

Efficient Buildings Fund Presentation for the Rhode Island Public Utilities Commission

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December 8, 2016



RHODE ISLAND
INFRASTRUCTURE BANK

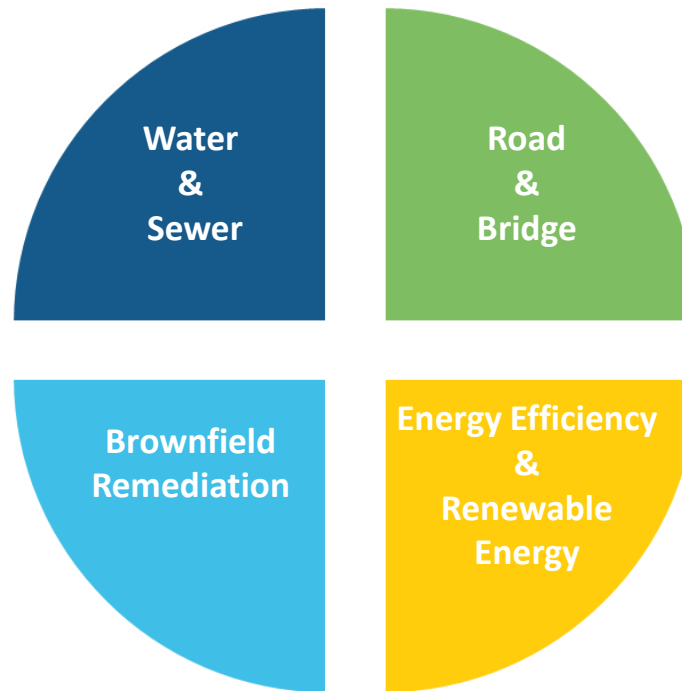
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Rhode Island Infrastructure Bank Overview

Who We Are

- Rhode Island Infrastructure Bank (RIIB) is a Quasi-State agency and component unit of the State responsible for overseeing a variety of infrastructure finance programs in the following areas:



Our Mission

Rhode Island Infrastructure Bank's mission is to support and finance investments in the State's infrastructure. RIIB does 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 RIIB fosters infrastructure improvements that enhance the environment, create jobs and promote economic development.

RIIB Product Overview

Clean Water State
Revolving Fund

Drinking Water State
Revolving Fund

Community Septic
System Loan Program &
Sewer Tie-In Loan Fund

Municipal Road &
Bridge Revolving Fund

Efficient Buildings Fund

Commercial/Residential
Property Assessed Clean
Energy

Brownfield Remediation
Revolving Loan Fund

Water Quality
Protection Fund

Rhode Island Infrastructure Bank Business Model

- RIIB's business model is to leverage public sources of capital in the private capital markets to the greatest extent possible
- RIIB issues bonds or borrows in the bank market, on a tax exempt basis, to achieve the lowest cost of funds
- RIIB pools small transactions together to achieve the benefits of scale and spreads the fixed costs of financing across a number of borrowers
- By leveraging through the bond or bank market, RIIB can invest in more projects today with a limited amount of capital up front
- RIIB will only invest in projects that are listed on a program project priority list developed by a state-agency partner

Efficient Buildings Fund: Background

Efficient Buildings Fund (EBF) Overview

- Jointly administered by the Office of Energy Resources (OER) and Rhode Island Infrastructure Bank (RIIB)
- EBF provides long-term, fixed rate financing for comprehensive energy savings projects
- Financing structured in a way that allows projects to produce positive cash flow, net of debt service, for borrowers
- Investment goals are to reduce energy consumption in public buildings by >20%
 - Targeting investments that lead to electric and heating savings and/or investments for renewable energy generation

Sustainability of the Efficient Buildings Fund

- Significant demand exists (\$40mm to \$60mm this year) for energy efficiency and renewable energy investments in the public sector
- The proposed \$5mm in capital will be dedicated to meet anticipated comprehensive energy efficiency project demand of \$20mm to \$25mm in 2017
- RI Dept. of Education school facility audits identified \$480mm of energy efficiency investments and \$247mm of renewable energy investments
- The EBF program does not have a recurring source of capital
 - Initially, the General Assembly and OER provided an allocation of ~\$4.8 million in capital to support \$21mm of investments over three years
 - EBF financed \$17mm in projects in the first program year
- The EBF program has been established to be self-capitalizing over time

EBF History

- Created in July 2015 as an expansion of RIIB's programmatic responsibilities to include financing programs in the energy efficiency, renewable energy, and environmental remediation sectors
- EBF codified in Rhode Island General Laws: 46-12.2-4.2
- Rules and regulations developed throughout the fall of 2015 with input from a stakeholder working group¹
 - OER developed rules and regulations for the application process and PPL development
 - RIIB developed rules and regulations for project financing

(1) Rules and regulations for EBF attached to this submission

EBF Working Group

- Since September 2015, the EBF working group meets weekly to implement the program
- Stakeholders in the EBF working group include:
 - Rhode Island Office of Energy Resources
 - Rhode Island Infrastructure Bank
 - Rhode Island Commerce Corporation
 - Rhode Island General Treasurer's Office
 - National Grid
 - Energy Efficiency Resources Management Council
 - Acadia Center
 - Rhode Island Department of Education
 - University of Rhode Island

Efficient Buildings Fund: Administration

EBF Program Management

RI Office of Energy Resources Responsibilities

- Develops rules and regulations establishing the project eligibility criteria
- Solicits applications and develops a project priority list
- Oversees data collection on energy savings / generation for completed projects
- Conducts project reviews, including eligibility, environmental and programmatic compliance

Rhode Island Infrastructure Bank Responsibilities

- Develops rules and regulations establishing the project financing criteria
- Provides project financing for projects only listed on OER's project priority list
- Disburses funds to borrowers in accordance with OER's review and approval

Project Eligibility

Energy Efficiency

- ***Energy Efficiency Project:*** one or more energy efficiency measures that are collectively cost effective.
- ***Energy Efficiency Measure:*** equipment or technology that reduces energy consumption.

Renewable Energy

- ***Solar photovoltaic systems:*** Only electric (PV) projects are eligible. Battery back-up systems are also eligible.
- ***Wind:*** Only systems that are 100kW or greater with a direct drive nacelle are eligible.

OER Project Application Requirements

All Applications

- Energy consumption baseline for all facilities
- Strategic energy management plan (or intent)
- Applicant contact info, project site info, project summary, project construction schedule

Energy Efficiency Applications

- Energy Efficiency Project Summary Form
- Energy audit report with proposed measures (< 2 years old)

Renewable Energy Applications

- Turnkey contract (does not need to be signed)
- Documentation of ROI and simple payback
- Specifications of equipment to be used

OER's Project Evaluation Criteria

Energy Efficiency Projects

- >20% total energy reduction
- Includes both electric and heating measures
- Includes non-lighting electric measures

All Applications

- Green initiatives
 - Baseline energy consumption
 - Strategic energy management plan
- Readiness to proceed
 - Commence construction within 90 days of loan closing
- Application quality & project strength

Solar PV & Wind Projects

- Energy output (kWh)
- Installed price per watt
- Criteria for other renewable technologies shall be determined as necessary

Additional Criteria

- Distressed community status

OER Reporting Requirements

As stated in regulation, all borrowers in EBF must provide to OER the following information for at least 5 years following project completion:

- Actual FTEs and job types
- Entity-wide energy consumption compared to baseline
- For EE projects, actual vs. estimated energy saved
- For RE projects, access to production dashboards

RIIB's EBF Responsibilities

- RIIB meets with all applicants on the EBF Project Priority List (PPL) developed by OER
- Each applicant then must provide an application for financing to RIIB and is subject to RIIB's financial underwriting requirements
- RIIB's Board of Directors must approve each loan application
- Upon loan closing, borrowers may draw their loan funds by submitting requests to RIIB for OER's approval
 - RIIB will only disburse funds to the borrowers upon receiving written approval from OER for each request ensuring that the project meets the specifications in the application

Efficient Buildings Fund: Round 1 Process and Results

Energy Audits in Round 1

- To drive demand, National Grid and Rhode Island Infrastructure Bank provided free energy audits to all municipalities
- National Grid received requests for over 250 facility energy audits and provided 32 facility energy audits to a range of municipalities
- Rhode Island Infrastructure Bank used allocated ARRA funds to provide an additional 20 facility energy audits

EBF Round 1 Results

- \$60 million in project applications submitted to OER
- \$25 million did not move forward for a variety of reasons, and we are expecting many of these applications to be resubmitted for Rd2
- \$17 million will be constructed and completed with other private sector capital sources

EBF Round 1 Capital

- EBF financing provided borrowers with a 15% reduction in their market cost of borrowing
- Supporting the \$17 million in project financing was the following:
 - Approximately \$1.8 million in allocated rate-payer funds to support energy efficiency projects (RIGL 39-2-1.2(l)(m))
 - \$3 million in Regional Greenhouse Gas Initiative (RGGI) proceeds

EBF Round 1 Transaction Profile

Communities Participating	6
Capital Allocated	\$17,183,000 (57% EE / 43% RE)
Annual Energy Savings	25,242,469 kBTU
Percentage Energy Reduction	34.8%
EBF-Financed Renewable Energy Generation	3,811,735 kWh (13,006,179 kBTU)
Annual Cost Savings (Energy, Operations and Maintenance)	\$2,053,023
Lifetime Net Cash Flow (after debt service)	\$19,598,581
Jobs Created or Retained	263
Annual electric kwh saved	5,987,861 kwh

Efficient Buildings Fund: Round 1 Project Examples

Project Example: Edgewood Highland Elementary School

- In EBF Round 1, RIIB provided a \$2.24 million loan to the City of Cranston for energy efficiency improvements at Edgewood Highland Elementary School
- Project completed in fall of 2016
- Improvements will reduce energy and maintenance costs at the school by over 40%
- Energy Conservation Measures included heating and electric measures
 - Hot water heaters
 - Air chillers
 - Energy Management System
 - Motors and drives
 - LED lights and daylight sensors

EBF Finances Comprehensive Retrofits

- City of Providence financed comprehensive retrofits in five municipal buildings including three fire stations, the police academy, and a vehicle garage
- Across the five buildings, energy consumption will be reduced by 44%
- Comprehensive improvements financed include:
 - Boilers
 - Insulation and sealing doors/windows
 - Hot water heaters
 - Oil to Natural Gas conversion
 - LED lighting and controls

Efficient Buildings Fund: Round 2

EBF Round 2

- OER has a second project solicitation period open
 - Applications due to OER by December 21, 2016
- National Grid and Rhode Island Infrastructure Bank providing technical assistance to municipalities and quasi-state entities who are interested in energy efficiency projects
 - National Grid providing energy audits
 - Rhode Island Infrastructure Bank providing free engineering services
- OER moving to provide more flexibility in application through increasing the number of application periods throughout the year

EBF Round 2 Demand Expected to Increase

Round 1

- Application period 45 days
- Outreach was focused on municipally owned buildings
- Limited engagement from school districts

Round 2

- Application period 112 days
- Expanded outreach to include wastewater and drinking water utilities and quasi-state agencies
- RIDE school facility audits identified \$727mm of energy efficiency and renewable energy investment needs
- Future application periods will allow for municipalities with elections to still participate in 2017

Contact Information

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