

# Tried and True: Traditional Financing Options for State Buildings

## Moderator:

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## Speakers:

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# Financing for Government Lead by Example Programs

NGA, October 3, 2019



# Who We Are

The HB&C Team offers clean energy program design assistance.

- We design clean energy finance programs for states, local governments, and utilities. We bring programs from design to final launch.
- We work with clients to identify specific financing partners and products.
- Major recent projects: statewide consultant for all CA IOU energy efficiency finance programs; consultant to DC Green Bank; consultant to multiple states to establish finance programs.

# Typical Uses of Public Sector Clean Energy Finance Capital

- Small and single-purpose (eg. lighting) efficiency retrofits of existing buildings (school districts, individual buildings).
- Large efficiency retrofits that incorporate many measures, including non-efficiency measures
- Combined heat and power installations for individual buildings or small building campuses
- Solar power installations placed on public buildings or property to serve that property/campus of buildings.
- Microgrids and other very large investments

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## Installer and Contract

- ➔ Small-medium size contractors w/no savings guarantees
- ➔ Energy Service Companies (ESCOs) with a savings guarantees (ESPC)
- ➔ ESCOs with performance guarantee
- ➔ ESCOs with performance guarantee based on kWh produced
- ➔ ESCOs with performance guarantee based on kWh produced & other factors

# Three Important Definitions

An **ESCO** is a company that delivers all types of energy services (efficiency, solar, microgrids) to a public entity.

An **ESPC** is the contract that an ESCO typically offers. It generally guarantees energy savings and performance and is often created to comply with state statutes. It is not a financing agreement.

A **tax exempt lease, bond or power purchase agreement/service agreement** is a financial instrument that can be used to fund an ESPC project installed by an ESCO.

# Typical Public Sector Clean Energy Financing Options

## Bonds

- General Obligation Bonds
- Revenue Bonds

### Qualities:

- Always affect long term debt limitations
- Significant issuance costs
- Best for large projects or groups of projects

## Leases

- Tax exempt leases

### Qualities:

- Generally viewed as short term obligations
- Lower costs to originate
- Fund large or small projects or individual projects

## Power Purchase

### Agreements/Service Agreements

- Purchase of energy (kWh)
- Purchase of energy savings

### Qualities:

- Viewed as off-balance sheet
- Significant structuring costs
- May work for solar; unproven for efficiency investments

# Bonds

- A general obligation bond relies on the rated credit of the obligor (state, school district etc.) and that obligor's ability to continue to collect tax and other revenue, its history of making payments and related.
- A revenue bond relies on underlying ability of a specified project to repay its debt service (eg. a toll road).
- A bond issuance may be certified as a “green bond” if the proceeds from the bond issuance are used to support “green” uses - including energy efficiency, clean water etc. The benefits of a green bond may result in slightly lower rates, if that green bond can be marketed and sold to investors that value the green elements of the use of proceeds.





# Tax Exempt Leases

- A tax exempt lease (Tax Exempt Lease Purchase Agreement or TELP) is a capital lease where the use of proceeds is for a government entity - **not for private use**.
  - TELPS can be used for any type of equipment purchase - not just energy.
  - A TELP for energy efficiency that qualifies under ESPC is a specific kind of TELP
- The lease relies on the underlying ability of the obligor to **make debt service payments** over the life of the lease. A rated entity with a good rating or an entity with a history of issuing (and repaying) debt. In the case of a school district - a lender may look at student enrollment trends, for example.
- A tax exempt lease for energy is generally structured to be **subject to appropriations each year** - meaning that although it is debt, it is generally not classified as long term debt.
  - **Depending** on state statute, it will often be ignored in a classification of long term debt and an assessment of whether an entity will exceed its debt limits.
- A TELP is generally used to fund critical use facilities eg. A city hall is easier to fund than a sports field given the “subject to appropriations” clause because it is far less likely to have the appropriation for the lease payment pulled each year.

# PPAs and Service Agreements: Definition

- A PPA is an agreement to buy energy - energy not delivered is energy you don't pay for.
- An ESA (Energy or Efficiency Service Agreement) is an agreement to buy saved energy (measured energy savings).
- Both are agreements to purchase a service - they are not equipment purchases.
- If structured properly, they are off-balance sheet transactions that clearly do not count against government debt limits and may not require higher levels of approval necessary for bonding.

# PPAs and Service Agreements: Considerations

- Generally a PPA or ESA achieves off balance sheet treatment because a third party (not the government):
  - Owns the equipment
  - Controls the equipment
  - Manages the equipment
  - May remove the equipment
- And typically that third party is a commercial entity (therefore not able to access tax exempt rates).
- A PPA or energy generating facility may be appropriate uses in government markets.
- An ESA (with energy efficiency) is challenging because governments are often reluctant to allow a third party to own, control, manage and potentially remove mission-critical equipment.
- The cost of money is often higher with an ESA or PPA than it would otherwise be, since commercial owner-entities do not have access to tax exempt rates.
- As a result there have been very few ESAs in the government sector.



# Final Thoughts

- Governments have access to cheap capital, and should use the means to use this as much as possible.
- Tools such as bonding and tax exempt leases currently exist with well-funded and hungry investors.
- Tax exempt leases are flexible structures to use, although laws governing their use differ from state to state.
- And despite the temptation of an ESA, government entities should approach these structures carefully, keeping in mind similar funding opportunities from other more traditional structures.



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**Harcourt Brown & Carey**

ENERGY & FINANCE

# Financing Public Facilities Improvements through the Efficient Buildings Fund

*Lead-by-Example Workshop:*

*Innovative Financing Solutions For State Building Energy Strategies*

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**RHODE ISLAND  
INFRASTRUCTURE BANK**

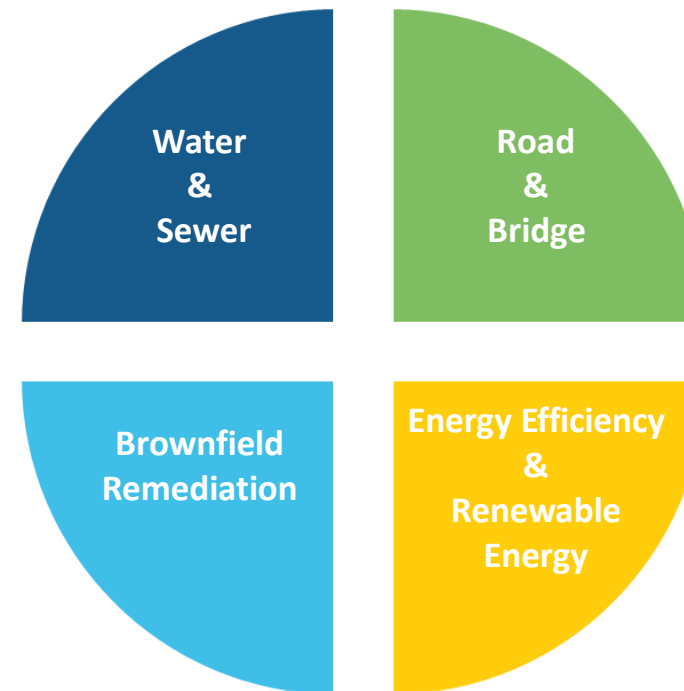
*Presented By: Jeffrey R. Diehl, Executive Director & CEO*

*October 3, 2019*

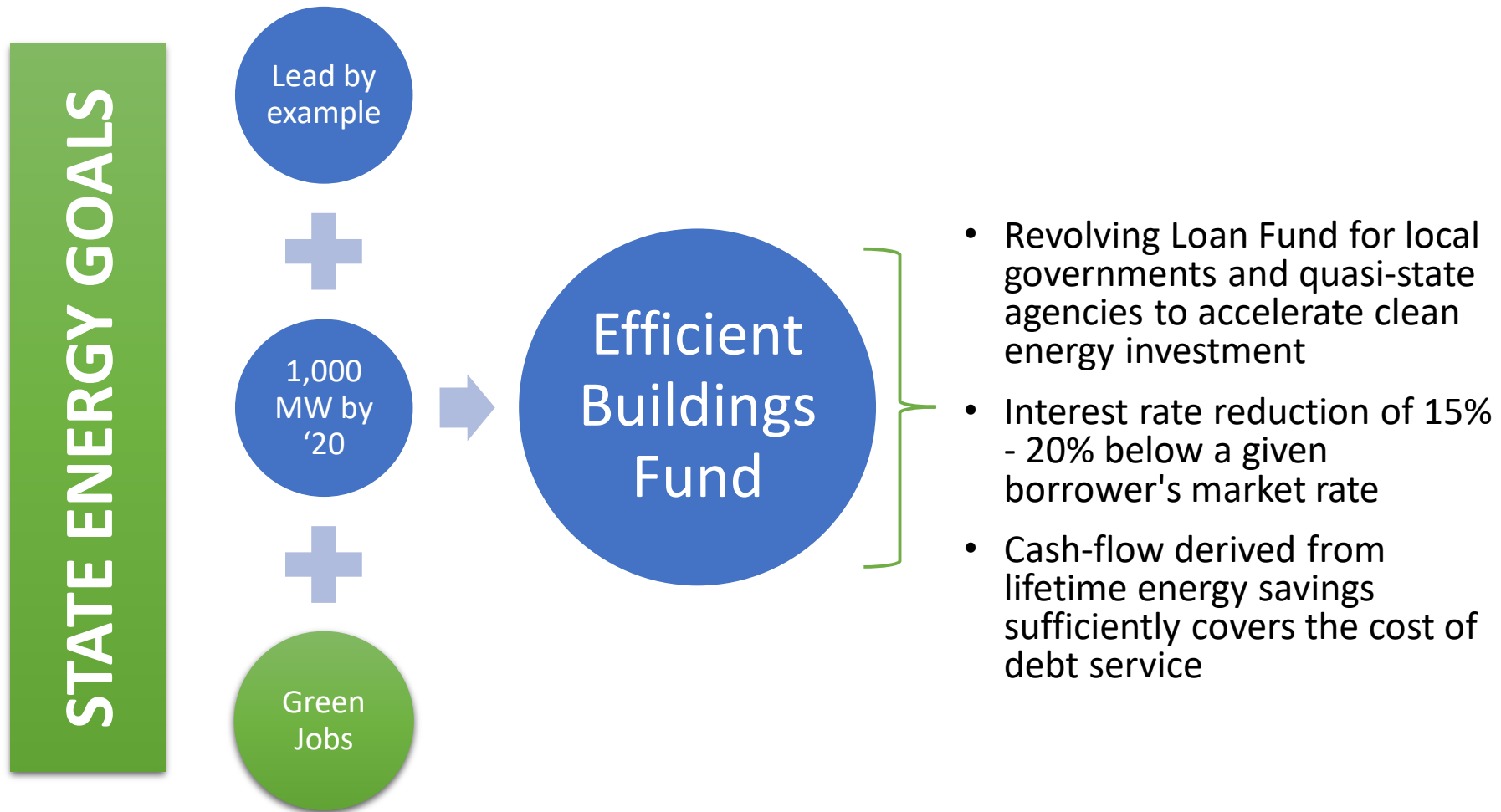
# About the Infrastructure Bank

Centralized hub of  
local infrastructure  
investment in Rhode  
Island

Our mission is to support and finance investments in the State's infrastructure. We do so through a variety of means, including the issuance of bonds, the making of loans and grants, and the engagement with and mobilization of sources of public and private capital. Through its activities the Bank fosters infrastructure improvements that enhance the environment, create jobs, and promote economic development.



# Advancing State Energy Goals





# Program Overview

## Efficient Buildings Fund

RIIB & OER sponsor building energy audits and technical assistance services through the engineering firm Cadmus. These services are provided to borrowers free of charge.

Partner agency subject matter experts review and grade project application

Project is then listed by score on the Project Priority List (PPL)



### Project & Credit Analysis

Bank's advisor conducts a thorough credit review & evaluation of the borrower and project

### Board Review

Bank's Board considers and votes on the borrower loan request

### Protection

Bank actively monitors project status and borrower financials

### Project Energy Reporting

OER & Nat. Grid track the relevant energy data to assess upgrade effectiveness

# One loan = Comprehensive Projects

**\$2.4 MM Loan**

5 projects

\$82 K

\$38 K

\$33 K

\$42.5 K

\$2.2 MM



**Borrower Snapshot:  
City of East Providence**

## Public Works Facility

- \$82K
- Lighting Systems
- Fuel Switching
- Boiler Replacement
- Hot Water Heater Replacement
- Motors/Drives-Variable Speed Drives
- Pipe Insulation

## Senior Center

- \$38K
- Lighting Systems
- Boiler Replacement
- Hot Water Heater Replacement

## Sweetland House (IT Dept.)

- \$33K
- Lighting Systems
- Boiler Replacement
- Fuel Switching
- Pipe Insulation
- Building Shell Insulation
- Programmable Thermostat

## Weaver Library

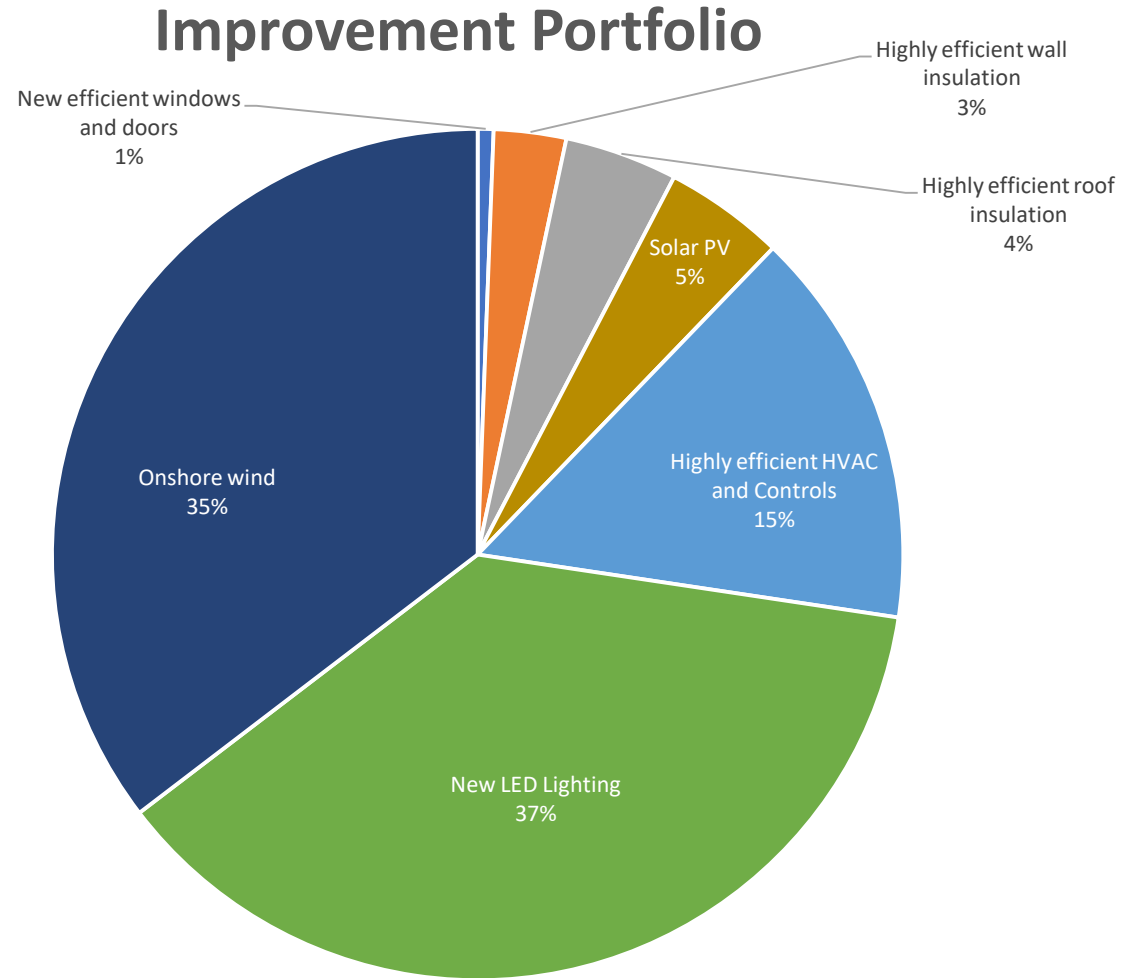
- \$42.5 K
- Lighting Systems
- Boiler Replacement
- Hot Water Heater Replacement
- Motors/Drives-Variable Speed Drives

## City Streetlights

- \$2.2 MM
- LED Conversion

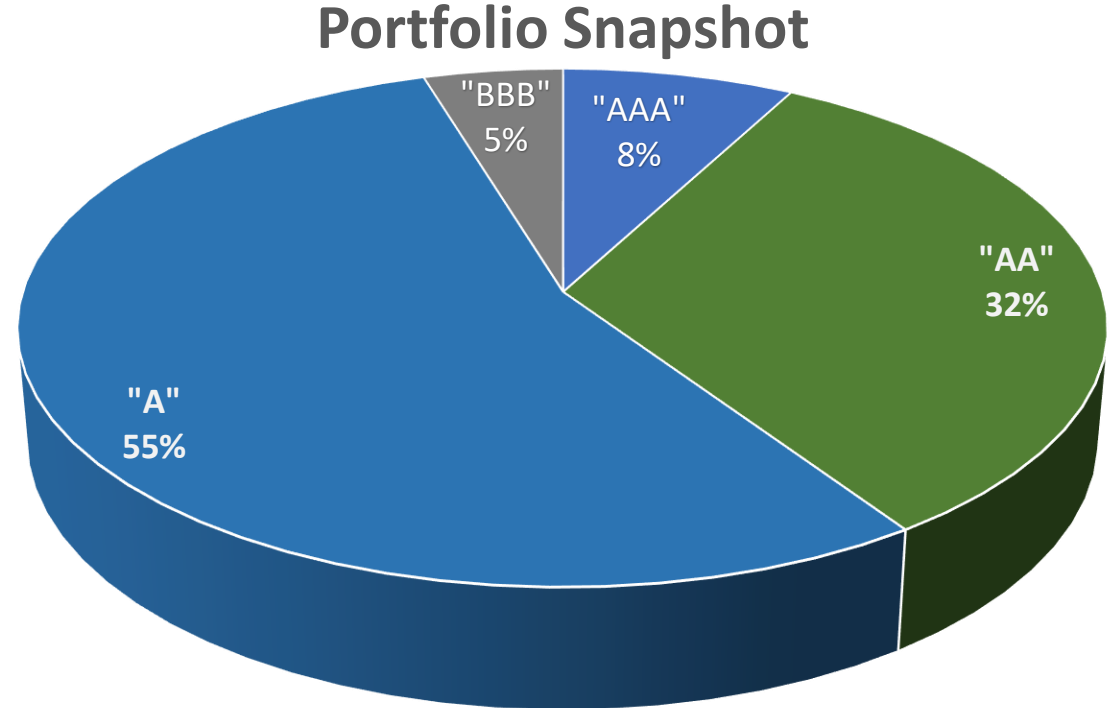
# Efficient Buildings Fund Results

#	Borrower	Amount (\$MM)	% of Portfolio
1	Barrington	2.5	8%
2	Cranston	2.2	7%
3	Cumberland	1.3	4%
4	East Providence	2.4	7%
5	Hopkinton	0.2	1%
6	Newport	1.2	4%
7	North Kingstown	0.9	3%
8	Pawtucket	4.5	14%
9	Providence	1.2	4%
10	Warren	0.5	2%
11	West Warwick	13.1	42%
12	Westerly	1.6	5%
<b>Total</b>		<b>31.6</b>	<b>100%</b>



# Capitalized Pool Financing Model

- The Bank's business model is to combine a number of smaller infrastructure loans into a "pool"
- Pool is financed with program capital and proceeds from a public market bond sale
  - Program capital is comprised of:
    - Energy Efficiency ratepayer funds
    - RGGI proceeds
- Benefits:
  - Economies of scale
    - Lower cost of issuance and debt service to borrowers
  - Risk transfer
  - Capital is recycled and supports new loans as older loans are paid back



Credit rating distribution of borrowers that comprise EBF "pool"

# Efficient Buildings Fund Bond Issue

## **Efficient Buildings Fund Revenue Bonds Series 2018 A (Green Bonds)**

### Use of bond proceeds:

- Refunding the Bank's \$23.3 MM Efficient Buildings Fund Revenue Bond Anticipation Note
- Funding a \$0.9 MM loan to the Town of North Kingstown

### Security:

- Cross-collateralized with Municipal Road & Bridge Revolving Fund
  - Added layer of lender and bondholder security
- Special obligation of the Bank payable solely from revenues generated by either Borrower Bonds, other monies or securities
- Step-Up mechanism

### Rating:

- First Infrastructure Bank Green-Bond to receive an independent "green certification/rating"
- Achieved the E1 Green Classification, which is the highest attainable score on S&P Global Ratings' green evaluation scale

Par Amount: \$18.3 MM
Premium: \$1.9 MM
Credit Rating: AA (S&P)
Green Evaluation: E1 (S&P)
Principal Payment Dates: October 1, 2019 to October 1, 2033*
Call Structure: 10-year par call
Tax Status: Federal & State Exempt
Closing Date: November 29, 2018

# Program Highlights

## IMPACT



Emissions reduction of 128,405 Metric Carbon Tons. A figure equivalent to the carbon footprint of 27,262 passenger vehicles driven for one year

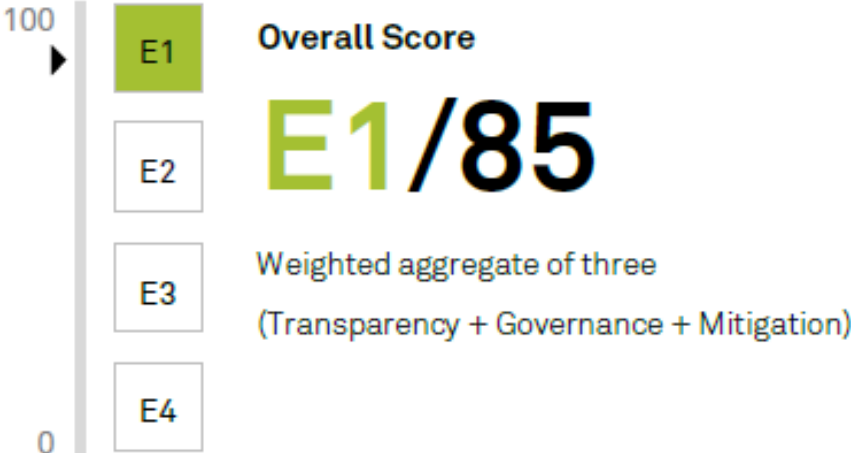


Over \$70 MM in gross-savings to local governments



On average, public buildings that receive upgrades financed through EBF expend 28% less energy when compared to the baseline calculations

## Green Bond Evaluation



Achieved the highest “green rating” attainable from S&P Global Ratings for the Bank’s inaugural independently rated green-bond

# Contact Information

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