



# Labeled Bonds: Market Overview H1 2025

## Authors



**Jakub Malich**

Executive Director

MSCI Research and Development



**Anett Husi**

Associate

MSCI Research and Development

## Contents

Executive summary .....	4
Key takeaways for H1 2025 .....	4
Introduction .....	5
Labeled-bond issuance and market statistics .....	5
Bond characteristics .....	6
Labels .....	6
Currency and other bond characteristics .....	8
Issuer characteristics .....	10
Issuer types .....	10
1. Corporate issuers .....	10
2. Supranational, sovereign and agency (SSA) issuers .....	12
ESG profile .....	13
Geographic overview .....	15
Market performance .....	17
Conclusion .....	18
Appendix .....	19
Appendix A .....	19
Appendix B .....	20
Appendix C .....	21
Contact us .....	22
Notice and disclaimer .....	23

## Executive summary

In our regular series dedicated to green, social, sustainability and sustainability-linked labeled bonds, we break down the market by multiple bond and issuer characteristics to identify key trends in this rapidly growing and increasingly diverse market.<sup>1</sup>

## Key takeaways for H1 2025

- The labeled-bond market saw a net addition of USD 303 billion in the first half of 2025, bringing the total outstanding amount to USD 5.2 trillion. Despite the 4% year-over-year decrease in gross issuance, labeled bonds continued to increase their presence in global bond benchmarks in H1 2025.
- Green bonds continued to dominate the labeled-bond market, accounting for 57% of new issuance and 56% of all outstanding labeled bonds. Green bonds were followed by sustainability bonds (24% of issued and 19% of outstanding), social bonds (15% of issued and 19% of outstanding) and sustainability-linked bonds (4% of issued and 7% of outstanding).<sup>2</sup>
- The market mostly consisted of EUR- and USD-denominated, fixed-coupon, senior unsecured bonds with up to 10 years to maturity (13% were set to mature within a year — market growth may slow down as more labeled bonds reach maturity).
- Corporate issuers led issuance in the first half of the year with USD 296 billion worth of labeled bonds (56% of the total), while supranational, sovereign and agency (SSA) entities issued USD 235 billion (44%).
- ESG leaders (those with an MSCI ESG Rating of AAA or AA) issued 57% of all new labeled bonds, while ESG laggards (MSCI ESG Rating of B or CCC) issued only 3%. The market provided ample opportunity to purchase labeled bonds of high credit quality from issuers with higher ESG Ratings (almost 50% of outstanding labeled bonds were investment-grade and issued by ESG leaders).
- Several markets had strong momentum in issuance in H1 2025: China, the Philippines, Taiwan and New Zealand in APAC; Italy, Austria, Sweden, Norway, Ireland, Saudi Arabia and South Africa in EMEA; and Peru in the Americas. For long-term, cumulative issuance, European issuers dominated the market, while APAC-based issuers lagged.
- Labeled bonds within MSCI fixed-income indexes performed well in H1 2025, but the performance was primarily influenced by traditional fixed-income risk and return drivers, especially currency (from a USD investor's point of view).

---

<sup>1</sup> Based on FactSet data, as of June 30, 2025. Labeled bonds referenced in this report have not been assessed by MSCI ESG Research. The categorization is based on the assessment available from FactSet. We focus on the four main labels: green, social, sustainability and sustainability-linked bonds (SLBs). The objective of this report is not to provide a qualitative assessment of the individual labeled bonds but to dissect high-level market trends.

<sup>2</sup> Refer to footnotes on page 7 for the definition of each labeled-bond type used in the report.

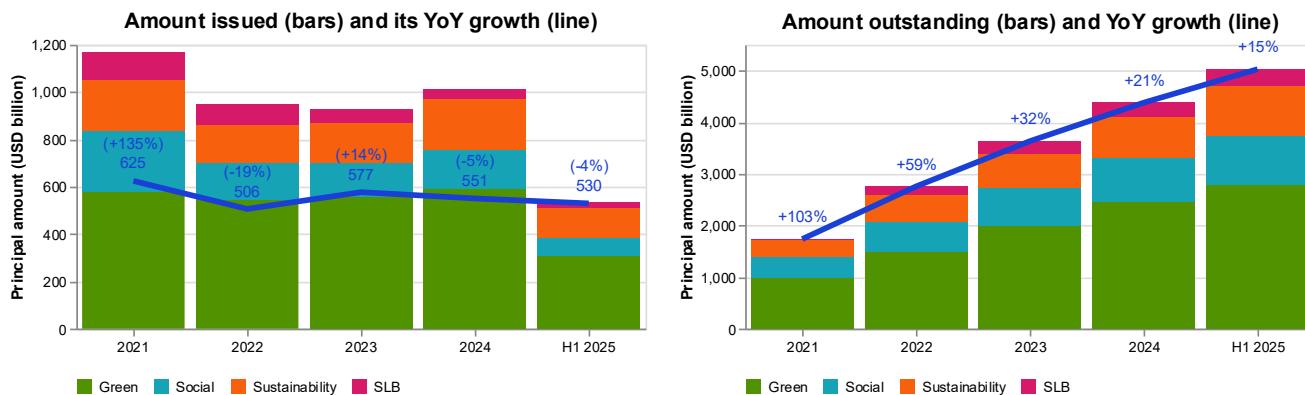
## Introduction

The labeled-bond market brings together issuers wanting to raise capital to finance various environmental and social goals and build rapport with sustainability-oriented investors. In turn, these investors tend to look for opportunities to add exposure to projects that accelerate, for example, the transition to new energy sources. Labeled bonds offer one avenue of adding such exposure to a bond portfolio without markedly altering its credit characteristics. This is because, all else equal, labeled bonds tend to have similar risk and return profile as comparable conventional bonds (the bond's repayment obligation does not vary with the projects' success or failure, with the exception of instruments with embedded links to performance indicators or those that provide direct exposure to the funded projects).<sup>3</sup> A limitation for investors is that many self-labeled bonds have not been [assessed by a third party for their alignment with recognized external frameworks](#) and may have limited contribution to sustainability-related investment objectives.

## Labeled-bond issuance and market statistics

The market added USD 303 billion net (USD 530 billion gross) worth of labeled bonds in the first half of 2025, which brought the outstanding amount to USD 5.2 trillion.<sup>4</sup>

Gross issuance and amount outstanding (last five years)



Data as of June 30, 2025. Source: FactSet, MSCI ESG Research LLC

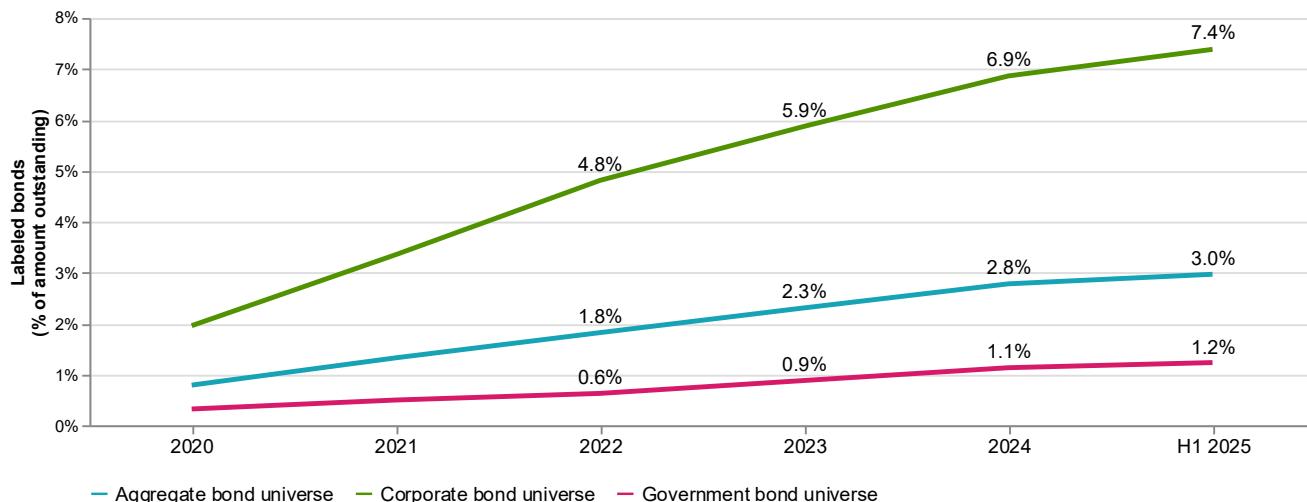
Gross issuance was 4% lower than in H1 2025 and the lowest since 2022. Despite the decline in new issuance, the stock of labeled bonds in the market continued to grow, with outstanding amounts rising 15% year over year in H1 2025, and labeled bonds continued to increase their presence in global bond benchmarks in H1 2025.

<sup>3</sup> "Green Bond Principles: Voluntary Process Guidelines for Issuing Green Bonds," International Capital Market Association (ICMA), June 2021 (with June 2022 Appendix 1).

"Sustainability-Linked Bond Principles: Voluntary Process Guidelines," ICMA, June 2023.

<sup>4</sup> Only bonds with a principal amount equal to or higher than USD 100 million were included in the report. Matured or called bonds were excluded from data and charts (except in sections focused on cumulative issuance), as the report's focus is on labeled bonds available to investors, as of the report date.

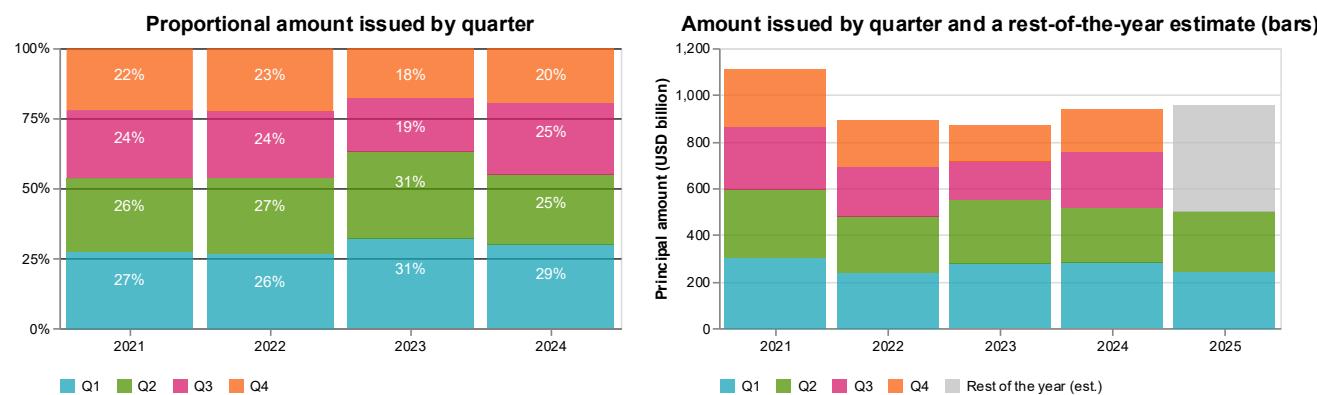
## Labeled bonds' increasing proportion in global bond benchmarks



The data shows the total outstanding principal amount of labeled bonds within [MSCI Government, Provincial and Municipal and Corporate Bond Indexes](#). Data as of June 30, 2025. Source: FactSet, MSCI ESG Research

Based on historical issuance trends, which saw higher activity in the first half of the year, we estimate 2025 full-year issuance to be similar to that in 2024 (USD 900 billion to 1 trillion).

## Labeled-bond quarterly issuance trends and rest-of-the-year issuance estimate



The issuance estimate for FY 2024 is based on annualized five-year average issuance in the first two quarters of the year. Data as of June 30, 2025. Source: FactSet, MSCI ESG Research

## Bond characteristics

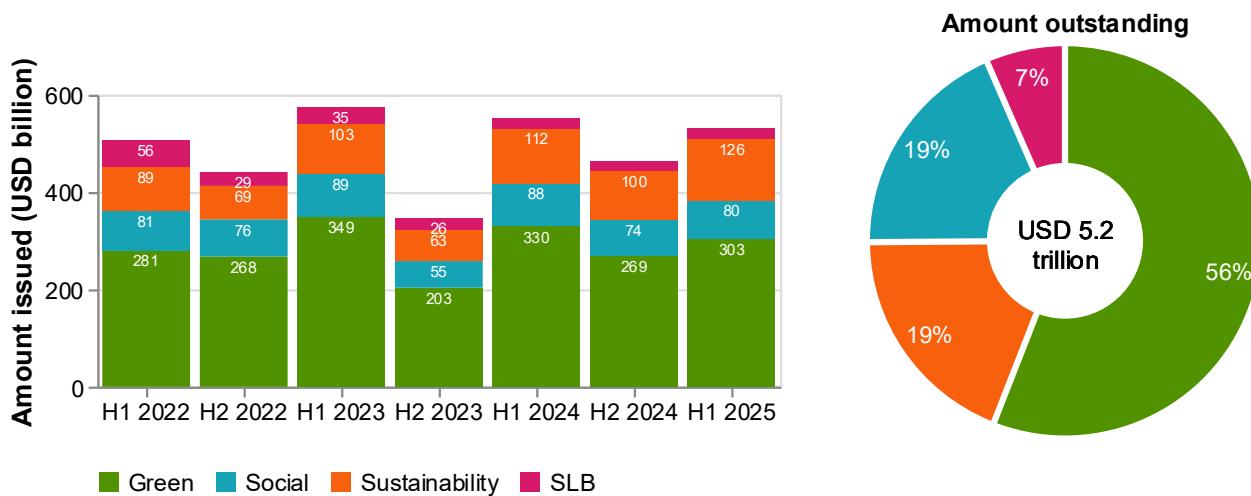
### Labels

As the bar chart below shows, green bonds continued to be the most frequently issued label (USD 303 billion and 57% of all labeled bonds issued in the first half of 2025), though the issuance

decreased by 8% year over year (YoY).<sup>5</sup> Sustainability bonds came in second (24% of newly issued), and their issuance was up 12% YoY.<sup>6</sup> Social bonds' (15% of issued) issuance decreased by 9% YoY.<sup>7</sup>

Sustainability-linked bonds (SLBs) continued to be the least-issued (4%) of the four main labels, and their issuance was down 4% YoY.<sup>8</sup>

### Issuance trends and market breakdown by label



Data as of June 30, 2025. Source: FactSet, MSCI ESG Research

As the pie chart shows, issuance in the first half of 2025 was largely in line with long-term trends, and green bonds continued to dominate the market (56% of the total outstanding principal amount).

#### Green bonds in focus

Green bonds, when aligned with recognized external frameworks, such as the Green Bond Principles (GBPs) administered by the ICMA, must meet certain criteria; principally, their proceeds must be used to finance environmentally sound and sustainable projects that foster a transition to a low-emission economy and/or protect the environment. The committed use of the proceeds, among other evaluations, needs to be evaluated against a more specific set of criteria on what constitutes such projects, to determine whether a bond can be considered green.

<sup>5</sup> "MSCI Labeled Bond and Loan Assessment Methodology" (March 2025) defines green bonds as those whose proceeds are exclusively and formally applied to projects and activities that promote the transition to a low-carbon economy or other environmental sustainability purposes.

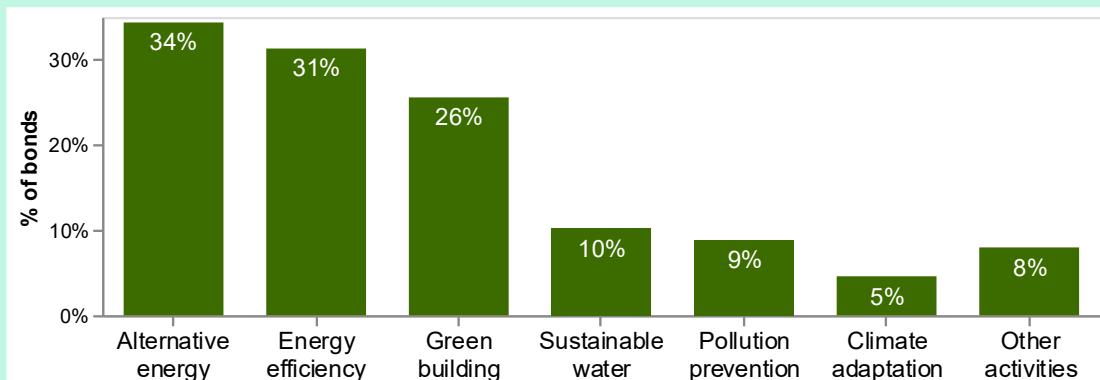
<sup>6</sup> "MSCI Labeled Bond and Loan Assessment Methodology" (March 2025) defines social bonds as those that finance projects and activities that aim to address or mitigate a specific social issue and/or seek to achieve a positive social outcome, especially but not exclusively, for a target population.

<sup>7</sup> "MSCI Labeled Bond and Loan Assessment Methodology" (March 2025) defines sustainability bonds as those that finance projects and activities that meet both the green and social criteria above.

<sup>8</sup> ICMA's Sustainability-Linked Bond Principles defines SLBs as any type of bond instruments for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined sustainability/ESG objectives.

The “[MSCI Labeled Bond and Loan Methodology](#)” recognizes seven eligible categories for green bonds’ use of proceeds. Among the green bonds assessed by MSCI ESG Research, the project categories most often financed were alternative energy, energy efficiency and green buildings.

#### Green bonds’ use-of-proceeds distribution



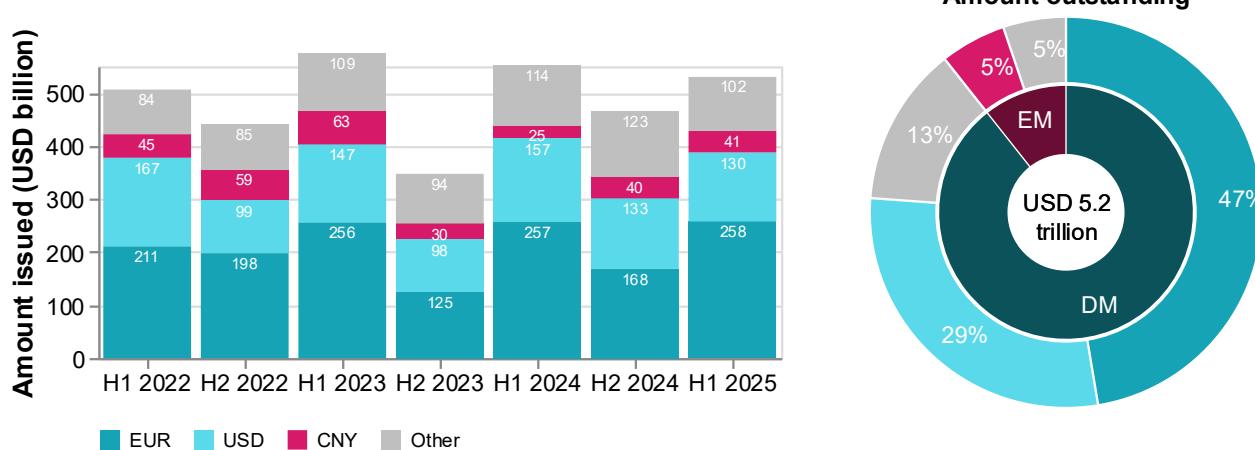
*Data as of June 30, 2025. Based on green bonds assessed by MSCI ESG Research (n=4,516). Please note that a green bond can be used to finance projects across multiple eligible project categories. Source: MSCI ESG Research*

#### Currency and other bond characteristics

As the bar chart shows, developed-market (DM) currencies dominated issuance, with 72% of new issuance in EUR and USD in H1 2025.<sup>9</sup> Most of the new issuance in emerging-market (EM) currencies came in CNY (11% of all), which has been the long-standing third-most-popular currency for labeled bonds. As the pie chart in the exhibit shows, 89% of the market was denominated in DM currencies — on top of EUR (47%) and USD (29%), notably GBP (3%), JPY (3%) and SED (1.6%).

<sup>9</sup> DM, EM and frontier-market (FM) classifications are based on [MSCI Market Classification](#). For the purposes of this report, FM includes markets classified as stand-alone markets and all non-classified markets.

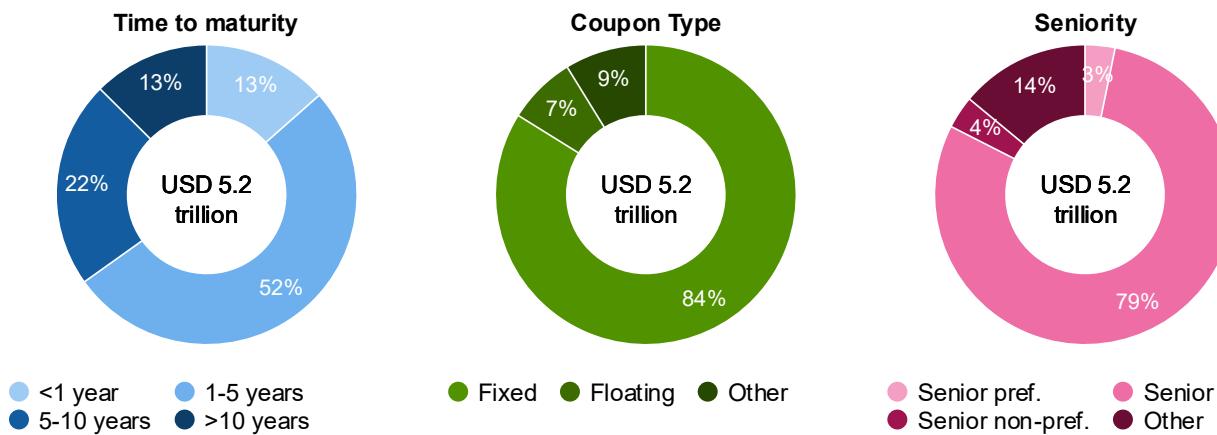
## Issuance trends and market breakdown (by currency)



Data as of June 30, 2025. DM currencies in blue and EM in orange. Source: FactSet, MSCI ESG Research

As the exhibit below shows, most labeled bonds in the market were fixed-coupon, senior unsecured bonds with time to maturity of up to 10 years (over 60% less than five years). Notably, 13% (roughly USD 530 billion) were set to mature within a year and will have to be replaced for the market to keep growing.

## Market breakdown (other characteristics)



Data as of June 30, 2025. The breakdowns show the market value of bonds with available data in each category. "Other" in coupon type contains indexed, hybrid, variable, zero, stepped and fixed-to-float. "Other" in seniority contains senior-subordinated and subordinated bonds. Source: FactSet, MSCI ESG Research

## Issuer characteristics

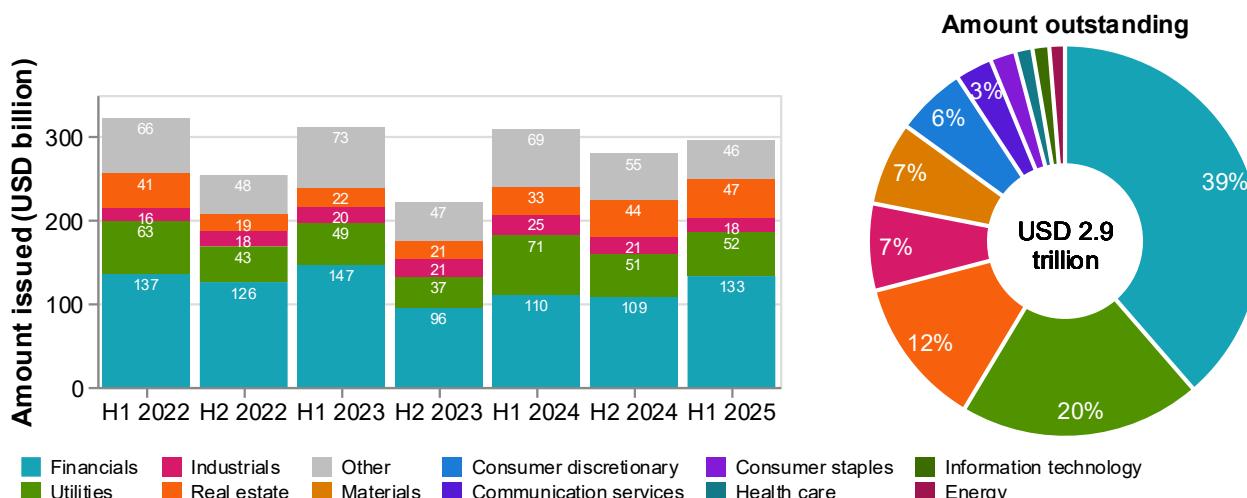
### Issuer types

#### 1. Corporate issuers

In the first half of 2025, 598 unique corporate issuers brought a combined USD 296 billion worth of labeled bonds to the market.<sup>10</sup> Corporate issuers were responsible for 56% of new issuance during the half-year (with the rest from sovereigns, supranationals and agencies). There were more than 2,900 unique corporate issuers with outstanding labeled debt in the market, spanning all 11 [Global Industry Classification Standard \(GICS®\)](#) sectors.<sup>11</sup>

As the exhibit shows, financial companies were customarily the most active among corporate issuers (accounting for USD 133 billion, or 45% of issuance by companies in H1 2025), followed by utilities (USD 52 billion) and real estate (USD 47 billion). Health-care (USD 2.6 billion), energy (USD 2.3 billion) and information-technology (USD 1.8 billion) companies issued the least.

### Issuance trends and market breakdown (by corporate sector)



Data as of June 30, 2025. Source: FactSet, MSCI ESG Research

Financials accounted for 39% of the outstanding labeled bonds by corporate issuers, followed by utilities (20%) and real estate (12%) at the end of H1 2025. Energy, information technology and health care remained the least active sectors, together accounting for less than 5% of the outstanding labeled bonds issued by corporates.

As the exhibit below shows, however, this distribution to an extent reflects the wider corporate-bond market, as some sectors issue more debt than others.<sup>12</sup> Considering this, notably active in the

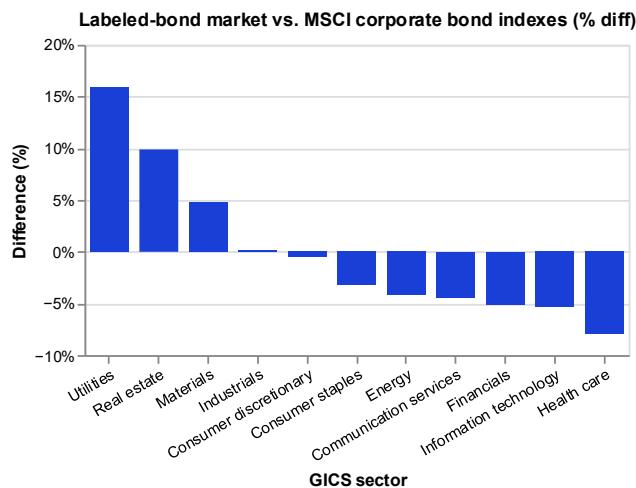
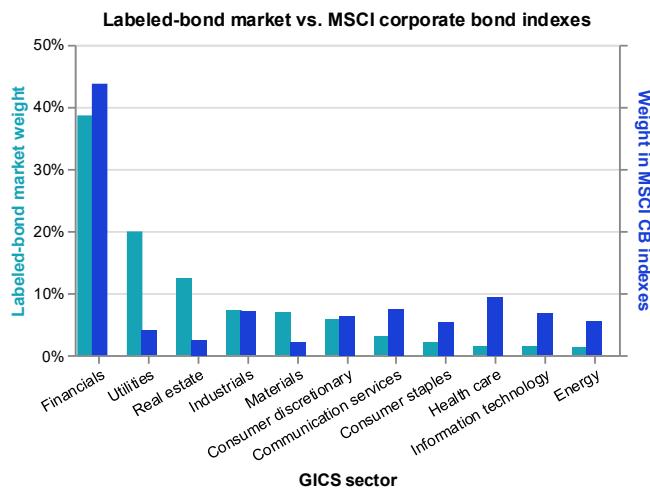
<sup>10</sup> We define unique issuers as those within MSCI ESG Ratings coverage not mapped to another issuer. The count may include multiple issuers within one corporate group, so the count of unique issuers without any cross-relationships may be lower.

<sup>11</sup> GICS® is the industry-classification standard jointly developed by MSCI and S&P Dow Jones Indices.

<sup>12</sup> Approximated by the composite of MSCI Investment Grade and High Yield Corporate Bond Indexes, as of Dec. 29, 2023. For more information on MSCI's fixed-income indexes, please see [MSCI Fixed Income Indexes](#).

labeled-bond market were utilities (16% higher presence in the labeled-bond market compared to the wider corporate-bond market) and real estate (10% higher), while the biggest laggards in these relative terms were health care (8% lower) and information technology (5% lower).

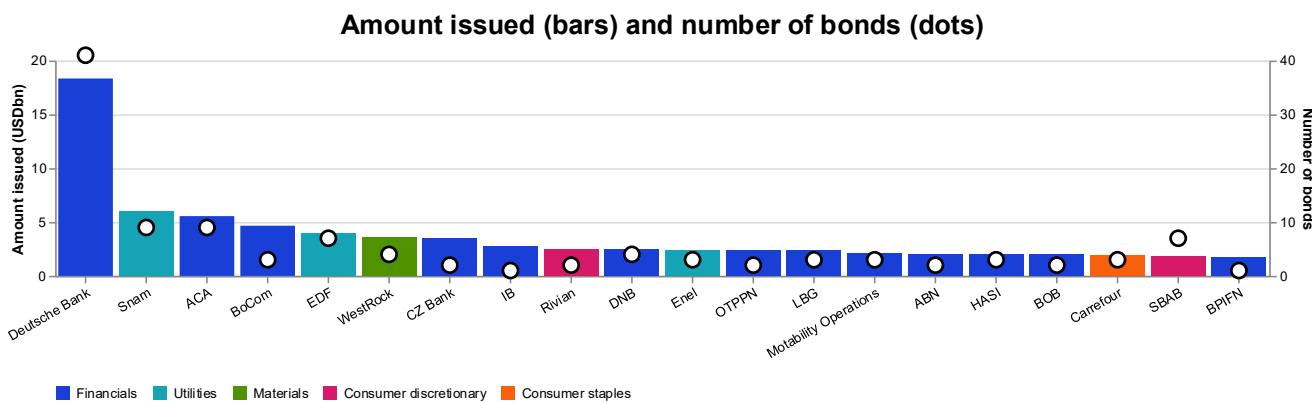
### Market breakdown by corporate sector



*Labeled-bond market presence refers to the total principal amount outstanding and is compared to the respective GICS sector's weight in the composite of the MSCI Investment Grade and High Yield Corporate Bond Indexes. Data as of June 30, 2025. Source: FactSet, MSCI ESG Research*

The exhibit below shows the most active corporate issuers in H1 2025. Issuers from financials and utilities dominated the rankings, with 16 issuers from these two sectors in the top 20.

### Most active corporate issuers of labeled debt in H1 2025

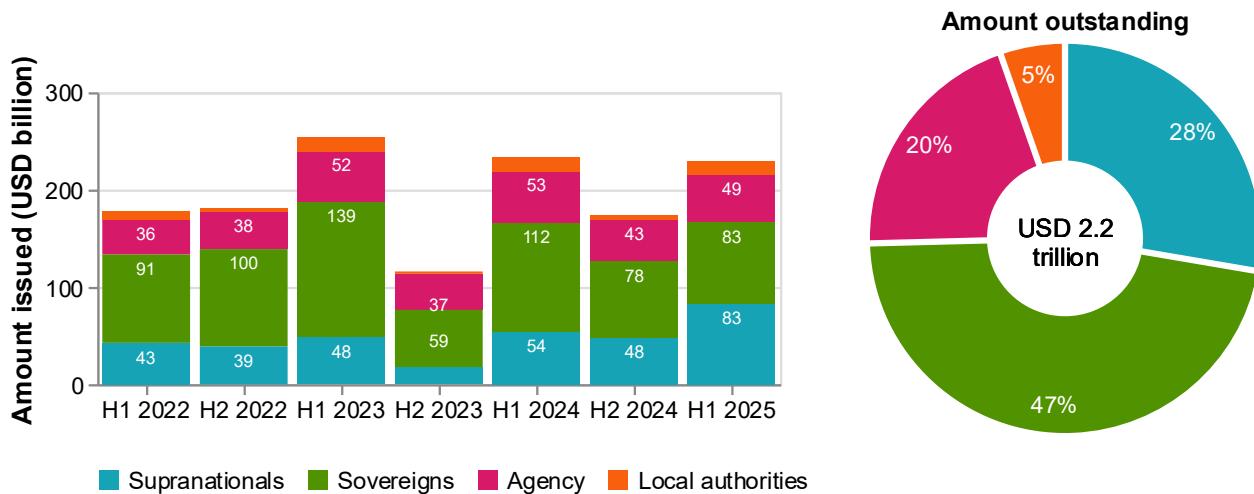


*"Number of bonds" refers to the number of individual bonds issued by each issuer during H1 and "amount issued" to their cumulative principal value. Data as of June 30, 2025. Source: FactSet, MSCI ESG Research*

## 2. Supranational, sovereign and agency (SSA) issuers

SSA entities issued labeled bonds worth USD 235 billion (44% of new issuance, with the rest issued by corporate issuers) in H1 2025, with the total amount of outstanding labeled debt of such issuers rising to USD 2.2 trillion. Whereas labeled-bond issuance used to be the domain of supranational issuers, such as multilateral development banks, other SSA issuer types have notably increased their activity in the market in recent years.

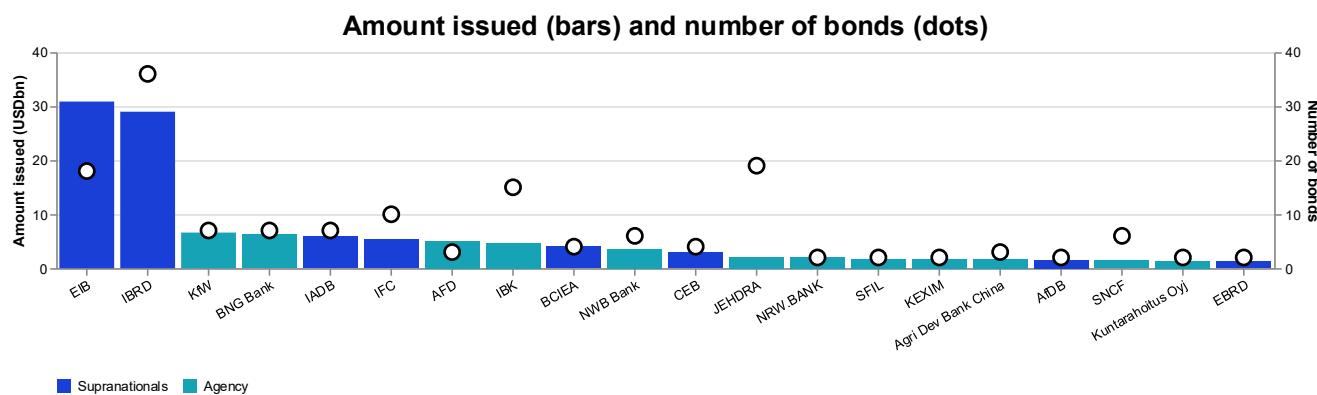
### Issuance trends and market breakdown by SSA issuer type



*Data as of June 30, 2025. Sovereigns may include sub-sovereign and state-owned corporate issuers not otherwise classified. Source: FactSet, MSCI ESG Research*

The exhibit below shows the most active SSA issuers in H1 2025. Supranational and national agency issuers dominated the rankings, while there were no sovereigns or local authorities in the top 20.

### Most-active SSA issuers of labeled debt in H1 2025

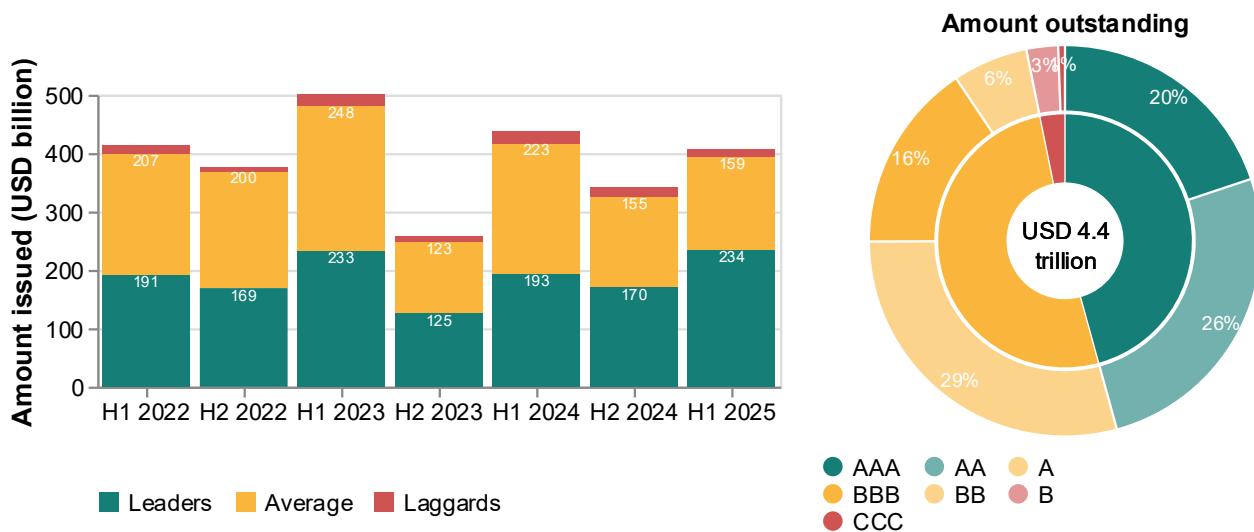


*"Number of bonds" refers to the number of individual bonds issued by each issuer during H2 and "amount issued" to their cumulative principal amount. Data as of June 30, 2025. \*Hong Kong's issuer classification reflects its stand-alone financing in the bond market. Source: FactSet, MSCI ESG Research*

## ESG profile

Among issuers with an MSCI ESG Rating, ESG leaders (MSCI ESG Rating of AAA or AA) issued 57% of all new labeled bonds in H1 2025, while ESG laggards (B or CCC) only 3% (slightly down from 5% a year ago).<sup>13</sup> In line with the longer-term trend, new issuance among the ESG laggards came almost entirely from issuers rated B, with minimal activity from issuers rated CCC.

## Issuance trends by MSCI ESG Rating



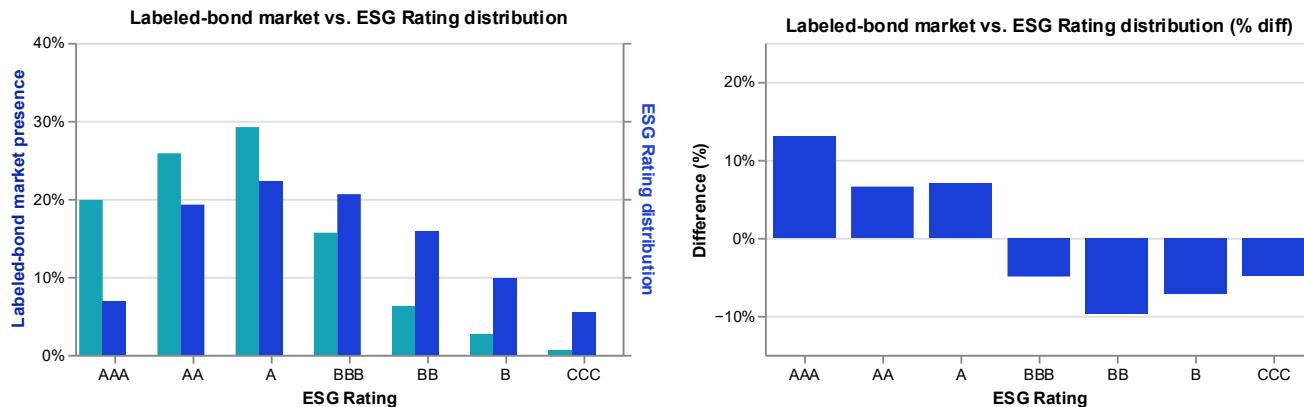
The exhibit is based on labeled bonds of issuers with available MSCI ESG Rating. Data as of June 30, 2025. Source: FactSet, MSCI ESG Research

Labeled bonds from ESG leaders accounted for 46% of the total outstanding principal amount by rated issuers (45% of all issuers), but ESG laggards accounted for only 3% of the rated issuers (5% of all issuers). The same dynamic held true when controlling for size, as 31% of the outstanding individual bonds were issued by ESG leaders, compared with 3% by ESG laggards.

As the exhibit below shows, the labeled-bond market is dominated by highly rated issuers, relative to the distribution in the MSCI ESG Ratings coverage.

<sup>13</sup> There were 9,457 unique corporate and SSA issuers with an available MSCI ESG Rating, as of June 30, 2025. Issuers of 69% of the bonds (corresponding to 84% of the total principal amount) included in the report were in MSCI ESG Ratings coverage.

## Market breakdown by MSCI ESG Rating



*Labeled-bond market presence refers to the total outstanding principal amount per MSCI ESG Rating letter grade (assigned at issuer-level) and is compared with the distribution of MSCI ESG Ratings coverage (n=9,457). Data as of June 30, 2025. Source: FactSet, MSCI ESG Research*

The dominance of issuers with high MSCI ESG Ratings in the labeled-bond market suggests a positive correlation between the issuance of such instruments and the issuers' ESG profiles. While labeled-bond issuance does not directly lift the issuer's MSCI ESG Rating — that is, it is not one of the scored indicators within the [MSCI ESG Ratings Methodology](#) — proper earmarking and use of proceeds to deliver on green, social or sustainability-related goals could contribute to ESG-profile improvement (see Appendix 1 for examples of such a transmission mechanism). We elaborated on this relationship in our publication focused on [labeled-bond issuers' cost of debt](#).

Finally, as the heatmap shows, investors have ample opportunities to gain exposure to labeled bonds without compromising the credit or ESG quality of their portfolios, as almost 50% of the outstanding labeled bonds were investment-grade (credit-quality grade of BBB or higher) and issued by ESG leaders (ESG Rating of AAA or AA).<sup>14</sup>

<sup>14</sup> Please note that MSCI ESG Ratings and credit ratings are constructed differently and do not aim to measure the same outcomes; some degree of variation is therefore expected.

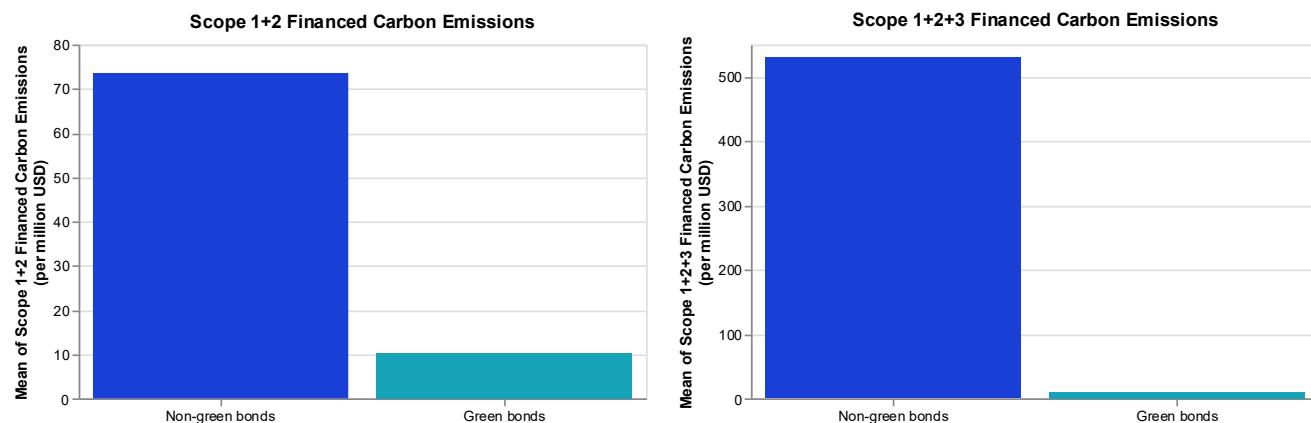
## Labeled bonds' MSCI ESG Ratings vs. credit-quality grades



The exhibit is based on labeled bonds with available MSCI ESG Rating and a credit-quality grade. Credit-quality grades are defined as the average of the credit ratings by Standards & Poor's Global Ratings (S&P) and Moody's and aggregated into a credit-quality letter grade. If only one rating was available, that rating was used. Data as of June 30, 2025. Source: MSCI ESG Research

In addition to these quality considerations, the bar chart below — based on the MSCI Total Portfolio Footprinting model — shows that green bonds tend to exhibit lower average financed emissions compared to conventional corporate and sovereign bonds. This suggests that, from an impact perspective, green bonds may offer a more climate-aligned financing channel, making them appealing to investors aiming to decarbonize fixed-income portfolios.

## Average Scope 1+2 and Scope 1+2+3 financed carbon emissions



The exhibit is based on bonds in our [MSCI Government, Provincial and Municipal and Corporate Bond Indexes](#) covered by our [Total Portfolio Footprinting](#) model. Data as of June 30, 2025. Source: MSCI ESG Research

## Geographic overview

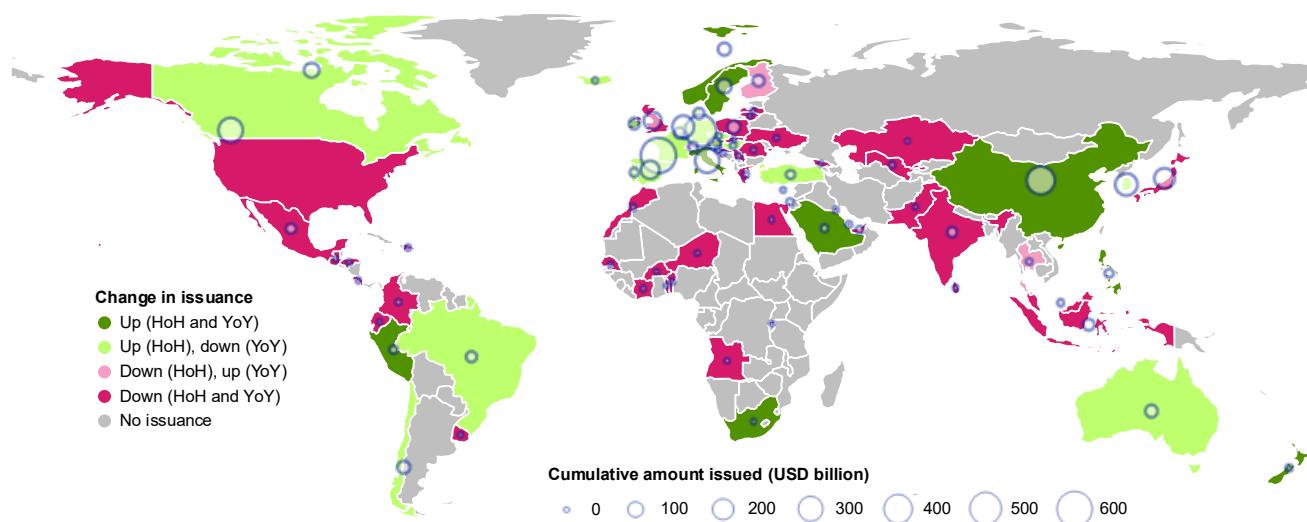
Monitoring cumulative issuance can provide insight into how issuers in different regions may be looking to finance their transition to a low-carbon economy and the feasibility of their nationally

determined contributions (NDCs). Markets with high emission intensities may have to mobilize more capital to decarbonize their economies.<sup>15</sup>

Issuance of use-of-proceeds labeled bonds, particularly green and sustainability, is one of the ways economies (through local issuers) can earmark capital toward their climate targets. Social bonds may be useful in advancing social goals that can complement the other labels in promoting a just transition, a topic that resonates in the emerging and frontier markets.<sup>16</sup> SLBs may play a role in understanding the [direction of travel of their issuers and keeping them on track](#), provided they meet certain criteria.

Several economies showed a strong positive momentum in H1 2025 (half-on-half and YoY growth in issuance) — particularly China, the Philippines, Taiwan and New Zealand in APAC; Italy, Austria, Sweden, Norway, Ireland, Saudi Arabia and South Africa in EMEA; and Peru in the Americas.

#### Issuance of labeled bonds by market in H1 2025



*Cumulative issuance refers to the total amount issued by issuers domiciled in each market to date. Issuance by supranational issuers is excluded from this graphic. Data as of June 30, 2025. Source: FactSet, MSCI ESG Research*

If we take contributions to global emissions of greenhouse gases (GHG) as an indication for how much has to be invested (partly financed with sustainable debt) in the transition to a lower-carbon economy, some regions are ahead and some behind the curve (this is shown in greater detail in Appendix B). EMEA is responsible for around 25% of global GHG emissions, but EMEA-based issuers, chiefly those from the EU, have issued 52% of all labeled bonds to date, at the end of H1

<sup>15</sup> Shamik Dhar and Brian Davidson, "An investor's guide to net zero by 2050: Understanding the investment risks and opportunities created in what may be the largest redeployment of capital in history," BNY Mellon, Fathom Consulting, October 2022. In their joint study, BNY Mellon and Fathom Consulting estimated the cost of net-zero transition by 2050 at USD 100 trillion, with the share of investment to be made by each market roughly proportional to its share in production of global emissions of greenhouse gas.

<sup>16</sup> "Social Bond Principles: Voluntary Process Guidelines for Issuing Social Bonds," ICMA, June 2023.

2025. Conversely, APAC is responsible for 55% of global emissions but issued only 22% of all labeled bonds. The Americas show a slight imbalance between their responsibility for global emissions and cumulative labeled-bond issuance, with 21% of global emissions but only 12% of all labeled bonds issued.

The dominance of DM issuers from EMEA and North America could be explained by easier access to capital markets. Still, regions that cannot raise transition capital using labeled bonds might need to find alternative financing options to fill the potential funding gap and support their transition to a low-carbon economy.

That can be done, for example, through capital transfers from DM to EM, including financing from supranational organizations and multilateral development banks, which have issued 14% of all labeled bonds to date and are poised to be increasingly important in financing the EM transition.<sup>17</sup>

Another way to finance the low-carbon transition is through the greening of regional financial systems and extension of labeled loans, as another important source of capital. Analogous to the bond market, the labeled-loan market has also grown significantly in recent years (Appendix C). The loan market is particularly important for issuers unable to raise capital in the bond market due to size or other limitations.

## Market performance

To look at how labeled bonds performed compared to similar conventional bonds, we looked at the performance of a subset of the labeled-bond universe that overlapped with our proxy for the wider bond market (represented by the composite of the MSCI Corporate Bond and Government Bond Indexes).<sup>18</sup> As labeled bonds keep increasing their presence in global bond benchmarks, seeing whether there is any difference in performance between labeled and conventional bonds is increasingly relevant to investors beyond those specifically targeting this market segment.

As the exhibit below shows, the sampled labeled bonds outperformed the wider bond market in the first half of 2025. This was, however, mostly driven by the currency effect (from a USD investor's point of view; most of the sampled labeled bonds were in EUR, whereas most of the bonds in our benchmark universe were in USD), with the term structure being the second most important, albeit negative, contributor to the performance.

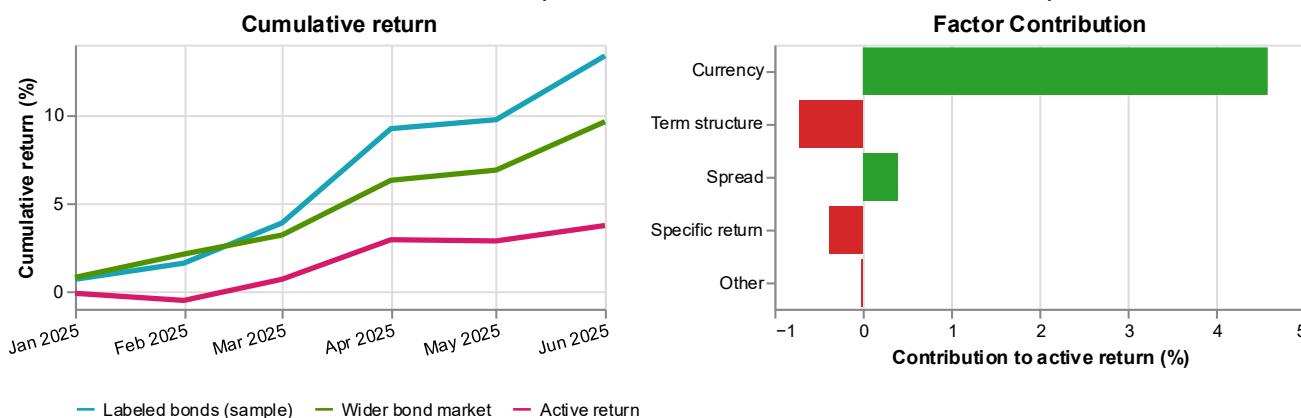
The difference in performance coming from a potential investor preference for labeled bonds would likely materialize in spread (consistently tighter spread or spread compression relative to peers) or the specific return (return unexplained by the other factors). These two factors, however, played a lesser role in performance so far this year.

---

<sup>17</sup> "COP27 Multilateral Development Banks Joint Statement," African Development Bank, November 2022.

<sup>18</sup> 901 labeled bonds included in the composite of [MSCI Government, Provincial and Municipal and Corporate Bond Indexes](#).

## Cumulative return and factor attribution (labeled bonds vs. wider bond market)



"Wider bond market" refers to bonds that were constituents of [MSCI Government, Provincial and Municipal and Corporate Bond Indexes](#) during the study period ( $n=14,018$ ). "Labeled bonds (sample)" refers to labeled bonds included in these MSCI bond indexes during the study period ( $n=1,234$ ). Performance attribution was conducted using the [MSCI Multi-Asset Class Factor Model](#) in MSCI's BarraOne® risk and portfolio-management analytics platform. Past performance does not indicate future returns. Data as of June 30, 2025. Source: MSCI ESG Research

## Conclusion

Labeled-bond issuance in the first half of 2025 experienced a modest decline compared to the same period in 2024. Nevertheless, the supply of labeled bonds in the market continued to grow, and their presence in global bond benchmarks further increased during H1 2025.

The market continued to grow in both size and diversity, with hundreds of new and recurring corporate and government-related issuers bringing labeled bonds to the market. This provided investors more opportunities to choose from a wider range of fixed-income instruments across various labels, currencies, maturities and other bond and issuer characteristics. Most newly issued and outstanding labeled bonds were investment-grade and issued by ESG leaders, which provided opportunities for investors to add exposure to labeled bonds, while preserving the credit and ESG quality of their portfolios.

We also observed that the performance of labeled bonds, despite their distinctions from conventional bonds, was primarily driven by key fixed-income risk and return drivers, such as currency fluctuations and interest-rate sensitivity. Therefore, while investors may scrutinize bonds' sustainability credentials and their impact on performance, the traditional performance drivers of fixed-income instruments continue to play a decisive role.

## Appendix

### Appendix A

#### Potential effects of labeled-bond issuance within the MSCI ESG Ratings framework

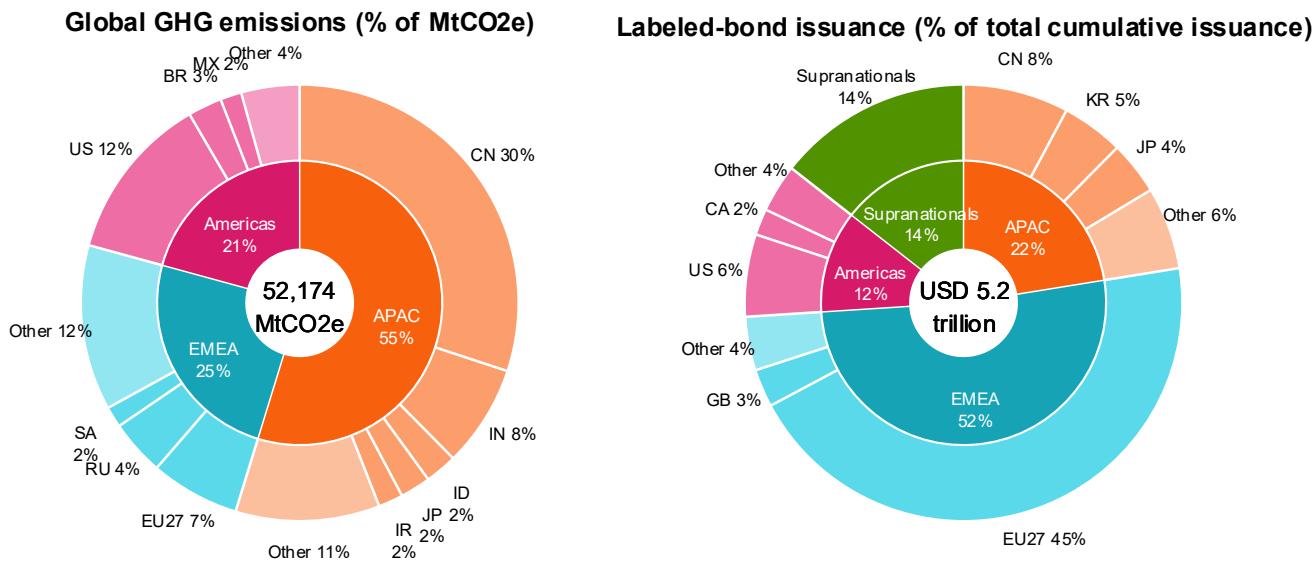
Labeled-bond issuance does not directly lead to a rise in the issuer's MSCI ESG Rating or environmental- or social-pillar scores; that is, it is not one of the scored indicators within the [MSCI ESG Ratings methodology](#). Proper earmarking and use of proceeds to deliver on environmental or social goals could contribute to improvement in the environmental and social profile and be reflected in the issuer's MSCI ESG Rating, however. The following are three examples of such a transmission mechanism:

- A green bond issued to fund decarbonization of production facilities could lead to a reduction in direct carbon emissions, which is a scored performance indicator in the carbon-emissions key issue under the climate-change theme within the environmental pillar of the MSCI ESG Ratings model.
- A green bond issued to fund efforts to lower the water intensity of operations could lead to a reduction in water-withdrawal rates, which is a weighted performance indicator in the water-stress key issue under the natural-capital theme within the environmental pillar of the MSCI ESG Ratings model.
- A social bond issued to fund projects to facilitate access to services, such as health care or finance, and/or targeting various segments of underserved populations, could lead to improvement on key issues under the social-opportunities theme within the social pillar of the MSCI ESG Ratings model.

We elaborated on this potential relationship in our publication focused on [labeled-bond issuers' cost of debt](#), where most of the labeled-bond issuers improved their MSCI ESG Rating after they commenced issuing labeled bonds.

## Appendix B

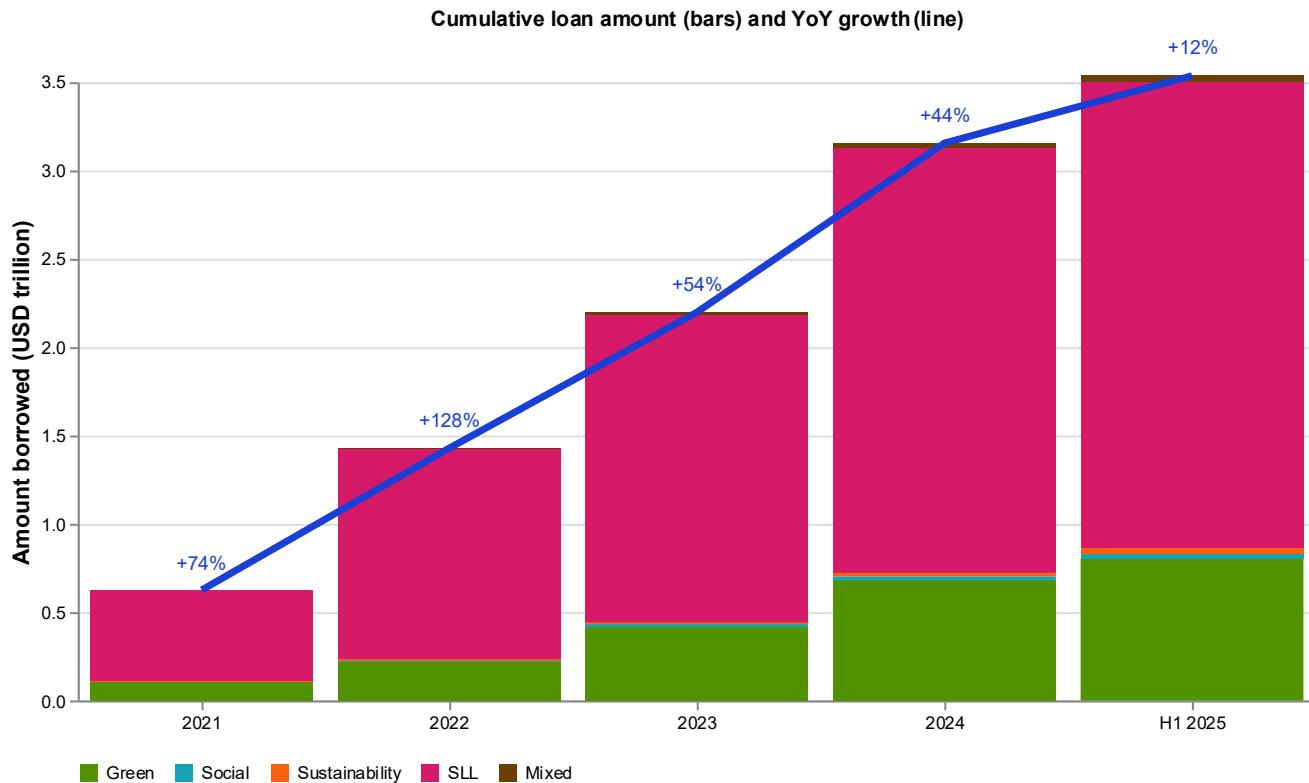
### Global GHG contribution vs. cumulative labeled-bond issuance



GHG emissions data as of full year 2022. Labeled-bond issuance data as of June 30, 2025. The issuance refers to the cumulative amount issued by issuers domiciled in each market. Supranationals include organizations backed by multiple government bodies, with regional or global scope of operations. The results look similar when excluding social bonds, as those are usually not directly linked with environmental objectives. Source: IMF Climate Change Dashboard, FactSet, MSCI ESG Research

## Appendix C

### Growth in labeled-loan market



*Cumulative amount borrowed over last five years and in year to date. Data as of June 30, 2025. Sustainability-linked loans (SLLs) are loan instruments analogous to SLBs. "Mixed" contains loans combining several labels (e.g., green and SLL). Source: Environmental Finance, MSCI ESG Research*

## Contact us

### About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

**About MSCI ESG Research Products and Services**  
 MSCI ESG Research products and services are provided by MSCI ESG Research LLC, and are designed to provide in-depth research, ratings and analysis of environmental, social and governance-related business practices to companies worldwide. ESG ratings, data and analysis from MSCI ESG Research LLC. Are also used in the construction of the MSCI ESG Indexes. MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc.

To learn more, please visit [www.msci.com/msci.com/contact-us](http://www.msci.com/msci.com/contact-us)

### AMERICA

United States	+ 1 888 588 4567 *
Canada	+ 1 416 687 6270
Brazil	+ 55 11 4040 7830
Mexico	+ 52 81 1253 4020

### EUROPE, MIDDLE EAST & AFRICA

South Africa	+ 27 21 673 0103
Germany	+ 49 69 133 859 00
Switzerland	+ 41 22 817 9777
United Kingdom	+ 44 20 7618 2222
Italy	+ 39 02 5849 0415
France	+ 33 17 6769 810

### EUROPE, MIDDLE EAST & AFRICA

China	+ 86 21 61326611
Hong Kong	+ 852 2844 9333
India	+ 91 22 6784 9160
Malaysia	1800818185 *
South Korea	+ 82 70 4769 4231
Singapore	+ 65 67011177
Australia	+ 612 9033 9333
Taiwan	008 0112 7513 *
Thailand	0018 0015 6207 7181 *
Japan	+ 81 3 4579 0333

\* toll-free

## Notice and disclaimer

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or re-disseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.

Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. **NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.**

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information may include "Signals," defined as quantitative attributes or the product of methods or formulas that describe or are derived from calculations using historical data. Neither these Signals nor any description of historical data are intended to provide investment advice or a recommendation to make (or refrain from making) any investment decision or asset allocation and should not be relied upon as such. Signals are inherently backward-looking because of their use of historical data, and they are not intended to predict the future. The relevance, correlations and accuracy of Signals frequently will change materially.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. The calculation of indexes and index returns may deviate from the stated methodology. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on [www.msci.com](http://www.msci.com).

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of [msci.com](http://www.msci.com).

Neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, provided that applicable products or services from MSCI ESG Research may constitute investment advice. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from any regulatory body. MSCI ESG and climate ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI ESG Indexes, Analytics and Real Estate are products of MSCI Inc. that utilize information from MSCI ESG Research LLC. MSCI Indexes are administered by MSCI Limited (UK) and MSCI Deutschland GmbH.

Please note that the issuers mentioned in MSCI ESG Research materials sometimes have commercial relationships with MSCI ESG Research and/or MSCI Inc. (collectively, "MSCI") and that these relationships create potential conflicts of interest. In some cases, the issuers or their affiliates purchase research or other products or services from one or more MSCI affiliates. In other cases, MSCI ESG Research rates financial products such as mutual funds or ETFs that are managed by MSCI's clients or their affiliates, or are based on MSCI Inc. Indexes. In addition, constituents in MSCI Inc. equity indexes include companies that subscribe to MSCI products or services. In some cases, MSCI clients pay fees based in whole or part on the assets they manage. MSCI ESG Research has taken a number of steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its research and ratings.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P Dow Jones Indices. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Dow Jones Indices.

**MIFID2/MIFIR notice:** MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data.

**Privacy notice:** For information about how MSCI collects and uses personal data, please refer to our Privacy Notice [at https://www.msci.com/privacy-pledge](https://www.msci.com/privacy-pledge).