NH Energy Efficiency Programs and Policy
NH Saves Program Oversight

- Run jointly by NH Utilities
- Oversight from NH Public Utilities Commission
- Stakeholder Input
- Accountability and high standards
- Multiple funding sources with different policy impacts.
Funding Sources

- Forward Capacity Market (FCM)
- Regional Greenhouse Gas Initiative (RGGI)
- Gas Local Distribution Adjustment Clause (LDAC)
- System Benefits Charge (SBC)
Why is investing in EE a good policy choice for NH?

Saves Money
- $1.9 B saved since inception
- 3.66 Cents vrs. 16.3 Cents
- Benefits all customers

Good for the Environment
- Emissions reductions – 144,406 Cars off the road for 2017 program alone

Enhances Quality of Life
- Comfort, Health and Safety
Getting it done in NH

Businesses do energy efficient work in NH:

20+ Technical Assistance (auditors)

20+ Weatherization Contractors

333+ Homebuilders

143+ Heating & Cooling Installers

600+ Energy Service Companies (including electricians & distributors)

150+ Retailers

1,200+
Opportunities for the Future

Energy Efficiency Resource Standard:

“A policy that sets specific targets or goals for energy savings, which utility companies must meet.”

NH PUC Order No. 25,932
NH Energy Savings as % of 2014 Sales
Electric

- 2016: 0.5%
- 2017: 0.6%
- 2018: 0.8%
- 2019: 1.0%
- 2020: 1.3%

Energy Efficiency Resource Standard
NH Energy Savings as % of 2014 Sales

Natural Gas

<table>
<thead>
<tr>
<th>Year</th>
<th>Energy Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.65%</td>
</tr>
<tr>
<td>2017</td>
<td>0.66%</td>
</tr>
<tr>
<td>2018</td>
<td>0.70%</td>
</tr>
<tr>
<td>2019</td>
<td>0.75%</td>
</tr>
<tr>
<td>2020</td>
<td>0.80%</td>
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Energy Efficiency Resource Standard
Three-Year Plan

• Process for developing the 2018-2020 Energy Efficiency Program Plan.
• Stakeholder Review and Input
• Increased Evaluation, Measurement and Verification
• Submission and Final Review by PUC – Fall 2017
• Continued Refinement and Improvement
Programs for **ALL** Customers
Residential Customers

- New Construction/Renovations
- Existing Homes
- Lighting and Appliances
- Refrigerator Recycling
Business & Municipal Customers

- **Small & Large Business**
  - Assist business customers in bridging the financial challenges of installing energy efficient equipment, including fuel neutral measures

- **Municipal**
  - Targets municipal customers and towns served by the five NH municipal utilities
  - Includes technical assistance services
What can we do to help?

- Audits
- Plan reviews
- Education
- Incentives
Energy Incentives

Electric and gas utilities offer rebates for:

- Lighting
- Heating and cooling
- Kitchen equipment
- Compressed Air
- Motors
- Variable Frequency Drives
- Insulation and air sealing
- Custom projects (almost anything that will save energy cost effectively!)

Municipal, large commercial, and retail/service customers can qualify for thermal projects, regardless of fuel type.
New Equipment

- New buildings
- Replacing of failed equipment
- Remodel/redesign
- Change of use

Rebates are based on incremental cost of using highly efficient equipment.

Design decisions on new buildings last a very long time, so building in energy efficiency is key.
Retrofit projects

- Working systems
- Could continue business as usual
- Main goal is energy efficiency

Rebates are based on project costs to switch working equipment new efficient equipment.

Good opportunities for financing project costs that are left over after rebates.
Example: Shaker Regional School District

- Three schools and SAU office
- Full LED lighting replacement
- Energy efficient transformers
- Insulation and air sealing
- Heating equipment
Example: Shaker Regional School District

- 287,000 kWh
- 17,000 gallons oil
- 3,679 gallons of propane

Annual savings of approx. $100K

Through a Performance Contract, vendor helped bundle over $200K in utility rebates, plus PUC rebates for pellet boilers, plus financing.
Example: Keene Ice
Example: Keene Ice

- Icemaking equipment
- Insulation
- Lighting
- Dehumidification

Incentive: $68,000
Annual Savings: 200,000 kWh ($25,000/year)
NHSaves.com

- Case studies
- Energy efficiency blog
- Program information
- Utility contacts

SAVE THE PLANET, SAVE @ MUNICIPALITIES
SAVE ENERGY AND USE THE EXTRA RESOURCES TO IMPROVE YOUR TOWN'S ROADS.

SAVE @ MUNICIPALITIES

Benefits
New Equipment & Construction
Energy Profiles

NHSaves helps communities and school districts save energy and money while protecting the environment. This allows municipalities to reapply vital funds for other important needs.

In order to improve the efficiency of existing works, NHSaves offers comprehensive savings for municipal vehicles. These savings offer safety, advice, and incentives to help reduce costs and energy consumption by replacing inefficient equipment with newer, more efficient options.

Cities and towns that are adding new equipment, building a new facility, or conducting a renovation or expansion can qualify for new equipment and construction savings. These savings include incentives and technical assistance to help ensure that your new equipment and buildings are as efficient as possible.

Contact your electric utility provider to learn more about municipal energy efficiency options from NHSaves.

Upcoming Events

Leading HWI's Wastewater Facilities to Energy Efficiency
September 20 @ 8:15 am - 2:30 pm

2016 Northeast Residential Lighting Workshop
September 20 @ 9:30 am - 4:00 pm
Thank You!

Mark Toussaint, CEM
603-634-2301
Mark.Toussaint@Eversource.com

Kate Peters
603-568-1680
Katherine.peters@eversource.com

WWW.NHSaves.com
An ESPC is an agreement between a building owner and an Energy Services Company (ESCO) that identifies, designs, and installs energy related (savings) improvements that pays for the new equipment over time and guarantees their performance.
What is Performance Contracting (ESPC)?

- Guaranteed performance
- Single source responsibility
- Life-cycle versus first cost approach
- Improvements can be made with no impact to taxpayers
- Supported by The State of NH, VT & ME: Title 20a 15915,
Opportunity - Based on average use.

### Historic Utility Consumption for 2015-16

<table>
<thead>
<tr>
<th>Utility</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Electricity</td>
<td>$269,258.00</td>
</tr>
<tr>
<td>Oil/Propane/water</td>
<td>$361,050.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$630,308.00</strong></td>
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</table>

### Potential Opportunity Funded 100% by savings

<table>
<thead>
<tr>
<th>% Annual Savings</th>
<th>savings per Year</th>
<th>Term</th>
<th>Project Potential</th>
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<tbody>
<tr>
<td>15</td>
<td>$94,546.00</td>
<td>15</td>
<td>$1,418,190</td>
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<tr>
<td>20</td>
<td>$126,061.00</td>
<td>15</td>
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<tr>
<td>20</td>
<td>$126,061.00</td>
<td>20</td>
<td>$2,521,220</td>
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</table>
Relationship between Customer and Contractor

**Plans and Specification**
- Public Sector customers must select the “lowest, responsive bid”
- Contractor seeks Change Orders to increase scope and profit margin
- Focus is on getting the job completed for the lowest first cost
- Contractor and Customer in adversarial relationship each focused on their own best interest

**Performance Based Solutions**
- Depending on law, customers can select on qualifications or best value
- No Change Orders
- Focus is on lowest life cycle cost and long term, positive cash flow
- Siemens and Customer are partners focused on getting the best long-term solution that creates the most operational savings for the longest time period
News release: public awareness cont........

The Hillsho-Being School District is excited to be developing a more sustainable learning environment for our children, our local ecosystem, and our planet! Our buildings have already evolved through the installation of energy efficient lighting, mechanical systems, and weatherization, and now we are looking to our school community to implement strategies for reducing our footprint even further.

Sustainability:
Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Improvements will generate
$2.5 million in savings by 2026

Guaranteed savings of up to
$93,458 in the first year

The district will save
115,891 kWh annually

That's like removing
17.2 passenger vehicles
and saving 77 acres of forest

School Administrative Unit
District Energy Policy

#34

We are calling on all employees and students to actively participate in our effort to enjoy the same quality of life and education we have always maintained in our schools.

Set computers to "sleep" when not in use. Turn monitors off when leaving a classroom & turn computers off when leaving for the day.

Keep air flowing around vents so the heating and cooling systems don't have to work as hard to keep you comfortable.

Using a shared coffee maker, microwave, and refrigerator in the teacher's lounge rather than one in each classroom could save $140/year per class! And with the new efficiency improvements, space heaters can go too - saving the district another $200/year per classroom!