HOW TO ISSUE A GREEN MUNI BOND

A STEP-BY-STEP GUIDE

PREPARATION

1 IDENTIFY QUALIFYING GREEN PROJECTS AND ASSETS

The key feature of a Green Muni Bond is that the proceeds go toward green projects or assets. The "greenness" of the issuing entity does not matter—it's about the physical assets or projects.

Green Muni Bonds can be issued by:

- City governments
- Utilities; water, transport, energy, etc.
- Corporations developing, building or managing green assets for issuers
- States or development banks

If you can issue a municipal bond, in principle, you can also issue a Green Muni Bond if you have qualifying green assets or projects. You have to disclose your assets and projects.

Guidance about qualifying assets or projects can be obtained from the Green Bond Principles, which set out broad green asset categories, the Climate Bonds Taxonomy, and the Climate Bonds Standard and Certification Scheme, which set out more specific standards for what qualifies within these asset categories.

2 ARRANGE INDEPENDENT REVIEW

Credible independent review and Certification protects your reputation. Verifiers can also help identify green assets.

3 SET UP TRACKING AND REPORTING

The issuer establishes procedures for tracking and reporting on the use of proceeds. To ensure all proceeds are applied to green projects, the sum of the cash-on-hand and amounts invested in assets or projects, must not be less than the amount of the bond.

ISSUANCE

4 ISSUE YOUR GREEN MUNI BOND

The usual steps apply here, as for any other conventional bond:

- Structure the bond, working with an investment bank or advisor
- Obtain a credit rating.

5 MONITOR USE OF PROCEEDS AND REPORT ANNUALLY

On an annual basis, issue a public report to confirm that the funds are still properly allocated to green projects.

This can be done by an auditor or in a letter signed by an authorised officer of the municipality.

That's it!

See next page for more detailed information.

Climate Bonds Initiative · CDP Driving Sustainable Economies · C40 Cities · NRDC · Ceres · As You Sow

THE 5 STEPS FOR ISSUING A GREEN MUNI BOND

1 IDENTIFY QUALIFYING GREEN PROJECTS AND ASSETS

GREEN EARMARKING IS THE KEY FEATURE. That means that the proceeds from the green bond sale are earmarked for green projects or assets. The "greenness" of the issuer is irrelevant—it's about the physical assets or projects.

EXISTING ASSETS OR NEW CAPITAL EXPENDITURE CAN BE USED.

Proceeds of a Green Bond can be applied, through refinancing of pre-existing debt, to existing assets, such as public transportation assets. For example, a municipality can issue a Green Muni Bond to refinance an existing metro rail line project, and use the funds to repay or increase the existing financing for the rail line.

When proceeds are allocated to upcoming capital investment for new projects, investors prefer that funds are deployed in a reasonable period after issuance, in order to timely achieve green impact.

GUIDELINES AVAILABLE ONLINE: See the next page for guidance about which assets or projects qualify as 'green'. Greater detail can be found in the Climate Bonds Taxonomy for all labelled green bonds and the more stringent Climate Bonds Standard and Certification Scheme for bonds consistent with the 2 degrees Celsius warming limit in the Paris Agreement.

TREASURY AND ENVIRONMENTAL DEPARTMENTS MUST WORK TOGETHER.

Identifying qualified assets and projects will require cooperation between the issuer's finance and environmental departments. Establishing coordination between them early on will save time.

The Green Bond Pledge - A New Conversation on Climate, Infrastructure & Investment

Launched in 2018, the Green Bond Pledge is a simple declaration with broad and far-reaching impact. Bonds that finance long-term infrastructure and capital projects need to address environmental impact and climate risk.

It is designed as a starting point, to open up the conversation at a municipal and city level around linking climate goals and long-term financial directions and investment.

More information and US municipal signatories can be found at www.greenbondpledge.com/.

2 ARRANGE INDEPENDENT REVIEW

Both policymakers and climate-friendly investors want assurance that green investments are genuinely green.

Internationally, the majority of issuers use independent review to increase investor confidence in funded projects. This can be done with a Certification of the bond's green credentials under the Climate Bonds Standard.

The Climate Bonds Standards Board has a straightforward, low cost Certification and verification process for potential issuers. Approved Verifiers include EY, KPMG, Sustainalytics, DNV GL, etc.

Review can also be provided by organizations with a strong environmental knowledge base. Various types of 'reviews,' such as second party opinion, third party assurance and green bond rating are widely used in the market. Second opinion providers in the U.S. market to-date include Vigeo EIRIS, CICERO, Sustainalytics. They will assess:

- The green credibility of the proposed Green Muni Bond investments
- The processes established for tracking funds and for reporting.

Reviewers can also help identify green assets.

Using accepted standards when issuing a Green Muni Bond reduces the cost of independent review and improves tradeability.

BENEFITS OF ISSUING A GREEN BOND

Distinguishes you as a leader in an expanding market.

Reflects your preparation around climate adaptation and resilience to investors and citizens.

Attracts new investors interested in green & ESG based opportunities.

Enables smaller environmental projects to be bundled into 'bond size' attractive to investors.

THE 5 STEPS FOR ISSUING A GREEN MUNI BOND

3 SET UP TRACKING AND REPORTING

Full disclosure on the allocation of proceeds (to provide transparency to the investor) is necessary for a Green Muni Bond.

Key rules:

- The proceeds from Green Muni Bonds must only be used for specified projects, so there must be systems in place to track Green Muni Bond proceeds and keep track of their use. Issuers that have done this in the past have used separate coding for the Green Muni Bond proceeds and have created special allocation codes to help ensure funds are used properly
- To ensure all proceeds are applied to green projects, the sum of the cash-on-hand and amounts invested in assets or projects must not be less than the amount of the bond.

It is best practice to include these rules in the 'use of proceeds' section of the legal documentation for the bond issuance.

4 ISSUE YOUR GREEN MUNI BOND

The usual steps apply here, as for any conventional bond:

- Structure the bond, working with an investment bank or advisor. Any sort of structure, from vanilla bonds to asset-backed securities, can be used as long as proceeds are allocated to green assets or projects
- Market and price the Green Muni Bond.

Credit quality is judged the same as for other bonds. Cities should expect to have the bond credit rated in the usual manner.

5 REPORT REGULARLY

To maintain the status of a Green Muni Bond, the issuer must confirm, at least each year that the funds are still properly allocated to green projects.

Confirmation involves:

- A public letter from the municipality auditor or a letter signed by an authorized officer of the municipality
- A brief report that sets out the environmental impact of the Green Muni Bond, highlighting the main features of the bond to investors, shareholders, and other stakeholders. Consider using CDP Cities annual disclosure questionnaire to communicate project plans, and environmental and budget impacts on an ongoing basis.

Reports should be publicly available, such as on the issuer's website.

Where possible, reporting should also include the environmental impact of specific investments, such as the amount of pollutants prevented from entering the air or water, or the total energy saved.

SUBSEQUENT GREEN MUNI BOND ISSUANCES ARE EVEN SIMPLER.

Repeat Green Muni Bond issuers can use the same framework for identifying green projects and assets as well as the same independent reviewer and the same processes for managing proceeds and reporting. If they need to replenish the pool of assets linked to the bond, they can look to other qualifying green assets.

Repeat issuers of Green Muni Bonds have stated that issuances the second time around.

Snapshot: The US Green Muni Bond Market

Over $10billion of green muni bonds were issued in the US in 2017, with New York, California and then Massachusetts leading the Top 10 states. Clean transport, sustainable water and renewable energy were the largest sectors, dominating the project lists and expenditure. The first half of 2018 sees that 1-2-3 order remain unchanged, though number of states where muni green bonds have been issued has reached 31.

Large issuers including the San Francisco Public Utilities Commission (SFPUC) and the New York Metropolitan Transportation Authority (NY MTA) have adopted Climate Bonds Certification as a best practice model for their green muni bonds and use the streamlined Programmatic Certification process for repeat issuance. At policy level the California Treasurer has signed the Green Bond Pledge and released a green bond market report outlining future directions.

More detailed analysis on the 2017 green muni results and a Q1-Q2 2018 green muni bonds issuance summary.

Guidance: QUALIFYING GREEN ASSETS

Within these broad categories there are further details needed to qualify as 'green'.

Green Muni Bond issuers can use the Climate Bonds Taxonomy to identify climate-aligned sectors that enable the transition to a low carbon economy. The Taxonomy is intended for broad guidance only. Detailed eligibility is required for Certification, and specific Sector Criteria are being developed under the Climate Bonds Standard & Certification Scheme.

ENERGY

Solar and wind energy generation

Solar and wind energy equipment manufacturing

Grid connections to renewable energy generation

Hydro-electricity generation (run of river or existing dams) which maximize climate benefits and minimize negative environmental and social impacts

Geothermal energy
(subject to limits on greenhouse gas emissions)

Biomass energy generation which maximize climate benefits and minimize negative environmental and social impacts

Tidal energy generation and other emerging renewable energy technologies

Energy storage

GREEN BUILDINGS

Buildings meeting industry certification schemes such as LEED, BREEAM, Miljöbyggnad, DNGB, EDGE, ENERGY STAR

Energy efficiency and conservation projects in buildings (such as LED lighting installation)

LAND USE

Sustainable agriculture, forestry, and land use

Agriculture produce supply chain improvements to reduce waste

INDUSTRY

Eco-efficiency improvements/cleaner production such as for cement, iron, steel, glass production

Facilities dedicated to manufacturing energy efficient components (such as motors, automation systems) and products (such as household appliances and equipment)

WATER

Water storage and management

Defences and storm water management

Water treatment

Ecological restoration

WASTE

Circular economy activities (recycling, re-use, anaerobic digestion facilities, qualifying waste-to-energy plants)

Waste disposal (closed landfill facilities with gas capture)

Pollution control including carbon capture and storage (excluded for fossil fuel energy)

TRANSPORT

Mass transit: subways, light rail, Bus Rapid Transit Systems

Rolling stock for railways provided <50% fossil fuel transport

Rail track capital expenditure

Bicycle and public walking infrastructure and schemes

Zero- and low-emission vehicle fleets such as electric vehicles (EVs), hybrids and hydrogen fuel cell vehicles