



STATE OF RHODE ISLAND
**OFFICE OF
ENERGY RESOURCES**



Efficient Buildings Fund Technical Session

December 2, 2015



Background

- Rhode Island's economy is struggling
 - Rhode Island lost 40,000 jobs during the recession; has gained less than 30,000 back
 - Of the 11,000 construction jobs lost, RI has gained back fewer than 5,000
- Rhode Island's energy costs among the nation's highest (Aug 2015)
 - Commercial electricity price is 32% above the national average
 - Residential electricity price 46% above national average
 - Municipalities spend more than \$50 million annually on electricity
- Many opportunities to invest in energy efficiency unaddressed
 - National Grid retrofit programs reach many customers, but are limited in scale
 - Deep energy retrofits for large public and private buildings not adequately addressed
 - RI eligible for millions of dollars of federal funds for energy efficiency that have gone un-used

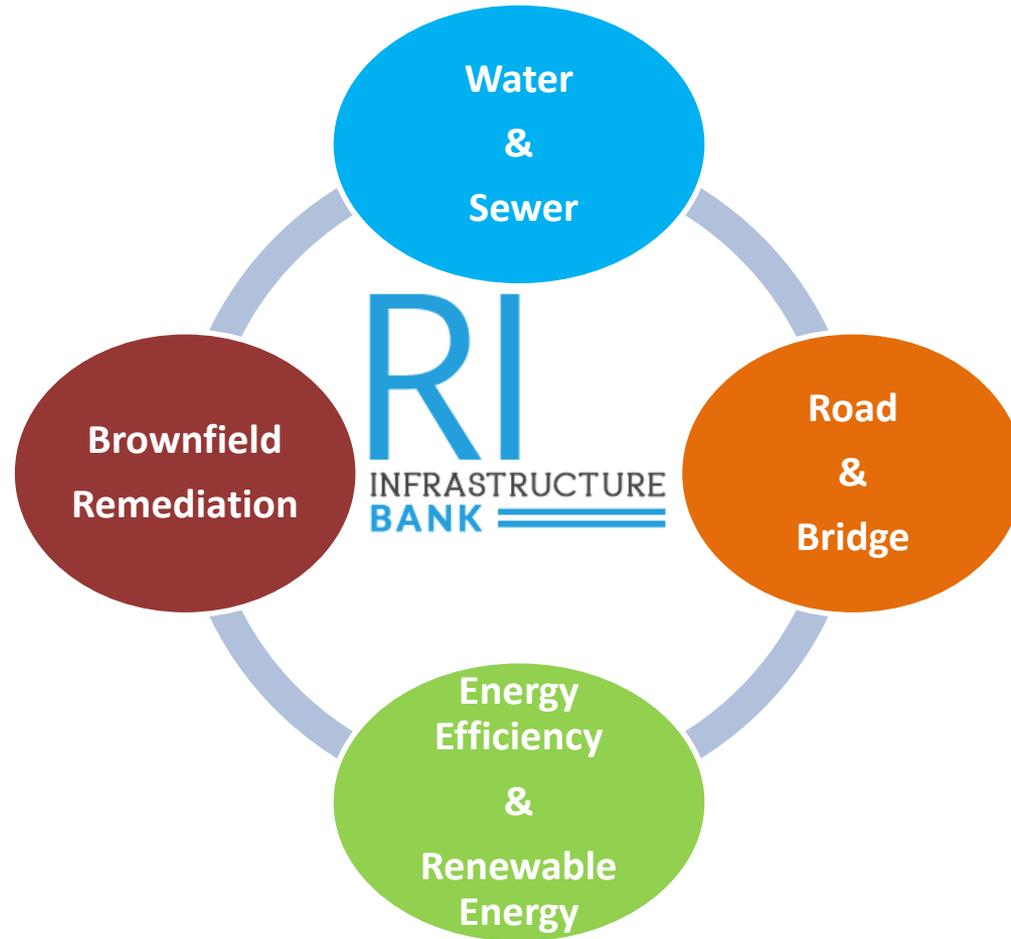


Opportunity

- The Rhode Island Infrastructure Bank (RIIB) will make our state more economically competitive, improve energy efficiency, and put Rhode Islanders back to work.
- As the central hub for existing and new green infrastructure financing initiatives, the RIIB will focus on energy efficiency and renewable energy projects that will save money for businesses, residents, and municipalities on their energy bills.
- The Efficient Buildings Fund, which will use innovative financing methods to fund tens of millions of dollars' worth of deep energy retrofit projects, will help public buildings save money and reduce carbon emissions.



RI Infrastructure Bank

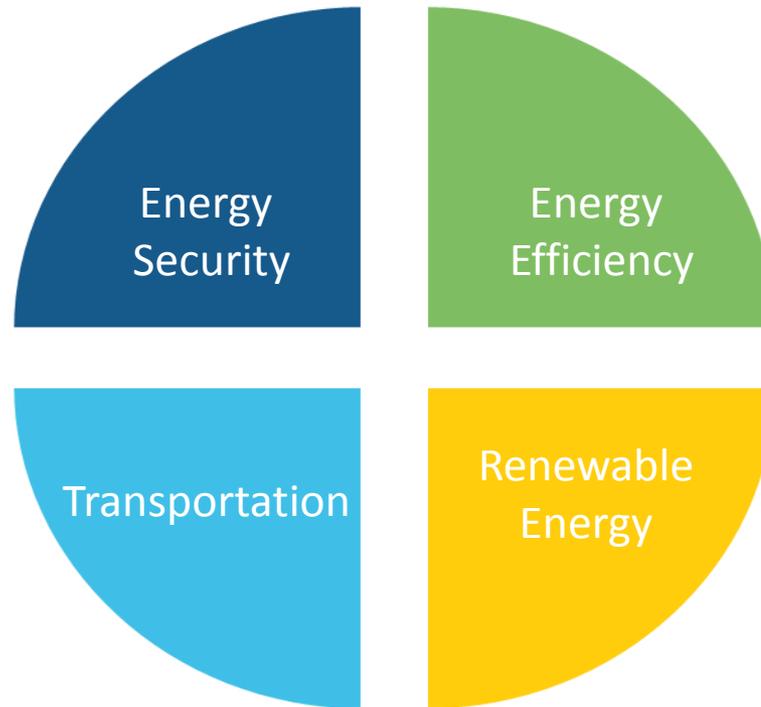


Provided over \$1.4 billion in low-cost loans to municipalities for environmental infrastructure



RI Office of Energy Resources

The OER is the lead state agency on energy policy and programs



*Our mission is to lead Rhode Island to a secure, cost-effective,
and sustainable energy future*



Progress in Energy

- Clean Energy Industry Report
 - 9,832 clean energy jobs, 1,295 businesses
 - Companies expect to add 1,600 new workers in 2016
- RI ranks #4 in the country for energy efficiency
- RI Public Energy Partnership resulted in 120+ public sector EE projects at ~24% energy savings
- State agencies working together to drive deep energy savings



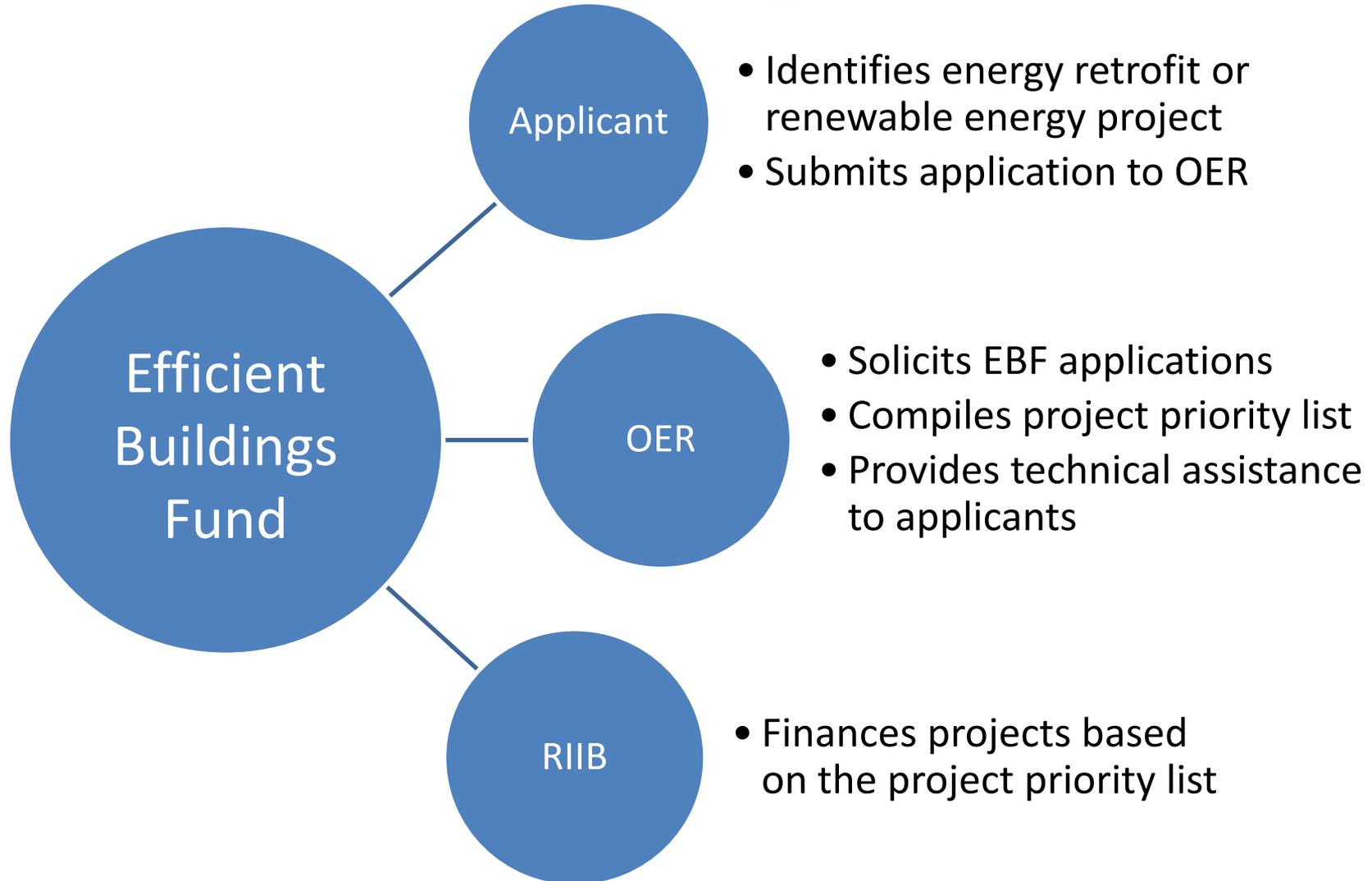
Efficient Buildings Fund (EBF)

- Public building energy efficiency and renewable energy revolving loan program
- Approximately \$25 million in capital available in first round
- Eligible entities include municipalities, school districts and quasi-governmental entities that own their buildings
- Promoting projects that result in deep energy savings (20%+) or renewable energy generation





Efficient Buildings Fund (EBF)





Key Dates

- 12/2 – Application period opens
- 1/22 – Applications due to OER
- 2/5 – Project Priority List posted for comment
- 2/15 – Project Priority List given to RIIB
- 2/16 – Application for financing opens
- 3/1 – RIIB board gives preliminary approval
- **3/1 to 4/1 – Town council resolutions (if needed)**
- 4/18 – RIIB board gives final approval
- June 2016 – Financing closes



Project Assessments

Efficiency Projects

- An energy audit is required for all efficiency applications
- Scope of audit needed will vary, but many will need investment grade audits
- Free energy audits are available on a first-come, first-served basis
- To schedule, contact Jerry.Drummond@nationalgrid.com ASAP
- Entities not served by National Grid will be assisted by OER

Renewable Energy Projects

- Select a licensed installer - www.energy.ri.gov/renewable/REP/
- OR
- Issue a RFP bid for an installer
 - Installer will provide site assessment and project proposal at no charge
 - Turnkey contract not required for the EBF application



Application Process

1/22 Applications due to OER

2/5 OER scores and ranks all complete proposals and posts for comment

2/12 Comments due to OER

2/15 OER publishes final PPL on its website

2/16 Financing application to RIIB opens



Eligible Projects

Energy Efficiency

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





Eligible Projects

Renewable Energy



- ***Solar photovoltaic:*** Electric (PV) projects and battery back-up systems are also eligible
- ***Wind:*** Systems 100kW or greater with a direct drive nacelle are eligible



Required Information

All Applications

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

Energy Efficiency Applications

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

Renewable Energy Applications

- Documentation of ROI and simple payback
- Specifications of equipment to be used
- One-line electrical drawing
- Project proposal from developer

*We will only score
and rank **COMPLETE**
applications!*



Evaluation Criteria

Energy Efficiency Projects

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

Renewable Energy Projects

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

All Applications

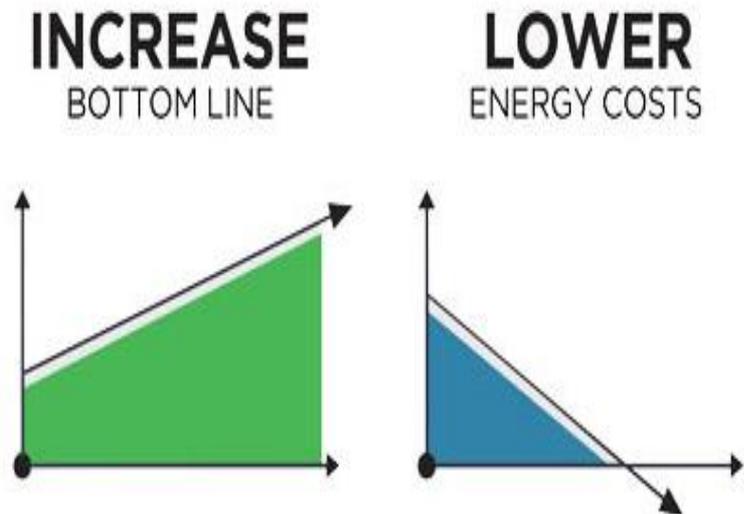
- Green initiatives
 - Baseline energy consumption
 - Strategic energy management plan
- Readiness to proceed
 - Commence construction within 90 days of loan closing
- Application quality & project strength

Additional Criteria

- Distressed community status
- Energy efficiency and renewable energy projects

EBF Financing Considerations

- RIIB will provide financial assistance to those projects listed on the PPL established by OER
- Municipal lease obligation
 - Security for loan - Sources of repayment include: Appropriations pledge, projected project energy savings, general revenues of other dedicated sources of revenue
- Technical energy audit may be required for financing
- Annual energy savings > project cost
- Long-term financing available (up to 20 yrs)
- Application period for financing opens 2/16





Energy Efficiency Project Example: Barrington Town Hall

MEASURE	% ENERGY SAVED	COST	GRID INCENTIVE	\$ SAVINGS (Energy + O&M)
Boiler	5%	\$125,000	\$10,000	\$6,000
LED Lighting	25%	\$50,000	\$12,500	\$6,500
Energy Mgt System	6%	\$75,000	\$10,000	\$7,000
Insulation & Air Sealing	2%	\$10,000	\$0	\$1,000
Motors & VFD	5%	\$25,000	\$4,000	\$2,500
TOTAL	24%	\$285,000	\$36,500	\$23,000



Principal \$248,500
 Loan Term 15 years
 Interest Rate 4%
 Annual Savings \$23,000
 Annual Debt Service (\$22,350)
Annual Cashflow \$650

Reporting Requirements

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

Financial reporting throughout the life of the loan



ENERGY AUDIT REMINDER!

- Energy audits are required with all EE project applications
- Free energy audits are available on a first-come, first-served basis
 - Contact Jerry Drummond ASAP to schedule at jerry.drummond@nationalgrid.com
 - Entities not served by National Grid will be assisted by OER



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Reference Documents

For additional information, refer to the following documents, on www.energy.ri.gov or www.riinfrastructurebank.com

- Rules and Regulations for the Efficient Buildings Fund Project Priority List
- Efficient Buildings Fund Policies and Procedures
- Frequently Asked Questions
- Guidance on Energy Usage Baseline and Energy Management Plans
- Energy Efficiency Project Summary Form

Contact Information

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