Energy Efficiency Financing
Background Information for NH PUC Financing and Funding Work Group

February 21, 2018
Financing - Purpose

- A tool to encourage and enable adoption of energy efficiency measures by customers and/or to install more measures than available cash will allow.
- Removes barriers to customer adoption of energy efficiency measures, helping to meet participation and energy savings goals.
- Lays the groundwork for and encourages market transformation.
Financing Mechanisms Currently Used in NH

- Mechanisms
  - Third Party
  - On-bill
  - Smart Start

- Segments
  - Residential
  - Municipal
  - C&I
Financing Mechanisms Currently Used in NH Residential Third Party Financing

- Program Administrator works with Third Party lending institution to offer loans for qualified measures.
  - Capital Source – Lending Institution
  - Qualification – Lending Institution Criteria
  - Interest Rate – Varies, market rate or bought down to desired level with EE funds
  - Repayment – Unsecured loan, term based on loan amount
- Lending experts have capacity and process to service large volumes
- Proven model for utilities scaling up with EE
Financing Mechanisms Currently Used in NH
On-Bill Financing

- Utility offers loans for qualified measures, which customers pay back on their monthly bill
  - Capital Source – SBC, LDAC, or RGGI Funds
  - Qualification – Utility Bill History and/or Credit Score
  - Interest Rate – 0%
  - Repayment – Attached to account, term based on loan amount. Must be paid up if customer moves.
Financing Mechanisms Currently Used in NH Smart Start

- On-bill repayment tied to the meter for eligible measures
  - Capital Source – EE Funds
  - Qualification – Utility Bill History
  - Interest Rate – 0% (Eversource), 3% (NHEC)
  - Repayment – Attached to meter, term based on loan amount or scaled with projected EE savings.
Residential – Current Offerings
Third Party and On-Bill Financing

• Third Party
  • Available for qualified measures
  • Five In-State Lending Partners
  • Buy down to 2% interest
  • Up to $15,000 over 7 years

• On-Bill
  • $2,000 or less, for qualified measures
    • NHEC and Unitil increasing to $4,000
  • 0% interest, 2 year term
Residential Loans Over Time

Number of Loans by Type

<table>
<thead>
<tr>
<th>Year</th>
<th>3-rd Party</th>
<th>On-Bill BetterBuildings</th>
<th>On-Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>74</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>106</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>47</td>
<td>152</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>58</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>42</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

- **On-Bill**: Up to $7,500
- **BB**: Up to $20,000

**BB: Ends On-Bill**

Capital Constraints

**Mid-Year:** 3rd Party begins, on-bill reduces to $2,000

**All Years:** Home Performance Program meets energy savings goals
Residential – Eligible Measures make a difference

**Average Loan Amount**

- **On-Bill**
- **On-Bill BetterBuildings**
- **3-rd Party Electric**
- **3-rd Party Gas**

BB: Includes Pellet Boilers, heating systems, siding, roofing and windows

Natural Gas Loans include heating systems

- 2012: $3,482
- 2013: $3,789
- 2014: $4,592
- 2015: $5,871
- 2016: $4,916
- 2017: $5,220

- 2012: $5,240
- 2013: $6,617
- 2014: $4,592
- 2015: $5,392
- 2016: $7,167
- 2017: $7,444
Municipal Current Offerings

- Smart Start Program
  - Eversource and NHEC offering since 2002
  - 0% (Eversource, with a reduction in rebate), 3% NHEC
  - Term depends on energy savings and loan amount

- On-Bill
  - Unitil and Liberty Electric 0%
  - Term depends on loan amount
Municipal Loans over Time

Number of Municipal Loans by Utility

<table>
<thead>
<tr>
<th>Year</th>
<th>Eversource Smart Start</th>
<th>NHEC Smart Start</th>
<th>Liberty On bill</th>
<th>Unitil On bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>4</td>
<td>1</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>2013</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>2014</td>
<td>1</td>
<td>3</td>
<td>53</td>
<td>1</td>
</tr>
<tr>
<td>2015</td>
<td>2</td>
<td>2</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>2016</td>
<td>1</td>
<td>4</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>2017</td>
<td>2</td>
<td>2</td>
<td>22</td>
<td>1</td>
</tr>
</tbody>
</table>
### Smart Start Loan Amounts

#### Smart Start Average Loan by Utility

<table>
<thead>
<tr>
<th>Year</th>
<th>Eversource</th>
<th>NHEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$23,500</td>
<td>$48,401</td>
</tr>
<tr>
<td>2013</td>
<td>$16,414</td>
<td>$53,580</td>
</tr>
<tr>
<td>2014</td>
<td>$20,463</td>
<td>$27,441</td>
</tr>
<tr>
<td>2015</td>
<td>$12,480</td>
<td>$28,150</td>
</tr>
<tr>
<td>2016</td>
<td>$18,679</td>
<td>$49,994</td>
</tr>
<tr>
<td>2017</td>
<td>$16,449</td>
<td>$66,755</td>
</tr>
</tbody>
</table>

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**Note:** The chart shows the average loan amounts for the years 2012 to 2017, comparing Eversource and NHEC. The data indicates a trend of increasing loan amounts from 2012 to 2017 for both utilities, with Eversource generally having higher average loan amounts than NHEC.
Commercial Loans
Current Offerings

- Smart Start Program
  - NHEC 3.5%
  - Term depends on energy savings and loan amount

- On-Bill
  - Unitil and Liberty Electric
  - 0%
  - Term depends on loan amount
C&I Loans over Time

C&I Loans by Utility

- 2012: NHEC Smart Start = 3, Liberty On bill = 1, Unitil On bill = 1
- 2013: NHEC Smart Start = 3, Liberty On bill = 28, Unitil On bill = 1
- 2014: NHEC Smart Start = 3, Liberty On bill = 6, Unitil On bill = 4
- 2015: NHEC Smart Start = 3, Liberty On bill = 10, Unitil On bill = 1
- 2016: NHEC Smart Start = 1, Liberty On bill = 2, Unitil On bill = 1
- 2017: NHEC Smart Start = 1, Liberty On bill = 1, Unitil On bill = 1

Legend:
- Blue: NHEC Smart Start
- Cyan: Liberty On bill
- Green: Unitil On bill
C&I Loan Amounts

Average Loan Amount

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$21,625.73</td>
</tr>
<tr>
<td>2013</td>
<td>$19,192.50</td>
</tr>
<tr>
<td>2014</td>
<td>$34,144.12</td>
</tr>
<tr>
<td>2015</td>
<td>$7,483.82</td>
</tr>
<tr>
<td>2016</td>
<td>$30,605.10</td>
</tr>
<tr>
<td>2017</td>
<td>$30,605.10</td>
</tr>
</tbody>
</table>

Average Loan
Opportunities

- Residential
  - Moderate Income Offering
  - NHEC and Unitil – increasing on-bill finance amount
  - Marketing and Awareness, lessons learned and opportunities
- Commercial
  - Investigate additional options for small business
- EM&V
  - Market Assessment Study
  - HPwES Process Evaluation