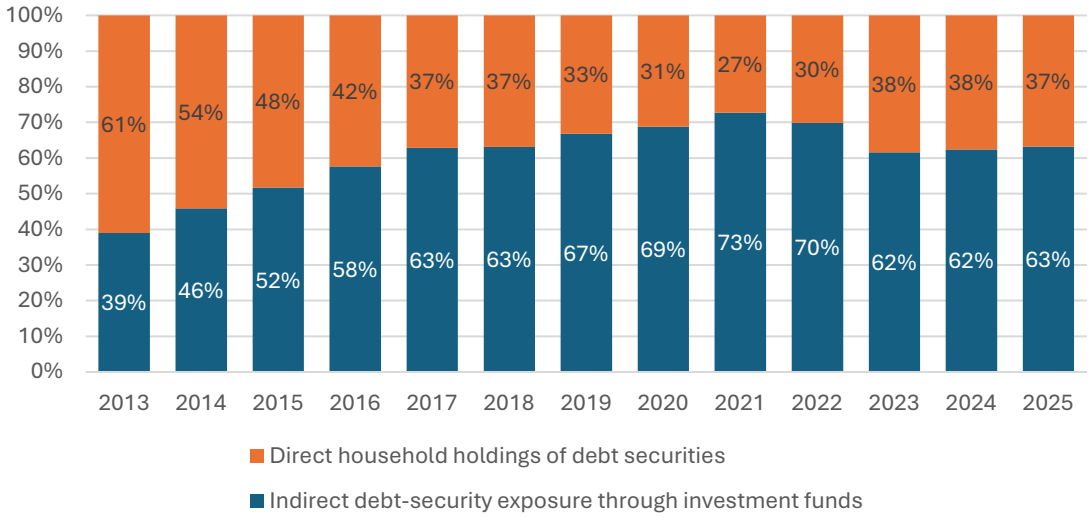
Figure 12. Allocation of household financial assets by Member State (% of total financial assets, 2025)



Note: 'Other' includes both loans and financial derivatives and employee stock options.
Source: Authors' elaboration based on Eurostat data.

Focusing on the category of debt securities, the former trend is increasingly indirectly channelled through investment funds rather than directly held (see Figure 13). In 2013, direct holdings accounted for around 61 % of overall household exposure to debt securities, compared with around 39 % indirect exposure through investment funds. The trend had largely reversed by 2025, with indirect exposure through investment funds accounting for around 63 % and direct holdings around 37 %. The former can be viewed as consistent with the broader trend of fund-based household investments, and the ability of investment funds to deliver diversification and professional management. The partial re-emergence of direct holdings in the past few years may also be consistent with the renewed attractiveness of bonds in a higher yield environment (Campbell, 2006; Catherine *et al*., 2023) and the increased use of retail government bond programmes in some Member States (Dutch State Treasury Agency, 2023; OECD, 2026). The key point in general is that a significant and growing percentage of household bond exposure is indirectly mediated, affecting the penetration of retail-facing green finance.

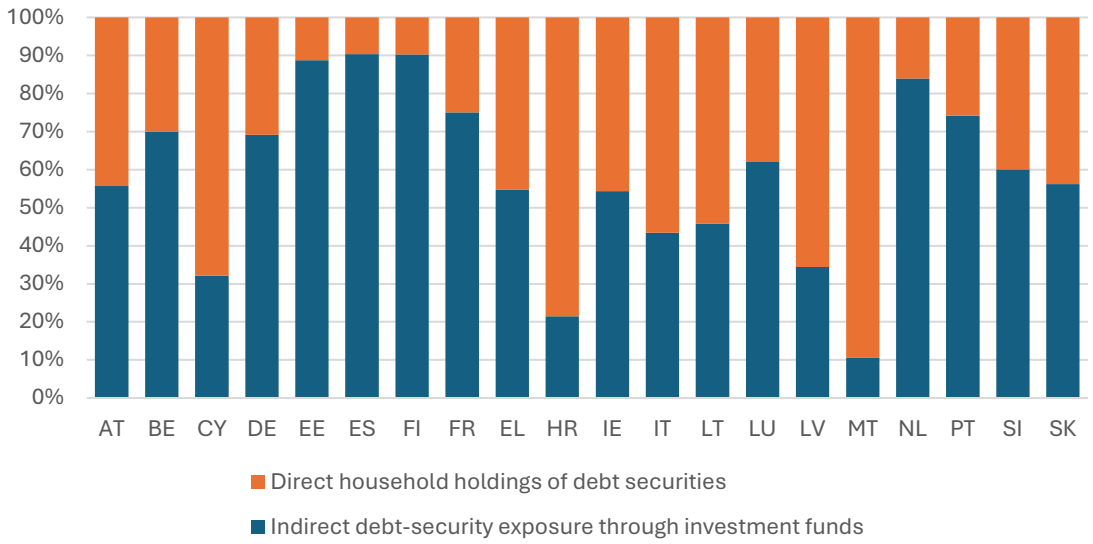
Figure 13. Household exposure to debt securities in the EA (% of total debt-security exposure, 2013-25)



Notes: 'Direct household holdings of debt securities' refers to the European Central Bank (ECB) series for debt securities held by households excluding the look-through of investment fund shares. 'Indirect debt-security exposure through investment funds' refers to the ECB look-through series for debt securities held via households' investment fund shares. The figure does not capture all possible indirect debt-security exposure embedded in insurance and pension products.
Source: Authors' elaboration based on ECB data.

The balance between direct holdings and indirect exposure through investment fund shares also differs substantially across Member States (see Figure 14). In several countries, household debt-security exposure is obtained mainly indirectly through investment fund shares. This is particularly visible in Estonia, Spain, Finland, the Netherlands and Portugal, where the indirect component accounts for a large majority of total debt-security exposure. By contrast, in Malta, Croatia, Cyprus, Latvia and Italy, direct holdings represent a larger share of household debt-security exposure. Retail bond participation is therefore not a uniform phenomenon across the euro area. In some Member States, a retail-facing green bond may build on a stronger existing habit of direct bond ownership. In others, household exposure to bonds is more likely to be mediated through funds and other investment products.

Figure 14. Household exposure to debt securities by EA Member State (% of total debt-security exposure, 2025)



Notes: 'Direct household holdings of debt securities' refers to the ECB series for debt securities held by households excluding the look-through of investment fund shares. 'Indirect debt-security exposure through investment funds' refers to the ECB look-through series for debt securities held via households' investment fund shares. The figure does not capture all possible indirect debt-security exposure embedded in insurance and pension products.
Source: Authors' elaboration based on ECB data.

The route through which households hold bonds has important implications for adoption. Direct participation can provide households with a more direct link to both the issuer and (in the case of green bonds) the use of proceeds. However, it comes at the cost of placing greater demands on the investor, including the need to assess creditworthiness of the issuer, maturity, yield, liquidity and price risk (van Rooij *et al.*, 2011; Lusardi and Mitchell, 2014). The need to build up a diversified portfolio using individual securities may also require larger investable amounts, diversification requiring exposure to more than one issuer rather than concentration in a given bond (Calvet *et al.*, 2007). Investment funds can mitigate some of these costs by pooling investments, and delegating portfolio construction and diversification to professional managers (Guiso and Sodini, 2013). They can also be accessed through more established channels such as banks, financial advisers, fund platforms and digital investment platforms. The trade-off is a more indirect link between the household's investment and particular issuers or green assets, as individual bonds are incorporated into a larger portfolio.

These differences suggest that direct green bonds are likely to address a narrower segment of the household market than products distributed through funds, savings products or other intermediated channels. This does not make direct green bonds unimportant; rather, it means that their reach depends more heavily on reducing the

financial, informational and distribution frictions faced by individual investors. Table 10 summarises the principal differences between the two routes.

Table 10. Direct and indirect bond exposure: retail adoption implications

Dimension	Direct bond exposure	Indirect exposure through funds
Financial literacy	Greater investor knowledge required	Professional management reduces the burden on the investor
Diversification	Investor bears greater responsibility for managing concentration risk	Diversification is built into the portfolio
Entry threshold	A larger portfolio may be needed to diversify across individual bonds	Lower practical entry through fund units
Liquidity	Depends on the individual bond and secondary market	Entry and exit are generally managed at fund level
Distribution	Broker, bank or public offer	Bank, adviser, fund platform or app
Green claim	More direct link to issuer and, for use-of-proceeds bonds, allocation of proceeds	Sustainability exposure is portfolio-based and may be less tangible

Source: Authors' elaboration.

6.2. What citizens want versus what markets offer

Household decisions about whether to invest in sustainable products are unlikely to be framed primarily in terms of sustainable-finance classifications, metrics or reporting frameworks. They are also financial decisions, shaped by considerations such as safety, liquidity or clarity about redemption, expected return, purpose, and familiarity with the distribution channel. The relevant comparison is therefore not only between green and conventional instruments, but between a green product and alternatives such as deposits, savings accounts, investment funds, insurance-based savings products and government-backed savings instruments.

The market offer can take a different shape. While sustainable retail exposure in many cases is offered through funds, insurance-based investment products or other intermediated solutions, these can involve pros and cons of their own. Such solutions provide diversification, management and distribution benefits, but the link between the household's investable product and any specific green asset or outcome is weaker.

Conversely, green bonds may exist in the market without actually being aimed at mainstream retail investors. Because they are not being structured, marketed or

distributed as a regular product, they can technically be offered through brokers or secondary markets. And this is the key conundrum behind the product market fit question: while familiar products embed fewer tangible links at specific transitions, more direct exposures are arguably more complex to engineer and less mainstream.

The relevant question is therefore not simply whether sustainable products are available, but whether suitable products are visible and readily selectable under the conditions in which households make financial decisions. Table 11 summarises some of the resulting mismatches between household decision criteria and the characteristics of the market offer.

Table 11. Household decision criteria and potential market frictions

Household decision criteria	Potential market frictions
Safety and understandable risk	Technical risk and disclosure language
Liquidity or clear redemption terms	Exit conditions that may be difficult to assess
Transparent net return	Fees, spreads and tax effects that may be difficult to compare
Visible purpose and credible link to outcomes	Sustainability communicated primarily through labels and frameworks
Familiar saving and investment routines	Products outside mainstream household financial journeys

Source: Authors' elaboration.

These mismatches can operate through several related mechanisms: whether a product enters the household's consideration set, whether its financial and sustainability propositions can be understood and trusted, and whether its financial characteristics can be compared to familiar alternatives. The following sections examine these mechanisms through trust and credibility, comprehension and communication, product design, and distribution and choice architecture.

6.3. TRUST AND CREDIBILITY

Trust is an important constraint in retail-facing green finance because households are generally not able to verify sustainability propositions independently at the point of sale. Trust in financial institutions is recognised as an important determinant of financial-market participation and depends, among other factors, on institutional behaviour, the services provided, financial soundness and citizens' perceptions (van der Cruijsen *et al*., 2020). Institutional investors can draw on dedicated teams, data providers, external

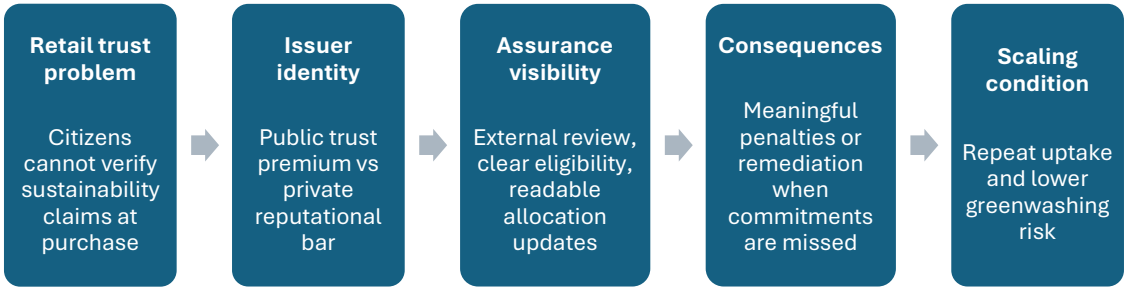
reviewers and engagement processes. Households have fewer resources for independent verification and may therefore rely more heavily on observable indicators, including who stands behind and distributes the product and what evidence supports its sustainability proposition. Research on retail investors and financial advisers similarly indicates that non-expert investors can rely on trust and advice-taking heuristics rather than exclusively on technical assessments of risk and return (Monti *et al*., 2014).

Greenwashing risk is therefore also a demand-side issue, rather than only a supervisory or reputational concern. ESMA defines greenwashing as sustainability-related statements, actions or communications that do not clearly and fairly reflect the underlying sustainability profile of an entity, financial product or financial service and that may be misleading to consumers, investors or other market participants (ESMA, 2024). Perceptions that a green product is primarily a marketing proposition rather than a credible sustainability instrument can therefore reduce trust and willingness to invest, including among households that are supportive of environmental objectives.

A systematic review of the greenwashing literature finds that perceived greenwashing can increase consumer confusion and scepticism and negatively affect trust and purchasing intentions (Santos *et al*., 2024). Consumer evidence also indicates difficulties in distinguishing between sustainable and conventional investments and demand for sustainability claims to be supported by evidence and independent verification (BEUC, 2025). Trust therefore depends partly on features embedded in the product and its governance rather than on additional communication alone.

For retail-facing products, three trust anchors are particularly relevant: issuer identity, verification and reporting, and consequences where sustainability commitments are not met. Stakeholder consultations with securities-market actors, including a securities-market supervisor and a market-infrastructure operator, similarly pointed to these elements as important to retail credibility. They also indicated that the distribution process can reinforce these anchors, particularly by helping investors identify who stands behind the product, understand the basis of the sustainability claim and locate the relevant verification and reporting. Figure 15 summarises the three trust anchors.

Figure 15. Trust anchors in retail-facing green finance



Source: Authors' elaboration.

The first trust anchor is issuer identity. Sovereign and sub-sovereign issuers may benefit from greater familiarity and perceived stability among households, particularly where retail investors already use public-sector savings or investment products. This does not in itself establish the credibility of a sustainability claim, which still depends on the underlying framework, governance and reporting. For private issuers and financial institutions, sustainability propositions may face greater scrutiny where investors perceive a risk that the green dimension is primarily promotional. Credibility therefore depends on more than the choice of label: it also depends on the consistency between the product proposition, the issuer's commitments and the evidence supporting them (Allman and Lock, 2024; Tang and Zhang, 2020; Flammer, 2021).

The second trust anchor is verification and reporting. External review, eligibility criteria and allocation or performance reporting can provide evidence in support of a sustainability proposition (Bhaskar *et al.*, 2025; Pizzi *et al.*, 2024). For retail-facing products, the key requirement is that the verification pathway is identifiable: investors should be able to determine what is being verified, by whom, and that the relevant commitments continue to be monitored over the life of the product. Regular and consistent reporting can create credibility by providing an observable record of whether the product is operating consistent with its stated sustainability framework. How this evidence is translated into a form that is easily digestible by households is discussed in Section 6.4.

The third trust anchor is consequences. Credibility can also be related to what happens if sustainability commitments are not met. For use-of-proceeds products, this means addressing how allocation deviations or failures to meet stated commitments are identified, reviewed and disclosed. For performance-linked instruments, contractual mechanisms such as coupon step-ups can link financial consequences to missed sustainability performance targets (Berrada *et al.*, 2023; Climate Bonds Initiative, 2024). Clearly defined consequences can make commitments more observable and reduce the risk that they will be perceived as mere symbolism. Conversely, poorly defined targets or

consequences can undermine the credibility of sustainability-linked structures (Ul Haq and Doumbia, 2022).

Taken together, the three anchors demonstrate that trust is partly a governance and product-design result. Retail-facing green instruments can limit reliance on unsupported sustainability claims by making responsibility identifiable, verification observable and the consequences of unmet commitments clear. The objective is not to give households access to the same information as professional investors, but rather to design an integrity structure where a retail investor is able to answer three basic questions: who stands behind the claim, how is it verified, and what happens if the commitment is not met?

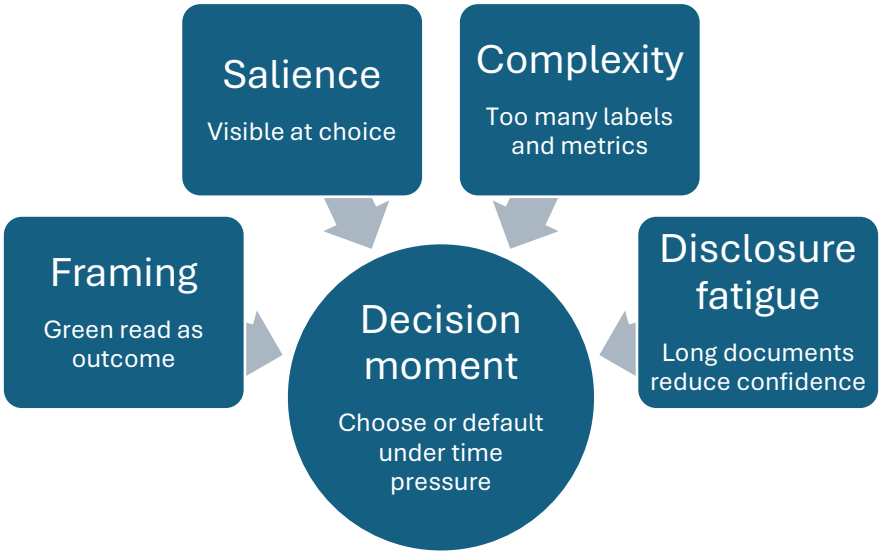
6.4. Comprehension and communication

Comprehension problems in retail-facing green finance do not necessarily result from a lack of information. They can also arise from the way information is framed, presented and layered. Retail investors make decisions with limited attention and against familiar alternatives such as deposits, regulated savings accounts or packaged investment products. Sustainable-finance products, meanwhile, can involve labels, classifications, disclosures and metrics that are meaningful for market professionals but difficult for households to interpret at the point of decision. A product can therefore comply with applicable disclosure requirements while remaining difficult for a retail investor to understand, compare and use at the point of decision (Allcott *et al*., 2026).

This matters because households need to understand both the financial proposition and the sustainability proposition sufficiently to make a decision. In practice, this means being able to answer a limited number of questions: what is the product, what happens to my money, what risks do I take, what return can I expect, what sustainability claim is being made, and what evidence will I receive over time (Filippini *et al*., 2024)[7]? Where these questions are difficult to answer, additional search and information-processing costs can discourage participation. Four communication constraints are particularly relevant at the retail decision point (see Figure 16).

[7] Italian survey evidence illustrates the problem: only 21 % of surveyed investors reported having much or enough information on sustainable finance, while 79 % reported having little, very little or no information (CONSOB, 2024b).

Figure 16. Communication constraints at the retail decision point



Source: Authors' elaboration.

Framing is the first constraint. Households may interpret green and transition-related claims as statements about the environmental purpose or effects associated with an investment. Evidence on sustainable investing suggests that investors value sustainable investment opportunities but do not necessarily process information about impact in a precise or technical way (Heeb *et al.*, 2023). Communication that relies primarily on classification terminology without explaining the nature of the sustainability proposition can therefore create misunderstanding about what the product finances or what commitment the issuer is making (IOSCO, 2021; ESMA, 2024).

Stakeholder feedback from a market-infrastructure operator points to several potential misunderstandings among retail investors: sustainability labels may be interpreted incorrectly; green bonds may be assumed to offer systematically lower returns; or purchasing a green product may be understood as automatically generating a corresponding environmental impact. This makes it important to distinguish clearly between the financial characteristics of the product and the sustainability claim attached to it. The distinction is particularly relevant for sustainability-linked instruments. Unlike use-of-proceeds bonds, these instruments do not generally earmark proceeds for specified green activities but link their financial or structural characteristics to issuer-level KPIs and sustainability performance targets (ICMA, 2024). Presenting them in the same way as use-of-proceeds products could therefore lead retail investors to misunderstand what their investment finances and what evidence is relevant for assessing the sustainability proposition.

Salience is the second constraint. Relevant information can be available without being sufficiently visible at the moment a decision is made. In digital journeys, sustainability

information may sit behind links, tooltips or longer documents that receive limited attention, reducing its practical relevance for consumer choice (OECD, 2018; SMSG, 2025). Research on financial-product choice similarly shows that visually salient product features can materially affect consumer decisions, including among financially experienced consumers (Hilchey *et al*., 2021). For retail-facing green finance, the issue is therefore not only whether information is disclosed, but whether the core financial and sustainability characteristics are sufficiently prominent to enter the investor's decision process.

Complexity is the third constraint. Multiple labels, overlapping terminology and technical sustainability metrics can make comparison difficult. Feedback from a retail-investor association similarly indicates that consumers may struggle to navigate different sustainability-related classifications and labels, including EU and national labels, green and wider ESG bonds, and classifications associated with sustainable investment products. Green bonds may in some cases offer a more readily explainable proposition than broader sustainable investment products, particularly where the use of proceeds is identifiable, but their financial and sustainability characteristics still need to be distinguished clearly.

The broader evidence on information processing supports this concern. Empirical research on information overload shows that information exceeding consumers' processing capacity can increase decision difficulty and reduce decision quality (Peng *et al*., 2021). ESMA's work on the retail-investor journey similarly recognises that lengthy or complex disclosures can create unintended barriers where information is difficult to compare and use in practice (ESMA, 2025). The relevant challenge is therefore to preserve the information needed for investor protection and market integrity while making the core product proposition usable by non-specialist investors.

Disclosure overload is the fourth constraint. It differs from conceptual complexity: even information that is individually understandable may become difficult to use when it is spread across lengthy, layered or legalistic documentation. The broader disclosure literature has long questioned whether extensive mandatory information necessarily translates into effective consumer understanding (Ben-Shahar and Schneider, 2011; Paredes, 2003). Under conditions of limited attention, the volume and presentation of information can affect how investors process it and whether they engage with it at all (Hirshleifer and Teoh, 2003). Technical standards, templates and disclosure requirements

remain important for comparability, accountability and market discipline, but the existence of more information does not by itself ensure retail comprehension[8].

The implication is not simply that more information or reporting is needed, but that the information supporting a sustainability claim must be usable in retail decision conditions. Institutional investors can process detailed allocation reports, impact metrics, taxonomy references and KPI updates. Retail investors need the core proposition and supporting evidence to be presented in a form that allows them to identify what the product finances or commits to, how the claim is substantiated and where subsequent information can be found.

At the retail decision point, this calls for a short and identifiable evidence chain. For a use-of-proceeds product, communication should explain what the money finances, how proceeds are tracked and what allocation or impact evidence will be provided. For a sustainability-linked product, it should identify the target, baseline, measurement date, consequence mechanism and verification source. For a savings-like product, it should explain how the account or deposit is linked to green lending, assets or portfolios.

Taken together, these constraints show that retail communication has to perform a different function from technical documentation. The latter establishes the detailed information and evidence supporting the product; retail communication must make the core financial and sustainability proposition usable at the point of decision while preserving access to that underlying evidence. The challenge is therefore not simply to provide less or more information, but to ensure that households can identify what the product is, what financial trade-offs it entails, what sustainability claim is being made and where the supporting evidence can be found.

6.5. DESIGN FEATURES THAT SUPPORT PARTICIPATION

For retail-facing green instruments, sustainability characteristics are only one part of the household investment proposition. Participation also depends on whether the product can be assessed against familiar alternatives in terms of risk, entry cost, liquidity, return and purpose. Behavioural household finance research shows that financial decisions are shaped by frictions, limited attention and simplified decision rules, making product characteristics and their presentation important for household participation (Beshears *et al.*, 2018). Figure 17 summarises five design features that are particularly relevant for retail-facing green finance.

[8] Stakeholder feedback similarly indicates that standardisation can support comparability and credibility, but that technical standards still need to be translated into information that is usable and actionable for retail investors.

Figure 17. Design features that support retail participation



Source: Authors' elaboration.

A first feature is perceived safety. Households are sensitive to downside risk and ambiguity in financial choices (Kahneman and Tversky, 1979; Dimmock *et al.*, 2016). Italian survey evidence also illustrates the importance of safety-oriented objectives: 81 % of investors identify capital preservation as an investment objective, compared with 48 % selecting sustainability where high returns are expected and 37 % where low returns are expected (CONSOB, 2024b). Perceived safety is not determined by a single risk metric. It can also be influenced by issuer identity, the clarity of the payoff structure and whether guarantee, credit and redemption conditions are understood. Evidence on household stock-market participation similarly identifies trust as a relevant factor in decisions to enter financial markets (Guiso *et al.*, 2008). For retail-facing products, it is therefore important to distinguish clearly between genuinely capital-protected or guaranteed products and investments in which the household remains exposed to issuer, market or liquidity risk.

This distinction is particularly relevant when comparing bond-like and savings-like products. In the EU, eligible bank deposits are generally protected up to EUR 100 000 per depositor and bank under deposit-guarantee arrangements, whereas ordinary bonds do not benefit from equivalent protection. A green label therefore does not make a bond equivalent to a protected deposit, and public-sector issuer status should likewise be distinguished from a formal capital guarantee.

A second feature is a manageable entry threshold. Minimum investment amounts affect both practical access and the breadth of potential participation. Stakeholder feedback from a retail-investor association indicates that high minimum denominations in individual bond markets can contribute to participation being concentrated among wealthier and often older investors. Lower denominations can therefore reduce one financial barrier to direct bond ownership. Italy's BTP Valore programme illustrates a retail-oriented design in which a EUR 1 000 minimum investment is combined with

distribution through established household channels, including banks and home-banking services (MEF, 2026). This does not establish EUR 1 000 as an appropriate threshold for all products or markets, but it illustrates how denomination and distribution can jointly affect the practical accessibility of an individual bond (Filippin, 2026).

A third feature is liquidity or clear redemption conditions. Households may be willing to accept restrictions on access to their money where the terms and trade-offs are clear (Beshears *et al.*, 2020). For retail bonds, relevant characteristics include maturity, secondary-market liquidity and, where provided by the product design, early-redemption or sell-back mechanisms. Italy's BTP Più, a retail government bond within the BTP Valore family, provides one example: retail investors who purchased the bond during the placement period can exercise an early-redemption option after four years, subject to the applicable conditions (MEF, 2025). Stakeholder feedback from retail investors similarly indicates that sustainability characteristics do not remove concerns about liquidity or potential capital losses. Clear maturity, redemption and exit conditions can therefore reduce uncertainty about the consequences of committing funds for a given period.

A fourth feature is net-return clarity. Households will compare green products to alternatives like deposits, savings accounts, government-savings products, and investment funds. The characteristics of sustainability may factor into such a decision, but so do the anticipated financial outcomes, as illustrated by the Italian surveys: 54.3 % of investors are interested in sustainable investments if the returns are the same as for the alternative products, compared to 30.2 % if the returns are lower (CONSOB, 2024b). Evidence on sustainable investments more generally also points to the potential for non-financial preferences to factor into an investment, even if their impact varies across investors and contexts (Riedl and Smeets, 2017; Hartzmark and Sussman, 2019).

Studies looking at retail investor decisions also point to the role of price complexity, non-salient charges, and the difficulties of comparing products in affecting choices (Barber *et al.*, 2005; Carlin, 2009; Choi *et al.*, 2010). As a result, the considerations for investors extend beyond yield to encompass costs in the form of fees, spreads, taxation and suchlike affect their net outcome (AFME, 2025). The importance of such factors is all the greater within the EU, given the differences between Member States in terms of tax treatment and savings wrappers. The evidence that tax salience can affect consumer behaviour also suggests that aspects related to the after-tax outcome may be important, even as the underlying treatment matters (Chetty *et al.*, 2009).

A fifth feature is clarity of the sustainability proposition. Retail investors need to be able to identify what environmental or sustainability claim is being made and the pathway through which it is expected to arise. Evidence from impact investing indicates that investors can value social and environmental outcomes while responding imperfectly to

differences in the magnitude of impact, reinforcing the importance of making the claimed sustainability proposition understandable and decision-relevant (Barber *et al*., 2021; Bonnefon *et al*., 2022).

Stakeholder feedback from a securities-market supervisor similarly emphasises the importance of balanced information on both the financial and sustainability-related characteristics of retail green bonds. The environmental objective and the basis for the sustainability claim need to be identifiable, while allocation and impact reporting provide evidence over the life of the instrument. Sustainability characteristics therefore complement rather than replace the assessment of conventional financial risks and returns.

The relevant sustainability pathway is differentiated by the type of product. Use-of-proceeds products draw the claim from the allocation of funds, whereas performance-linked instruments derive their claim from issuer-level KPIs, targets, and related consequences. In both examples, the claimed environmental contribution needs to be separated from the investor's act of purchasing the product. The literature on investors' impact places emphasis on the need to identify the mechanism through which an investment may contribute to outcome world rather than positing a direct equivalence between the holding of a sustainable asset and the achievement of environmental impact (Kölbel *et al*., 2020).

Combined, the five features illustrate that a green product aimed at the retail investor remains a financial product as much as it is a sustainability proposition and that its potential to be adopted by households depends on the ability of investors to evaluate the risk and capital characteristics of the product, access at an entry cost that is acceptable, understand the conditions for accessing their money, evaluate the net financial outcome against alternatives, and identify the environmental proposition associated with the investment.

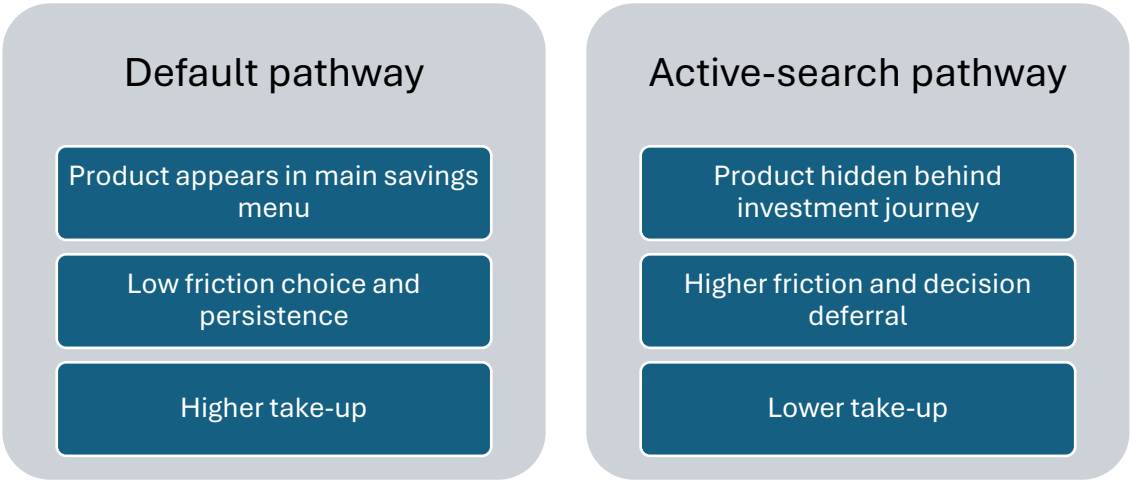
6.6. Distribution, defaults and choice architecture

Household participation might be affected by the context in which financial choices are framed as well as individual preferences or product characteristics: attention is limited, switching and search are costly and households may stick with familiar allocations if the perceived gains from reconsidering them are low. Evidence from retirement saving indicates that default options, simplification and the design of choice environments can have a significant impact on participation and asset allocation even when individuals are free to choose (Madrian and Shea, 2001; Beshears *et al*., 2008; Sunstein, 2013). While these results do not directly indicate how households might respond to green investment products, they help to explain why a willingness to invest in a sustainable way would not

necessarily result in high levels of participation if there were to be no relevant products within the interfaces and routines through which financial decisions are usually taken.

A useful distinction is therefore between a mainstream pathway and an active-search pathway (see Figure 18). In a mainstream pathway, a product is presented within an established saving or investment environment, such as a bank application, savings or investment menu, tax-advantaged account or maturity-rollover process. The household encounters the product when it is already making a financial allocation decision. In an active-search pathway, the product may be technically available, but the investor has to identify it, obtain the relevant information and initiate the investment process separately. Evidence distinguishing active and passive saving decisions shows that participation can differ substantially depending on whether households are required to pay attention and act or whether participation is incorporated into established routines (Chetty *et al.*, 2014). More recent evidence on 401(k) asset allocation likewise shows that default options can shape observed portfolio choices without necessarily revealing underlying preferences (Choukhmane and de Silva, 2026). Applied to retail-facing green finance, the distinction highlights the role of search and attention costs: legal or technical availability does not necessarily place a product within the household's effective choice set[9].

Figure 18. Mainstream pathway versus active-search pathway



Source: Authors' elaboration.

Within these pathways, five aspects of distribution and choice architecture can influence the ways in which products enter household decisions. The first of these is placement. How a product appears within a financial interface can affect the visibility of that product

[9] Stakeholder feedback from market-infrastructure and retail-investor representatives indicates that retail access to sustainable fixed income is often mediated through advisers, banks and online brokerage platforms, while prospectuses and key information documents (KIDs) generally serve as supporting or confirmatory information rather than the main decision-making interface. Products that are not actively displayed can therefore remain practically invisible to retail investors.

and whether it enters the investor's consideration set. Research into financial-product choice indicates that salient features of a product and the presentation of those features can influence consumer comparisons (Hilchey *et al*., 2021). For retail-facing green finance, the question is therefore concerned with whether the product appears alongside relevant alternatives or requires a search process.

The second is the concept of timing. Financial choices are not continuously reconsidered, and the placement of prompts can be important if they align with points at which households are already considering saving or investment. Evidence on household savings behaviour indicates that reminders can create increased attention and influence saving outcomes (Karlan *et al*., 2016). Points at which reminders might be considered include the maturity of an existing product, review of a portfolio or other occasions when funds are being reallocated. The more general implication is that visibility of the product at a particular time can be relevant, alongside the characteristics of the product.

The third is the comparative frame. Products are evaluated relative to alternatives, rather than in isolation. The way in which a green investment is presented alongside deposits, government securities, funds or other savings and investment products can therefore affect which financial characteristics become salient. For retail-facing products, a useful comparison needs to preserve differences in risk, liquidity, maturity and return rather than imply equivalence between products with materially different characteristics.

The fourth is ease of initial and recurring participation. Evidence from commitment-based saving arrangements, including Save More Tomorrow, indicates that mechanisms that reduce the effort involved in initiating or increasing saving can have an impact on participation over time (Thaler and Benartzi, 2004). In the case of retail-facing green finance, features that reduce the effort involved in initiating or continuing to invest – such as manageable amounts or the ability to make an ongoing, recurring investment – may therefore be relevant where those efforts are appropriate to the product. This is distinct from the idea of making a green investment the default: any use of automatic enrolment, preselection or preset allocations would raise separate questions regarding suitability, investor protection and freedom of choice.

The fifth is the role of reminders and feedback. The investor relationship does not necessarily end at the point of investment. Ongoing information can reorientate attention towards the product and provide evidence regarding its financial and sustainability-related performance. In the case of green finance, such feedback can also link the initial sustainability proposition to the reporting and verification discussed in Sections 6.3 and 6.4. Its relevance is therefore potentially both to ongoing engagement and the credibility of the product over time.

Taken together, these mechanisms show why distribution involves more than legal access to a product. A green bond, sustainability-linked instrument or green savings product may be technically available without entering the set of alternatives that households realistically consider. Choice architecture affects whether and when a product becomes visible, the alternatives against which it is assessed, the effort required to participate, and the information received thereafter (Johnson and Goldstein, 2006). For retail-facing green finance, the relevant distinction is therefore between making a product available and integrating it into the financial environments in which households already make saving and investment decisions.

6.7. Inclusion and participation breadth

The aggregate volume of retail investment does not indicate how broadly participation is distributed across households. Financial-market participation varies systematically with factors including wealth, education, fixed participation costs and financial sophistication (Guiso *et al.*, 2002; Campbell, 2006). Retail mobilisation can therefore remain concentrated among households that are already financially confident, digitally capable and able to commit larger amounts. This matters for retail-facing green finance because scaling can be assessed not only in terms of capital mobilised, but also in terms of the breadth of household participation. Italian evidence illustrates one dimension of this variation: sustainable investment holdings are reported by 42 % of investors aged 18-34, compared with 19 % of those aged 65-75 (CONSOB, 2024b).

Four inclusion risks are particularly relevant. The first is the digital divide. Digital platforms, app-based journeys and online banking can facilitate distribution at scale, but reliance on digital-only channels can disadvantage households with lower digital skills, accessibility constraints or a preference for assisted channels. Research on digital inequality shows that differences in digital skills and patterns of internet use can reproduce or reinforce wider socioeconomic inequalities (van Deursen and van Dijk, 2014; van Deursen and van Dijk, 2019). The expansion of digital distribution therefore needs to be distinguished from universal accessibility: a product can be widely available online without being equally accessible to all groups of households.

The second risk is minimum investment size. As discussed in Section 6.5, entry thresholds affect practical access to individual investment products. From an inclusion perspective, the additional concern is distributional: high minimum amounts can restrict participation to households with greater investable wealth and make diversification across individual securities more difficult for smaller investors.

The third risk concerns financial literacy and informational accessibility. The communication and comprehension constraints discussed in Section 6.4 may affect households unevenly, because understanding sustainability concepts is layered onto existing requirements to assess risk, return, liquidity and costs. Complexity can therefore

affect not only overall participation, but also which households are able to participate effectively.

The fourth risk is uneven access across Member States. As discussed in Chapter 4, household investment environments differ substantially across the EU, including in their tax treatment, savings wrappers, distribution structures and national retail-investment arrangements. Where the attractiveness or practical accessibility of retail green products depends on such national infrastructure, households in different Member States may face materially different opportunities to participate. Participation breadth therefore has a geographical as well as a socioeconomic dimension.

Inclusion should consequently be assessed alongside aggregate mobilisation. Relevant dimensions include the breadth of participation across household groups, the effect of minimum investment amounts, the accessibility of distribution channels and the extent to which product complexity places unequal demands on households with different levels of financial and digital capability. For an EU market, differences in practical access across Member States are an additional dimension of participation breadth.

6.8. Synthesis: adoption conditions

The analysis in this chapter shows that household adoption depends on more than environmental preferences or the legal availability of sustainable instruments. Products need to fit existing household portfolios and decision processes and to compete with familiar alternatives on the dimensions households use in practice.

The demand-side evidence strengthens three of the assessment criteria set out in Chapter 2. Attractiveness is defined here by the extent to which products provide understandable risk, liquidity, redemption and net-return characteristics compared to familiar alternatives. Accessibility is defined by the entry barriers and the interface with the channels and interfaces through which households currently save and invest. Integrity is defined by the availability of sustainability claims that are both understandable and supported by verifiable, reportable and governable arrangements.

These three dimensions are not only complementary but also mutually reinforcing. Strong sustainability credentials cannot offset poor visibility or unclear financial terms, and convenient distribution cannot offset poor credibility. Neither can the scope of participation be assumed: the same product characteristics, information requirements and distribution arrangements will affect different household groups in different ways, creating different opportunities in different Member States.

Chapter 7 looks at the policy measures that could help to strengthen these conditions and link the existing supply base for sustainable finance more closely to household participation.

7. FROM RETAIL-ACCESSIBLE TO RETAIL-FACING: POLICY RECOMMENDATIONS

The analysis in the preceding chapters suggests that the EU does not primarily lack sustainable financial instruments. The more profound void runs through the transformation of existing sustainable finance infrastructure into products that are accessible, understandable, trusted and comparable to households through the ordinary saving and investment process. The policy challenge lies less in innovation around sustainability labelling or disclosure regimes and more in product architecture, distribution, repeatability, supervisory clarity and integration into the existing household savings infrastructure.

The recommendations below build on the existing regulatory and market framework rather than proposing a separate EU retail green-finance regime. They focus on measures that can contribute to better accessibility, attractiveness and integrity, while preserving investor protection and enabling a plausible contribution to transition financing. In particular, the recommendations seek to make credible products more easily designed, distributed and understood, reduce unnecessary fixed costs and integrate them into the channels through which households already save and invest.

Recommendation 1: Develop a common retail-facing green product architecture.

A voluntary common blueprint could set out the attributes that enable an already credible sustainable instrument to operate effectively as a retail product. The objective would not be to create yet another sustainability label but to provide a common reference point across bond-like and savings-like products. The blueprint could draw on the product dimensions identified in Chapter 2, including capital protection or guarantee status, maturity and redemption arrangements, minimum denomination, payoff and net return, tax or wrapper treatment, sustainability claim and reporting and integration into mainstream distribution channels.

Recommendation 2: Create a short, standardised retail sustainability summary.

Retail investors need a valuable layer of information that provides a coherent interpretation of the technical sustainability documentation, explaining: (i) what the money finances, how proceeds are tracked, who reviews the claim and what reporting will follow, for use-of-proceeds products; (ii) the KPI, baseline, target, observation date, verification and consequences, for sustainability-linked products; (iii) how deposits are linked to green assets or lending, for savings-like products. Rather than replace or accompany prospectuses, KIDs, allocation reports or other regulatory disclosure, this should present both the financial and sustainability propositions.

Recommendation 3: Integrate retail-facing green products into mainstream distribution channels.

Technical availability is insufficient if such products are not integrated into the interfaces at which households save and invest. Retail-facing products should be able to appear alongside similar conventional alternatives in bank applications, savings and investment menus, adviser processes, broker platforms and, where appropriate, savings and investment accounts. The objective should be visibility and comparability rather than preferential positioning, with consistent presentation of risk, maturity, liquidity, costs, net return and sustainability characteristics.

Recommendation 4: Reduce fixed costs and enable repeatable retail issuance.

The economics of retail-facing issuance could be strengthened by enabling reusable documentation, standardised reporting formats, collective technical assistance and targeted support for developing sustainability frameworks, external review and reporting. This would be particularly important for smaller or less frequent issuers for whom fixed costs would constitute a larger share of transaction economics. The objective should be to enable repeatable high-integrity issuance rather than subsidising investor returns or encouraging isolated one-off offers with limited prospects for scale.

Recommendation 5: Improve compatibility with national tax and savings-wrapper frameworks.

In the light of the national scope of direct taxation and savings architecture, the emphasis should be on compatibility and portability rather than the creation of a new EU-level green tax privilege. Qualifying retail-facing green products should, where appropriate, be able to slot into existing savings and investment accounts and should not suffer from unintended tax disadvantages compared to similar conventional products. Any preferential green tax treatment should be carefully assessed in terms of fiscal cost, distributional effects and additional mobilisation.

Recommendation 6: Strengthen supervisory convergence in retail sustainability claims.

There is a need for greater clarity on how to simplify claims in a manner that is conducive to retail audiences without compromising on completeness and avoiding any form of misrepresentation. Increased supervisory guidance and examples would help to establish a greater degree of differentiation between use-of-proceeds, sustainability-linked and savings-like claims, provide further clarity on the way in which terms such as ‘green’, ‘transition’ or ‘impact’ should be substantiated, and contribute to greater consistency when it comes to communicating post-issuance updates. The aim must be to reduce uncertainty as to how to communicate claims in a manner that is accessible to non-

professional investors, rather than to lower the evidentiary standard of sustainability claims.

Recommendation 7: Monitor participation breadth as well as capital mobilised.

The success of retail-facing green finance should not be measured solely by issuance volumes or total subscriptions. Monitoring should also take account of the number and profile of retail participants, investment size distribution, use of digital and assisted channels, repeat participation, geographic coverage across Member States and, where feasible, evidence of misunderstanding or complaints. Aggregate capital mobilisation and participation breadth should be considered separate outcomes.

These recommendations focus on moving the emphasis from increasing the nominal supply of sustainable instruments to facilitating the conversion of the supply into credible and usable household products. The EU has most of the sustainable finance infrastructure required to support this transformation. However, it lacks an ability to attach this infrastructure more directly to the relevant financial characteristics, information needs and distribution channels that are important in influencing decision-making. The aim should not be to force households to focus on sustainable investments irrespective of their preferences and financial situations, but rather to enable credible green and sustainability-linked products to compete effectively in normal saving and investment choices.

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Annex 1. Additional evidence on sustainable bond stocks and issuance cadence

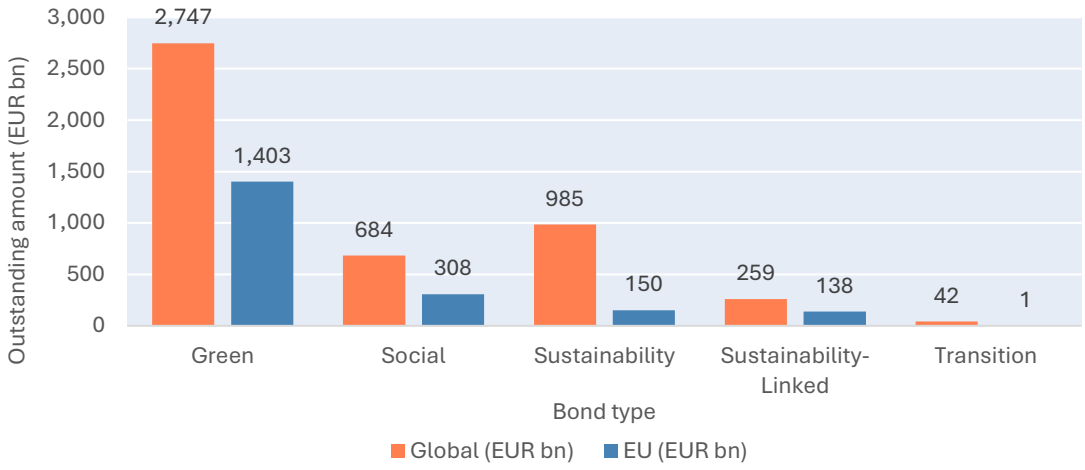
Annex 1 provides additional evidence supporting the market analysis in Section 3.2. It extends the main-text analysis in two areas: the stock and characteristics of sustainable bonds outstanding at end-2025, and the issuance cadence of repeat issuers.

Outstanding stocks of sustainable bonds

The issuance figures reported in Section 3.2 describe flows of labelled bonds brought to market over time, including bonds that may subsequently have matured. A complementary measure is the stock of bonds still outstanding, which provides a better indication of the sustainable bond universe potentially available to investors at a given point in time.

Globally, at the end of 2025 there were around EUR 4.7 trillion of sustainable bonds outstanding, representing roughly 17 400 bonds and 3 600 issuers (see Figure 19). The gap between this figure and the EUR 6 trillion of cumulative issuance reported in the main text reflects the bonds that have already matured. The composition of the outstanding pool by instrument type closely mirrors the cumulative issuance picture: green bonds dominate at 58 % of the total (EUR 2 747 billion), followed by sustainability (21 %), social (15 %) and sustainability-linked bonds (5 %), with transition bonds accounting for under 1 %. The composition of the outstanding pool is therefore broadly similar to that of cumulative issuance, suggesting that maturities have not materially altered the relative importance of the main instrument categories.

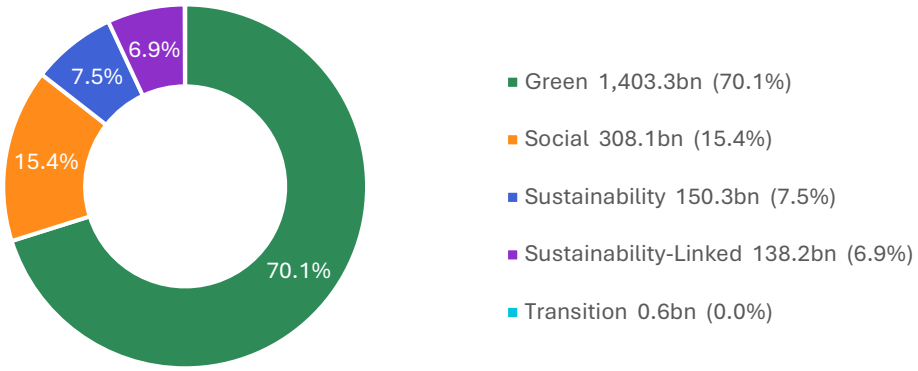
Figure 19. Global and EU outstanding sustainable bond stock by bond type (EUR billion, 2025)



Source: Authors' elaboration based on data from the LGX DataHub. Bonds outstanding at 31 December 2025.

The EU accounts for EUR 2.0 trillion, or 42 % of the global outstanding stock – a share marginally higher than its 39 % of cumulative issuance. Within the EU, the instrument mix is markedly more concentrated than at the global level (see Figure 20). Green bonds make up 70 % of the EU outstanding stock (EUR 1 403 billion), against 58 % globally, while sustainability bonds – the second-largest category worldwide – represent only 8 % in the EU (EUR 150 billion). Social bonds (15 %, EUR 308 billion) and sustainability-linked bonds (7 %, EUR 138 billion) make up the remainder, and transition bonds are effectively absent. The outstanding EU sustainable bond market is therefore overwhelmingly a green use-of-proceeds market.

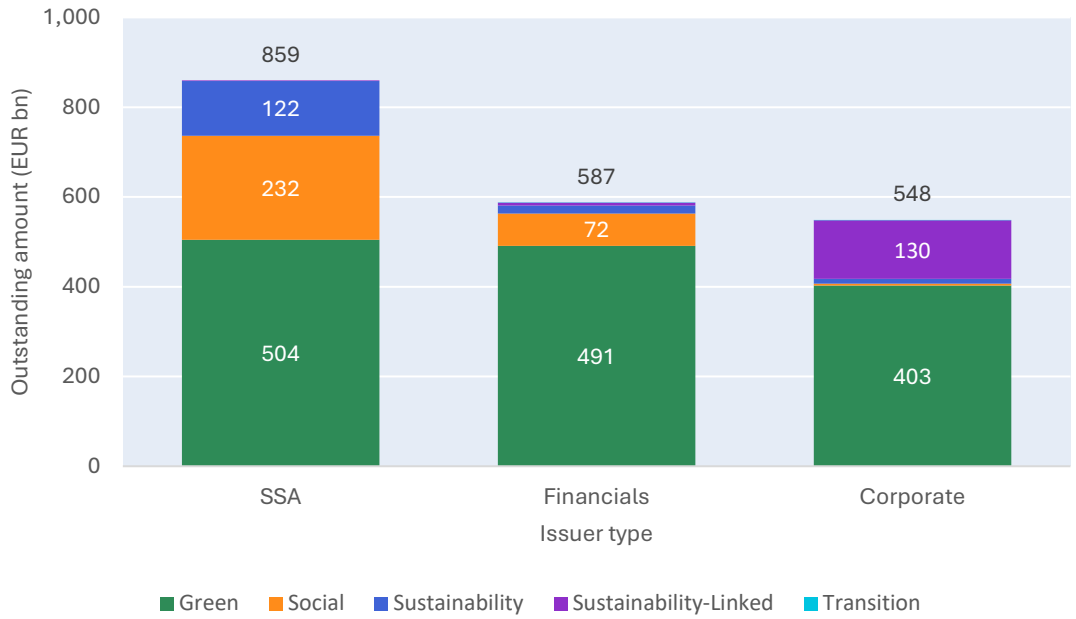
Figure 20. Composition of the EU outstanding sustainable bond stock by bond type (%, 2025)



Source: Authors' elaboration based on data from the LGX DataHub. Bonds outstanding at 31 December 2025.

Disaggregating the EU stock by issuer type, supranationals, sovereigns and agencies (SSA) hold the largest share at EUR 859 billion (43 % of the EU total), followed by financials (EUR 587 billion, 29 %) and non-financial corporates (EUR 548 billion, 27 %) (see Figure 21). Sovereigns account for EUR 318 billion within the SSA group and their outstanding stock is almost entirely green (EUR 312 billion of EUR 318 billion). Specialisation by instrument is sharp: of the EUR 138 billion of sustainability-linked bonds outstanding in the EU, EUR 130 billion (94 %) were issued by non-financial corporates, with SSA and financial issuers holding only marginal amounts. This matters for retail mobilisation because issuer segments with clearer precedents for dedicated retail distribution – particularly sovereigns and, to a degree, agencies – are concentrated in plain green use-of-proceeds instruments, whereas the performance-linked structures sit almost entirely with corporate issuers whose bonds are less likely to be structured for household placement.

Figure 21. EU outstanding sustainable bond stock by issuer type and bond type (EUR billion, 2025)



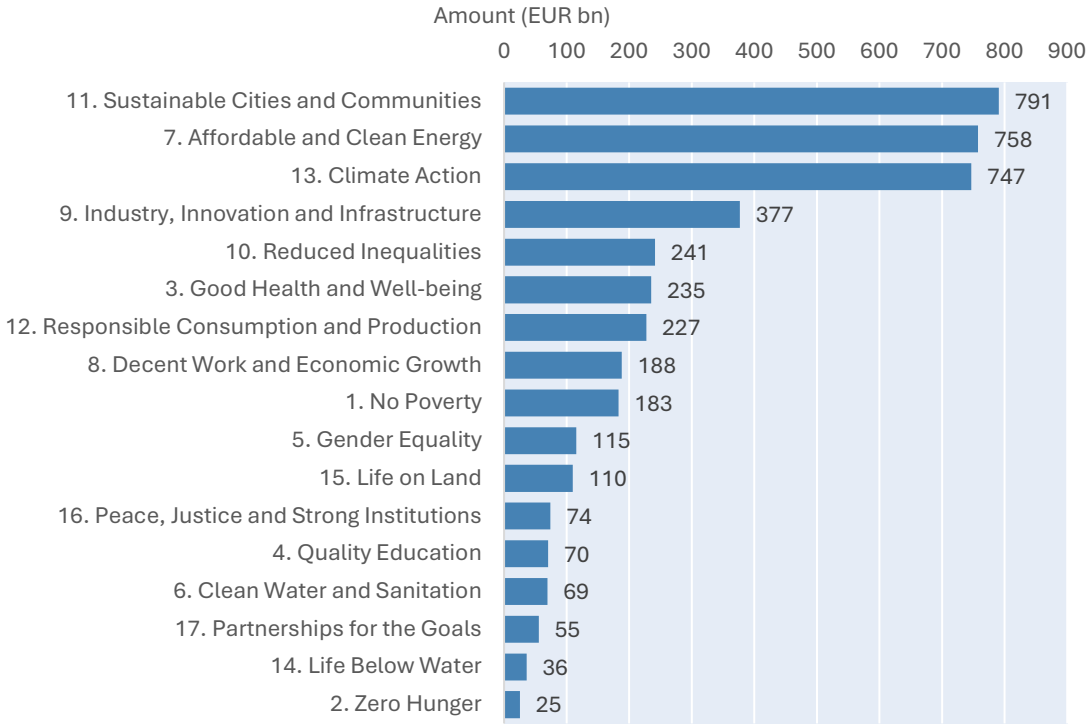
Source: Authors' elaboration based on data from the LGX DataHub. Bonds outstanding at 31 December 2025.

On disclosure standards and the use of a third-party external reviewer (Section 3.2.5), the evidence is stronger at the pre-issuance than at the post-issuance stage. Nearly all outstanding EU bonds (98 %) were covered by a pre-issuance external review and 83 % have a post-issuance report available, but only 53 % have externally verified allocation reporting and just 12 % externally verified impact reporting. Sovereigns show the highest coverage on these indicators – all their bonds carry a pre-issuance review, 63 % have verified allocation reporting and 32 % verified impact reporting – yet even there only around one in three bonds has externally verified impact reporting, leaving less independently verified impact evidence available after issuance. Taxonomy alignment is similarly limited: among EU bonds with a post-issuance report available, around 10 % are recorded as fully aligned and a further 2 % as mostly aligned. The outstanding stock therefore remains predominantly composed of labelled bonds issued outside the EuGB designation, for which full Taxonomy alignment is not a general requirement.

Finally, the outstanding EU stock can also be mapped against the Sustainable Development Goals (SDGs) identified in post-issuance reporting. The reported associations are concentrated particularly in three environmental and infrastructure-related goals: Sustainable Cities and Communities (SDG 11, EUR 791 billion), Affordable and Clean Energy (SDG 7, EUR 758 billion) and Climate Action (SDG 13, EUR 747 billion),

together far outweighing social goals such as No Poverty or Gender Equality (see Figure 22).

Figure 22. SDG mapping of outstanding EU sustainable bonds with post-issuance external review, (EUR billion, 2025)



Notes: Bonds frequently name more than one goal and the full amount is counted against each, so the EUR 4 302 billion mapped to SDGs exceeds the EUR 2 001 billion of EU bonds outstanding. Therefore, the figures should be read as indications of thematic emphasis rather than as additive volumes.
Source: Authors' elaboration based on data from the LGX DataHub. Effective (post-issuance) SDG contribution of EU bonds outstanding at 31 December 2025 that have a post-issuance external review.

ISSUANCE CADENCE AND QUARTERLY CONCENTRATION

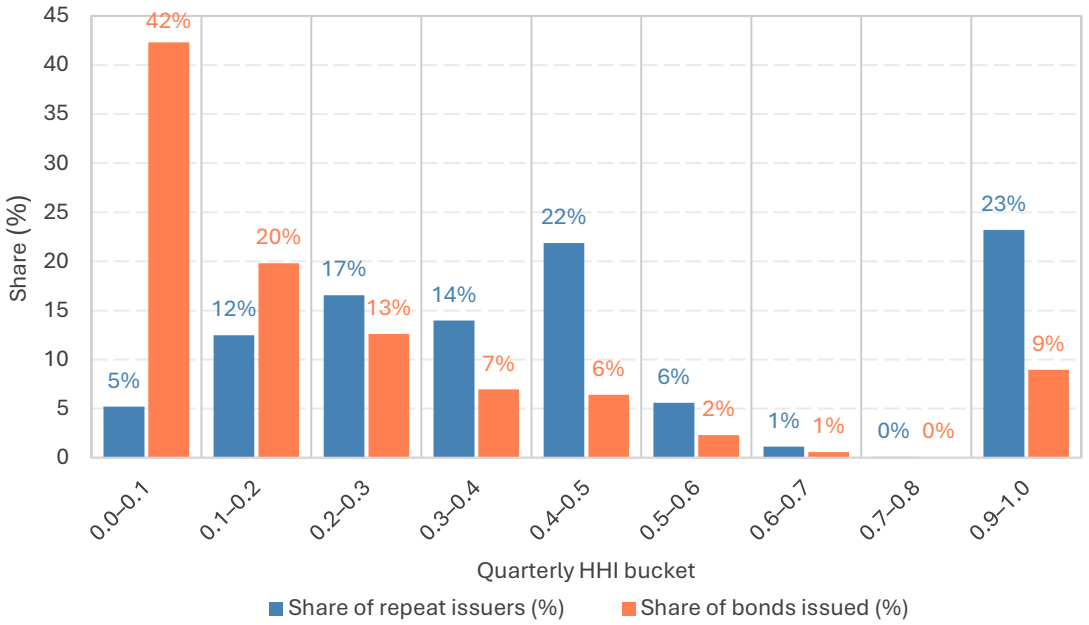
This annex expands on the cadence analysis summarised in Section 3.2.4. In addition to the number of labelled bonds an issuer brings to market, the timing of that issuance – how regularly and how widely it is spread across time – helps distinguish genuinely programme-like issuers from those whose activity is episodic.

An issuer that places several bonds within a short period is, in economic terms, closer to a one-off issuer than one that issues the same number of bonds but returns to the market steadily over a long period. The cadence of issuance therefore matters alongside the raw count of issues.

To capture this, we compute a Herfindahl-Hirschman Index (HHI) based on each issuer's quarterly bond counts (see Figure 23). A score of 1 means that all of an issuer's bonds

were issued within a single quarter, while lower values indicate issuance spread across multiple quarters. The distribution indicates that issuance is more dispersed over time for most repeat issuers: 23 % of repeat issuers score between 0.9 and 1.0, meaning their issuance was effectively concentrated in a single quarter (i.e. behaviour close to a one-off transaction), but the majority display a more distributed pattern, with 70 % recording an HHI of 0.5 or below. The median gap between consecutive issuances is around seven months, with variability of similar magnitude, reflecting heterogeneity in cadence across the sample.

Figure 23. Distribution of repeat issuers and bonds issued by quarterly HHI bucket (%)



Notes: The Herfindahl-Hirschman Index (HHI) is calculated from each issuer's quarterly distribution of bond issuance. Values closer to 1 indicate that issuance is concentrated in a small number of quarters, while lower values indicate that issuance is more evenly distributed over time. An HHI of 1 means that all of an issuer's bonds were issued in a single quarter.
Source: Authors' elaboration based on data from the LGX DataHub.

As with the issuer-count findings, cadence alone tells only part of the story. The 23 % of highly concentrated issuers (HHI above 0.9) account for only 9 % of all bonds issued by repeat issuers, whereas the 34 % of issuers with an HHI below 0.3 – those with the most distributed issuance patterns – account for approximately 75 % of all bonds. In other words, while concentrated, episodic issuance is not uncommon in terms of issuer count, the bulk of bond activity is driven by issuers that operate in a systematic, programme-like fashion, which is the pattern most consistent with systematic, programme-like issuance and scalable supply capacity.

ANNEX 2. SOVEREIGN AND PUBLIC-SECTOR SUSTAINABLE BOND FRAMEWORKS ACROSS THE EU

Table 12 provides the Member State-level mapping underlying the discussion in Section 3.3. It identifies sovereign and selected public sector sustainable bond frameworks across the EU and records their issuer type, sustainability structure, launch year and relevance for retail investors. Retail relevance is assessed using the distinction between retail-accessible and retail-facing instruments set out in Section 1.4.

Table 12. Sovereign and public-sector sustainable bond frameworks across the EU

Country	Programme/instrument	Issuer type	Bond type	Launch year	Retail relevance
AT	Republic of Austria Green Bond Framework	Sovereign	Green	2022	Retail-accessible, not retail-facing
BE	Green OLO Framework	Sovereign	Green	2018	Retail-accessible, not retail-facing
CY	Sustainable Bond Framework of the Republic of Cyprus	Sovereign	Sustainability	2023	Public-market/mainly institutional
CZ	Czech Republic social finance framework	Sovereign	Social	2025	Public-market/mainly institutional
DE	Federal Republic of Germany Green Bond Framework	Sovereign	Green	2020	Retail-accessible, not retail-facing
DK	Kingdom of Denmark Green Bond Framework	Sovereign	Green	2021	Public-market/mainly institutional
ES	The Kingdom of Spain's Green Bond Framework	Sovereign	Green	2021	Public-market/mainly institutional
FI	MuniFin Green (and social) Bond Framework	Sub-Sovereign	Sustainability	2016	Public-market/mainly institutional
FR	French Green OATs	Sovereign	Green	2017	Retail-accessible, not retail-facing
HU	Green Bond Framework Hungary	Sovereign	Green	2020	Public-market/mainly institutional

IE	Irish Sovereign Green Bond Framework	Sovereign	Green	2018	Public-market/mainly institutional
IT	Italian Green Bond Framework (BTP green)	Sovereign	Green	2021	Retail-accessible, not retail-facing
LT	Republic of Lithuania green bond framework	Sovereign	Green	2018	Public-market/mainly institutional
LU	Sustainability bond framework	Sovereign	Sustainability	2020	Public-market/mainly institutional
LV	Republic of Latvia sustainability bond framework	Sovereign	Sustainability	2021	Public-market/mainly institutional
NL	State of the Netherlands Green Bond Framework	Sovereign	Green	2019	Retail-accessible, not retail-facing
PL	Sovereign Green Bond Framework Republic of Poland	Sovereign	Green	2016	Public-market/mainly institutional
RO	Sovereign Green Bond Framework government of Romania	Sovereign	Green	2023	Public-market/mainly institutional
SE	Sweden's sovereign green bond framework	Sovereign	Green	2020	Public-market/mainly institutional
SI	Republic of Slovenia Sustainability-Linked Bond framework	Sovereign	Sustainability-linked	2025	Public-market/mainly institutional
SI	Slovenian sovereign sustainability bond framework	Sovereign	Sustainability	2021	Public-market/mainly institutional

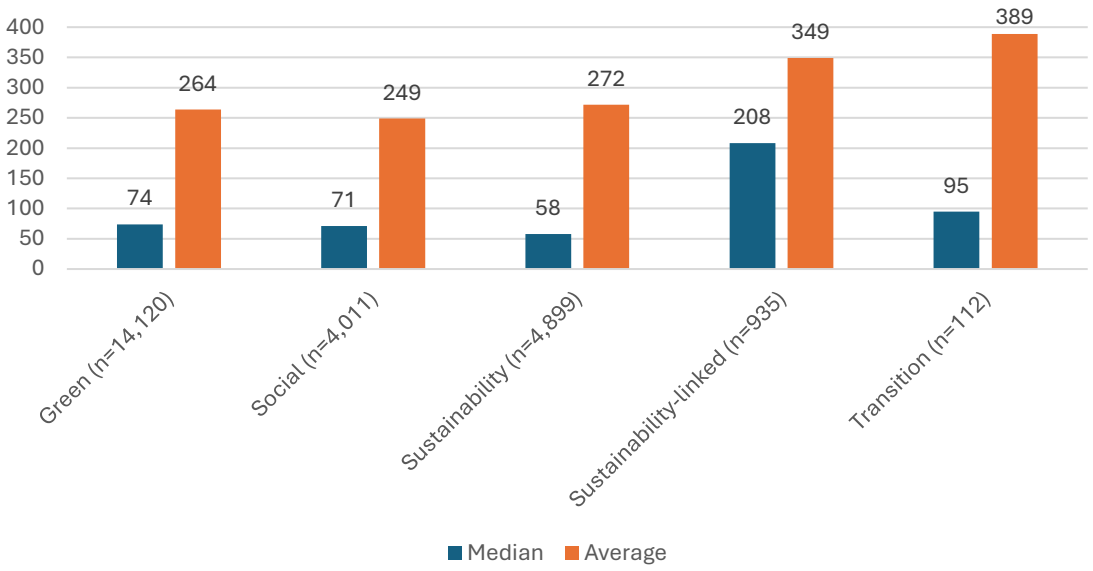
Notes: 'Retail-accessible, not retail-facing' refers to instruments that households may be able to buy through banks, brokers, securities accounts or secondary markets, but which are not primarily designed as dedicated retail green savings products. 'Public-market/mainly institutional' refers to frameworks and issuances primarily structured for sovereign or public sector debt-market funding, without clear evidence of dedicated retail distribution.
Source: Authors' compilation based on national DMO, Ministry of Finance and issuer documentation.

ANNEX 3. ISSUE SIZE PATTERNS

Issue size varies substantially across the labelled sustainable bond market and should not be interpreted as a proxy for retail accessibility. Large benchmark transactions may support market liquidity and secondary-market availability, but denomination, subscription mechanics and distribution channels are more directly relevant to whether an instrument can be accessed through retail channels. This Annex provides additional evidence on issue-size patterns by bond type, issuer type and geography.

Figure 24 shows that average issue sizes exceed median issue sizes across all labelled bond types. This indicates that relatively large transactions pull average deal sizes upwards, while the median bond is considerably smaller.

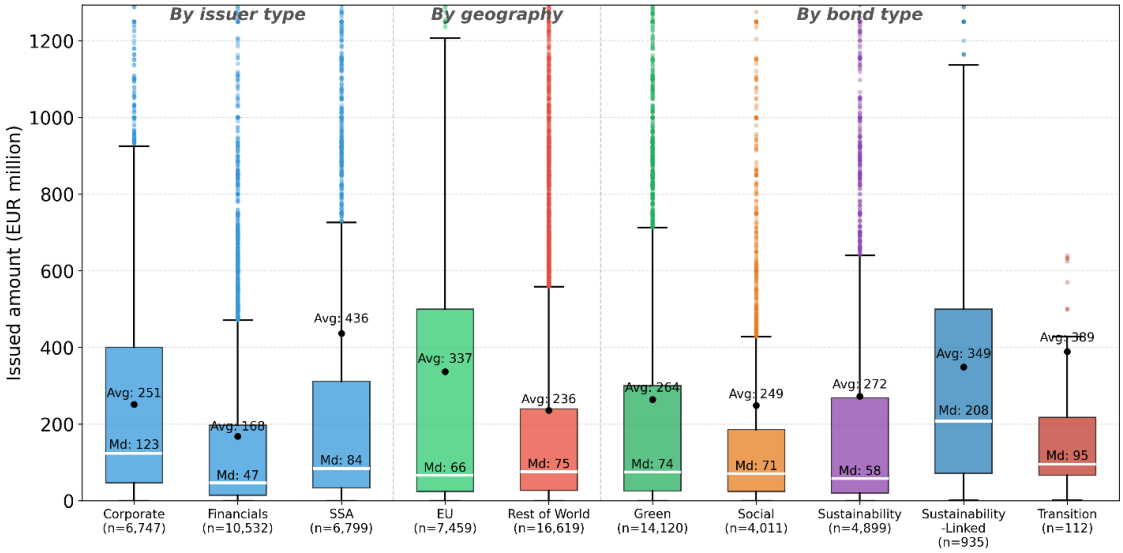
Figure 24. Issue size by bond type (EUR million)



Source: Authors' elaboration based on data from the LGX DataHub.

The difference between average and median issue size illustrates the skewed distribution of issuance and the limitations of using average issue size to assess the characteristics of the typical bond. Figure 25 therefore looks beyond these summary measures and shows the distribution of issue size across issuer type, geography and bond type. The boxplots make visible both the typical range of transactions and the large upper-tail observations that affect average issue size.

Figure 25. Distribution of issue size by issuer type, geography and bond type (EUR million)



Notes: 'Avg' is the average bond size in each category, 'Md' is the median. The box shows the interquartile range, i.e. the middle 50 % of the observations in each category (25th to 75th percentile).
Source: Authors' elaboration based on data from the LGX DataHub.

Across the different breakdowns, issue-size distributions are strongly right-skewed, with large transactions extending well above the central range of observations. Average issue size consequently exceeds the median in every category, in some cases substantially. This confirms that averages can give a misleading impression of the size of the typical labelled bond.

By issuer type, the pattern is most pronounced for SSAs, where the average issue size (EUR 436 million) is more than five times the median (EUR 84 million), reflecting a small number of very large sovereign and supranational benchmarks sitting above a base of much smaller transactions. Corporates show a higher typical deal size (median EUR 123 million) than either SSAs or financials. Financials record both the lowest average (EUR 168 million) and the lowest median (EUR 47 million), indicating a greater prevalence of relatively small transactions.

By geography, EU issuance is skewed towards larger deals at the top of the distribution – an average of EUR 337 million against EUR 236 million for the rest of the world – yet its median (EUR 66 million) is slightly lower than the rest-of-world median (EUR 75 million). The EU distribution therefore combines a slightly smaller typical issue size with a heavier upper tail of benchmark-sized transactions, rather than being uniformly characterised by larger issuance.

Overall, the data show considerable heterogeneity in issue size across the labelled market. Issue size may affect the economics of issuance and distribution, but it does not determine whether a bond is retail-facing. Denomination, subscription arrangements and the distribution model remain more direct indicators of practical retail accessibility.

ANNEX 4. SELECTED RETAIL-FACING AND RETAIL-ACCESSIBLE PRODUCT EXAMPLES

This annex provides selected product examples supporting the product-feature analysis in Chapter 3. The examples are not intended to provide a comprehensive inventory. Rather, they illustrate how entry thresholds, distribution channels, maturity and liquidity, payoff structures, capital protection and sustainability claims differ across retail-facing and retail-accessible instruments.

Table 13 illustrates that low entry tickets do not, by themselves, determine retail-facing design. BTP Green and BTP Valore both have low entry points, but BTP Valore is built around a dedicated retail placement architecture, while BTP Green is better understood as a green sovereign bond that may be retail-accessible without being a dedicated retail green savings product. Savings-like instruments such as the Livret de développement durable et solidaire (LDDS) and green deposits are closer to ordinary household saving behaviour, but remain shaped by national savings and tax frameworks.

Table 13. Selected retail entry thresholds and distribution characteristics

Product/ issuer	Country	Instrument type	Entry ticket	Access route	Retail status	Main relevance
BTP Valore	IT	Sovereign retail bond	EUR 1 000	Banks, post offices, home banking	Retail-facing	Retail distribution comparator
BTP Green	IT	Sovereign green bond	EUR 1 000	Auction/syndication, secondary market	Retail-accessible	Green sovereign with low denomination
Belgian Green OLO	BE	Sovereign green bond	No formal minimum	Wholesale market, broker access	Institutional/retail-accessible	Framework credibility, not retail design
Belgian State Note	BE	Sovereign retail bond	EUR 100	Banks/state bond channels	Retail-facing	Domestic retail mechanics comparator
Fluvius Green Retail Bond	BE	Public utility green retail bond	EUR 1 000	Belgian retail offer	Retail-facing	Green bond directly marketed to households
LDDS	FR	Regulated sustainable savings account	EUR 10	Bank savings account	Retail-facing	Closest to household saving behaviour
ING Groen Spaardeposito	NL	Green savings deposit	EUR 5 000	Bank deposit account	Retail-facing	Green deposit with tax-wrapper relevance

Dutch green savings/investment wrapper	NL	Tax-supported green savings/investment	Product-specific	Banks / qualifying providers	Retail-facing, depending on product	Shows role of national tax architecture

Notes: LDDS stands for Livret de développement durable et solidaire. 'Retail-facing' refers to products deliberately designed or marketed to households. 'Retail-accessible' refers to products that households may be able to buy, but that are not primarily designed as mass retail products.
Source: Authors' compilation based on public issuer, debt-management office and product documentation.

Table 14 illustrates three liquidity models. Some products are designed primarily as buy-and-hold instruments with fixed maturity dates and, in some cases, incentives for holding to maturity. Others are tradable, meaning that early exit depends on secondary-market conditions. Savings-like products may be closer to household liquidity preferences, but can still be subject to account caps, fixed terms or withdrawal charges.

Table 14. Maturity, liquidity and early-exit characteristics of selected products

Product/issuer	Maturity/term	Liquidity before maturity	Retail implication
BTP Valore	Fixed maturity, e.g. six years in 2026 issuance	Tradable through MOT after issuance	Designed for buy-and-hold retail investors, with extra final bonus only for those holding to maturity
BTP Green	Medium to long term, typically over 10 years	Tradable after issuance	Retail-accessible, but long maturity requires clear duration and price-risk communication
Belgian State Note	Fixed terms, including 1, 3, 5, 8 and 10 years	Quoted on Euronext Brussels	Simple maturity profile and low entry ticket, but not equivalent to on-demand savings
Fluvius Green Retail Bond 2023	Four years, due 28 June 2027	Listed on Euronext Brussels	Retail-facing green bond, but exit before maturity depends on market sale conditions
LDDS	No fixed maturity	Deposits and withdrawals generally free within the account cap	Closest to liquid household saving behaviour
ING Groen Spaardeposito	Fixed term, including one-year product	Early withdrawal possible in some cases, with withdrawal charges	Familiar savings format, but liquidity is weaker than an ordinary savings account

Note: MOT stands for Mercato Telematico delle Obbligazioni e dei Titoli di Stato, Borsa Italiana's electronic bond market.
Source: Authors' compilation based on public issuer, DMO and product documentation.

The examples show that liquidity should be understood from the retail investor's perspective, not only from the market perspective. Tradable bonds such as BTP Green or the Fluvius green retail bond can be sold before maturity, but this does not make them equivalent to liquid savings: a retail investor selling before maturity may face market-price risk, execution costs and uncertainty about the sale price. By contrast, LDDS is closer to a liquid savings product because deposits and withdrawals are built into the account structure, subject to the applicable cap. The retail-facing implication is that products need a clear liquidity story: hold-to-maturity expectations, secondary-market exit risks, withdrawal conditions, notice periods, penalties and caps should be clearly explained.

Table 15 compares selected payoff structures and capital-protection features. The examples show the difference between bond-like instruments, where investors face issuer credit risk and market-price risk if they sell before maturity, and savings-like products, where deposit-guarantee protection may apply but funds may be subject to fixed terms or withdrawal restrictions.

Table 15. Payoff structure and pricing characteristics of selected products

Product/issuer	Payoff structure	Capital protection/ risk framing	Retail implication
BTP Valore	Pre-set increasing coupons, with final loyalty bonus for investors who buy during placement and hold to maturity	Sovereign credit risk; market-price risk if sold before maturity	Retail-facing payoff, but investors must understand the hold-to-maturity condition
BTP Green	Fixed semi-annual coupons	Sovereign credit risk; market-price risk if sold before maturity	Simple bond structure, but not a dedicated retail savings product
Fluvius Green Retail Bond 2023	Fixed annual coupon of 4.0 %	Issuer credit risk; listed bond with market-price risk if sold before maturity	Simple coupon and maturity, but no deposit-style protection
LDDS	Regulated interest rate, tax-exempt income	Savings-account format; liquidity within account limits	Closest to ordinary savings behaviour, with simple pricing and no market-price risk
ABN AMRO Groen Spaar Deposito	Fixed-term deposit; interest paid at end of term where applicable	Covered by Dutch deposit guarantee up to applicable limits	Savings-like and protected as a deposit, but funds are generally locked during the term

Source: Authors' compilation based on public issuer, DMO and product documentation.

BTP Valore is tailored to retail investors through pre-set increasing coupons and a final loyalty bonus for investors who buy during placement and hold to maturity. BTP Green and the Fluvius green retail bond have simpler fixed-coupon structures but remain bonds and therefore expose investors to issuer credit risk and market-price risk if sold before maturity. Fluvius's 2023 green retail bond, for example, had a fixed annual coupon of 4.0 %, a four-year maturity and a listing on Euronext Brussels.

Savings-like products follow a different logic. LDDS is a regulated savings account with tax-exempt income, while Dutch green deposits such as ABN AMRO's Groen Spaar Deposito are fixed-term deposit products and may be covered by the applicable deposit guarantee scheme. These examples underline the importance of distinguishing clearly between bond-like risk, deposit protection and sustainability-linked payoff features.

The main implication is that retail-facing products should make the net return and protection status clear. Investors should be able to understand the coupon or interest rate, tax treatment, fees, penalties and the conditions under which the advertised return is earned. They should also be able to distinguish between a bond, a protected deposit and a sustainability-linked structure where the financial payoff depends on the achievement of a target.

ANNEX 5. PROSPECTUS REQUIREMENTS AND CROSS-BORDER RETAIL OFFERS

The EU Prospectus Regulation (Regulation (EU) 2017/1129) provides exemptions for certain offers and issuers, while the amendments introduced by the Listing Act (Regulation (EU) 2024/2809) further simplify the framework for offers of securities to the public. From 5 June 2026, the previous system under which Member States could exempt offers below nationally determined thresholds of between EUR 1 million and EUR 8 million is replaced by a more harmonised framework. The general exemption threshold is EUR 12 million, calculated over a 12-month period, although Member States may instead apply a threshold of EUR 5 million.

The reform therefore reduces one source of regulatory fragmentation, but does not eliminate differences in the treatment of smaller public offers. Member States retain discretion over the applicable threshold and may require an issuer making an exempt offer to publish and file a document containing specified information. National requirements concerning investor information, filing procedures, warning language and advertising may consequently continue to differ. An issuer relying on an exemption in one Member State cannot therefore assume that an identical retail offer can be replicated in another without further adaptation.

The Irish implementation provides an illustration of the remaining national dimension. Ireland applies the EUR 12 million threshold under the revised regime, while its national framework also provides for an information document for certain offers exempt from the obligation to publish a prospectus. Such national requirements can provide additional investor information without amounting to a full prospectus, but they also illustrate why the exemption from the EU prospectus requirement does not in itself create a uniform EU format for smaller retail offers.

Passporting and investor-facing documentation

Where a prospectus is required, the Prospectus Regulation provides a passporting mechanism for cross-border offers. Once a prospectus has been approved by the home competent authority and the relevant notification procedure has been followed, it can be used for an offer to the public or admission to trading in other Member States without requiring a new prospectus approval in each host Member State.

Passporting nevertheless concerns the prospectus rather than the entire retail distribution process. Language requirements provide one example. Depending on the circumstances of the cross-border offer, the prospectus may be drawn up in a language accepted by the relevant competent authorities or in a language customary in

international finance, while translation of the prospectus summary may be required. For a retail-facing offer, however, the practical language requirement extends beyond the prospectus itself. Marketing material, subscription information, risk explanations and other investor-facing communications need to be understandable to the intended retail audience.

Advertising is also subject to requirements separate from prospectus approval. Under Article 22 of the Prospectus Regulation, advertisements relating to an offer of securities to the public or admission to trading must be clearly recognisable as advertisements, must not be inaccurate or misleading and must be consistent with the information contained in the prospectus. For green or sustainability-related products, investor-facing sustainability claims also need to remain consistent with the characteristics and commitments underlying the product.

Passporting therefore harmonises the approval of the prospectus, but does not harmonise all investor-facing documentation, marketing and distribution arrangements associated with a cross-border retail offer.

ANNEX 6. CONDUCT AND DISCLOSURE REQUIREMENTS RELEVANT TO RETAIL-FACING PRODUCTS

The regulatory requirements applying to the distribution of retail-facing products differ according to the nature of the product and the distribution channel. For investment products, the MiFID II framework establishes requirements concerning suitability, appropriateness and product governance. Other products through which households may direct savings, including deposits and packaged or insurance-based investment products, are subject to partly different frameworks. These distinctions affect how products are incorporated into retail distribution channels.

Suitability, appropriateness and product governance

Under MiFID II, the obligations applying to a distributor depend partly on the investment service being provided. Where a firm provides investment advice or portfolio management, it must obtain information on the client's knowledge and experience, financial situation, including the ability to bear losses, and investment objectives, including risk tolerance, in order to recommend or undertake transactions that are suitable for that client.

For other investment services, firms may instead be required to assess appropriateness by determining whether the client has the necessary knowledge and experience to understand the risks associated with the product or service. MiFID II also permits certain transactions in non-complex financial instruments to be provided on an execution-only basis without an appropriateness assessment, subject to specified conditions.

These distinctions matter for retail bond distribution because the same instrument may be accessed through different channels and services. The compliance process associated with an advised sale, for example, differs from that applying where an eligible instrument is purchased through an execution-only platform.

MiFID II product-governance requirements add a further layer. Manufacturers are required to identify a target market for financial instruments and ensure that the distribution strategy is consistent with that market. Distributors must understand the products they offer or recommend, assess their compatibility with the needs of the clients to whom they provide investment services and take account of the identified target market.

Sustainability preferences

Since August 2022, sustainability preferences have formed part of the MiFID II suitability framework for investment advice and portfolio management. Firms must obtain

information about a client's sustainability preferences and take those preferences into account when assessing suitable products.

The framework defines sustainability preferences by reference to specified characteristics of financial instruments, including minimum proportions of environmentally sustainable investments under the EU Taxonomy and sustainable investments within the meaning of the Sustainable Finance Disclosure Regulation, as well as consideration of principal adverse impacts on sustainability factors.

ESMA's guidelines on MiFID II suitability provide further guidance on how these requirements should be applied. Among other things, firms should explain the concept of sustainability preferences and the distinctions between the relevant categories in sufficiently clear terms to enable clients to understand the choices available to them. The guidance therefore recognises the need to translate relatively technical regulatory concepts into information that can be used in interactions with retail clients.

Disclosure requirements and different product categories

The disclosure framework also differs across the types of products through which households may invest or save. Ordinary bank deposits do not fall within the MiFID II investment-product framework. Structured deposits are subject to specified MiFID II conduct requirements, while packaged retail and insurance-based investment products within the scope of the PRIIPs Regulation are accompanied by a KID.

The PRIIPs KID is intended to provide retail investors with standardised and comparable information before they purchase a product. It is limited to three pages and contains prescribed information on, among other things, the nature of the product, its risks, possible performance outcomes, costs and the recommended holding period. Its standardised structure is intended to facilitate understanding and comparison across packaged investment products.

The applicable disclosure and conduct framework therefore depends on the legal and financial characteristics of the product rather than on the similarity of the sustainability proposition presented to the customer.

Retail Investment Strategy

The Retail Investment Strategy modifies parts of this framework. The Commission presented the package in May 2023 through a directive amending MiFID II, the Insurance Distribution Directive, the UCITS Directive, the Alternative Investment Fund Managers Directive and Solvency II, together with a regulation amending the PRIIPs Regulation. The Council and European Parliament reached a provisional political agreement on the package in December 2025, followed by further steps towards formal adoption in 2026.

The package addresses several elements relevant to retail distribution, including investor information and disclosures, suitability and appropriateness assessments, product governance, inducements, costs and charges, and the PRIIPs framework. Its implications for the distribution of retail-facing green products will depend on the final requirements and their subsequent implementation through technical standards, supervisory guidance and firms' own distribution processes.

Annex 7. National tax and savings arrangements relevant to retail investment

Tax treatment and savings arrangements differ substantially across Member States and can affect both the after-tax return of financial products and the channels through which households access them. The examples below are illustrative rather than a comprehensive mapping of national regimes. They show different ways in which taxation, savings wrappers and established distribution arrangements can shape the environment in which retail-facing green products would need to compete.

National tax and savings arrangements

France provides an example in which sustainable development is incorporated directly into a mainstream regulated savings product. The Livret de développement durable et solidaire (LDDS) is a regulated savings account offered by banks, with interest exempt from income tax and social contributions. Funds collected through the LDDS are linked through the regulatory framework to financing objectives including small and medium-sized enterprises, the social and solidarity economy and energy-saving measures. Its relevance for retail-facing green finance lies less in the sophistication of its sustainability characteristics than in the integration of a sustainability-related proposition into a familiar and liquid household savings product.

The Netherlands provides a different example through its tax treatment of qualifying green savings and investments. Eligible holdings in recognised green funds or savings products receive specific treatment under the Box 3 wealth-tax framework. This can alter their after-tax attractiveness relative to otherwise comparable investments. The precise fiscal advantage has changed over time, illustrating both the potential importance of tax incentives for green investment and their dependence on national fiscal policy.

Sweden's Investeringssparkonto (ISK) illustrates the broader role of tax-supported investment wrappers. The ISK allows households to hold eligible financial instruments within an account subject to standardised taxation based on the value of the assets rather than conventional taxation of each realised capital gain and dividend. Recent reforms have introduced a tax-free amount for savings held through ISKs and certain other savings arrangements. Although the ISK is not specifically green, it illustrates how a widely used national wrapper can establish a familiar tax and administrative framework within which investment products are accessed.

Germany provides another model through Vermögenswirksame Leistungen and the associated employee savings allowance (Arbeitnehmer-Sparzulage). The framework supports eligible forms of household asset formation through employer-linked saving and,

subject to specified conditions, state support. It is not a green-finance instrument but it illustrates how established savings channels and fiscal incentives can influence the products and structures through which households accumulate financial assets.

Italy illustrates the interaction between taxation and dedicated retail sovereign-bond distribution. Retail Treasury instruments such as BTP Valore are distributed through channels designed to reach domestic households. Italian government securities also benefit from a preferential tax rate on relevant investment income compared with the rate generally applicable to many other forms of financial income. The combination of dedicated distribution arrangements and fiscal treatment contributes to a nationally embedded retail proposition.

Table 16. National tax and savings architectures influencing the household benchmark

Country	Product	Type of mechanism	Relevance for green retail scaling
FR	LDDS	Regulated sustainable savings account	Makes sustainable savings a mainstream bank product
NL	Green savings/green investments	Box 3 tax exemption	Improves after-tax return for eligible green products
SE	ISK	Simplified investment savings wrapper	Sets a benchmark for simple retail investment access
DE	Employee savings allowance/VL	State-supported asset formation	Shows importance of recognised savings channels
IT	BTP Valore and retail Treasury products	Preferential government-bond tax treatment	Supports domestic household bond mobilisation

Source: Authors' compilation based on national tax authority, public savings and product documentation.

The examples differ substantially and should not be interpreted as directly comparable policy models. France and the Netherlands incorporate an explicit environmental dimension into parts of their savings or investment framework, whereas the Swedish, German and Italian examples primarily illustrate the broader importance of tax treatment and established savings channels. Taken together, they show that a retail-facing green product enters an existing national savings environment rather than competing solely on its financial and sustainability characteristics.

Savings wrappers as distribution infrastructure

Eligibility for national savings wrappers generally does not travel with the underlying financial instrument. A security may therefore circulate across the single market while its eligibility for tax-supported accounts, tax treatment and associated reporting arrangements differ between Member States. Harmonisation of the financial instrument does not in itself imply harmonisation of the savings architecture through which households hold it.

Savings-like green products are particularly closely connected to national infrastructure. Green savings accounts and deposits operate within domestic banking, tax and deposit-guarantee frameworks. A sustainability proposition may therefore be replicable across Member States without the associated savings product being directly portable in its existing form.

Withholding tax and reporting frictions

Cross-border securities investment can also involve administrative frictions associated with withholding taxes, relief and refund procedures and differences in tax reporting. These frictions are not specific to green investments. They are nevertheless relevant where the objective is to make a bond or other security straightforward for households to acquire and hold across borders.

Where tax is withheld in the source Member State, an investor may be entitled to a reduced rate or exemption under national law or a double-taxation agreement. Obtaining that treatment has historically involved procedures that can differ between Member States and may require documentation or subsequent refund claims. These processes can also generate administrative requirements for financial intermediaries involved in the investment chain.

Such frictions matter differently for retail and institutional investors. For relatively small holdings, the administrative effort involved in obtaining the appropriate tax treatment can be material relative to the investment income concerned. Intermediaries serving retail clients may also need to provide information and documentation concerning the tax treatment of cross-border holdings. This can make the after-tax outcome of a foreign security less straightforward than that of a familiar domestic product.

FASTER

The EU has addressed part of this problem through the FASTER Directive (Directive (EU) 2025/50). The Directive seeks to make withholding-tax procedures for cross-border investment faster, safer and more standardised. Among its principal elements are a common digital tax residence certificate and harmonised systems intended to facilitate relief at source or faster refunds of excess withholding tax.

Member States are required to transpose the Directive by 31 December 2028, with the relevant rules applying from 1 January 2030. FASTER should therefore reduce some of the administrative friction associated with cross-border securities ownership once implemented.

Its scope should nevertheless be distinguished from broader tax and savings-regime integration. FASTER concerns procedures for obtaining the appropriate withholding-tax treatment. It does not harmonise Member State tax rates, determine the fiscal treatment of different investment products or create a common savings wrapper. It therefore addresses one element of cross-border investment friction rather than the broader heterogeneity of national savings systems.

Savings and Investment Accounts

The Commission's Recommendation of 30 September 2025 on Savings and Investment Accounts addresses another part of the household investment architecture. It encourages Member States to make savings and investment accounts available with features intended to facilitate household participation in capital markets, including simple access, a broad range of eligible investments and simplified and advantageous tax treatment.

The initiative is relevant because it addresses the accounts through which households invest, rather than only the regulation of individual financial products. However, the Recommendation does not harmonise national taxation or establish a single EU savings account. Member States retain responsibility for tax incentives, eligibility conditions and implementation arrangements, so the initiative promotes convergence in account design while preserving national differences.

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