

U.S. Muni Sustainable Bonds: Moderate Growth In 2024

Feb. 15, 2024

Emerging pressures will likely limit sustainable bond growth within the U.S. municipal bond market. But large public and not-for-profit issuers should drive modest issuance growth.

This research report explores an evolving topic relating to sustainability. It reflects research conducted by and contributions from S&P Global Ratings' sustainability research and sustainable finance teams as well as our credit rating analysts (where listed).

This report does not constitute a rating action



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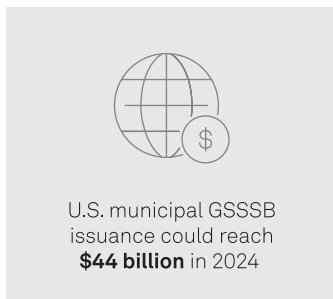
In S&P Global Ratings' recently published global bond forecast for 2024 (see "[Global Financing Conditions: Cautious Optimism After Peak Rates](#)", published Jan. 25, 2024), we estimate modest growth of 4.3% in global bond issuance and only 1% growth in U.S. public finance issuance. In this research, we provide our outlook for the U.S. municipal green, social, sustainability, and sustainability-linked bond (GSSSB) market for 2024. In addition, we explore some key themes defining this market segment based on historic issuance from 2013-2023.

Consistent with our recent reports about GSSSBs, this research draws on S&P Global Ratings' proprietary dataset, which contains data from our review of municipal GSSSB offering statements. The report is best read alongside the slide deck, "[U.S. Municipal Sustainable Bonds: Projecting Moderate Growth In 2024](#)", published Feb. 15, 2024. Our GSSSB forecasts are informed by S&P Global Ratings' global bond forecasts, issuer surveys, and market analysis by our sustainable finance and credit ratings teams.

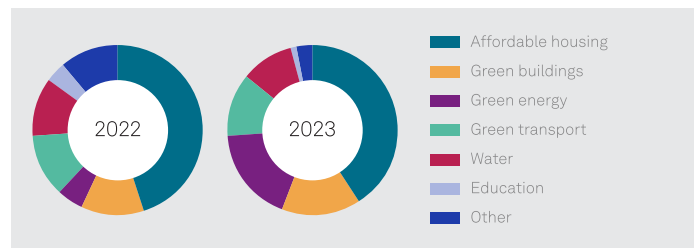
Key Findings

- **Moderate growth:** We anticipate 5% U.S. municipal GSSSB issuance growth in 2024, modestly outpacing the broader municipal market and reflecting pent-up demand.
- **Affordable housing will lead:** GSSSBs are especially well suited for such projects, particularly as housing affordability hit a low in 2023.
- **Prominence of large and frequent issuers:** A concentration of several large issuers will likely continue to embrace GSSSBs, but could also produce volatility.
- **Green energy and transportation as likely areas of growth:** State mandates for renewable power supply will support momentum in green bond financing while mass transit operators will continue tapping the market to fund capital-intensive systems.

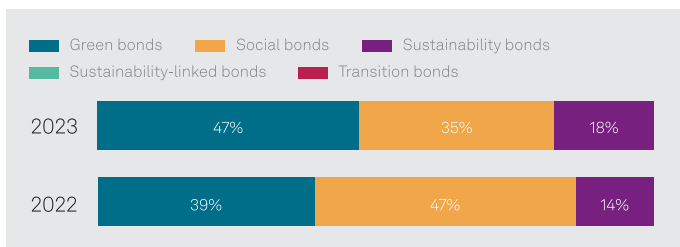
Key Figures



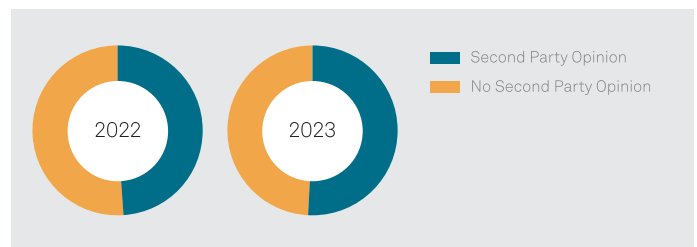
Affordable housing leads, green energy grew significantly



Green bonds and social bonds continue to lead



About half of U.S. municipal GSSSB get Second Party Opinions



GSSSB--Green, social, sustainability, and sustainability-linked bond. Source: S&P Global Ratings. Copyright © 2024 by Standard and Poor's Financial Services LLC. All rights reserved.

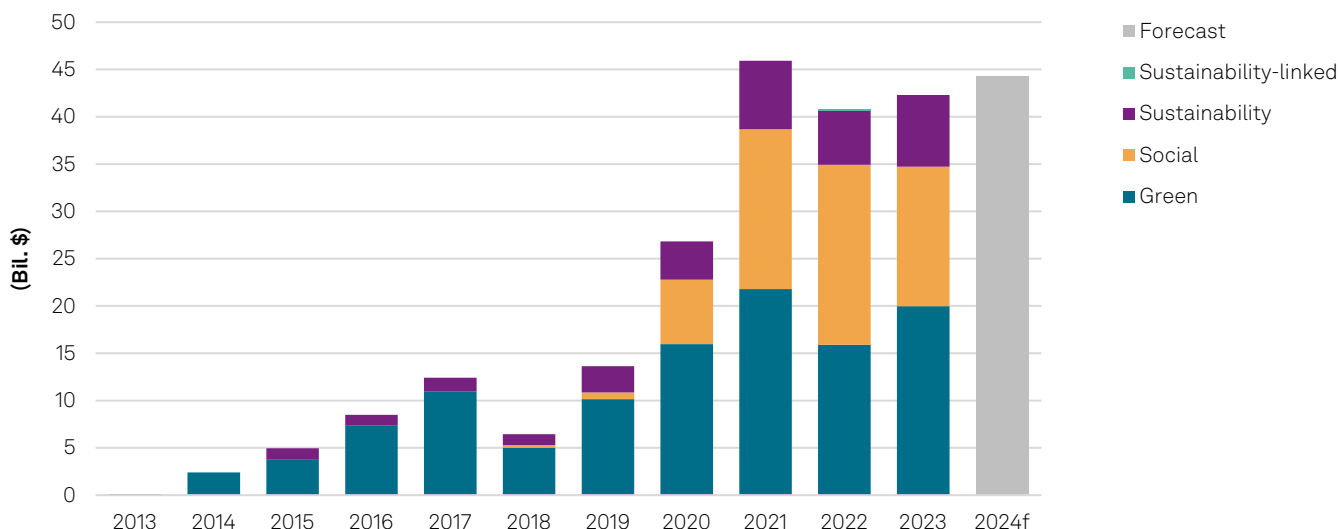
U.S. Municipal GSSSB Issuance Will Increase Moderately

We expect moderate U.S. municipal GSSSB issuance growth in 2024 to about \$44 billion, an increase of about 5%. This follows 2023, when U.S. municipal GSSSB issuance increased 3.5% while total U.S. municipal bond issuance declined 2.8%. A surge in green bonds that funded renewable energy purchases, along with the continued embrace of green bonds by transportation sector issuers and social bonds by housing finance agencies, underpinned growth.

Though high interest rates will likely continue to limit refinancing through at least the first half, a few factors will likely drive U.S. municipal GSSSB issuance growth. These include dwindling federal COVID-19 pandemic aid, the alignment between municipal issuers' public purpose and projects typically financed by GSSSBs, and social and environmental trends such as the persistent need for affordable housing and governments' incentive to address risks related to climate and weather-related threats.

Chart 1

U.S. municipal GSSSB issuance could increase 5% in 2024



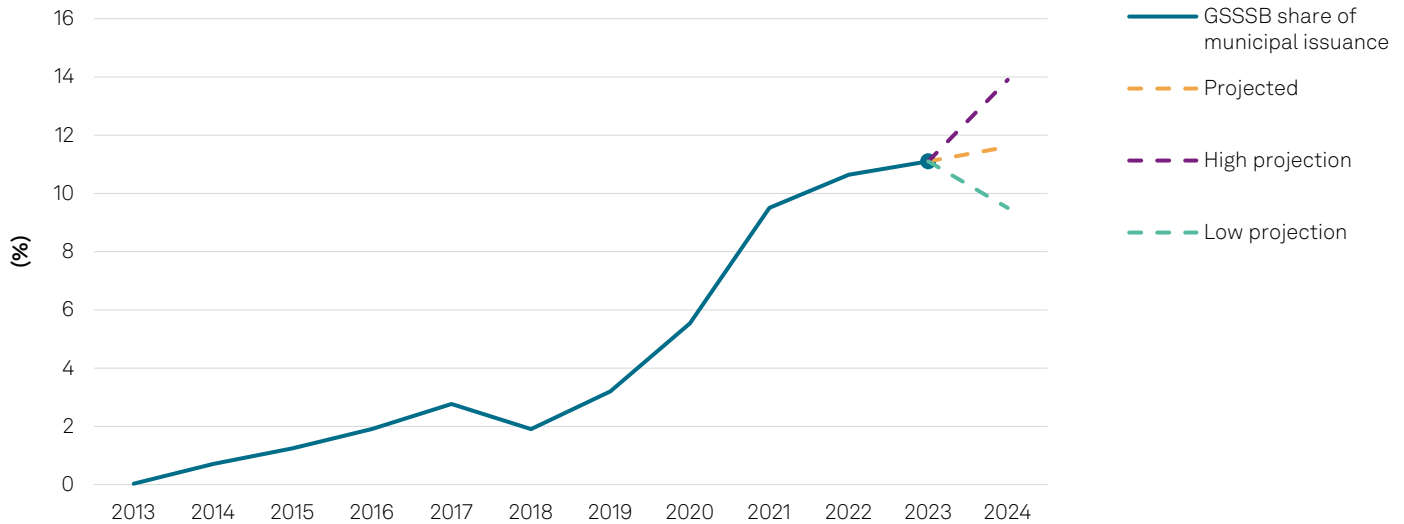
f--Forecast. Source: S&P Global Ratings. Copyright © 2024 by Standard and Poor's Financial Services LLC. All rights reserved.

Despite higher interest rates, municipal GSSSB issuance was resilient in 2023. For 2024, we believe U.S. municipal GSSSB issuance growth will continue despite softening macroeconomic conditions that could dampen revenue trends, with some issuers pursuing a more cautious approach to financing capital programs (see "[Economic Outlook U.S. Q1 2024: Cooling Off But Not Breaking](#)", published Nov. 27, 2023).

Other issues may also limit GSSSB growth as a proportion of overall municipal bond issuance in 2024 (chart 2). GSSSBs accounted for 11.1% of all U.S. municipal bonds issued in 2023, an all-time high. But the rate of year-over-year growth as a portion of total municipal bond issuance slowed for a second consecutive year to its lowest since 2018. Absent an unexpected reversal of recent trends, we believe that rate of increase will remain fairly stagnant.

Chart 2

Growth in GSSSBs' proportion of U.S. municipal bond issuance slowing to about 12% in 2024



GSSSB--Green, social, sustainability, and sustainability-linked bond. Source: S&P Global Ratings. Copyright © 2024 by Standard and Poor's Financial Services LLC. All rights reserved.

Several factors may support or limit U.S. municipal GSSSB issuance

Tailwinds

- Affordable housing issuers' embrace.** The sector's embrace of GSSSBs remains strong, although we note housing finance agencies in five states ceased labeling their bonds in 2023. Housing affordability reached an all-time low in 2023, and a recovery is unlikely in 2024, so we expect robust issuance in the housing sector. Housing finance agencies will continue leading GSSSB issuance, motivated by the larger pool of investors who do not normally purchase municipal bonds.
- Policy and funding support.** We expect municipal issuers to continue seeking federal matching funds made available by the U.S. Inflation Reduction Act and Infrastructure Investment and Jobs Act that could be leveraged to finance green projects in areas such as renewable energy and mass transit. In addition, state programs encouraging renewable energy projects are expanding, potentially creating incentives for more green bond investments.
- Rising costs from physical risks.** Municipal issuers' fixed geographies and the need to protect economic activity and the health and well-being of their constituents are likely to incorporate resilience and adaptation into capital programs over time. We expect support for municipal GSSSB issuance could come from adapting infrastructure to the physical risks exacerbated by climate change such as extreme temperatures, hurricanes, and wildfires.

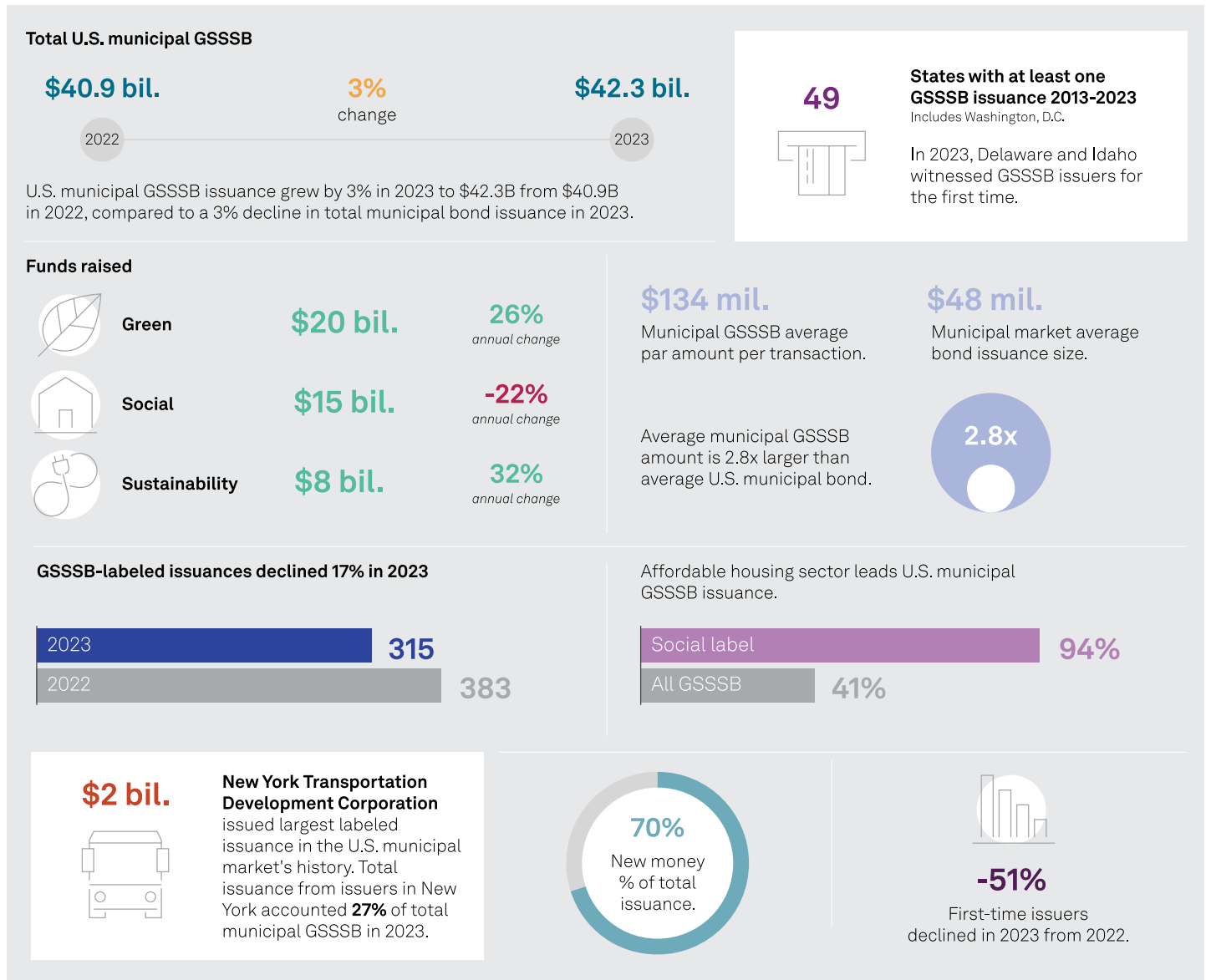
Headwinds

- **Political sentiment and policy actions.** Political sentiment is evolving around the considerations deemed to fall under the umbrella of environmental, social, and governance (ESG). At least one state enacted legislation that prohibits the sale of bonds designated or labeled to finance a project with an ESG purpose or to promote an ESG-related objective. We understand other states are considering similar legislation. We think this could signal a trend. For example, our data indicates GSSSBs from issuers in Florida totaled \$5.6 billion, or about 3% of U.S. municipal GSSSB issuance from 2013-2022. As in 2023, we expect political sentiment and policy actions in parts of the country to significantly dampen U.S. municipal GSSSB issuance growth in 2024.

Market conditions

- While the forecast from S&P Global Ratings Economics is for federal funds rate cuts beginning in mid-2024, we expect the current higher rates to limit issuance, both via less refinancing and some issuers delaying or reducing borrowings until rates further decline.

U.S. municipal GSSSB issuance trends



GSSSB--Green, social, sustainability, and sustainability-linked bond. Source: S&P Global Ratings. Copyright © 2024 by Standard and Poor's Financial Services LLC. All rights reserved.

Recent trends set the stage for the segment in 2024. In 2023, green bonds increased as a percentage of total U.S. municipal GSSSB issuance. This came mostly at the expense of social bonds, which declined 22% to their lowest level since 2020. Substantial declines in COVID-19 response-related social bond issuance and social bonds issued for education underpinned this decline. Social bond issuance greatly depends on the affordable housing sector and ongoing labeling of bonds by state-level housing finance agencies.

U.S. municipal green bond issuance increased to 47% from 39% in 2022, matching 2021. Prior to 2021, green bonds represented by far most U.S. municipal GSSSB issuance. A series of large issuances by the California Community Choice Financing Authority and a surge in green borrowing from transportation sector issuers drove a 26% increase in municipal green bond issuance in 2023.

Affordable housing remained the leading sector for U.S. municipal GSSSB issuance in 2023 at 41% of the total, while green energy (18%) was second for the first time. Green transportation (16%), water (10%), and green buildings (10%) followed.

Large issuances continued to drive market totals. In the U.S. municipal market, the average GSSSB skews much larger than the average transaction. The average municipal GSSSB was 2.8x larger than the average U.S. municipal bond in 2023, up from 2.5x in 2022, and ranged 2.3x-5.3x annually from 2013-2023. This is, in part, because of the strong embrace of GSSSBs by certain large, frequent municipal market issuers.

As we expected, sustainability-linked bonds (SLB) have not emerged as a significant part of the U.S. municipal GSSSB market. Just one SLB was issued in 2022. U.S. municipal bonds are issued in serial rather than bullet maturities like corporate bonds, making them difficult to suit an SLB. In addition, greater complexity and administrative burden from setting and monitoring sustainability performance targets, along with increasing scrutiny from investors and policymakers, will likely prevent SLBs from becoming meaningful in 2024.

Embrace of social bonds in affordable housing strong, not universal

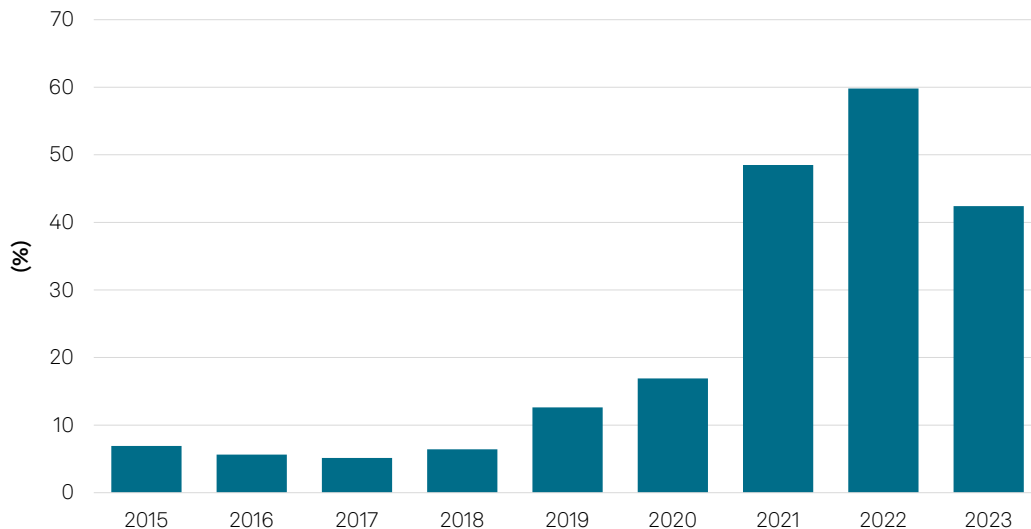
Affordable housing will remain the leading U.S. municipal GSSSB sector for 2024. The affordable housing sector, accounting for 41% of total U.S. municipal GSSSB issuance in 2023 (down from 45% in 2022), remained the largest sector in 2023. We expect such transactions to drive U.S. municipal GSSSB issuance in 2024 due to higher interest rates as well as wide bipartisan support to fund affordable housing projects.

However, in 2023, five state-level housing finance agencies discontinued issuing GSSSBs. These agencies accounted for 8.5% of the record \$19 billion in municipal GSSSBs issued for affordable housing in 2022. We believe this partly reduced GSSSBs to 42% of all affordable housing debt issued in 2023 from a high of 60% in 2022 (chart 3). In addition, the decline may also reflect higher construction costs and capitalization rates for multifamily housing, which historically accounted for most such issuance.

Chart 3

Affordable housing issuers' embrace supports U.S. municipal GSSSB issuance

Percentage of affordable housing bonds issued as GSSSBs



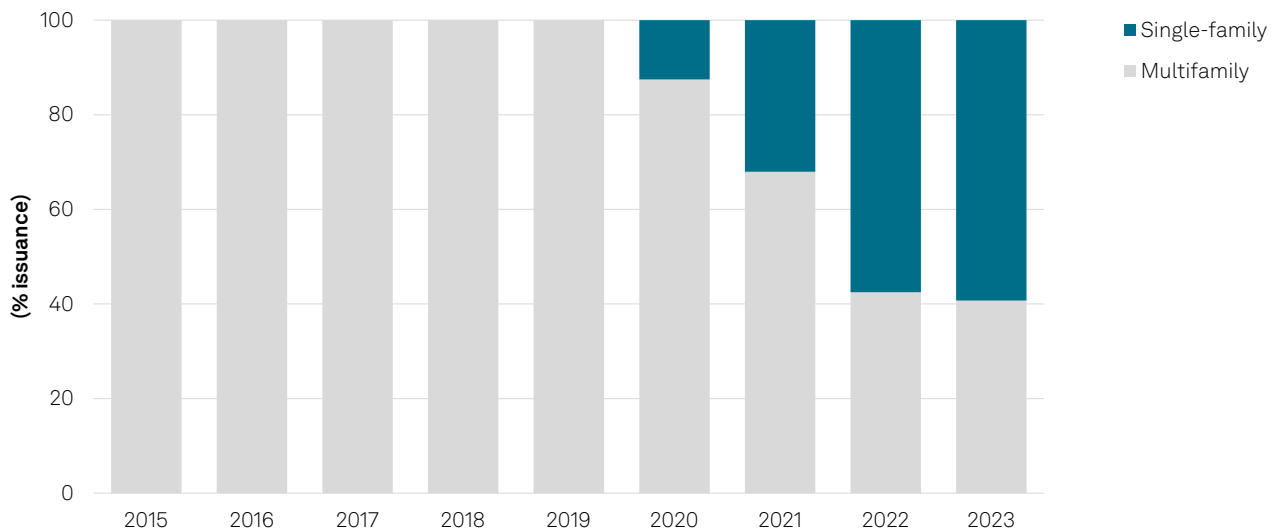
GSSSB--Green, social, sustainability, and sustainability-linked bond. Source: S&P Global Ratings. Copyright © 2024 by Standard and Poor's Financial Services LLC. All rights reserved.

With housing affordability falling to a low in 2023, we expect housing finance agencies to continue utilizing GSSSB proceeds to subsidize mortgage interest rates and fill the financing gap for homebuyers. In addition, the potential increase in the Low-Income Housing Tax Credit cap to \$1 billion from \$850 million will likely boost multifamily financing volume for both housing finance agencies and public housing authorities in the U.S.

Single-family affordable housing GSSSB issuance increased to 62% of total labeled affordable housing issuance in 2023, from 58% in 2022 (chart 4). We expect single-family housing to continue to outpace multifamily issuance, as housing finance agencies shift to bond financing for single-family borrowers. Issuers are utilizing bond proceeds from labeled single-family issuance to finance mortgages for moderate- to low-income and first-time homebuyers, and to provide or enhance down payment assistance programs.

Chart 4

Single-family financing becoming more prominent part of social bond issuance



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Affordable housing constituted 94% of all U.S. municipal social bond issuance in 2023, up from 75% in 2022, when the state of Massachusetts issued \$2.7 billion in social bonds, which were unrelated to affordable housing. Housing finance agencies constituted eight of the top 10 U.S. municipal social bond issuers in 2023.

Affordable housing bonds declined to 48% of U.S. municipal sustainability bonds in 2023. This decline, from 72% in 2022, was driven by a modest drop in nominal issuance of sustainability bonds for affordable housing. There was also a substantial increase in sustainability bonds issued for green buildings and green transportation, diluting the percentage of sustainability bonds attributable to the affordable housing sector. However, housing finance agencies were three of the top 10 sustainability bond issuers in 2023, as in 2022. We expect affordable housing issuers to continue issuing social and sustainability bonds in 2024 because of the lower costs to label and the wider investor pool for labeled debt.

Large issuers continue to bolster U.S. municipal GSSSB issuance

As in prior years, annual U.S. municipal GSSSB issuance will remain heavily swayed by large issuers. This held true in 2023, as the California Community Choice Financing Authority (CCCFA) issued \$5.9 billion of green bonds across 12 issuances (table 1). Through its issuances, the CCCFA represented 14.1% of municipal GSSSB issuance in 2023. It used proceeds to purchase renewable energy supply at a discount to sell to community choice aggregators in the state. More than two dozen states have active renewable portfolio standards, so we believe green energy projects will lead to higher GSSSB issuance in 2024 as utilities face increasing pressure to shift supply mixes toward renewable energy.

Table 1

Top issuers of U.S. municipal GSSSBs in 2023

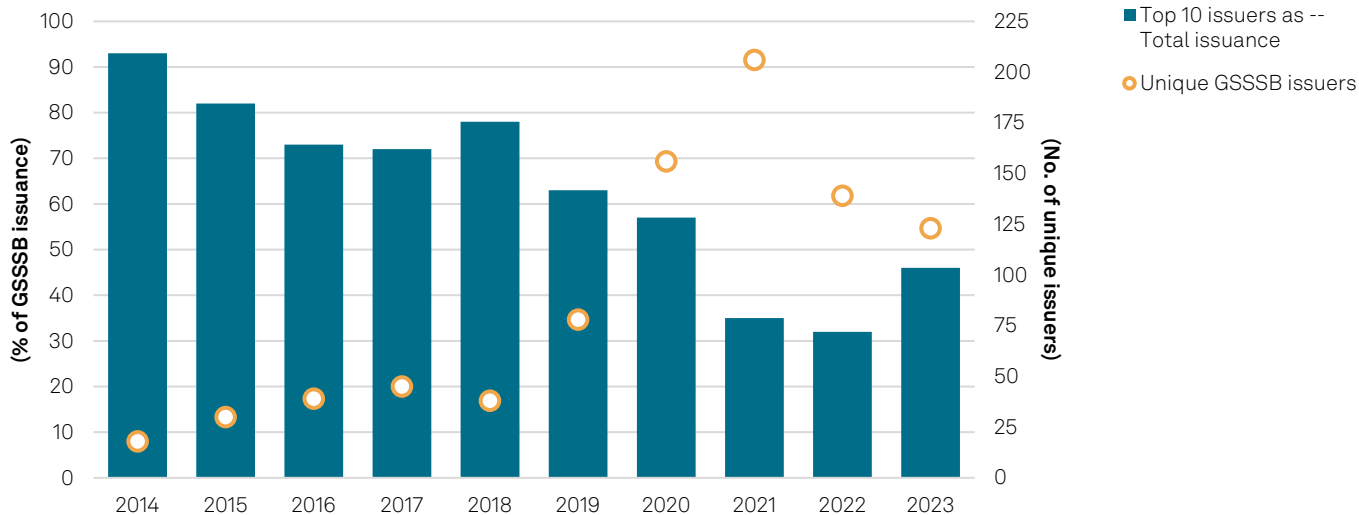
Issuer	GSSSB issuance (Bil. \$)	Total U.S. municipal GSSSB (%)
California Community Choice Financing Authority	5.94	14.1
Triborough Bridge And Tunnel Authority	2.50	5.9
New York Transportation Development Corp.	2.14	5.0
New York City Housing Development Corp.	1.81	4.3
Illinois Housing Development Authority	1.35	3.2
Los Angeles Unified School District	1.23	2.9
Washington Metropolitan Area Transit Authority	1.19	2.8
San Francisco Public Utilities	1.18	2.8
New York State Housing Finance Agency	1.07	2.5
Maryland Department of Housing and Community Development	0.91	2.2
Top 10	19.33	45.7

GSSSB--Green, social, sustainability, and sustainability-linked bond. Source: S&P Global Ratings. Copyright © 2024 by Standard and Poor's Financial Services LLC. All rights reserved.

New issuers entering the GSSSB market historically drove growth, with the largest accounting for a substantial, though declining, share of issuance in recent years (chart 5). However, the trend may be slowing. Unique issuers declined in 2023 and 2022 after peaking in 2021, while the top 10 concentration increased to 46% of total issuance in 2023 from the historic low of 32% in 2022.

Chart 5

Large issuers will remain key in driving U.S. municipal GSSSB issuance totals



GSSSB--Green, social, sustainability, and sustainability-linked bond. Source: S&P Global Ratings. Copyright © 2024 by Standard and Poor's Financial Services LLC. All rights reserved.

Transportation sector green bond issuance could bounce back

We expect transportation issuers to bolster green bond totals in 2024, despite financial challenges for fare-dependent mass transit issuers. As they exhaust federal stimulus funds, transit agencies will likely return to the municipal market for infrastructure funding, even as some entities struggle to balance operating budgets following pandemic-driven declines in ridership that have yet to fully recover.

The transportation sector's \$3.6 billion in green bonds in 2023 were the lowest since 2019, a 21% decline from 2022 and 53% below the peak in 2020. The trend followed the sector's overall 20% decline in total municipal bond issuance. However, despite overall contraction in green bonds for the sector in 2023, transportation was responsible for the largest-ever green bond—\$2 billion issued by the New York Transportation Development Corp. for the John F. Kennedy International Airport's new Terminal One project.

External reviews

We expect investor desire for greater transparency into labeled financings' environmental and social impacts to drive continued demand for Second Party Opinions (SPO) and other forms of external review, which assess among other things the alignment of GSSSB use of proceeds with positive environmental or social outcomes. However, the proportion of U.S. municipal GSSSBs issued with external review has stalled over the past three years at about 50%.

Looking Ahead

Unless a clear pricing advantage emerges, we believe GSSSB issuance will likely ebb and flow largely in line with the broader municipal market. The clear linkage between many municipal issuers' purposes and GSSSB efforts to maintain or improve environmental and social conditions makes a large swath of U.S. municipal bond market potentially suited for GSSSB issuance, particularly given the autonomy issuers still maintain to self-label bonds. Countervailing political and policy considerations will likely limit growth for municipal GSSSBs, at least in 2024. We believe larger considerations—such as economics, weather and climate-related impacts, and affordability considerations—will propel municipal issuers to the bond market to fund projects with green and social elements, irrespective of how issuers choose to label and market them.

Related Research

- [Sustainable Bond Issuance To Approach \\$1 Trillion in 2024](#), Feb. 13, 2024
- [2024 Outlook For U.S. Public Finance: A Mixed Credit Picture](#), Feb. 2, 2024
- [U.S. Business Cycle Barometer: Recession Risk Moderates, But Growth Is Limited By Potential](#), Jan. 26, 2024
- [Global Financing Conditions: Cautious Optimism After Peak Rates](#), Jan. 25, 2024
- [U.S. Public Finance Housing Outlook 2024: A Stable Foundation Despite Emerging Risks And Slower Economic Growth](#), Jan. 24, 2024
- [Key 2024 sustainability trends driving the year ahead](#), Jan. 15, 2024

A note on our data

Our data includes financing registered as green bonds by the Climate Bonds Initiative, municipal bonds that received SPOs by S&P Global Ratings, and other self-labeled GSSSBs identified by S&P Global Ratings based on our review of offering statements. We've also included certain issues that received an external review, even when they have not carried a GSSSB label. Although bonds compose most of our database, we include labeled notes and private placements that we deem not to be interim financing vehicles. Because our data consists almost entirely of bonds or bond-like financings, we use the term GSSSB to describe it. We exclude bonds issued by Fannie Mae and Freddie Mac because, as government-sponsored enterprises, they are not comparable to the municipal issuers in our database. Historical total U.S. municipal market bond issuance data is from The Bond Buyer. Finally, we aggregate certain labels to enable comparability throughout our database. For example, we classify "sustainable development bonds" under the sustainability label.

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