

Clean Energy Financing Public Utilities Commission Technical Session

May 18, 2017



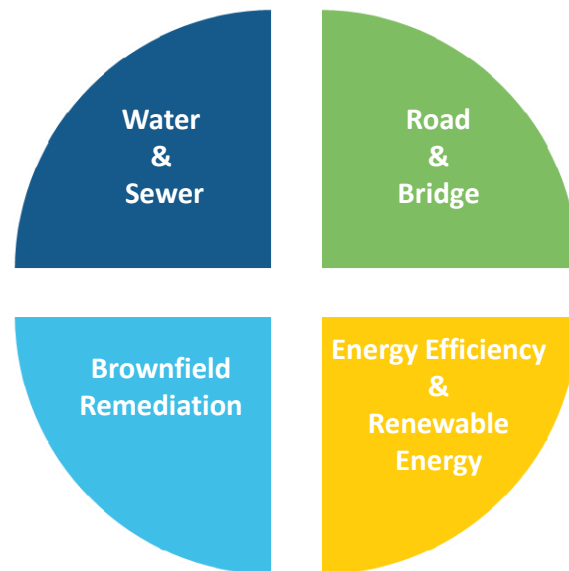
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A. Rhode Island Infrastructure Bank Overview

Who We Are

- Rhode Island Infrastructure Bank (RIIB) is a quasi-state agency responsible for overseeing 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.

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

Brownfields Revolving
Loan Fund

Water Quality
Protection Fund

Business Model

- RIIB's business model is to leverage limited sources of capital in the private capital markets
- To achieve the lowest cost of funds, RIIB borrows in the tax-exempt bank and bond markets
- RIIB pools small transactions together to achieve the benefits of scale enabling us to obtain a higher credit rating while spreading the fixed costs of financing across a number of borrowers
- By leveraging, 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 (except for C-PACE)

B. Rhode Island Infrastructure Bank – Clean Energy Program Financing

Clean Energy Financing – May 2017

	Municipal	Commercial	Residential
Energy Efficiency - Programs	EBF / CWSRF / DWSRF	C-PACE	In Development
Renewable Energy - Programs	EBF / CWSRF / DWSRF	C-PACE	In Development
Energy Efficiency - Financing	\$9.8MM*	\$0.0MM	TBD
Renewable Energy - Financing	\$7.4MM*	\$1.2MM	TBD

*EBF Only

C. Efficient Buildings Fund (EBF)

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

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 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.

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

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

EBF Round 1 Results

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

EBF Round 1 Transaction Profile

Communities Participating	6
Capital Allocated	\$17.2 MM (57% EE / 43% RE)
Energy Savings: Annual / Lifetime	25 MM / 375 MM kBTU
Percentage Energy Reduction	34.8%
EBF-Financed Renewable Energy Generation	4,000 MWh
Annual Cost Savings (Energy, Operations and Maintenance)	\$2 MM
Lifetime Net Cash Flow (after debt service)	\$20 MM
Jobs Created or Retained	263
Annual electric kwh saved	6,000 MWh

EBF Round 2 Applications

- Received approximately \$28 million in applications
- Anticipating \$20 million of efficiency projects to close financing in Summer 2017
- Initial estimates by CHA on the project applications show annual / lifetime savings of ~15,000 / 221,000 MWh across heating and electricity
- Anticipating \$6 million in renewable energy projects
- Estimated savings compared to baseline energy usage exceeded 25%

Sustainability of the Efficient Buildings Fund

- Seeing customer demand for annual energy efficiency investment running around \$20 MM per year
 - RI Dept. of Education school facility audits identified \$480mm of energy efficiency investments and \$247mm of renewable energy investments
- Seeking \$5 MM annually to support energy efficiency in public buildings
- The EBF program does not have a recurring source of capital
- The EBF program has been established to be self-capitalizing over time

D. Technical Assistance

Municipal Technical Assistance

- RIIB provides various technical assistance services outside of financing to help public entities identify their clean energy opportunities
- Provides an engineering consultant to work with public entities to review their energy portfolio and recommend a strategy to invest in energy efficiency projects
- Provides technical assistance to OER in EBF project application review and funding disbursement
- Partners with the US Department of Energy and their Wastewater Accelerator to facilitate better energy management approaches at wastewater treatment facilities

E. Commercial PACE

C-PACE – What is it?

New way to finance energy efficiency and renewables in commercial buildings

- 100% financing with no out-of-pocket expenses
- Long term – up to 25 years
- Cash flow positive projects
- Seamlessly combines financing with state, utility and tax incentives
- No personal guarantees
- C-PACE financing is transferable upon sale of the property

C-PACE Benefits to Building Owners

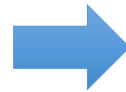
C-PACE enables building owners to meet investments needs who often lack:

- Capital budget to cover upfront costs
 - ✓ PACE requires no owner out of pocket expenses
- Sufficient credit quality for traditional financing
 - ✓ PACE underwriting is based on the property's financial health
- Ability to increase operating expenses
 - ✓ PACE financed projects are structured to generate immediate positive cash flow

C-PACE Promotes Installation of Comprehensive Projects

Old Way

Owner self-funded, short-term
payback focused

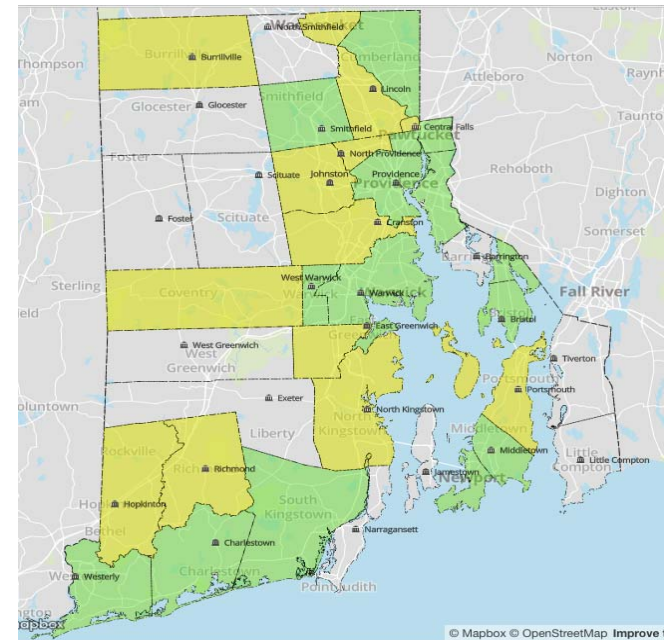


New Way

3rd party, long-term financed,
cash flow focused

Commercial PACE – Progress in RI

- C-PACE launched in May 2016
- First two projects closed in March 2017
- New construction pilot program launched in 2017
- 30 qualified EE & RE vendors
- 3 qualified lenders



- 14 municipalities have opted-in, 13 in-discussion

C-PACE New Construction Leads with Energy Efficiency

- C-PACE New Construction financing provides an incentive for the construction of more efficient buildings which reduce operational costs

"As Designed" Performance Exceedance above Energy Code	15%	20%	25%	30%
C-PACE Eligible Finance Amount as % of Total Eligible Construction Cost*	12.5%	15%	17.5%	20%

C-PACE Activity

- 107 active opportunities in pipeline
 - 40% have energy efficiency components to their project
- Long Term Care Initiative
 - Initial results show success, leading with energy efficiency opportunity
 - Actively engaged with four properties
 - Expecting first Long Term Care Facility, energy efficiency-only project to close in July 2017
 - Health Concepts, owners of 12 facilities actively engaged on energy efficiency
 - Comprehensive projects
- Lighting project moving forward with short-term C-PACE financing, didn't qualify for OBR
- Q2 / Q3 RI C-PACE actively taking a market sector project development approach in new markets

C-PACE Long-Term Care

- Four facility audits completed and currently engaging with Health Concepts, a owner that oversees twelve facilities
- On target to close two C-PACE projects in Q3 2017
- Early results show projects ranging from \$1M - \$2M
 - HVAC improvements and controls
 - Building envelop improvements, windows and roof enhancement w/solar
 - Lighting
 - Boiler replacement

F. Residential Financing Strategy

Residential Program Development

- Reviewing residential clean energy financing program opportunities for Rhode Island
 - Approximately 335,000 single family homes with a median home value of \$230,000
 - Average residential clean energy improvement projects range from \$5,000 to \$25,000
- Working closely with Dunskey Consulting, Rhode Island Housing and the EERMC to understand the landscape of financing programs nationwide
- Actively researching a single family residential financing program
 - Unsecured loan product: available for loans with 5 – 20 year terms
 - Secured loan product: R-PACE
- Reviewing unsecured loan product modeled after CTGB's Smart-E loan program

G. Contact Information

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