

Before the
Municipal Securities Rulemaking Board

Comments of the
California Green Bond Market Development Committee
(CGBMDC)

On
*Request for Information:
Environmental, Social and
Governance (ESG) Practices in the
Municipal Securities Market*

March 8, 2022

By
David Wooley
Cecilia Latapi
Michael Papanian
Secretariat for CGBMDC
Goldman School of Public Policy
University of California, Berkeley

Introduction

These comments are submitted on behalf of the California Green Bond Market Development Committee (CGBMDCC) in response to the MSRB's *Request for Information on Environmental, Social and Governance (ESG) Practices in the Municipal Securities Market*, issued December 8, 2021.¹

The CA Green Bond Market Dev Committee (“CGBMDC” or “Committee”) is a group of rating agencies, underwriters, bond counsel, investors, and government issuers interested in promoting the issuance of labeled bonds and increasing the availability of climate risk data in the bond market. The CA Green Bond Market Development Committee is chaired by the California State Treasurer, with the Goldman School's Center for Environmental Public Policy serving as Secretariat. The Committee seeks to advance education, training and policy research regarding sustainable finance for state and municipal governments. A key theme of the Committee's work is to enhance the consideration and disclosure of climate risk in financial instruments that support long-lived infrastructure in California.

The Committee is grateful that MSRB is paying attention to the impacts of ESG in the government bond market, especially in relation to climate risk, a factor we consider crucial for the long-term stability of the municipal securities market.

Our response to the RFI, focuses exclusively on questions 1, 5 and 7 in the section addressed to all market participants. We consider these the most urgent questions posed in the RFI and have been a subject of discussion in our Committee directly or indirectly since its creation in 2018.

These questions focus on the presence of ESG systemic risks in the municipal bond market, how the MSRB should address them, and how it could use EMMA to address market inefficiencies. After several discussions with our Committee members, it became evident that climate risk data is not generally available, and that, when climate risk data is presented, there often is no access point for such information that is presented.

The Committee's proposals seek to promote incremental change. The main goal is to facilitate the ability of issuers to make climate information easily accessible to investors, and to thereby support investors' ability to accurately price ESG risks.

The approaches suggested in these comments are just a few of the viable options available to the MSRB. Our comments should not be read to imply rejection of other approaches. We present these comments on behalf of the Committee, but these comments do not necessarily reflect the views of individual Committee members or their organizations.²

¹ <https://www.msrb.org/-/media/Files/Regulatory-Notices/RFCs/2021-17.ashx?>

² For more information on the CA Green Bond Market Development Committee membership, see Appendix A.

Context for the RFI

The Request for Information (RFI) from MSRB is not an isolated event. The RFI process runs parallel to actions by other financial agencies in the United States on ESG and climate risk disclosure. For example, the Securities and Exchange Commission is increasingly focused on disclosures related to environmental, social and governance (ESG) issues, including climate change, board diversity, human capital management and cybersecurity risk governance. Climate change will be a particular priority, as evidenced recently by the SEC staff's detailed, comment letters on climate-related disclosures in SEC filings³. The Commission is expected to propose mandatory ESG-related disclosure rules for corporate issuers in early 2022.

Another example is the Federal Reserve Bank of New York, who developed a stress testing procedure to measure the resilience of financial institutions to climate-related risks. The Reserve managers introduced a measure called CRISK, systemic climate risk, which is the expected capital shortfall of a financial institution in a climate stress scenario. During this process, the Federal Reserve found that institutions with a large exposure to the fossil fuel industry are facing considerably higher risks.⁴

Finally, the RFI comes out in a context of increasing awareness of climate risk from investors across all segments of the financial markets. By way of example, during the last months of 2021, the California State Treasurer's Office sent an informal, and non-binding survey to financial institutions and brokers/dealers acting as counterparties to the Treasurer on certain investment transactions asking if their organizations adhere to risk disclosure standards such as the Sustainability Accounting Standards Board, the Global Reporting Initiative or the Task Force on Climate-related Financial Disclosure. It is significant that 35 institutions either did not respond or stated that they do not follow and/or are not subject to any standards or recommendations regarding climate risk disclosure. Only 18 of the 53 institutions follow one or more of the standards.

These comments first answer selected questions posed in the RFI for All Municipal Market Participants, and then make several specific recommendations on how the MSRB might operationalize climate risk disclosure in the municipal and state bond market.

³ <https://www.skadden.com/insights/publications/2021/09/sec-staff-issues-detailed-form-10-comments>

⁴ https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr977.pdf

Response to Selected Questions Posed in the RFI

Regarding Question 1, Systemic Risk

- 1) *Are there any ESG-related factors that could pose a systemic risk to the municipal securities market? If so, how might the MSRB approach such systemic risks from a regulatory perspective? Are there non-regulatory approaches the MSRB could take that would advance issuer protection, investor protection, and the overall fairness and efficiency of the market?*

The ESG-related factors that the Committee identifies as systemic risks to the municipal securities market are mostly those related to physical climate risks. According to the Bank for International Settlements, physical climate risk events for financial institutions, and by inference, fixed income investors, can be divided into two categories:

Acute: extreme climate change-related weather events (or extreme weather events) such as heatwaves, landslides, floods, wildfires, and storms.⁵

Chronic: longer-term gradual shifts of the climate such as changes in precipitation, extreme weather variability, ocean acidification, and rising sea levels and average temperatures; and indirect effects of climate change such as loss of ecosystem services (e.g., desertification, water shortage, degradation of soil quality or marine ecology).⁶

The Committee focuses mostly on physical climate risks⁷ because those risks have the potential to impact employment levels, property values, local and state tax receipts, and local government financial strength. Low employment and falling property values arising from climate-induced changes to the local, regional and global ecology can affect governmental bond issuers' revenues, and therefore, their capacity to repay financial commitments over time.

The Committee is aware of the fact that there are few examples, so far, of municipalities, local or regional agencies who have struggled to repay their obligations due to climate impacts. But when those events have happened, the consequences in the financial market have been severe.

An example of this is the winter storm in February 2021 that had disastrous consequences in Texas, in large part because of its effect on the electric power and gas supply. Retail electricity suppliers were forced to purchase power at the maximum rate allowed under regulations, \$9,000 per megawatt hour, versus the average 2020 price of \$22. Natural gas fuel prices jumped too, due to supply interruptions and infrastructure failure and spiking demand. Almost five million customers went without power and 246 people died. The credit implications of this environmental catastrophe became evident almost immediately.

⁵ <https://www.bis.org/bcbs/publ/d517.pdf>

⁶ <https://www.bis.org/bcbs/publ/d517.pdf>

⁷ Compared to transition risks, which are the risks related to the process of adjustment towards a low-carbon economy.

One company, Brazos Electric Power Cooperative (BEPC), filed for bankruptcy citing debt owed to ERCOT. BEPC's troubles had repercussions for CoServ Electric, otherwise known as the Denton County Electric Cooperative. CoServ is the largest member of BEPC's distribution cooperative, taking a third of its electric sales, and it is obliged to buy from BEPC. In March, Fitch downgraded CoServ from AA- to A, based in part on the expectation that the cooperatives will be forced to bear BEPC's costs as determined by the bankruptcy court.

Of the 27 rated electric cooperative, municipal electric, wholesale, and combined utilities in ERCOT, S&P lowered the ratings on 14 given the financial effects of the storm, their view of ongoing physical risks, and governance risk associated with ERCOT that could negatively affect financial performance. The three utilities that exhibited the most pronounced rating changes among the utilities adversely affected by the winter storm were Brazos Electric Power Cooperative Inc. (D - in default), the Brazos Sandy Creek Electric Cooperative (BSC) (CCC), and the Rayburn Country Electric Cooperative (Rayburn) (CCC).⁸

Another example arises from recent California wildfires. In late 2018 a wildfire struck Butte County, California, killing 85 people and destroying 19,000 buildings. The most damaging and deadly fire on record in the state devastated the town of Paradise and 90% of the 27,000 residents left, at least temporarily.

Paradise was one of three obligors in a pool for a series of bonds issued as part of the California Statewide Communities Development Authority's Pension Obligation Bond Program, which allows local governments to finance unfunded pension liabilities. Moody's downgraded the relevant securities, the 2007 Series A-2 Bonds, from B1 to Caa3 in January 2019. The credit ratings agency said that the damage to Paradise would prevent it from paying debt service on its share of the bonds in the short term. At the time of the downgrade, its share of the debt service outstanding was 41%.

As average temperatures rise, climate science finds that acute risks such as heat waves and floods grow in frequency and severity, and chronic risks, such as drought and rising sea levels, will intensify.⁹

Credit ratings are also beginning to reflect climate risk, rewarding municipalities that implement climate-resilience strategies. For example, in 2020, S&P gave the City of Norfolk a AAA rating, highlighting the City's proactive management of its environmental, social, and governance risks.¹⁰

Asset managers (e.g., Fidelity, BlackRock, Vanguard) and other investment funds also face challenges when it comes to ESG disclosure. Asset owners' apprehension of climate risk is

⁸<https://www.spglobal.com/ratings/en/research/articles/211101-texas-winter-storm-brought-downgrades-and-spurred-response-among-public-power-and-electric-cooperative-utilit-12164982>

⁹ <https://www.mckinsey.com/business-functions/sustainability/our-insights/climate-risk-and-response-physical-hazards-and-socioeconomic-impacts>

¹⁰ <https://norfolkdevelopment.com/sp-raises-norfolks-credit-rating-to-aaa/>

growing, managers are being asked how they are addressing such risks both in the corporate and municipal bond markets. Asset managers rely on ESG data companies and consulting firms for advice on how to respond to the requests from the asset owners, but not all asset managers have the resources to engage in this data collection and reporting effort.

Climate risks are especially damaging for revenue bonds, where the repayment of the bond depends on the ability of the project and the obligor to collect revenue and direct such revenue to bond repayment. The default risk can increase dramatically as a result of climate driven weather events, particularly if the asset that creates revenue is affected by a series of climate catastrophes (e.g., recurring coastal hurricanes or inland riparian flooding).

Weather catastrophes have historically been perceived as one-time occurrences. However, under climate change scenarios, flooding and other climate-enhanced weather events have begun to increase in frequency. Record setting floods (Germany, China, Tennessee), heat events (Pacific Northwest of the U.S.), drought (Southwest U.S.), extreme cold (Texas), and wildfires (Western U.S., Siberia, Southern Europe) now beset virtually every region of the world. Society already feels the impacts of climate change. According to the latest available report from Intergovernmental Panel on Climate Change,¹¹ failure to adapt to climate change and to reduce emissions will adversely affect human well-being for centuries.¹²

Regarding Question 2, Other Markets

5) Does the availability of ESG-related information (or lack thereof) in other financial markets directly or indirectly influence the functioning of the municipal market? If so, how? For example, when evaluating competing investment opportunities, do taxable ESG investors expect the same timeliness and quality of ESG-related information for a municipal issuer as for a corporate issuer? And how might the differing expectations of different classes of investors (e.g., foreign versus domestic; retail versus institutional; or tax-exempt versus taxable) regarding ESG-related information affect pricing, underwriting, trading, and other market activities?

Yes. The Committee observes that there are two markets where ESG-related information disclosure is more advanced and whose disclosure and pricing practices could influence certain sectors of the municipal bond market in the US.

The first market is the European bond market, in which *greenium* - or a green bond premium - has emerged for bond issues that finance climate friendly-infrastructure and businesses. The *greenium* arises when a labeled issuance enters the primary market at a higher price and therefore offers a lower yield compared to matching outstanding non-labeled debt. There are a number of large governmental issuers in the US taxable municipal bond market who participate in the European markets.

¹¹ The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.

¹² <https://www.ipcc.ch/report/ar6/wg1/#FullReport>

The Committee feels strongly that the American municipal market will eventually follow the same trend, creating an economic incentive for local issuers to issue labeled bonds and promote their climate risk hedging strategies. This could create an incentive for a wide variety of issuers to issue labeled bonds, which, in the absence of any market standards could result in either asymmetric or incomplete information available to the broadest array of municipal bond buyers.

The Committee believes that the MSRB can serve a valuable role in the development of a readily accessible, centralized repository of information provided by issuers.

Regarding Question 7 - EMMA.

7) What improvements could the MSRB make to the EMMA website regarding ESG-Related Disclosures, ESG-Labeled Bonds, and other ESG-related information? Which improvements to the EMMA website would most enhance access for investors and other market participants to ESG-related information? Which improvements to the EMMA website would most enhance the fairness and efficiency of the municipal market?

After several discussions with Committee members, we recommend the following:

- Include specific functionality on the EMMA platform to enable issuers, on an optional basis, to provide information relating to climate risk and mitigation to investors seeking such data.
- Create alerts for green issuances in “Alert Groups”

Currently, the platform EMMA allows users to create “alerts” for market events for selected issuances. However, it would be very helpful for investors to have a built-in “Group of Securities” alert that focuses exclusively on labeled bonds, allowing investors to decide if they would like to receive trade alerts, primary market documents, variable rate security documents, and continuing disclosure documents market events, etc.

EMMA should provide the option of receiving via email the documents associated with post-issuance disclosure for labeled bonds, including any use of proceeds documents and environmental impact reports, categorizing both disclosures as “voluntary event filings”.

The information relating to the labeled bonds on EMMA should state whether the issuer has self-certified the status of the bonds as labeled, or if has commissioned a third-party certification. EMMA should be modified to upload third party verification, where applicable, into the Document archive of a green issuer.

Because verification documents don’t have a predetermined location in EMMA, analysts at investment funds, academic researchers, and others have difficulty locating the information issuers disclose in regard to labeled bonds. Some issuers integrate the second party opinions

and green frameworks to the bond's official statement, while others provide those documents independently of EMMA or official statements, and some do not share that information with the investors at all. Therefore, we suggest adding any verification documentation under Operating Filing(s), and add any ESG information disclosed after issuance, under Event Filing(s), on an optional basis.

Recommendations

The Committee encourages the MSRB to facilitate climate risk disclosure by issuers. The MSRB, through its market education role, can improve information flow on climate risk through changes to EMMA and via best practice guidelines. The Committee staff developed a list of information that could be useful to issuers, and the investment community in assessing climate risk. This list could assist MSRB in developing a method by which to structure climate risk disclosure.

The MSRB should consider adding checkboxes or a classification system in EMMA that provides visibility for issuers into climate risk data available from the issuer. The questions below suggest categories of information that could be used to formulate check boxes or a classification system.

In addition, the MSRB could develop a best practice guideline that recommends issuers respond to the following questions on climate risk on EMMA. See above for suggestions that would allow issuers to post documents related to climate risk on EMMA in a readily accessible manner.

Ten Questions

1. Does the issuer adhere to or use sustainability and risk disclosure metrics or standards promulgated by:¹³

- The Global Reporting Initiative (GRI), GRI Standards for Cities, [Global Reporting Initiative \(GRI\) Sustainability Reporting Standards](#).
- ISO 37101:2016 (establishes requirements for a management system for sustainable development in communities).
- Sustainable Sites Initiative, ([American Society of Landscape Architects](#)) national guideline and performance benchmark for sustainable land design, construction and maintenance practices.
- LEED for Cities and Communities (<https://www.usgbc.org/leed/rating-systems/leed-for-cities>).
- U.N. Sustainable Development Goals.
- Metrics from the Green Cities Index

¹³ This list is by no means exhaustive. The MSRB could offer this list as examples of methodologies, without specifically endorsing any particular approach.

- TCFD Disclosure Recommendations¹⁴
 - Other
2. Has the issuer established governance, processes, systems and oversight controls to provide for the ongoing completeness and accessibility of its climate risk disclosures?
 3. Does the issuer present its climate risk disclosures on its website? If so please provide a link to that presentation.
 4. Does the issuer have a climate action plan and if so, does the plan include a current inventory of factors being measured?
 5. For any long-lived infrastructure to be funded by the issuer's capital funds, did the issuer perform an assessment of the vulnerability of the infrastructure, over its expected life, to climate change or climate-enhanced storm, drought, flooding, heat storms, polar vortex, wildfire and other such events?
 6. For any long-lived infrastructure to be funded by the issuer's capital funds did or does the issuer plan for design, equipment or other measures to mitigate the impacts described in Item 4, above?
 7. For any long-lived infrastructure to be funded by the issuer's capital funds derived from sale of a labeled bond (e.g. climate, sustainability, ESG or equity bonds), did the issuer perform an assessment to identify opportunities to reduce greenhouse gas, air and water pollution from the construction and operation of the infrastructure?
 8. For any long-lived infrastructure to be funded by a labeled bond, what aspects of the design and operation of the asset have the effect of reducing greenhouse gasses from the asset's construction and operation of the asset over its expected service life? Examples might include:
 - use of low or zero carbon building materials or methods.
 - low or zero carbon fuels and energy sources, energy efficient equipment and products, water use efficiency and recycling.
 - heat island reduction measures.
 - carbon sequestration in landscapes.
 - vehicle charging.
 - indoor air filtration in areas subject to wildfire or concentrated transport equipment, vehicle or vessel emissions.

¹⁴ <https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>

- vehicle-miles-traveled reductions, and measures to increase resilience of the asset to climate related emergencies).
9. If the financing instrument constitutes a labeled bond, has the project been certified as meeting accepted standards for these labels by an independent certifier?
 10. How does the organization incorporate environmental factors into its capital improvement plan (CIP)? Detail might include how climate change mitigation, biodiversity, mitigation of natural disaster and other known environmental risks, energy efficiency, renewable energy, and/or environmental equity are incorporated into the entity-wide CIP and/or into the design of capital projects.

Conclusion

The proposals presented in this document are initial steps to begin incorporating climate and ESG-related systemic risks in the municipal bond market. Greater transparency can be expected to produce more efficient markets and refined pricing of municipal bonds, to the benefit of issuers and investors alike.

We believe that change in this direction has to be incremental, empowering all market stakeholders to gradually evolve in their understanding of the risks they are exposed to, and best ways to measure and disclose them.

We acknowledge that that best practices on climate risk disclosure are just emerging. In this environment MSRB should facilitate the information flow and accessibility that will encourage market participants to standardize their approaches in the most efficient manner possible. Any climate and ESG risk disclosure mechanisms adopted by the MSRB must be flexible enough to accommodate shifts in perspectives and methodologies.

Respectfully submitted,

David Wooley
Michael Papanian
Cecilia Latapi
Secretariat for CGBMDC
Goldman School of Public Policy
University of California, Berkeley
dwooley@berkeley.edu
415-271-1135

March 8, 2022

Annex 1: California Green Bond Market Development Committee
 Members

CA State Treasurer's Office	Fiona Ma & Tim Schaefer
Climate Bonds Initiative	Alex Rau
NV5	Jeffrey Cooper
KPMG	Daniel Feitelberg
UC Berkeley	Kiran Jain
CalSTRS	Matt Schott
S&P	Jenny Poree
San Francisco Public Utilities Commission	Mike Brown
LA Metro	Cris Liban
Ceres	Kirsten Snow Spaulding
Sempra Energy	Kathleen Brown
California Statewide Communities Development Authority	Catherine Bando
Stradling, Yocca, Carlson & Rauth	Kevin Civale
Ramirez	Raul Amezcua
Revalue	Mark Hall
NRDC	Doug Sims
Goldman Sachs	Ruth Pan
Kestrel	Monica Reid
UBS	Sandra Kim
Local Government Commission	Julia Kim
Scripts Institute	Margaret Leinen (Gwen Nero)
Sacramento Utility District, Board member	Heidi Sanborn
Orrick	Bob Feyer
CA Pollution Control Financing Authority	Nancee Robles
Governor's Office Planning and Research	Nuin-Tara Key
Governor's Office of Business & Economic Development	Dan Adler

Project Advisors, Staff and Observers

David Wooley	Director, Environmental Center, UC Berkeley Goldman School
Dave Jones	UC Berkeley Law (Former CA Insurance Commissioner)
Neil Murthy	Vice President, Relationship Manager, The Bank of New York Mellon Trust Company, N.A.
Michael Paparian	Climate Bonds Initiative
Caitlin MacLean	Milken Institute
William Collins	UC Berkeley & Lawrence Berkeley National Lab