

Green Bonds in the Golden State:

A Practical Path for Issuers

Webinar Two: It's Not Easy Being Green

September 18, 2019

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Presentation Links

Provided for additional research, links accessible in PDF version of the slides



Webinar 1 Resources

Available on CDIAC's website:

<https://www.treasurer.ca.gov/cdiac/webinars/2019/greenbonds/description.asp>

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Our Vision

Equip attendees with the practical knowledge they need to evaluate a project, integrate green into the plan of finance, and certify their bond as Green.

Describe how issuers can meet the Green Bond Market's expectations for verification, reporting, and disclosure.

Leave participants with the understanding that although it may not be easy being Green, there is a way to strike a balance between environmental and financial stewardship.





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Part 1: Webinar 1 Review

Presenter



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Update: New Resource

Global Green Bond Partnership's Green Bond Roadmap

Provides users with a basic outline of green bonds and their role in mobilizing capital for climate change action. It is intended to help government officials quickly get oriented to the world of Green Bonds and provides curated tools and information from organizations around the world that play an active role in the Green Bonds market.



Link: www.globalgreenbondpartnership.org

Green
Bonds
Overview

Green
Bonds
Checklist

Types of
Green
Bonds

Framework, Labeling,
Certification,
Verification,
Standards

Resources



Why Green Bonds?



*"We need to build trust and reduce risk, make the best use of available resources, and find innovative ways of financing, such as **Green Bonds** whose viability and success are already realities," the Secretary-General said. **Finance is the key to successful climate action. We need more ambition – climate change is moving faster than we are and this is a war we cannot afford to lose.**"*

*"The world should adopt a simple rule: **If big infrastructure projects aren't green, they shouldn't be given the green light.** Otherwise we will be locked into bad choices for decades to come. Investing in climate-friendly development is where the smart money is needed."*

António Guterres
UN Secretary General



*Green Bonds are used to
finance the infrastructure of a
climate-challenged world.*

California State Treasurer
Fiona Ma, CPA

Webinar 1 Recap

Green Bond
Overview


Issuer and Investor
Considerations

Green Bond Market and
the Path Forward



Audience Question

How many Green Bond issues has your organization been involved in?



Part 1: A Counsel's Perspective

Outline

This part will discuss the following considerations as they relate to Green Bonds.

- Planning
- Green Designation Options
- Legal Documentation
- Federal Securities Law

Presenter



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Planning Considerations

Integrate Sustainability Into Capital Improvement Program (CIP)

Consider Green Bond issuance as early as possible in CIP planning process.

Understand 'Green' Standards

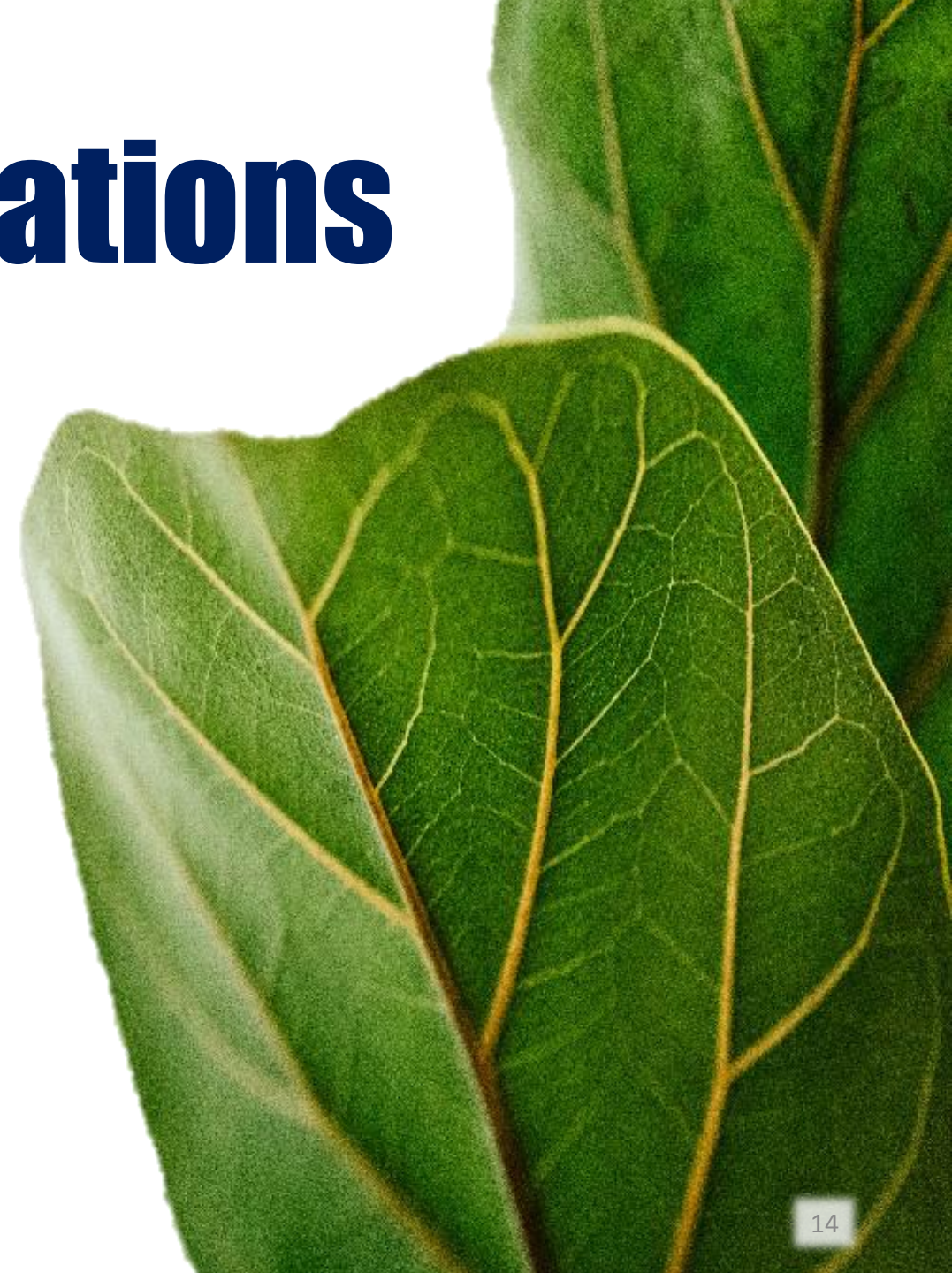
Identified in Climate Bond Initiative's (CBI) [taxonomy](#) and ICMA's [Green Bond Principles](#) (GBP). It may be the project can be developed to more closely align without increased cost or delay.

Engage a Third Party Reviewer

Consider partnering with a third party reviewer to assist with analyzing the project's alignment with standards.

The Sooner, The Better

Even if Green Bond issuance considered after CIP is prepared, address it early in the financing process (when assembling financing team, developing timeline, etc.).





Green Designation Considerations

No Designation
Self-Certification
External Review

No Designation

**Regular “Vanilla”
Bond**

Must finance projects with climate-related or environmental benefits.

+

~~**Green Label**~~

Issuer describes, in detail, expected environmental benefits, but does not self-certify or receive external review.

=

**Green
Bond**

If the bond “finances investments with environmental or climate related benefits” it’s a Green Bond, even if the label isn’t attached.

Considerations

- This approach avoids some of the potential pitfalls to be described, but achieves many of the goals.
- Buyers interested in Green Bonds are provided the information they need to make their own conclusion.
- However, may not attract buyers that you might otherwise attract by Green Bond designation.

Self-Certification



Considerations

Issuers should:

- Document the criteria, and the reasons for concluding that the issuance/project complies with it.
- Be reasonable – issue separate Green/non-Green series if some Project elements aren't appropriate for designation.
- Be transparent.

External Review



Issuer retains third party reviewer to provide second party opinion, verify, certify, or score the bond. The most common approach is certification.

Considerations

- Verifier assists in analysis and process.
- Imposes discipline, which provides the issuer and financing team with comfort that Green Bond designation is appropriate.
- Maximizes potential for interest from Green Bond investors.



Documentation Considerations

Generally, Green Bond Issuance does not include enforceable contractual obligations of issuer to adhere to identified standards/principles.

Statement of present intention.

Legal documents typically provide flexibility to review Project.

Green Bond expectations must be consistent with State and federal tax law requirements.

Reporting requirement *may* be contractual. If so, consider making it a separate document from your Continuing Disclosure Undertaking pursuant to Rule 15c2-12.

Federal Securities Law Considerations

Materiality

- Federal securities law generally requires all “material” information be disclosed
- Information is material if “there is a substantial likelihood that a reasonable investor or prospective investor would consider the information important in deciding whether or not to invest”

Designation Description

- Clearly describe designation approach
- If self-certified, describe analysis used
- Describe environmental benefit on which certification was based
- Make it clear the Green Bond Designation doesn't effect security for repayment (i.e. Green Bonds have no more or less claim to repayment than other non-Green Bonds if issuer)

More Federal Securities Law Considerations

Disclaimers (aka free insurance)

- No contractual promise to build identified project or comply with Green Standards
- No Assurance that Project as constructed will achieve anticipated benefits
- No obligation to comply with changes in standards
- Describe Verifier opinion (and state it is only an opinion, not a guarantee)

Optional Extras

- Include External Reviewer Report (?)
If you do, you own it
- Post-issuance reporting could be subject to the federal securities law
If you do it, make sure it is right

A Verifier's Perspective

Outline

- Green Standards and Market Participants
- External Review Process
- Common Challenges
- Fees

Presenter



Monica Reid

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Green Bonds

**An Eligible
Vanilla Bond**

+

Green Label

=

**Green
Bond**



The bond must finance or refinance, in whole or in part, a **project or asset** that benefits the climate or environment.



Green Bond, Certified Climate Bond, Sustainability Bond

There are green **standards and certification criteria.**

Green Standards

Green Bonds



Standard: ICMA

Use: Projects with a beneficial environmental or climate impact.

Examples: Renewable energy and energy efficiency, clean public transportation, pollution prevention and control, conservation, sustainable water and wastewater management, and green buildings

Certified Climate Bonds



Standard: CBI

Use: Projects consistent with lowering greenhouse gas emissions as established in the Paris Agreement.

Examples: Investments that contribute to addressing climate change, such as bus rapid transit systems, low carbon transportation, green buildings and water infrastructure.

Social Bonds



Standard: ICMA

Use: Social Bonds are used to raise funds for new and existing projects with positive social outcomes.

Examples: Affordable housing, education, libraries

Sustainability Bonds

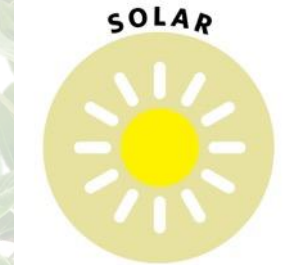


Standard: ICMA

Use: Activities aligned with the Green Bond Principles and the Social Bond Principles.

Examples: Green, affordable housing, green public buildings, residential solar programs

Green Sectors



The slide is framed by vibrant green leaves on the left and right sides, set against a white background. The main title is in a large, bold, dark blue font.

Green Bond Benefits

Potential Lower Cost of Funds

Brings New Investors to the Table

Enhance Reputation and Leadership

Build Stakeholder Engagement

**Verification provides confidence
and consistency in this market.**

Market Participants

External Review is a Best Practice for Green Bonds.

**Second Party Opinion
Providers**

Third Party Verification

CBI Approved Verifiers

Directory available [online](#).

Examples include:



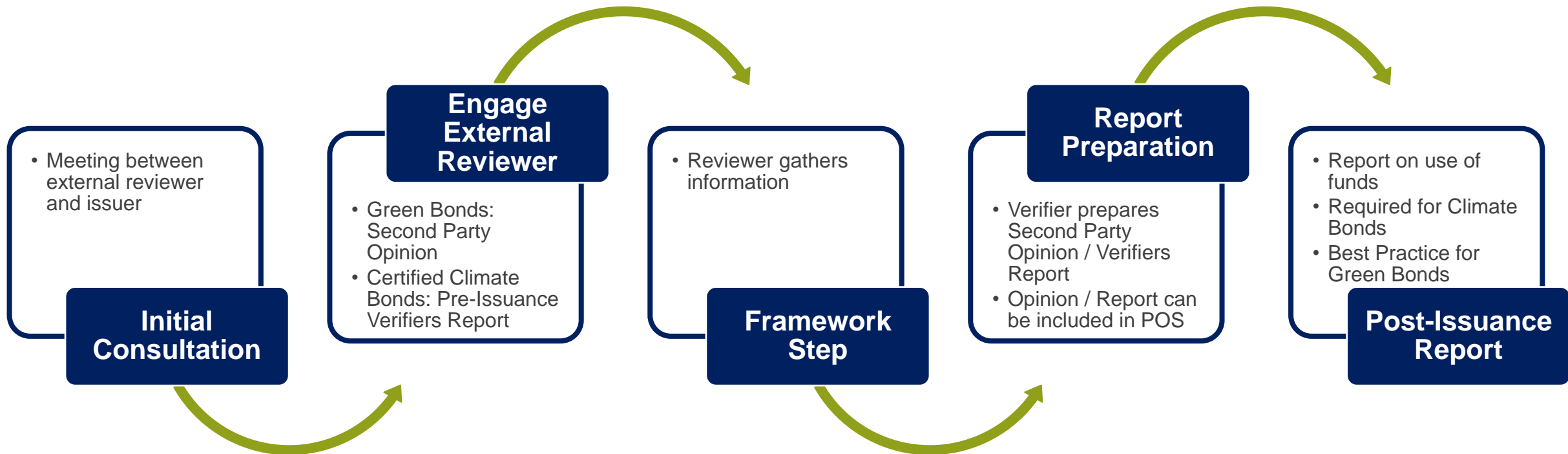
Standards/Certification

ICMA and CBI



Climate Bonds INITIATIVE

Typical External Review Steps



What Verifiers Look For

Alignment with Green Bond Principles or CBI Standards and Sector Criteria

Four Pillars

Use of Proceeds

Project Evaluation and Selection Process

Management of Proceeds

Reporting

Key Questions We Ask

Use of Proceeds

- What will the funds be used for? (i.e. Project Description)
- What are the Green Attributes

Selection of Projects

- How do you identify projects for bond financing?
- What are the decision-making processes?
- Who authorizes project and use of proceeds?
- How did you select the projects for this bond?

Management of Proceeds

- How do you track and manage bond expenditures?
- How quickly do you plan to spend the money?
- What is your short-term investment policy?

Reporting

- How do you currently report on your bonds?
- What disclosure reporting is planned for this bond?
- Do you want to also report on green impact?



Common Challenges

Data to support Certified Climate Bonds designation

- Green buildings must show energy savings above certain threshold
- Low carbon transport – some types have emissions thresholds
- Water storage, treatment, etc. – need Greenhouse Gas impacts data

Certain CBI Criteria not available yet

Impact reporting

- Finance teams not accustomed to this, but project teams are
- In California, Local governments do impact reports on grants and SRF loans

Thinking about Green Bonds late in the process

Reporting for Green Muni Bonds

Standard Continuing Disclosure

Standard requirement for all municipal bonds, green or not.

Post-Issuance Report

Requirement if the issuer issues a CBI Certified Climate bond.

This is a one-time report produced by the Verifier within 24 months of issuance.

Voluntary Impact Reporting

Best practice and recommended for all Green Bond issuances.

- Issuer decides what impact to measure. The [Global Reporting Initiative](#) has recommendations.
- Can be simple, for example, an energy savings table.
- Possible tool to engage investors and show leadership.

Comparison of Approaches

Summary of the most common approaches to standards and best practice recommendations.

	GBP	CBI	EU GBS
<i>Eligibility Criteria</i>	High-level	CBI Taxonomy	EU Taxonomy
<i>External Review</i>	Recommended <i>Not Required</i>	Required	Required
<i>Publication of External Review</i>	No	Required	Required
<i>Accreditation of Reviewers</i>	No	Yes	Yes <i>New EU system</i>
<i>Impact Reporting</i>	Recommended <i>Not Required</i>	Recommended <i>Required Eligibility Reporting</i>	Required
<i>Use of Proceeds in Legal Documentation</i>	Recommended <i>Not Required</i>	Required	Required



Proactive Approach

When preparing the CIP, identify assets that are likely Green Bond eligible.

Develop a replicable reporting approach.

Prepare a Green Bond Framework, with or without consultant assistance.

Engage verifier for an Opinion on the Framework or on a specific bond.

Efficient, reduces need for external reviews.

External Review

Costs

Second Party Opinion or Verifiers Report

\$1,000-\$25,000, could be more if complex

CBI Certification Fee

1/10th of a basis point of the bond principal.

Example: \$500M bond, the certification fee is \$5,000

Impact Reporting

Could be as low as \$500/year for basic report

Benefits

Quotes from a research article, [Financing the Response to Climate Change: The Pricing and Ownership of U.S. Green Bonds](#):

“We confirm green municipal bonds are indeed priced at a premium. After-tax yields at issue for Green Bonds versus ordinary bonds are roughly 6 basis points below yields paid by otherwise equivalent bonds.”

“Interestingly, this premium doubles or triples for bonds that are ... externally certified as green by a third party, according to industry guidelines, and publicly registered with the Climate Bonds Initiative (CBI).”

Authors: Malcom Baker, Daniel Bergstresser, George Serafeim, Jeffrey Wurgler

The Business of Sustainable Infrastructure

Lessons Learned and Trends

Outline

- LA Metro Overview
- Sustainability Challenges
- Sources of Sustainability Funding
- Green Bond Experience

Presenter



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LA Metro is....

Los Angeles County's Regional Transit:

Planner

Funder

Builder

Operator



Measure R Transit Program

Existing and future transportation projects and programs, more information [online](#).

Existing Lines

96 Stations

105 Miles

370,000 Daily Boardings

Existing Lines + Measure R

Total: 197-205 Stations

236+ Miles

390,000+ New Boardings

Measure M

No Sunset Date

\$120B Funding in 30 Years

Environmental and Sustainability Strategy Reframing



Transit is a Sustainable Operation

LA Metro's Energy and Resource Report, 2017



Sustainability Challenges

In the midst of the largest build-out in the history of Los Angeles, LA Metro is posed with the following challenges:

Environmental

- Stringent Regulatory Requirements
- Rapid Evolution of Technology
- Aspiration to Optimize Environmental Benefits

Social

- Diversity
- Equity
- Inclusion

Technical Basis for Sustainable Infrastructure

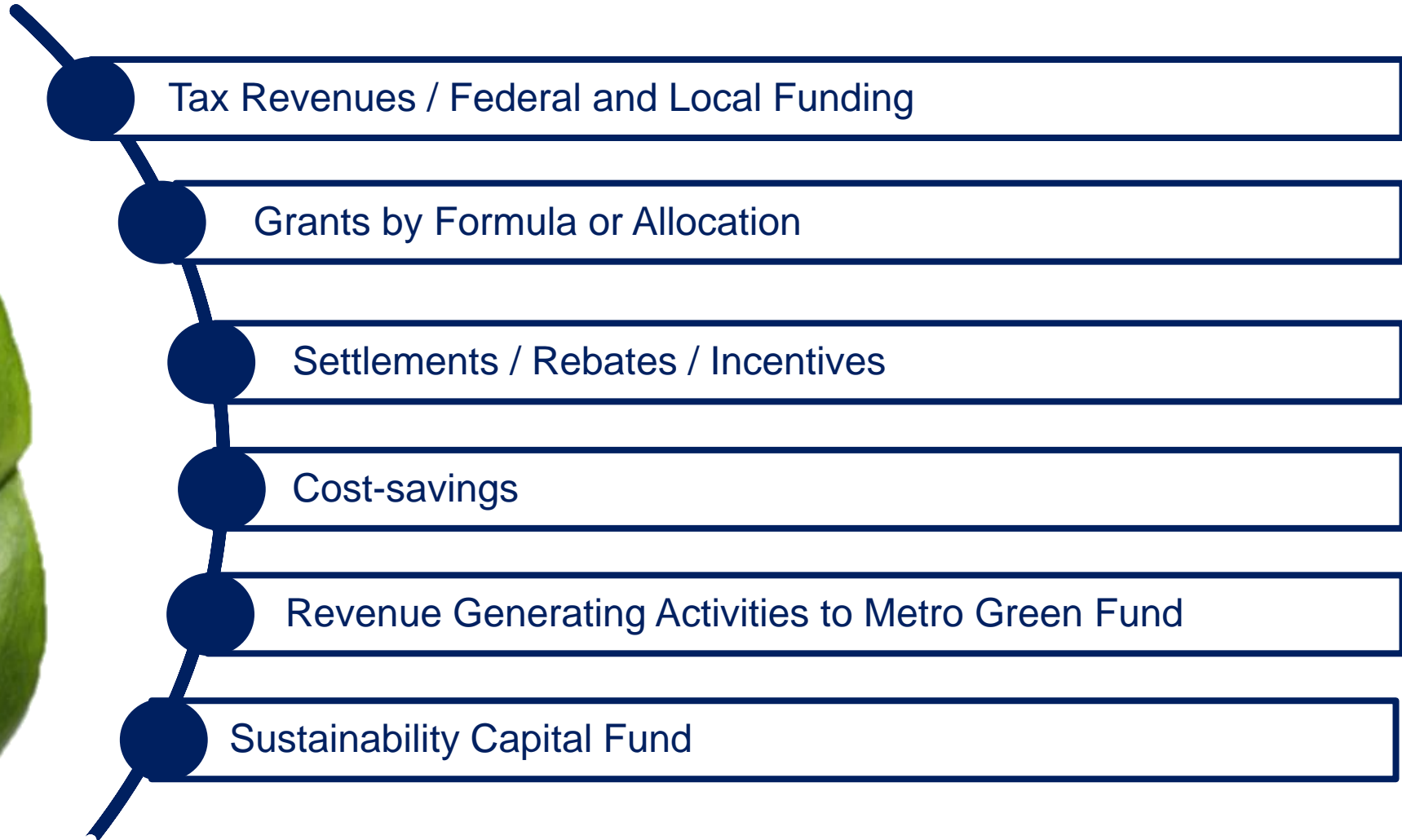
- Builds on existing Metro climate work
- Prioritizes and evaluates adaptation implementation priorities through indicators
- Mapping of assets versus vulnerable populations
- Familiarizing Metro team with concept of Resiliency and Team (Internal and External)

2019 Updates

- CAAP/Resiliency Framework/Resiliency Policy Update
- Sustainable Acquisition Program



Sources of Sustainability Funding



We Need Financial Sustainability

Use of Funds Examples

- Climate Impact Reduction Strategies
- Resiliency: Organizational, Energy, Personal
- Sustainable Infrastructure Reinvestment
- Pilots and Demonstration Projects
- Operational Efficiency
- Sustainability Capital Program
 - Electric Vehicle Chargers
 - Low Impact Development Projects
 - Energy-Efficiency Projects
- New Technology for Customer Experience

Funding Focus: Bonding Strategies

Issue:

We need to re-strategize our financing and funding strategy.

Solution: Green Bonds

October 2017 and February 2019

About \$850M for Low Carbon Transport

Use of Funds Was for Capital and Refinancing

Climate Bonds INITIATIVE

Investments in a Multi-Modal System

- Rail and Busway
- Near Zero/Zero Emissions Buses
- Battery Electric/Hybrid Vehicles
- Electric Vehicle Chargers
- Purchased Transportation
- Carpool and Vanpool Vehicles
- Green Construction Equipment
- Transportation Demand Strategies





Bond Certification

While working through the certification process, we ask ourselves:

Who are the players?

What was done?

What is needed?

LA Metro's Approach to Impact Reporting

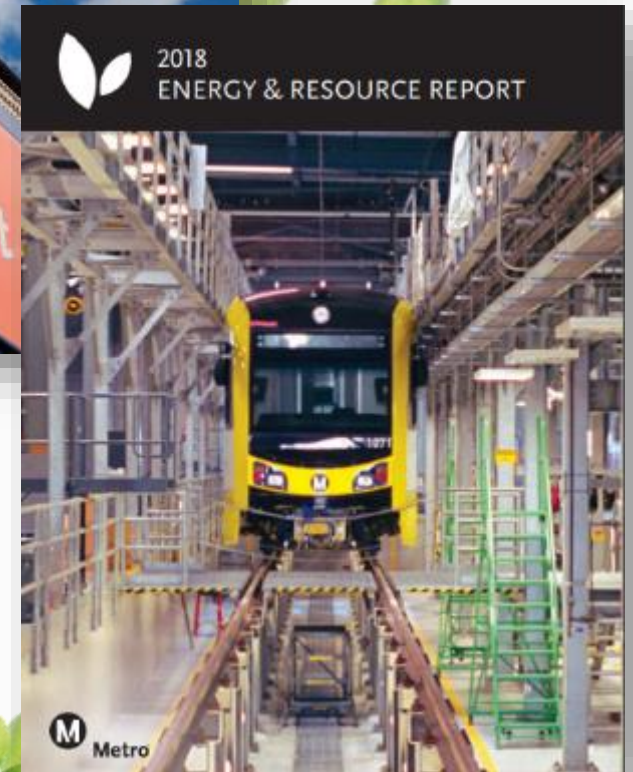
[2017 Energy & Resources Report](#)

[2018 Energy & Resources Report](#)

What do we report regarding sustainability?

What do we report regarding Green Bonds?

What challenges do we face with Green Bonds reporting?



Considerations

- Incorporate climate change data into infrastructure design, construction, and maintenance
- Regulatory and statutory requirements
- Investment in community sentiment
- New projects versus retrofits
- Metrics and how to measure
 - Competing criteria and tools
- Agency appetite for investment risks
- Transition and workforce development
- Operations and maintenance

Audience Q&A Opportunity

*If you want the answer –
ask the question.*

Lorii Myers

Additional Resources

Available [online](#).

Treasurer.ca.gov/CDIAC/Seminars
Select link for *Green Bonds In the Golden
State: A Practical Path for Issuers*





**Webinar
Evaluation**

Upcoming CDIAC Education Programs

Green Bonds in the Golden State:

A Practical Path for Issuers

Free three-part webinar series on fundamental concepts, integrating green finance into projects and policies, and the status of green bonds in the municipal market.

10:00 AM to 12:00 PM on:
August 14, 2019 ✓
September 18, 2019 ✓
October 2, 2019

More information on treasurer.ca.gov/CDIAC/Seminars



For more information and to register go to:

Treasurer.ca.gov/CDIAC/seminars

Other Programs

Bond Buyer Pre-Conference

September 23

San Francisco

Municipal Market Disclosure

October 30

Irvine

Public Funds Investing Workshop

November 19, 20

West Sacramento