

PRESENTATION FOR



Rhode Island Energy Efficiency  
Resource Management Council  
Executive Committee

# END OF CONTRACT REPORT DUNSKY RETAINER FINANCING ASSISTANCE

*March 15, 2018*





# OVERVIEW

Dunsky's work for the EERMC began in 2014, focusing on supporting three key directives:

- 1) Expanding program reach and coverage (fill gaps)*
- 2) Reduce costs to rate-payers*
- 3) Support wider and accelerated adoption of efficient and clean energy technology*

***PART 1:***  
***EE FINANCING***  
***WORK TO DATE***



- **2014-15 White Paper:** Assessed the use of financing and prepared gap analysis for financing opportunities in RI
  - ▶ **Missed markets:** Solar, Multi-family, Deep savings, Low-Income
  - ▶ **Supported CWFA expansion to establish RIIB**
  
- **2016:** Input into RIIB programs, annual efficiency plan and National Grid process evaluations (HEAT + OBR)
  
- **2017-18:** Ongoing Challenges and Opportunities
  - ▶ Provide feedback on **Annual and 3-Year Plans**, and reporting frameworks
  - ▶ **Meetings and Input:** May PUC Meeting, EERMC, Executive, National Grid, RIIB, Infrastructure Forum
  - ▶ Provide input on **next wave** of financing: Residential, MF, OBR Pilots





**1. Expand coverage and access:**

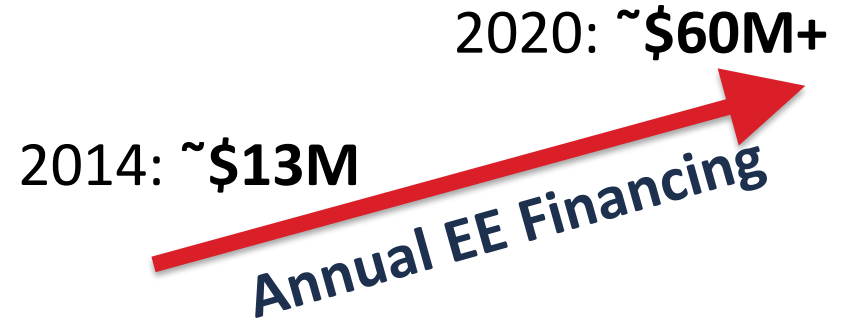
Aim to reach new target markets and project types

**2. Reduce costs to ratepayers:**

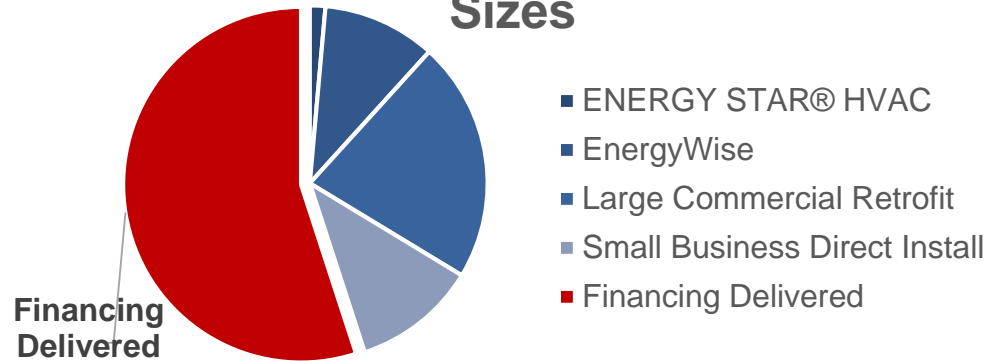
Leverage private capital and integrate delivery with incentives

**3. Accelerate adoption (deeper savings):**

Appropriate funding allocations, evaluations, targets and reporting



2020 Financing/Incentive Program Sizes





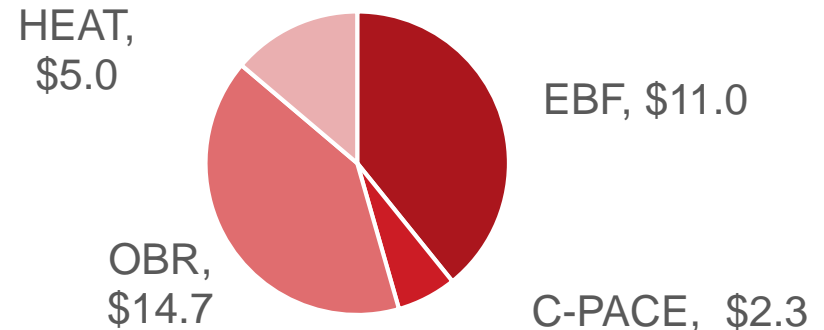
## National Grid

- **Residential:** HEAT Loan – 0% Interest up to 7 years
- **Non-Residential:** On-Bill Repayment (OBR) – 0% Interest up to 5 years

## RIIB\*

- **Efficient Buildings Fund:** Municipal, Low-interest, Long Term
- **C-PACE:** Property Assessed, Long Term

2017 Estimated  
Financing Volume (\$33M total)



*\*Programs also include renewable energy*

# THE RIIB OPPORTUNITY



## ■ Encapsulates three key opportunities that are the key to RIIB providing value

- ▶ Leveraging Private Capital
- ▶ Underwriting capabilities to expand markets (long term lending)
- ▶ Demonstrate new markets for financing (Proof of concept)

## ■ RIIB- National Grid are setting an example of successful cooperation

- ▶ Programs are highly complementary
- ▶ National Grid Financing Strengths (Accessing EE Opportunities)
- ▶ RIIB Financing Strengths (Long-Term Lending and Capitalization)



<i>Expand Coverage and Access</i>	✓
<i>Reduce Ratepayer Costs</i>	✓
<i>Accelerate Adoption (deeper savings)</i>	✓



***PART 2:***  
**THE DIRECTION**  
**AHEAD**



- **Coverage:** How well is the program covering the market?
  - ▶ Expanded access to financing
  - ▶ Consider equity and overall coverage
  
- **Ratepayer Costs:** What was the cost to ratepayers?
  - ▶ Direct program costs
  - ▶ Financing (credit) risks and capital invested
  
- **Acceleration:** Did the financing create new savings?
  - ▶ Increased overall volume of financing/incentive programs
  - ▶ Larger projects, more projects, new measures
  - ▶ Increased lifetime savings (deeper savings)

# RESIDENTIAL FINANCING



- HEAT Loan encourages weatherization project size increase of over 25%
  - ▶ Satisfaction with program is high and financing appears to address a key barrier for weatherization / HVAC upgrades
  - ▶ Cost of 0% financing to ratepayers is significant – almost equals cost of additional insulation (over \$1,000/loan)
  - ▶ Unclear how much demand/access 0% financing supports

■ Further evaluation needed to determine program impacts

■ Possible update to EnergyWise program may impact HEAT Loan (volume dropping)

<i>Expand Coverage and Access</i>	-
<i>Reduce Ratepayer Costs</i>	X
<i>Accelerate Adoption (deeper savings)</i>	✓



- Connecticut Green Bank works with local lenders to offer “Smart-E Loans” for residential clean energy improvements.

Smart-E Loans



- ▶ **Expanded Access:** Through Loan Loss Reserve (LLR) and customer acquisition, includes non-energy related measures
- ▶ **Longer terms:** Market interest rates for up to 12 years
- ▶ **Reduced rates:** Private lenders agree to “not-to-exceed” rates
- ▶ **Volume:** at \$4M per year, Smart-E struggles to compete with 0% financing

- **Cost Savings:** Dunsky estimated that LLR model costs about 1/3 of HEAT Loan (5% buy-down compared to LLR at 2% defaults)

<i>Expand Coverage and Access</i>	✓
<i>Reduce Ratepayer Costs</i>	✓
<i>Accelerate Adoption (deeper savings)</i>	✓



- Capital Good Fund's DoubleGreen Loan expands access to National Grid's Heat Loan program to moderate-to-middle income homeowners
  - ▶ Interest free loans ranging from \$500 to \$10,000 for weatherization and other energy efficiency measures; terms of 2 to 7 years
- 2018 EE Plan includes new \$500,000 revolving loan opportunity for the Capital Good Fund
- Expects to serve nearly 3X more moderate income customers annually

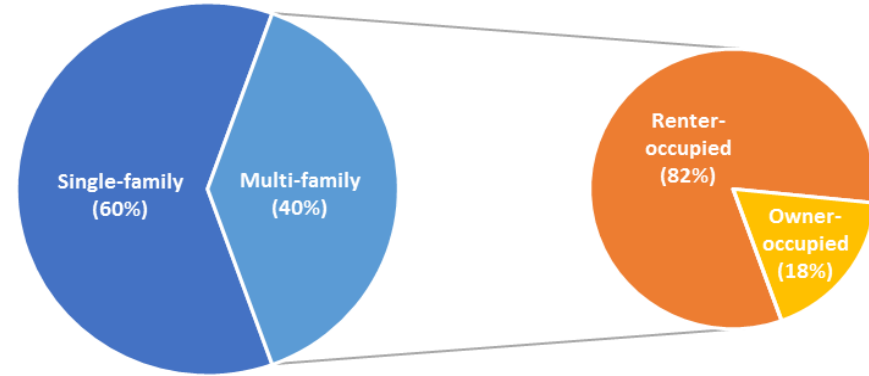
<i>Expand Coverage and Access</i>	✓
<i>Reduce Ratepayer Costs</i>	-
<i>Accelerate Adoption (deeper savings)</i>	-





■ Multi-family a significant and important segment of the residential market in RI

- ▶ Primarily rental units and Low to Medium Income (LMI) customers
- ▶ High percentage of rental units have in-suite metering



■ **Need & Opportunity:**

- ▶ Sufficient LMI funding and support (link to Capital Good Fund + other)
- ▶ Different approaches for in-suite vs. master-metered
- ▶ Building owner engagement

<i>Expand Coverage and Access</i>	✓
<i>Reduce Ratepayer Costs</i>	-
<i>Accelerate Adoption (deeper savings)</i>	-

# COMMERCIAL AND INDUSTRIAL (C&I) FINANCING



- Dunsky worked with RIIB and National Grid to establish an Apples-to-Apples comparison of revolving fund impacts/utilization
- Attempts to establish regular tracking of revolving fund availability, usage and impacts.
- Includes indicators specific to financing benefits (e.g. lifetime savings)
- 2017 Year-End results provided by both RIIG and N.Grid. Some challenges remain to arrive at full and consistent reporting.



Revolving Fund Reporting Template

Balance Sheet	Program Impacts
Funds injected	Participation
Fund available	Incentive costs
Loans paid	Annual Saving
Repayments	Lifetime Savings
Defaults	Cost Savings

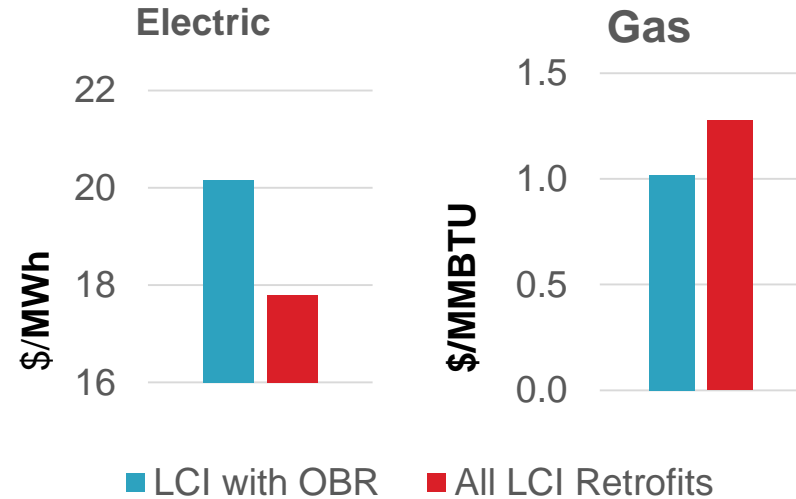
# ON BILL REPAYMENT (OBR)



- 100% Ratepayer supported revolving fund
  - ▶ Customers like OBR, but it is used predominantly in the Public/Institutional Sector
  - ▶ Lighting is by-far the majority of the electric OBR (Over 90% of electric projects)
  - ▶ In 2017 OBR appears to support largest projects

■ **Key Challenge:** As National Grid ramps up OBR volume, questions around cost and impact need to be given closer scrutiny in the evaluation process.

C&I Retrofit Incentive Costs

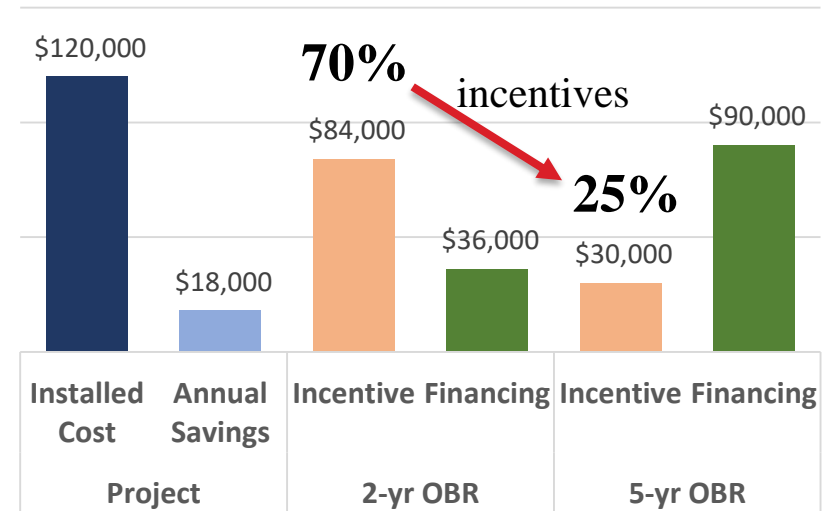


Expand Coverage and Access	✓
Reduce Ratepayer Costs	✗
Accelerate Adoption (deeper savings)	■



1. **Reduce Incentive Costs:** Apply cashflow-based analysis to adjust incentives and OBR balance for projects with short paybacks.
2. **Private Capital:** Include private financing offers alongside OBR (longer terms with interest rate buy downs)
3. **Financing Option Comparison Tool:** Compare interest rates, terms, cashflow impacts, to help customers pick the right option for them

Hypothetical Lighting Project



Expand Coverage and Access	-
Reduce Ratepayer Costs	✓ X
Accelerate Adoption (deeper savings)	✓

# SAMPLE FINANCING PROPOSAL



**Indicative Financial Quotation**  
**Prepared For: 123 Main St**

**ABC Efficient Lighting Corp**

Project Summary		\$ Financing Metrics	
<p>ABC Efficient Lighting Corp has engaged HBC Energy Capital to procure low cost financing for your project. The figures on this sheet explain the payments and savings calculated specifically for your project. Choose the term that best suits your needs and HBC Energy Capital will reach out with a 1-page application for financing approval.</p> <p>Please note: indicative quotation amounts are subject to credit review; interest rates and final payment amounts may vary.</p>			
<b>Project Cost</b>			\$35,000
<b>Incentive</b>			\$8,700
<b>Net Financed</b>			\$26,300
<b>Estimated Interest Rate</b>			5.90%

\$ Project Savings Metrics		
<b>Annual Savings</b>	\$8,750	<i>Energy and Maintenance Cost Savings</i>
<b>Ten Year Savings</b>	\$87,500	<i>Energy and Maintenance Cost Savings</i>
<b>6 Month Cost of Delay</b>	\$4,375	<i>Last Cash Flow From Waiting 6 Months to Install Project</i>

\$ Project Financing Estimates*			
Term	Monthly Savings	Monthly Payment	Net Monthly Cash Flow
3 years	\$729	\$799	-\$70
4 years	\$729	\$616	\$113
5 years	\$729	\$507	\$222

Next Steps	
<input type="checkbox"/> <b>Step 1</b>	Review indicative quote
<input type="checkbox"/> <b>Step 2</b>	Request a 1-2 page application for financing with an HBC Energy Capital Finance Partner. Return application to info@HBCEnergyCapital.com
<input type="checkbox"/> <b>Step 3</b>	Receive notification of financing approval and begin equipment installation

*Monthly payment estimate is based on financing the total project cost minus incentives (requires assignment of incentive to finance company). Longer terms may be available to some borrowers*

**Questions? Call HBC Energy Capital (720) 420-7648 to discuss your financing options today.**





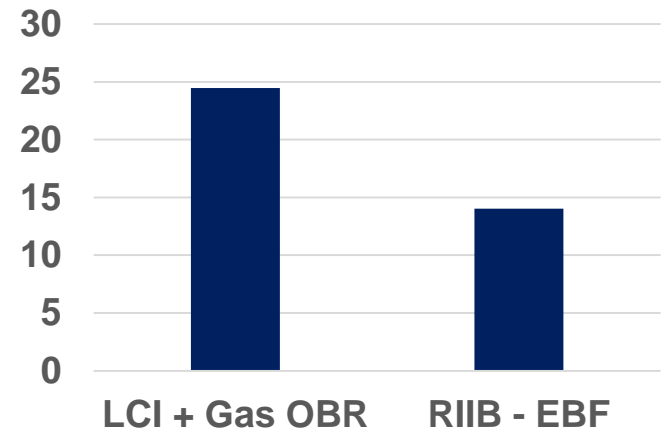
■ Expanding financing options for municipal facilities

- ▶ Leveraging ratepayer funds through bond financing
- ▶ Long term financing (15 years) fit with deeper savings projects
- ▶ Reduced interest rates relative to market

■ EBF is still finding its ideal target annual efficiency project volume

- ▶ Round 1 (2016): \$11M
- ▶ Round 2 (2017): \$4.7M
- ▶ *Predominantly street lighting by cost, but other comprehensive opportunities are emerging*

Investments Cost (SBC \$ / lifetime MMBTU)



Expand Coverage and Access	✓
Reduce Ratepayer Costs	✓
Accelerate Adoption (deeper savings)	■



## ■ C-PACE offers long term financing to commercial properties for efficiency and renewables

- ▶ Streamlined underwriting and in many cases does not impact future borrowing capacity (opens market for SB)
- ▶ 100% private capital – no additional cost to ratepayers
- ▶ C-PACE long term financing (20 years) ideal fit for deep retrofits

## ■ C-PACE is struggling to finance efficiency projects in RI

- ▶ Deeper integration needed at N.Grid
- ▶ Dunsky will provide some best-practices guidance in final report

<i>Expand Coverage and Access</i>	✓
<i>Reduce Ratepayer Costs</i>	✓
<i>Accelerate Adoption (deeper savings)</i>	✓

# WRAP-UP AND NEXT STEPS



- **Progress is being made toward the three financing objectives:**
  - ▶ **Coverage:** New programs, expanded access (C-PACE, EBF, Smart-E)
  - ▶ **Reduce Ratepayer Costs:** In some cases, but diligence is required
  - ▶ **Accelerate Adoption:** New and improved tools and approaches
  
- **Current 3-year plan sets a direction for needed next steps:**
  - ▶ **Evaluations:** Holistic evaluation of the HEAT Loan and C&I OBR programs to prepare for the next phase of their evolution, including cost-effectiveness and net impacts analysis
  - ▶ **New Tools:** Test and apply new/expanded tools (e.g. Smart-E Loans; OBR Pilots, new ways to leverage private capital)
  - ▶ **Reporting:** Maintain revolving fund reporting template, to track and compare program impacts and balance sheets

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