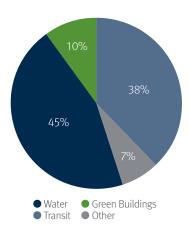


Municipal Green Bond issuance totaled \$10.4 billion in 2017, a 43% increase over the 2016 volume.¹ Earlier this year, the California State Treasurer (in consultation with the Milken Institute) convened a two-day summit to promote the use of Green Bonds. And recently, Environmental Finance convened its fourth annual Green Bonds America conference in New York. In this article, we attempt to answer a few questions: What exactly are Green Bonds? Are they truly a new way to finance infrastructure? What value do Green Bonds provide municipal borrowers? We will also offer our own assessment on the benefits of the Green Bond label.



What exactly are U.S. Municipal Green Bonds?

From a credit, legal, and structuring perspective, U.S. municipal Green Bonds are exactly like traditional municipal bonds. But, Green Bonds differ in three ways:

(a) they finance projects that reduce/mitigate environmental

impacts; (b) offer sufficient, if not robust, project detail in the Official Statement; and (c) ideally, offer an annual disclosure on the funded project's environmental impacts. Most municipal Green Bonds issued between 2015 and 2017 have financed water (45%), green buildings (10%), and transit (38%) projects that reduce carbon or other pollutions and/or enhance sustainability.¹ Perhaps not surprisingly, while many states (and the District of Columbia) have issued at least one Green Bond, three states have taken a leadership role in this space. California, New York, and Massachusetts accounted for 48% of all U.S. Green Bond transactions between 2013 and 2017 (64% of par volume).¹

That said, we acknowledge that while not all U.S. Municipal Bonds carry the "green" label, almost all improve people's lives by building government offices, schools, hospitals, roads, public transit, public power, water & sewer systems, etc.

Are Green Bonds a new way to fund municipal projects?

No! In the U.S., there is no shortage of infrastructure needs. The American Society of Civil Engineers' most recent estimate of unfunded infrastructure needs totaled \$4 trillion.² Financial capital available from private investors is also not the intrinsic bottleneck in this equation. What we do have is a "how do we pay for infrastructure" problem. It goes without saying that Green Bonds are no different than non-labeled municipal bonds in that there needs to be a source of revenue for repayment.

Why issue Green Bonds?

Simply put, investor interest in Green Bonds is expanding. The number of global funds that incorporate "environmental" factors among their investment criteria has risen from 55 in 1995 to over 1,000 in 2016 (\$12 billion to \$2.6 trillion).³ A recent Stifel tweet noted that 86% of millennials and 84% of women are interested in socially responsible investing.4 Consequently, Green Bond issuance is growing. In 2017, \$160 billion Green Bonds were issued worldwide.⁵ In the U.S., Green Bond municipal issuance totaled \$10.4 billion (65 issues) or 25% of total U.S. Green Bond issuance in 2017, a 43% increase over the 2016 volume.¹ The three primary benefits from the Green Bond label include: (a) an expanded investor base that, while difficult to uncover in the data so far, may arguably result in a lower cost of capital, (b) "free" PR for doing the right thing with positive local press coverage, and (c) improved employee and taxpayer morale as the organization and community are more supportive and motivated when leadership does the right thing and leads by example.

Source:

¹ S&P Global Ratings, "2018 U.S. Municipal Green Bond & Resiliency Outlook," February 2018

² The Milken Institute and John Chiang (California State Treasurer), "Growing the U.S. Green Bond Market," August 2017

³ The Forum for Sustainable and Responsible Investment, "U.S. Sustainable, Responsible and Impact Investing Trends 2016"

⁴ Morgan Stanley Institute for Sustainable Investing, "Sustainable Signals," 2017

⁵ Andrew Whiley, "2017 GB Issuance," Climate Bond Initiative, January 2018



What is the Green Bond Pledge?

Some state and local governments are doing their part to accelerate the usage of Green Bonds even faster with the Green Bond Pledge. The Green Bond Pledge launched in 2018 as a joint initiative between international climate finance and environmental groups. The Pledge is a declaration that all bonds financing infrastructure and capital projects need to address environmental impacts and climate risk. The Pledge reflects the goals of the Paris Climate Agreement and asks cities, counties, state governments, and corporations to account for climate risk when building infrastructure and to finance these projects with Green Bonds, where applicable. Just this August, California State Treasurer John Chiang signed the Green Bond Pledge and, in doing so, promised to support the expansion of the Green Bond market and ensure climate change mitigation in all future capital projects undertaken by the State of California. The California Treasurer proclaimed, "[a]s the world's fifth largest economy, California will lead the way and help finance as much

Green Bond Pledge Signatories

- California State Treasurer
- City and County of San Francisco
- San Francisco Public Utilities Commission
- State of New Mexico Treasurer's Office
- State of Rhode Island Office of the General Treasurer
- King County, Washington
- City of Asheville, North Carolina
- Mexico City

new clean infrastructure as we possibly can." The fact that California and other early Green Bond Pledge signatories, like the City and County of San Francisco, are throwing their weight behind Green Bonds, portends further growth for this market and more climate-aware planning by local governments.

What is the incremental cost of issuing Green Bonds?

Clearly, a more robust project disclosure that specifically describes the climate benefits of a Green Bond project will require some incremental level of staff time to prepare. We would hope and assume that, since Green Bonds mirror a conventional municipal bond in terms of credit, legal, and structuring features, there would not be incremental costs charged by bond counsel,

municipal advisors, or underwriters. Hence, the only true out-of-pocket cost of issuing Green Bonds is an optional



third-party report. We would note that over half of all municipal Green Bonds issued in California since 2016 are "self-labeled," meaning the issuer self certifies that the Green Bonds meet certain Green Bond standards. One recent development that could help lower some external costs in the labeling of Green Bonds is Build America Mutual's GreenStar program. Build America Mutual's GreenStar assessment, which is aligned with industry standards for Green Bonds, is provided at no additional cost to issuers that use Build America Mutual's bond insurance for its traditional economic benefit.

Conclusion

Some might contend that U.S. municipal issuers already have easy access to the low-cost municipal market, so why go through the trouble of issuing Green Bonds. We would say that issuers who provide more robust disclosure and are financing climate-aware infrastructure are viewed more favorably by investors. Although difficult to show a concrete pricing advantage on every Green Bond issued, Green Bonds do attract a wider investor audience (and, arguably, lower cost of capital). The ancillary benefits of free positive press and improved morale among key stakeholders should also not be discounted. The price for these benefits: more robust project disclosure.

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