

Global Sustainable Bonds 2023 Issuance To Exceed \$900 Billion

Sept. 5, 2023

Green, social, sustainable, and sustainability-linked bond issuance has risen this year, despite challenges posed by high global interest rates, while traditional bond issuance is stagnating.

This research report does not comment on current or future credit ratings or credit rating methodologies. It reflects research conducted by, and contributions from, S&P Global Ratings' sustainable finance and credit rating analysts.

This report does not constitute a rating action.



Authors

Sustainable Finance

Patrice Cochelin

Paris

patrice.cochelin@spglobal.com

Bryan Popoola

Washington, D.C.

bryan.popoola@spglobal.com

Credit Ratings

Dennis Sugrue

London

dennis.sugrue@spglobal.com

Contributors

Ashley Yen

Washington, D.C.

Florence Devevey

Paris

Emmanuel Volland

Paris

S&P Global Ratings recently published its midyear update for its global bond forecast for 2023 (see “[Credit Trends: Global Financing Conditions: Market Resilience Supports Stronger-Than-Expected Issuance in 2023](#),” published July 26, 2023). Below, we provide our outlook for the green, social, sustainable, and sustainability-linked bond (GSSSB) market for the second half of the year. Additionally, we explore key drivers of issuance growth in the first half of the calendar year, broken down by sector and region. All 2023 figures are for Jan. 1 to June 30.

Consistent with our recent GSSSB reports, this research draws on Environmental Finance’s Bond Database of global GSSSB issuance for nonfinancial corporates, sovereigns, financial institutions, and international public finance issuers but excludes structured finance issuers. Because the database is continuously updated, some figures may not exactly match those cited in previous years. For U.S. public finance issuers, we use a proprietary dataset we have maintained for 10 years that we believe best captures the nuances of the U.S. municipal bond market. Our GSSSB forecasts in this research are informed by S&P Global Ratings’ global bond forecasts and by market data gathered by our sustainable finance and credit ratings analysts.

Key Takeaways

- Despite stagnating global bond issuance, we anticipate that GSSSB issuance should be in line with our forecast of \$900 billion to \$1 trillion, or 14% to 16% of total issuance, in 2023.
- We anticipate issuance of sustainability-linked bonds will decline in 2023 as questions regarding the credibility of targets persist, while green bonds will continue to dominate the GSSSB market, building on a record level of issuance in the first half of the year.
- Europe will remain the leading region for GSSSBs, while North American issuance may be hampered by lower supply and demand for the remainder of the year. Emerging markets may see increased issuance in the coming year.

GSSSB issuance growth maintains momentum

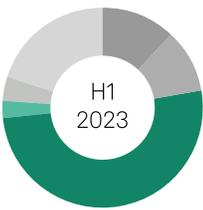


Issuance since inception for the GSSSB class surpassed the **\$4 trillion** mark in 2023



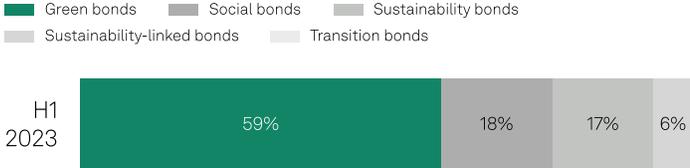
The GSSSB share of the overall market should hit **14%-16%** in 2023

EMEA countries account for the **majority of GSSSB issuance**



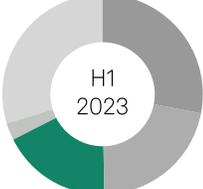
Region	Share
Supranational	~15%
North America	~10%
Europe	~45%
Middle East / Africa	~20%
Latin America	~5%
Asia-Pacific	~5%

Green bonds remain the **leading GSSSB category**



Category	Share
Green bonds	59%
Social bonds	18%
Sustainability bonds	17%
Sustainability-linked bonds	6%
Transition bonds	0%

Sovereigns look set to achieve **record share** of overall issuance



Category	Share
Nonfinancial	~15%
Financial services	~10%
Sovereign	~45%
U.S. public finance	~15%
International public finance	~15%

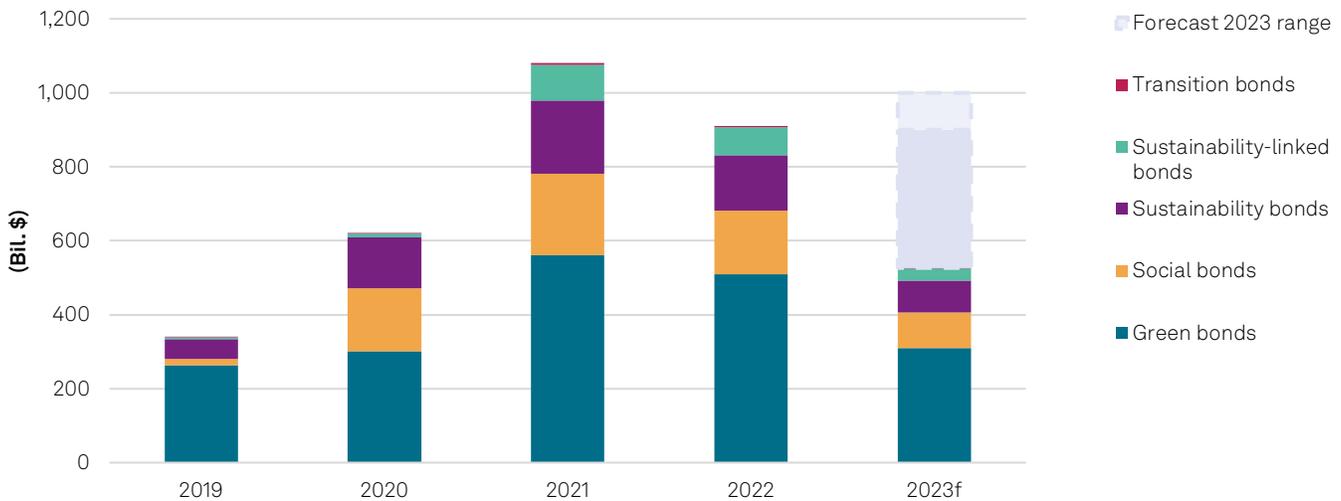
GSSSB--Green, social, sustainability, and sustainability-linked bonds.
 Copyright © 2023 by Standard and Poor's Financial Services LLC. All rights reserved.

GSSSB Issuance Will Almost Reach 2021 Levels In 2023

Given first-half trends, we reiterate our previous forecast for \$900 billion to \$1 trillion of GSSSB issuance in 2023. This is in line with our forecasts published Feb. 7, 2023, (see "[Sustainable Bond Issuance Will Return To Growth In 2023](#)"). Financial markets rebounded in April-June this year. This enabled many sectors to reduce or reverse first quarter year-on-year issuance shortfalls in the traditional global bond market (see chart 1).

Chart 1

GSSSB issuance totals are forecast to increase by 5%-17% in 2023 versus 2022

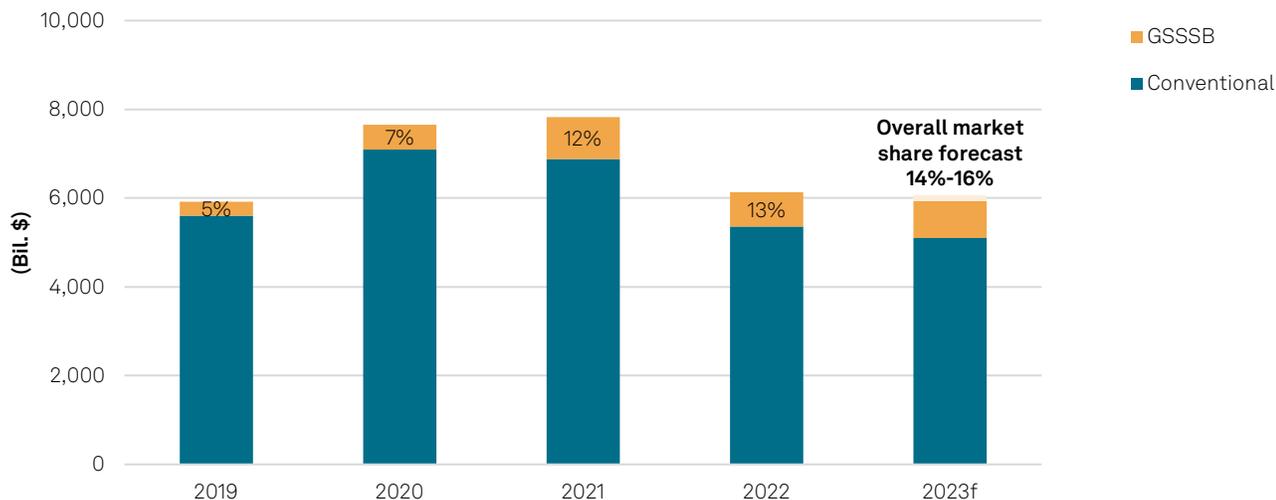


Note: Excludes structured finance issuance. Data for 2023 combines January-June results with our forecasts for the full year. f--S&P Global Ratings forecast. GSSSB--Green, social, sustainable, and sustainability-linked bonds. Sources: Environmental Finance Bond Database. S&P Global Ratings. Copyright © 2023 by Standard and Poor's Financial Services LLC. All rights reserved.

We believe GSSSB issuance will account for 14%-16% of total bond issuance in 2023. We draw on issuance from nonfinancial corporates, financial services, and the U.S. and international public finance sectors. GSSSB data also includes sovereign issuance. GSSSB issuance captured nearly 13% of total global bond issuance from Jan. 1 to June 30. In our view, GSSSB issuance growth will continue to outpace that of traditional bond issuance for the remainder of 2023 and claim its highest-ever percentage of global bond issuance (see chart 2).

Chart 2

GSSSB share of global bond issuance likely to reach 14%-16% in 2023



Note: Excludes structured finance and sovereign issuance. f--S&P Global Ratings forecast. GSSSB--Green, social, sustainable, and sustainability-linked bonds. Sources: Environmental Finance Bond Database. S&P Global Ratings. Copyright © 2023 by Standard and Poor's Financial Services LLC. All rights reserved.

Issuance of GSSSBs is poised to approach the level reached in 2021, when volume surpassed \$1 trillion. Total cumulative issuance of GSSSBs since inception reached \$4 trillion in June 2023, less than one year after surpassing the \$3 trillion mark. We believe increased demand in key regions, continued focus on the energy transition, and supportive climate policies will drive GSSSB issuance in the second half of the year.

Many factors that could stifle issuance in the traditional bond market could also lead to decreased GSSSB issuance. These include rising interest rates and risks of recession in key regions such as Europe and North America. GSSSB issuance could also be constrained by political headwinds: Some U.S. states have discouraged or even taken steps to disallow certain U.S. public finance issuers from labeling their bonds as GSSSBs. We believe such measures could also diminish the use of GSSSB labels by issuers in other sectors, including nonfinancial corporates.

Green bonds are likely to continue to dominate, as sustainability-linked bonds falter. Green bond issuance during the first half of 2023 reached \$310 billion (see table 1), marking the highest half-year total since the inception of the green bond market. Green bonds have comprised 59% of the GSSSB market in 2023 so far. We predict they will remain prevalent through the rest of the year. Nonfinancial corporates are currently the largest issuers of green bonds, despite issuance contracting 6% compared with the first half of 2022.

Sovereign green bond issuance should increase notably this year. This follows a significant uptick in the first six months of the year. The \$80 billion of issuance through June is more than the full-year total for 2022. Green bond issuance in the Middle East has also reached new highs this year, at \$13 billion so far. This is more than the region's entire GSSSB issuance last year.

Sustainability-linked bond (SLB) issuance continues to lag other bond types and will likely not reach 2022 levels. Issuance for the year is likely to be \$33 billion, accounting for 6% of all GSSSB issuance, down from a high of 9% in 2021. Notably, more than 99% of SLB issuance this year was from nonfinancial corporates, compared with 88% in 2022. SLB issuance from other types of

entities has all but disappeared. Financial services, sovereign, and U.S. and international public finance entities issued less than \$200 million (0.4%) of SLBs in the first half of 2023.

Questions persist about whether SLBs motivate issuers to set ambitious sustainability targets.

These concerns have persisted for more than a year, as stakeholders have expressed doubts about whether the structural and financial features associated with missing targets give issuers sufficient incentive to achieve them. For example, there is increasing sensitivity from stakeholders on targets related to Scope 3 greenhouse gas emissions. These emissions are indirect and can originate in companies' value chains or during the end-use of their products.

Table 1

GSSSB issuance breakdown by bond type

(Bil. US\$)	Green bond	Social bond	Sustainability bond	Sustainability-linked bond	Transition bond	Total
2019	262.50	18.79	52.80	4.24	1.05	339.38
2020	301.94	170.38	137.15	9.31	2.60	621.38
2021	560.99	220.05	198.58	96.20	4.26	1,080.08
2022	508.52	173.73	149.19	75.77	3.50	910.71
H1 2023	309.81	95.49	87.05	33.07	1.08	526.50

Note: Data exclude structured finance. Sources: Environmental Finance Bond Database. S&P Global Ratings. Copyright © 2023 by Standard and Poor's Financial Services LLC. All rights reserved.

Policies, Laws, Regulations, And Transparency Initiatives Will Continue to Drive Issuance

Many regional and country-level policies around GSSSBs were in place before the year began, but their effects may be felt throughout 2023. The EU's new voluntary Green Bond Standard (GBS) is unlikely to have a substantial impact on issuance this year. S&P Global Market Intelligence has noted that issuers are finding it difficult to meet stringent criteria as well as limited data availability, which could discourage adoption (see: "[New EU green bond standard may see low uptake with challenges exceeding benefits.](#)" published May 18, 2023).

If issuers find it too difficult to implement the GBS, they may decide to continue using other standards, such as the International Capital Market Association (ICMA) principles. Meanwhile, we expect China to have a greater number of internationally-aligned green bonds because of updates made to the country's green bond standard in 2022. The updates align the local standards with international standards such as ICMA's Green Bond Principles. In January to June 2023, green bond issuance from mainland China totaled \$8 billion. Only Hong Kong, with \$13 billion, issued more in Asia-Pacific.

China and the EU are working on a common taxonomy that harmonizes definitions on which activities qualify as green. They aim to facilitate cross-border issuances.

In the U.S., the Inflation Reduction Act has boosted investments related to decarbonization. Companies are striving to take advantage of the various tax credits for investment in green projects (see "[U.S. Inflation Reduction Act Highlights Diverging Approaches With Europe.](#)" published March 1, 2023). In 2023, issuances from auto manufacturers, energy companies and financial institutions have increased. This has spurred investments in clean transport, renewable energy, and energy efficiency projects. Notably, there may also be a rise in foreign companies relocating their manufacturing and production facilities to meet minimum U.S. production

requirements. U.S. issuance may be impacted by the Securities and Exchange Commission (SEC) climate disclosure rule, once it is finalized. However, this may be delayed beyond the end of 2023.

GSSSB Defined

Green, social, sustainability, and sustainability-linked bonds fall into two main categories:

Sustainability-linked bonds (SLBs): Any type of instrument for which the financial or structural characteristics can vary depending on whether the issuer achieves predefined sustainability objectives.

Use-of-proceeds bonds: Any type of instrument where the net proceeds (or an equivalent amount to the net proceeds) are exclusively used to finance or refinance, in part or in full, new and/or existing eligible green and/or social projects. The three main subcategories of use of proceeds instruments are:

- Green bonds: Instruments that raise funds for projects with environmental benefits including renewable energy, green buildings, and sustainable agriculture.
- Social bonds: Instruments that raise funds for projects that address or mitigate a specific social issue and/or seek to achieve positive social outcomes, such as improving food security and access to education, health care, and financing, especially but not exclusively for target populations.
- Sustainability bonds: Instruments that raise funds for projects with both environmental and social benefits.

Finally, transition bonds can be either sustainability-linked or use-of-proceeds bonds issued specifically to support climate transition goals, geared towards issuers in hard-to-abate sectors.

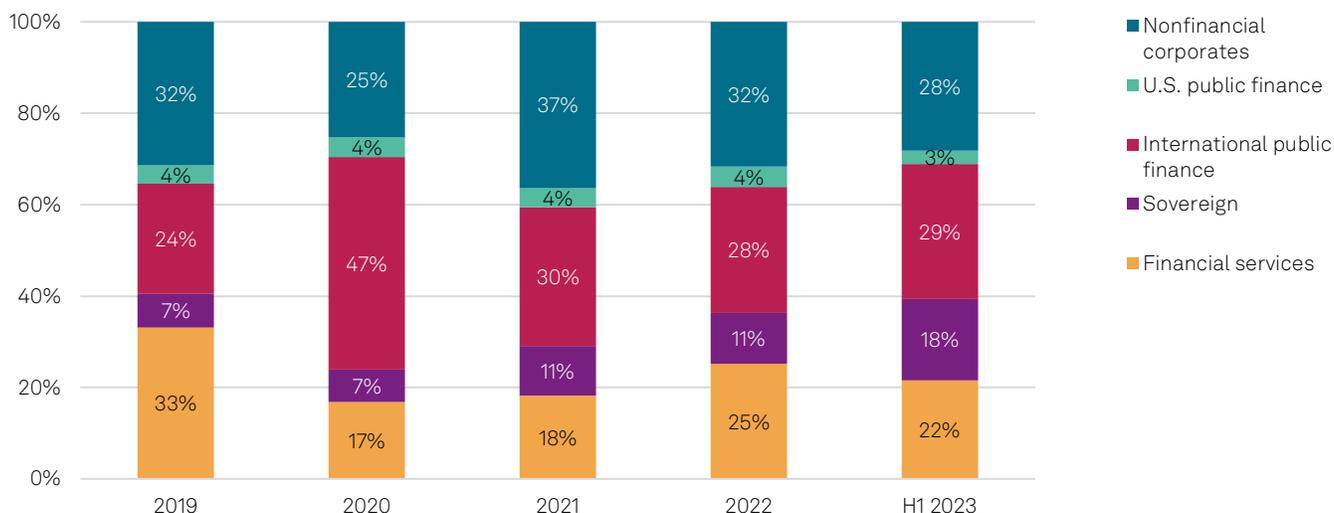
Source: International Capital Market Assn.

Drivers of Growth Differ By Sector

We believe that by the end of 2023, GSSSB issuance in nearly all sectors will increase or remain flat compared with 2022. Comparing issuance levels from the first halves of 2022 and 2023 supports this (see chart 4). Sovereigns in particular are set to have their largest year on record. Large green bond issuances from Germany and Italy helped drive the growth. Both countries aim to achieve their nationally determined contributions from the Paris Agreement.

Chart 3

Sovereigns now account for a larger portion of global GSSSB issuance



Note: Excludes structured finance issuance. Sources: Environmental Finance Bond Database. S&P Global Ratings. Copyright © 2023 by Standard and Poor's Financial Services LLC. All rights reserved.

GSSSB issuance among nonfinancial corporates declined 15% in the first half of 2023. It made up 28% of the market in January-June 2023. Despite this decline, we expect issuance to remain flat year-on-year and for the sector to maintain a significant share of the GSSSB market. We see increased interest for green bond issuance over other GSSSBs among nonfinancial corporates, a trend that has been persistent for a few years and that we expect this to continue. This is most notable in Europe, where investor demand has increased in light of EU regulations. Fund classification under Article 8 or 9 of the EU Taxonomy suggests it will likely be easier to justify portfolio integration of green-labelled debt instruments in comparison with other forms of sustainable debt. As decarbonization strategies and sustainability frameworks continue to formalize across corporates, we have observed the emergence of new green investment needs, improvements in reporting, and ultimately debt issuance that better qualifies as green-labelled capital. Volumes will remain highly dependent upon bond market conditions for the rest of the year. At the same time, we think the relative share of GSSSB to total bond issuance will continue to grow among nonfinancial corporates. Supply of and demand for green financing will remain driven by the acceleration of the energy transition and a growing number of renewables projects.

U.S. public finance GSSSB issuance will slow, as will overall issuance. Total GSSSB issuance in the U.S. municipal market was \$15.3 billion in the first half of 2023. Issuance of green bonds led all other types of GSSSB, with \$8.4 billion of issuance. We expect market share for GSSSBs to increase for a fifth consecutive year. Share will likely range from 12% to 17% of total municipal bond issuance, in our view. However, we anticipate that GSSSB issuance in the U.S. public finance sector will stagnate year-on-year. This is because overall municipal bond issuance is likely to slow this year. We identified persistent headwinds in our U.S. municipal GSSSB outlook (see [“U.S. Muni Sustainable Bonds: Momentum To Continue In 2023,”](#) published Feb. 9, 2023). These include:

- An ongoing high interest rate environment that curtailed overall municipal issuance in the first half of 2023, with the total volume down between 16% and 20%;
- U.S. local governments having ample liquidity; and
- Policy initiatives restricting issuance of GSSSB labeled bonds.

In international public finance, SLBs have lost ground, while use-of-proceeds bonds continue to grow. Overall GSSSB issuance in the international public finance (IPF) sector was about 10% higher in the first half of 2023 compared with last year. It is slightly ahead of our forecast for the year. Issuers' preference for sustainability bonds rather than green, social, or SLBs is clear. Multilateral and supranational entities and sovereign agencies make up about 85% of the total GSSSB issuance in the IPF sector. This figure has grown around 7% year-on-year to date. Issuance among sub-sovereign entities and financing agencies--particularly in South Korea, Germany, and Japan--has grown around 40% so far this year. This is in line with overall issuance in the sector.

Sovereign issuance surges, driven by green bonds. GSSSB issuance by sovereigns looks set to grow more than any other issuer type. Issuance in the first half of the year reached nearly \$94 billion in 2023, compared to \$48 billion in the first half of 2022. These record figures stem primarily from issuance in Europe of 64%, followed by 16% in Asia-Pacific. Green bonds accounted for 86% of such issuance, with the majority coming from Europe. Based on clear indications from national governments, we expect that sovereign GSSSB issuance will break the 2021 record of \$117 billion. Only one sovereign (Chile) has issued a social bond this year, while five have issued sustainability bonds. Some countries are exploring the possibility of issuing GSSSBs through integrated national financing frameworks. These are comprehensive financing strategies developed to ensure the long-term sustainability of sovereign debt by enhancing domestic revenue mobilization, effectiveness and efficiency of expenditure, and alignment with national sustainable development priorities. Several sovereigns have made their GSSSB debut in 2023, including Turkey, Israel, India, and Sharjah, one of the United Arab Emirates (UAE).

Higher interest rates have been a particularly negative factor for issuance in the financial services sector. Issuance in the sector reached \$114 billion in the first half of 2023. This is close to the issuance of \$113 billion seen in the first half of 2022. We anticipate GSSSB issuance from the financial services sector will remain relatively stable in 2023 compared with last year. We had previously forecast growth for the year. We expect green bonds to continue to be the leading category of GSSSB issued by financial services entities for the remainder of the year. An increasing number of banks, insurers, and other financial institutions are making progress toward establishing and implementing net-zero ambitions and targets aligned with the Paris Agreement.

Regions Diverge, In Part Because Of Policies

Europe has long been the global leader for GSSSBs, and we expect its issuance levels to continue to grow in the second half of the year. The Middle East will also reach its highest-ever yearly issuance levels. North America, meanwhile, will likely see its lowest issuance volumes since 2020.

Chart 4

More than half of GSSSB issuance is European for the first time



Note: Excludes structured finance issuance. Sources: Environmental Finance Bond Database. S&P Global Ratings. Copyright © 2023 by Standard and Poor's Financial Services LLC. All rights reserved.

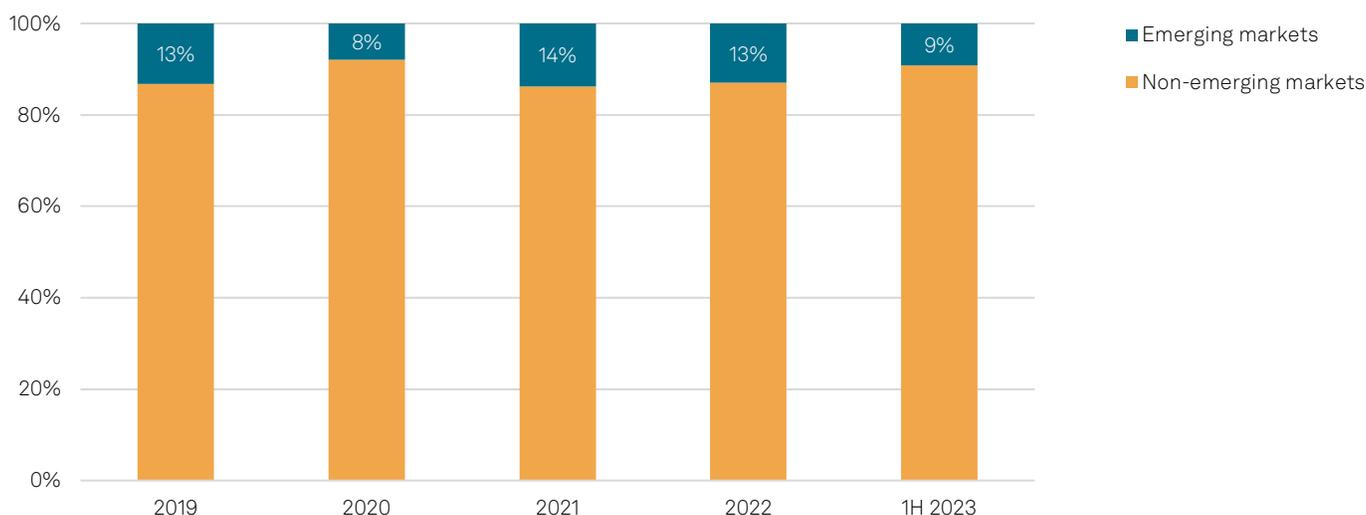
Europe continues to lead the way, thanks in particular to sustained green bond issuance. It reached \$269 billion, surpassing the previous first-half record of \$262 billion reached in 2021 and accounting for more than 50% of global GSSSB issuance for the first time. Green bond issuance, including among sovereigns, drove volumes. Established issuers Germany (\$15 billion), Italy (\$13 billion), the U.K. (\$10 billion), and France and Austria (\$6 billion each) stepped up volumes significantly. Efforts to accelerate the energy transition were the primary reason for issuance growth. Recent updates to the EU Taxonomy show the region continues to refine its definition of sustainable activities to only include those that provide the most impact. Sovereign GSSSB issuance nearly doubled year-on-year in the first half of 2023. First half issuance among financials was at almost exactly last year's record level of \$73 billion. Nonfinancial corporate issuance declined by 10% year-on-year. However, it remained the leading issuer type in Europe, accounting for 30% of volumes. The decline for nonfinancial corporate issuance is partly attributable to the higher reliance of the corporate GSSSB segment on sustainability-linked instruments. The second half of the year may signal whether SLBs can rebound through the use of combined frameworks. Under these frameworks, issuers make commitments on use-of-proceeds and sustainability-linked debt in one document. We expect European issuance to continue to grow in the second half, and potentially set a new record in 2023.

In North America, a confluence of factors is pushing down issuance. Overall, issuance in North America has contracted significantly since 2022, reaching only \$55 billion so far in 2023. This is just over one-third of the amount raised in 2022, and less than one-third of the amount recorded in 2021. For the first half of 2023, North America comprised a record low of just over 10% of global GSSSB issuance. We expect North American GSSSB issuance to continue at its current pace for the remainder of 2023, leading to issuance volumes that are markedly lower than in 2022. European issuance volumes were more than five times higher than North America's in the first half of 2023. The overall decline can be attributed to a general bond market hesitancy among U.S. investors after the fall of regional banks such as Silicon Valley Bank in March, the prolonged U.S. debt ceiling debate, and some states implementing policies that hinder supply and demand for GSSSB. The U.S. municipal bond market makes up 33% of U.S. GSSSB issuance, consistent with previous years. Many U.S. municipal bonds have inherent alignment with social and environmental objectives. However, certain factors may prevent municipalities from labeling their debt as such. These include political concerns and an evolving disclosure landscape (see: "[U.S. Muni Sustainable Bonds: Momentum To Continue In 2023](#)," published Feb. 9, 2023).

Emerging market issuance in 2023 is unlikely to be as strong as in previous years. This is mainly because of a 73% decline to \$9 billion in issuance from China in the first half of the year. Emerging market issuance accounts for less than 10% of all GSSSB for the first time since 2020. We believe tight financing conditions and subdued domestic and global economic activity have affected issuance in these countries (see: "[Emerging Markets Monthly Highlights: Crossing Inflation Peak](#)," published May 17, 2023). Several challenges hinder issuers in emerging markets from participating in GSSSB markets. These include currency and inflation risks. Emerging markets also generally have shorter maturities on their debt. Therefore, increased borrowing costs are quicker to filter through. In addition, a lack of resources to support data and reporting prevents issuers and investors from determining which investments provide the most impact. Possible solutions to help guide emerging market issuers include technical assistance programs and facilities, often provided by third parties such as regional multilaterals and development banks. These programs help issuers develop sustainable bond frameworks.

Chart 5

Emerging market issuance declined to below 10% of overall GSSSB issuance



Note: Excludes structured finance issuance. Data for 2023 is January to June. Sources: Environmental Finance Bond Database, S&P Global Ratings. Copyright © 2023 by Standard and Poor's Financial Services LLC. All rights reserved.

Issuance in Asia-Pacific pulled down by China. Overall, GSSSB issuance in Asia-Pacific is down 10% compared with the first half of 2022. However, the region has seen contrasting dynamics in the first half of the year. Compared to last year, Chinese issuance declined. This is despite the lifting of pandemic restrictions and support from authorities. It may reflect rising interest rates, tightening regulations, a slow economic recovery, and persisting uncertainty in the real estate sector. Issuance in South Korea and Japan, meanwhile, was flat. South Korea remained the region's leading issuer of GSSSBs (\$38 billion). Social bond issuance related to housing continues to underpin South Korean issuance. We expect values to remain flat or decline slightly for the remainder of the year. This is because of first-half dynamics, as well as the prevalence of China, Japan, and South Korea in the region's issuance. Sovereign issuance doubled to \$15 billion. India received renewed impetus for GSSSB issuance in 2023 from the government's new green bond framework, with critical projects straddling decarbonization, adaptation to climate change, and the protection of biodiversity.

In the Middle East, governments are key to issuance. Sustainable bond issuance in the Middle East more than tripled compared with the same period last year, reaching \$15.4 billion in the first half of 2023. Notably, most issuances involved governments as key stakeholders and were green bonds. Three Saudi Arabian Public Investment Fund (PIF) issuances accounted for 36% of issuance. The region also benefits from continued issuances in the UAE, and new issues in Turkey and Jordan. The UAE and Saudi Arabia capture more than 80% total GSSSB issuance in the region. We expect this trend to continue into 2024 (see: "[Saudi Arabia's Debt Market: Ready For Takeoff](#)," published June 19, 2023). We are also seeing strong growth in Islamic finance sectors. Total volume of sustainability-linked sukuk increased by around 50% in the first half of 2023 (\$6.7 billion) compared with 2022 (\$4.4 billion). We expect to see higher volumes as issuers meet investor demands and core Islamic finance countries seek to reduce their carbon footprints. We think COP28 in the UAE could shine a light on the opportunities offered by Islamic finance and sukuk to finance initiatives related to the climate transition. In our view, the introduction of sustainable finance-linked Islamic instruments could add further depth to the investor base.

In Africa, issuance from nonfinancial corporates has disappeared. Overall issuance decreased significantly on the continent, reaching only \$140 million in the first half of 2023. This represents a 91% decline for the region compared with the first half of 2022. Financial services issuance has decreased by 80%. In line with figures from the first half of the year, we expect Africa to have its weakest-ever year for issuance in 2023.

Latin American GSSSB issuance could reach the upper end of our estimates, if international financing conditions improve. We maintain our forecast that Latin American GSSSB issuance will reach \$30 billion-\$40 billion in 2023 (see "[Latin America Sustainable Bond Issuance To Recover In 2023](#)," published Feb. 23, 2023). GSSSB issuance reached \$19.7 billion from January through June 2023, up 32% growth from the same period in 2022. Domestic markets drove this, amid subdued international volumes. In our view, sovereigns will continue leading Latin American issuance in 2023. New frameworks are being released in the market for both sustainability-linked and use-of-proceeds financings. Despite their relatively small presence in the overall GSSSB market, issuers in the region continue to innovate. In June, Chile became the first sovereign issuer to add a social target to an SLB Issuance, aiming for a 40% board composition of women for all companies registered with the country's Financial Market Commission.

Looking Ahead

Despite stagnating issuance in the traditional global bond market in the first half of the year, GSSSB issuance looks set to grow once again in 2023. This is in line with our forecast of issuance reaching \$900 billion to \$1 trillion for the year.

We believe that despite potential headwinds, 2023 will be the second-largest year for GSSSB issuance, nearly reaching the high of 2021. Though short-term interest rates may continue to rise in many major economies, long-term rates have largely stabilized, reflecting market sentiment that inflation may soon get back under control and creating a favorable environment for increased GSSSB issuance through the end of the year.

Green bonds are likely to continue to lead the way and possibly even set new issuance records. Social and sustainability bonds, which have also shown impressive resilience in the first half of the year, will continue to contribute to overall issuance in 2023. Increased issuance from regions such as the Middle East and Latin America may bolster the presence of emerging markets, as GSSSB issuance set for its highest percentage of total global bond issuance on record.

Related Research

- [Credit Trends: Global Financing Conditions: Market Resilience Supports Stronger-Than-Expected Issuance in 2023](#), July 26, 2023
- [Saudi Arabia's Debt Market: Ready For Takeoff](#), June 19, 2023
- [Emerging Markets Monthly Highlights: Crossing Inflation Peak](#), May 17, 2023
- [U.S. Inflation Reduction Act Highlights Diverging Approaches With Europe](#), March 1, 2023
- [Sustainability Insights: Research: Sustainable Bond Issuance Will Return To Growth In 2023](#), Feb. 7, 2023
- [Sustainability Insights: Research: U.S. Muni Sustainable Bonds: Momentum To Continue In 2023](#), Feb. 9, 2023).
- [Sustainability Insights: Research: Asia-Pacific Sustainable Bond Issuance To Increase In 2023](#), Feb. 14, 2023
- [Sustainability Insights: Research: Latin America Sustainable Bond Issuance To Recover In 2023](#), Feb. 23, 2023

External Research

- [New EU green bond standard may see low uptake with challenges exceeding benefits](#), May 18, 2023

Editor

Richard Smart

Digital Designer

Halie Mustow

Copyright 2023 © by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content 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. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.spglobal.com/ratings (free of charge) and www.ratingsdirect.com (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.spglobal.com/ratings/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.