Special Comment

Sustainable Finance and the US Municipal Market

Fixed Income, Currencies & Commodities
Municipal Products

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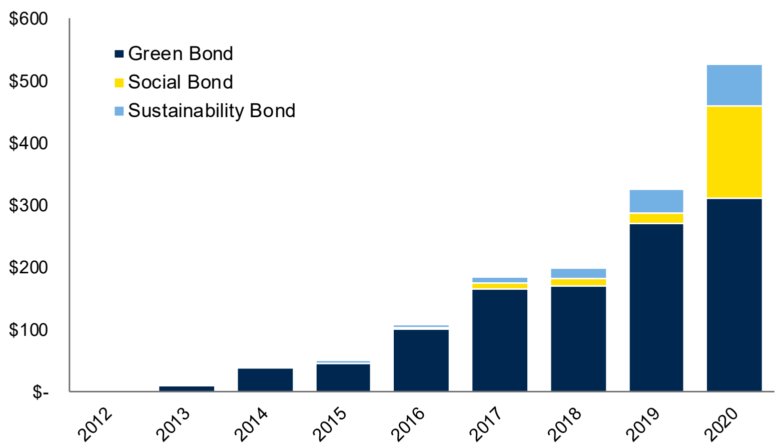
The market for environmental, social and governance (ESG) investing has grown dramatically over the last ten years. While the market for ESG bonds, or Sustainable Bonds, has developed most significantly in the taxable market, particularly the non-US taxable market, the concept is slowly taking hold in the US municipal market. We believe that interest in Sustainable Bonds will grow rapidly among both issuers and investors in coming years. In that regard, we believe that, as a result of growing investor demand, participants in the US municipal bond market will eventually coalesce around a uniform set of standards, similar to those that currently exist in the international fixed income markets, which define Green, Social and Sustainability bonds.

The Global Sustainable Bond Market

Green, Social and Sustainability Bond issuance in 2020 totaled approximately $530 billion, a 60% increase from comparable 2019 figures. Of that amount, Green Bonds accounted for about $303 billion, Social Bonds $148 billion and Sustainability Bonds $69 billion. Issuance of Social Bonds, while currently second to Green Bonds in total volume, is growing at a faster pace than that of either Green or Sustainability Bonds. Current growth trends are expected to continue given strong investor demand. Issuance of Sustainability-Linked Bonds, in which the coupon is tied to the issuer's achievement of predefined sustainability performance targets, is in its nascent stage. In 2020, $10.6 billion Sustainability-Linked Bonds were issued. Currently, there are over 3,000 investors, representing more than $103 trillion in assets under management, which are signatories to the UN Principles for Responsible Investment. Additionally, 545 investors with $52 trillion in assets under management have signed on to the Climate Action 100+ initiative.

Global ESG Bond Issuance ($ billions)



Source: Bloomberg Intelligence as of Jan. 2021

The International Capital Markets Association

The labeling of Sustainable Bonds is currently a voluntary process. The International Capital Market Association (ICMA) has established a set of voluntary principles that define each bond type and outline their core components. By promoting these principles for issuers to use in establishing their Sustainable Bond issuing framework, the intent of ICMA is to facilitate more capital flows for sustainability by promoting transparency, disclosure and reporting.

The ICMA codified these voluntary process guidelines in its Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines (the "Principles"). The ICMA released its Green Bond Principles in 2014 and Social Bond Principles and Sustainability Bond Guidelines in 2017 (the "Principles"). Bonds that align to the core components of the ICMA Principles are designated as either Green, Social or Sustainability Bonds. In this Desk Commentary, we do not go in-depth into Sustainability-Linked Bonds given their nascent evolution in the market.

- Green Bonds have the longest issuance history of the four types. As the name suggests, Green Bonds are designated to those proceeds devoted to finance or re-finance projects with positive environmental benefits. Project categories include, but are not limited to, water and wastewater, renewable energy, pollution control, energy efficiency, clean transportation and buildings, conservation and climate change adaptation.

- Social Bonds' proceeds finance or re-finance social projects with positive social outcomes. Project categories include, but are limited to, those which provide affordable basic infrastructure, access to essential services such health and education, affordable housing, employment, food security and socioeconomic advancement and empowerment. A social bond addresses a specific social issue for a target population.

- Sustainability Bonds finance or re-finance a combination of both green and social projects. However, the market for ESG bonds has evolved over time such that the term "Sustainable Bond" is now commonly used as a generic label for any Green, Social or Sustainability Bond.

The Principles encompass the following four core components:

1) Use of Proceeds: The issuer describes the use of proceeds with clear evidence of the environmental and/or social benefits.
2) Process for Project Evaluation and Selection: The issuer describes the process it will use to determine if the proposed projects are consistent with eligible project categories. Further, the information should be presented within the context of the issuer's "overarching objectives, strategy, policy and/or process relating to sustainability."
3) Management of Proceeds: The issuer should have procedures in place to track and report annually on the use of proceeds to in order to provide a high level of transparency. To provide a high level of transparency, the ICMA encourages issuers to secure a third-party to audit or verify the tracking and allocation of the net proceeds.
4) Reporting: The issuer should report annually on the projects that the bond proceeds were allocated to. The reporting of quantitative and qualitative performance indicators is recommended.

The Climate Bonds Initiative and EU Taxonomies

While the ICMA Principles are guidelines that provide high-level indicative categories for eligible green and social projects, other international entities such as the Climate Bonds Initiative and the European Union (EU) are attempting to more discretely define eligible green projects.

The Climate Bonds Initiative (CBI) produces data and analysis on the Green Bond market as well as policy proposals for the benefit of governments, financial institutions and corporations. However, it is principally known for its Climate Bonds Taxonomy, part of its Climate Bonds Standard and Certification Scheme, which provides criteria for the certification of Green Bond projects. According to the CBI, this is a "labeling scheme for bonds…designed as an easy tool for investors and governments that assists them in prioritizing investments that truly contribute to addressing climate change'. The CBI maintains a list of approved third party verifiers who confirm that the projects in question conform to the CBI's Climate Bonds Standard and can be labeled "Climate Bonds Standard Certified."

The focus of the EU Taxonomy for Sustainable Activities and EU Green Bond Standard is more regulatory in nature. In March 2018 the European Commission published its "Action Plan for Financing Sustainable Growth" which included commitments to establish an EU classification system (taxonomy) for sustainable activities and EU labels for green financial products. It established a Technical Expert Group (TEG) in June 2018 to assist in implementing this plan. Specifically, the TEG was tasked with helping develop the EU Taxonomy and an EU Green Bond Standard. The key elements of the EU Taxonomy are environmental objectives, classification of sectors covered, requirements for inclusion and disclosure requirements. The taxonomy is being developed in stages, with the final elements fully established by the end of 2021 to be fully applicable by the end of 2022.

The Role of External Reviews

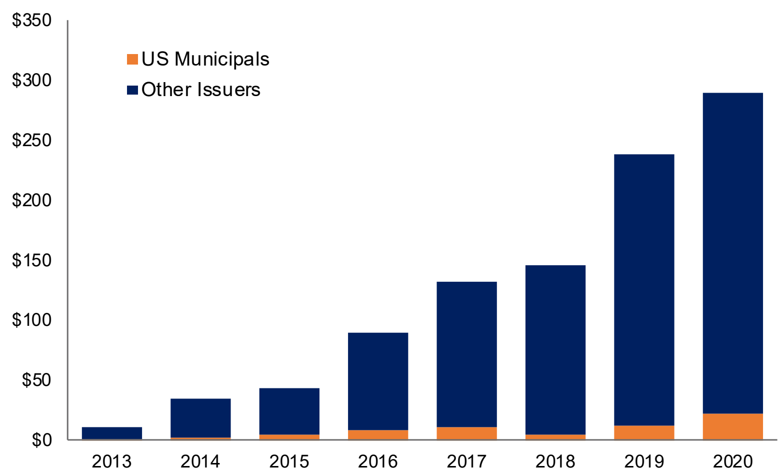
The use of external reviews is considered best practice. External reviews confirm that the bond or bond programs align with international standards such as the four core components of the ICMA Principles. External reviews can vary in scope. They may assess the issuer's Green, Social or Sustainability Bond framework or the alignment of a discrete Green, Social or Sustainability Bond issue to a related global standard. External reviewers generally issue either a report that is contained in the offering document, or a statement indicating that the verifier has reviewed the offering and has determined that the stated use of proceeds conforms to applicable standards. External reviews generally take one of the following forms:

1) Second Party Opinion: The verifier makes an assessment of the issuer's overall sustainability framework including its objectives, strategy, policy, and procedures. The second party opinion may also include an evaluation of the environmental or social features of the intended use of proceeds.
2) Verification: The verifier makes an attestation as to the issuer's internal tracking of use of proceeds, statement of environmental or social impact, or alignment of the issuer's reporting and disclosure with the ICMA Principles.
3) Certification: The verifier provides certification of a Green Bond issue against a recognized external green standard or label. The best example of this is the verification of the CBI's Climate Bond Certified label that will be affixed to the cover of the offering statement.
4) Scoring: The verifier provides an evaluation or assessment of a bond or bond portfolio against an established scoring or rating methodology.

Sustainable Finance Trends in the US Municipal Market

The issuance of sustainable municipal bonds has been increasing and has kept pace with the growth in sustainable debt in the global market. According to Bloomberg Intelligence, the amount of municipal Green Bond new issues has increased from approximately $300 million in 2013 to over $22 billion in 2020, compared to the global market, which saw Green Bond issuance increase from about $38 billion in 2014 to over $300 billion in 2020. US municipal Green Bonds comprised approximately 8% of the global market for Green Bond issuance in 2020. Bloomberg Intelligence forecasts that Green Bond issuance in the municipal market in 2021 could rise to $30 billion to $35 billion.

Global and Municipal Green Bond Issuance ($ Billions)

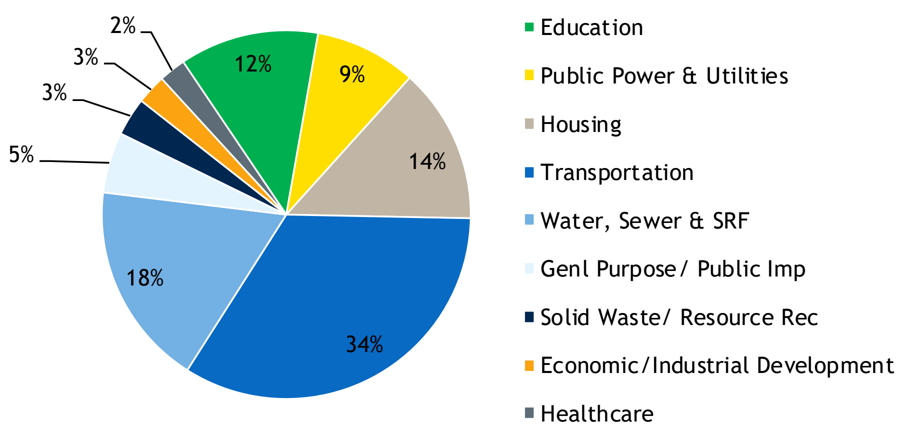


Source: Bloomberg Intelligence, January 20, 2021

By their very nature, US municipal bonds lend themselves well to sustainable financing based on the use of proceeds typical in many municipal financings. The US Securities and Exchange Commission defines municipal bonds as "debt securities issued by states, cities, counties and other governmental entities to fund day-to-day obligations and to finance capital projects such as building schools, highways or sewer systems". From a sustainable finance prospective, the proceeds of many municipal bonds finance clean water, pollution control, affordable housing, health care, public transit, and education just to name a few. In the Green Bond category, for example, the transportation and water and sewer sectors are typically among the two largest categories of issuers of Green Bonds. In 2020, transportation accounted for 33.7% of total municipal Green Bond issuance, followed by water and sewer at 17.4%.

While the first global Green Bond was issued by the World Bank in 2008, the first labeled US municipal Green Bond transaction was the $100 million Commonwealth of Massachusetts General Obligation Bonds, Consolidated Loan of 2013, Series D, issued in June 2013. Proceeds of the Series D bonds financed the Commonwealth's investment in environmentally beneficial projects including clean water and drinking water, state building energy efficiency and conservation, open space land acquisition and river and waterway habitat restoration, revitalization and preservation. Since that time, Massachusetts, along with New York and California, has been one of the largest issuers of Green Bonds. In recent years however, New York and California have together accounted for approximately 70% of annual Green Bond issuance in the municipal market. The first US municipal Social Bond was the $276.2 million City of Los Angeles General Obligation Bonds, Series 2018-A issued in June 2018. Bond proceeds were used to provide health, housing and other services to the city's homeless population.

Muni Green Bond Issuance by Sector (2020)



Source: RBCCM, Secrities Data Corporation

Unlike its global counterparts, the US municipal market has not generally coalesced around the concept of independent verification. Many municipal issuers continue to self-certify their bonds as either Green, Social or Sustainability bonds. S&P Global estimates that approximately 60% of sustainable debt issued in the US municipal market in 2020 carried an independent verification, up from 44% in 2019 and 31% in 2018. This percentage may continue to increase as more investors add independent verification to their sustainable debt purchase criteria, particularly if the liquidity enhancement inherent in an independent verification becomes more readily apparent as the demand for these securities grows. For their part, many investors also utilize proprietary internal methodologies to designate bonds for their sustainable investing mandates. Regardless, we believe that many institutional investors will continue to rigorously screen sustainable bond issues based on their own internal standards, as they do now.

The municipal market has also not yet adopted a common set of standards or taxonomy, either through regulation or market consensus, as it relates to sustainable bond labeling and disclosure in the US municipal bond market. We anticipate however, that such industry standards and best practices will eventually be forthcoming as the US municipal sustainable finance market matures. We believe that ultimately, a US municipal sustainable bond taxonomy will be similar in nature to those currently functioning in the global capital markets.

Finally, we note that environmental, social and governance factors are becoming a component of the credit rating process. Rating agencies have established ESG methodologies to govern the incorporation of ESG factors into their credit analysis with the goal of increasing transparency as to how ESG factors affect the credit profiles of individual issuers. Several of the rating agencies have acquired firms that provide ESG data and analysis in an effort to better define an issuer's environmental, social and governance characteristics.

Municipal Sustainable Finance Case Studies

Issuer: **New York State Environmental Facilities Corporation**

Transaction: $120.7 million State Revolving Funds Revenue Bonds, Series 2019A

Ratings: Aaa/AAA/AAA (Moody's/S&P/Fitch)

Sustainable Bond Type: Green Bond

Summary: The New York State Environmental Facilities Corporation (EFC) is a public benefit corporation of the State of New York which administers and finances state revolving loan funds pursuant to the federal Water Quality Act and Safe Drinking Water Act. Bond proceeds were used to provide financial assistance to local governmental units in New York State for clean water and drinking water projects. The bonds were self-designated as Green Bonds by the EFC.

Issuer: **California Infrastructure and Economic Development Bank**
Transaction: $272.6 million Lease Revenue Bonds
California State Teachers' Retirement System Headquarters Expansion, Series 2019
Ratings: A1/A+/AA (Moody's/S&P/Fitch)
Sustainable Bond Type: Green Bond – Climate Bond Certified

Summary: This inaugural tax-exempt issue for the California State Teachers' Retirement System (CalSTRS) was issued through the California Infrastructure and Economic Development Bank. Bond proceeds were used to construct, furnish, and equip an expansion to the existing CalSTRS headquarters. The project is designed to meet a number of environmental standards, including the Leadership in Energy and Environmental Design (LEED) standard. The project will also include onsite renewable energy to assist CalSTRS in achieving a zero net energy facility. The bonds were Climate Bond Certified by Kestrel Verifiers.

Issuer: **Southern California Public Power Authority**
Transaction: $274.3 million Windy Point/Windy Flats Project
Refunding Revenue Bonds, 2020-1
Ratings: Aa2/AA- (Moody's/Fitch)
Sustainable Bond Type: Green Bond

Summary: The Southern California Public Power Authority (SCPPA) is a joint-action power agency established in 1980 to facilitate joint investments in energy resources by its twelve members. Bond proceed were used to refund SCPPA's Windy Point/Windy Flats Project 2010-1 bonds. The 2010-1 bonds were originally issued to secure a prepaid supply of electricity from a 262.2 MW wind farm in Washington State over a 20-year contract period. The participants in the Windy Point/Windy Flats project are the Los Angeles Department of Water and Power and the City of Glendale, California. The bonds were self-designated as Green Bonds due to the renewable nature of the contracted power supply.

Issuer: **Equitable School Revolving Fund**
Transaction: $122.7 million Arizona Industrial Development Authority
Senior National Charter School Revolving Loan Fund Revenue Bonds, Series 2020A
$48.1 million California Infrastructure and Economic Development Bank
Senior National Charter School Revolving Fund Revenue Bonds, Series 2020B
Rating: A (S&P)
Sustainable Bond Type: Social Bond

Summary: The Equitable School Revolving Fund (ESRF) is a national state revolving fund loan program that makes loans to qualifying public charter schools. Loan proceeds are used by the public charter school recipient to finance or refinance costs associated with the acquisition, construction, improvement, equipping, and furnishing of the attendant charter school facilities. Bond proceeds were used to finance or reimburse the ESRF for the cost of loans made or expected to be made and purchased by ESRF. The bonds were determined to be in conformance with the ICMA Social Bond Principals in the eligible project category of Access to Essential Services by Kestrel Verifiers.

Issuer: **The Bush Foundation**
Transaction: $100 million Series 2020 Bonds (Taxable, Corporate CUSIP)
Rating: Aaa (Moody's)
Sustainable Bond Type: Social Bond

Summary: The Bush Foundation is a non-profit charitable foundation headquartered in St. Paul, Minnesota. Founded in 1953 to advance "charitable, scientific, and educational purposes", it provides grants and opportunities to individuals in Minnesota, North and South Dakota and the 23 Native nations within this three-state region. Bond proceeds were used to make grants in the areas of home ownership, education and other economic development purposes in the Native American and Black/African American communities in the region in order to counter systemic racial injustice and address racial wealth gaps. The Foundation's Social Bond Framework was determined to align with the ICMA Social Bond Principals by the independent verifier Sustainalytics.

Issuer: **Colorado Housing and Finance Authority**
Transaction: $125 million Single Family Mortgage Bonds, Series 2021 A, B, C-1, C-2
Ratings: Aaa/AAA (Moody's/S&P)
Sustainable Bond Type: Social Bond

Summary: The Colorado Housing and Finance Authority was established by the Colorado General assembly for the purposes of "increasing the supply of decent, safe and sanitary housing for low and moderate income families and promoting economic growth and development in the state". The Series 2021 bonds represented the Authority's inaugural social bond issuance. Bond proceeds were used to purchase mortgage-backed securities guaranteed by the Government National Mortgage Association and certain second mortgage loans. Eligibility requirements of the loans included a limitation on family income of not more than 115% (for three or more persons, 100% for less) of the local or state median gross income, whichever is greater. The bonds were determined to be in conformance with the ICMA Social Bond Principals in the Affordable Housing eligible project category by Kestrel Verifiers.