

NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

An Overview of Energy Efficiency as a Resource, and New Hampshire's Place in the Region

Presentation by Natalie Treat to the N.H. House Committee on Science, Technology & Energy January 14, 2015

NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

"Accelerating Energy Efficiency"



MISSION

Accelerate the efficient use of energy in the Northeast and Mid-Atlantic Regions

APPROACH

Overcome barriers to efficiency through Collaboration, Education & Advocacy

VISION

Transform the way we think about and use energy in the world around us.



NEEP is one of six Regional Energy Efficiency Organizations (REEOs) designated by the U.S. DOE to support state efficiency policies.

EE: AN UNBEATABLE VALUE PROPOSITION



BENEFITS OF EFFICIENCY:

- Clean, affordable energy
- Economic driver/job creation
- Power system reliability
- Helps meet climate goals
- Protect N.H.'s natural resources

65% of what N.H. spends on energy leaves the region, adding little economic value.

Strong
investments in EE
are reducing the
need for T&D
investments

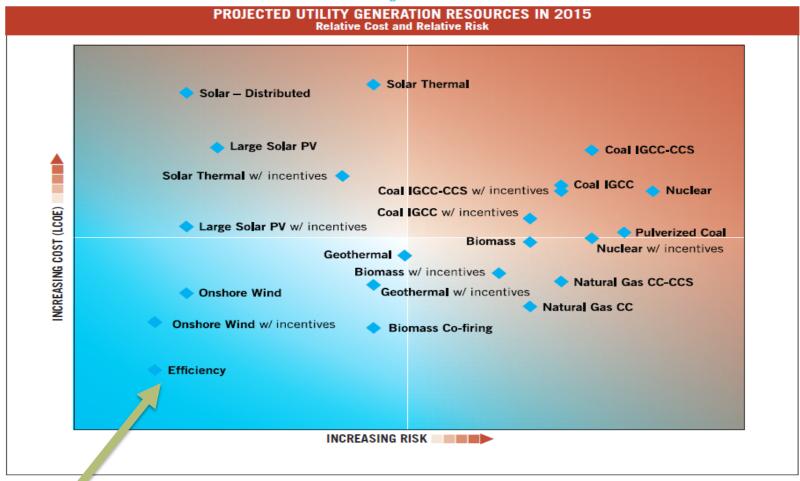
increase competiveness and temper rates

Half a dozen recent studies and reports conclude N.H. should ramp up, create a policy to lock in savings.

ENERGY EFFICIENCY OFFERS SIGNIFICANT BENEFITS





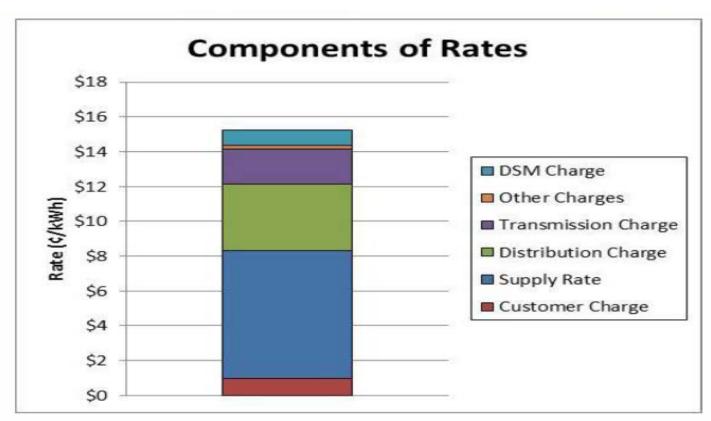


Efficiency is the least-cost, lowest risk energy resource. States & utilities should "buy" EE first.

Savings for Customers Amid Times of High Energy Costs



- ➤ One portion of customer energy costs that state utility commissions <u>can</u> control
- ➤ Energy efficiency helps mitigate supply/fuel costs, transmission charge, and distribution charge



THE REGION AS AN EFFICIENCY LEADER



Aggressive Savings Goals

Strong
Policy
Support for
Efficiency
Programs

Leader in High Efficiency Products & Buildings

Innovative Programs & Policies

THE REGION LEADS IN EE POLICY ... YET N.H. IS FALLING BEHIND



- New Hampshire ranked <u>22nd</u> in the ACEEE 2014 State Energy Efficiency Scorecard, dropping one spot from last year.
- Six of the top ten most efficient states in the nation are in the Northeast / Mid-Atlantic Region.
- Delaware may surpass N.H. in 2015, thanks to passage of strong legislation creating a policy to put efficiency first.





FOUR KEY POLICY ELEMENTS IN LEADING ENERGY EFFICIENCY STATES

- 1. A DEFINED POLICY DIRECTIVE
- 2. SUFFICIENT AND STABLE FUNDING
- 3. STAKEHOLDER BOARD & STATEWIDE COORDINATION
- 4. COMPLEMENTARY POLICES TO LOCK IN SAVINGS

FOUR KEY POLICY ELEMENTS IN LEADING EFFICIENCY STATES



1. A DEFINED POLICY DIRECTIVE

- Nine states in the region have legislative directives to:
 - Capture "all cost-effective energy efficiency"
 (MA, CT, ME, RI, VT, and now DE) or,
 - Meet defined energy efficiency savings targets, i.e. EE Portfolio Standard (MD, PA, NY)

NH had U.S. DOE \$ to study an EERS policy and implement it. Still waiting...

2. SUFFICIENT AND STABLE FUNDING

- Most states in region ramping up funding, though some are still capped (NH, ME, PA, NJ, DC)
 - Instability hurts consumer and vendor confidence
 - Could pay too much for expensive generation

KEY POLICY ELEMENTS



3. STAKEHOLDER BOARD & STATE COORDINATION

Delaware recently joined MA, CT, RI, ME in creating an EE Advisory Council. Why they work:

- ✓ Broad representation with expert consultants
- ✓ Transparency & venue for public input
- ✓ Work out issues before getting to regulators.
- ✓ Share resources planning, communication, EM&V
- ✓ Statewide consistency of programs & marketing
- ✓ Integrated, comprehensive approach to planning and policies

NH EESE Board <u>could</u> serve this purpose - currently no oversight of CORE programs, no dedicated support staff or independent consultants.

KEY POLICY ELEMENTS



4. COMPLEMENTARY POLICIES

"Help lock in" savings and foster progress on energy efficient technologies and practices. Building energy rating helps the market value efficiency. Other policies include:



Building energy codes – target new buildings; training and compliance are key.



<u>Appliance standards</u> – remove least-efficient products from the market; preserve choices.



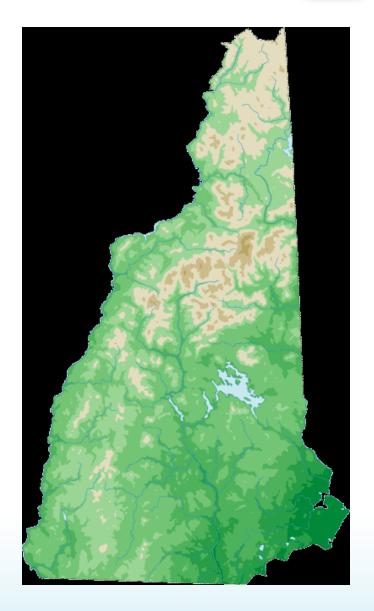
<u>High performance building programs</u> – improve overall energy and environmental performance for new and existing buildings.

WHAT ABOUT NEW HAMPSHIRE?



Numerous state studies show significant benefits from expanding efficiency. Granite State has:

- Similar utility structure and program delivery model
- Same regional electricity grid
- High cost of energy
- RGGI greenhouse gas exchange
- Strong community interest in sustainable energy
- Utility, state & stakeholder support for efficiency as a resource

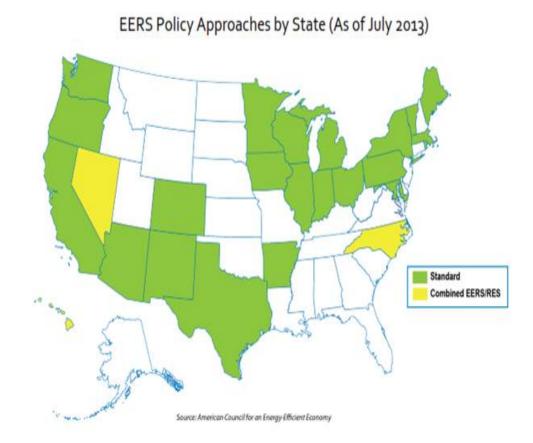


MISSING: A Policy Platform!

POLICIES THAT VALUE ENERGY EFFICIENCY AS A RESOURCE



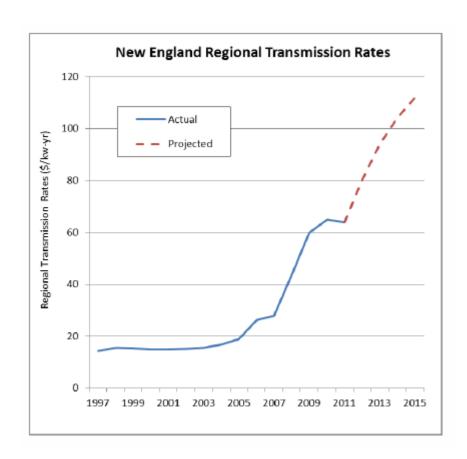
- ➤ 26 states treat efficiency as a resource, similar to generation... but a fraction of the cost.
 - Nine in the Northeast / Mid-Atlantic: CT, DE, ME, MA, MD, NY, RI, VT
- Focus on value of energy efficiency to ratepayers
 - "All Cost-Effective" energy efficiency policy and/or
 - Energy Efficiency Resource Standard (EERS)



ENERGY EFFICIENCY BENEFITS ALL CUSTOMERS (even non-participants)



- Transmission and distribution benefits
 - Transmission prices on the rise
- ➤ Reduce the price of wholesale energy and capacity markets in New England
- Avoided future environmental compliance costs
 - EPA regulations on CO₂ and Air pollution



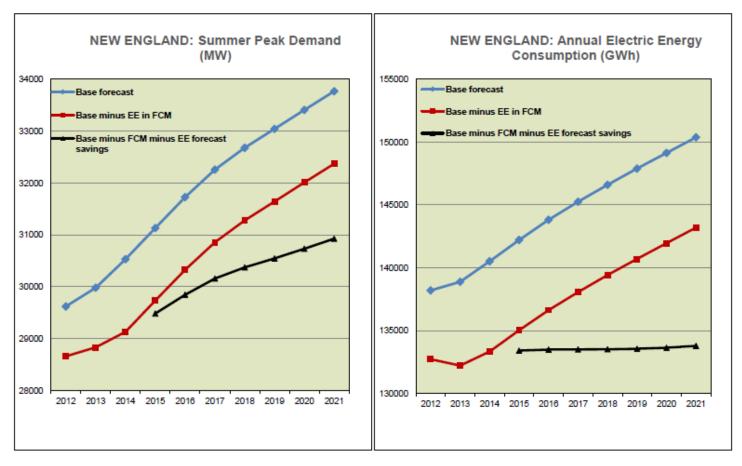
EE AS A RESOURCE POLICY EXAMPLES



State	Policy Type	Program Administrator	Energy Savings Goals
Connecticut	All Cost-Effective Energy Efficiency	Utilities	Saving 1.5% electric sales, 1% of gas
<u>Maine</u>	All Cost-Effective Energy Efficiency (legislative cap lifted 2013)	Efficiency Maine	~1.5% of electric sales by 2016
<u>Massachusetts</u>	All Cost-Effective Energy Efficiency	Utilities + Cape Light Compact	2.6% of electric & 1.14% of natural gas sales annually by 2015
Vermont	All Cost-Effective Energy Efficiency	Efficiency Vermont + Utilities	2% of electric sales annually
Rhode Island	All Cost-Effective Energy Efficiency	Utilities	Estimated 2.4% of electric & 1.0% of natural gas sales by 2014
New Hampshire	Program Funding Only	Utilities	No mandated savings goals = stagnation

ENERGY EFFICIENCY WILL SIGNIFICANTLY REDUCE TRANSMISSION AND SYSTEM COSTS...

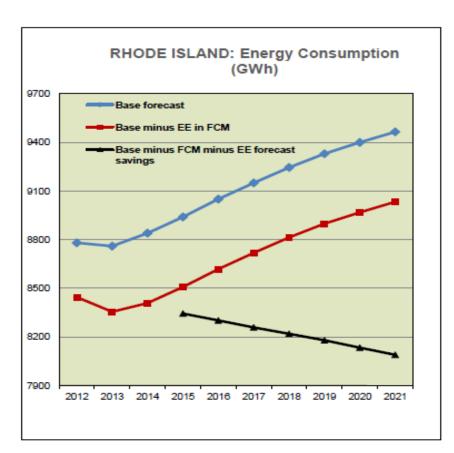


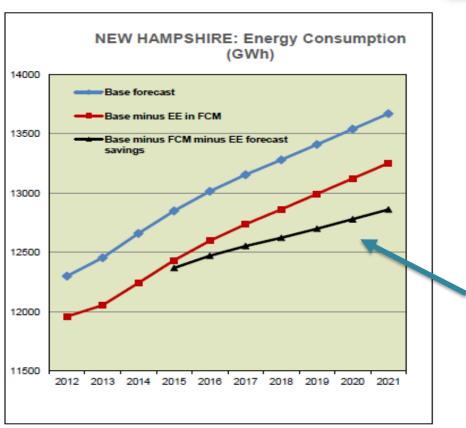


According to ISO-New England, the nearly \$6 billion in planned investments in energy efficiency will significantly curb peak demand and keep electric load growth flat through 2021. These reductions resulted in \$260 million savings from deferred transmission upgrades.

...BUT NOT ALL STATES WILL BENEFIT EQUALLY







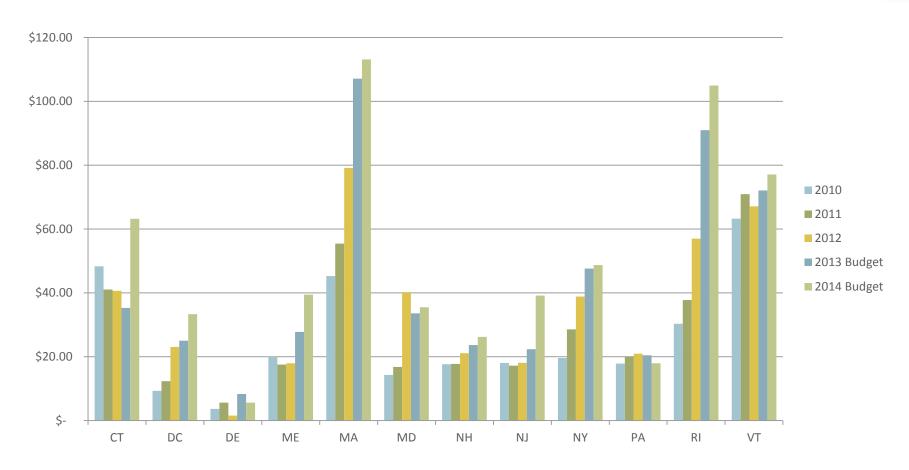
The forecast finds that states that plan to aggressively pursue energy efficiency, like Rhode Island, will see their electricity loads fall significantly, while states with lower levels of investment, like New Hampshire, will not benefit as greatly.

ISO New-England, "ISO on Background: Energy-Efficiency Forecast," December 14, 2012: http://www.iso-ne.com/nwsiss/pr/2012/ee_forecast_final_12122012_post.pdf

POLICY COMMITMENTS MATTER



COMPARISON OF 2010 TO 2014 PER CAPITA PROGRAM SPENDING



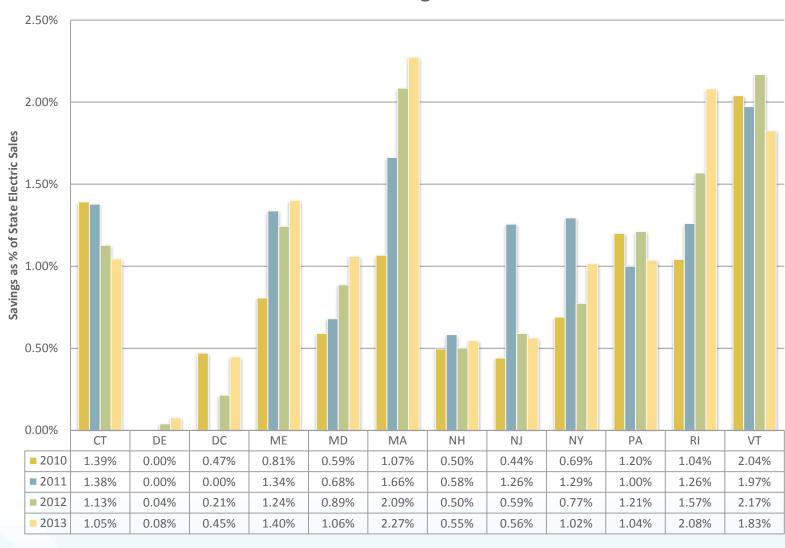
Expenditures include all electric and natural gas <u>ratepayer funding</u> and funding from RGGI and wholesale markets like the Forward Capacity Market. It does not include federal funding from the American Recovery and Reinvestment Act (ARRA) and the Weatherization Assistance Program (WAP) or any customer contributions. Data is taken from state annual efficiency reports available through the <u>NEEP website</u>. 2010 - 2013 are year-end reported data while 2013 and 2014 represents budget data that are subject to change.

ELECTRIC SAVINGS, 2010-2012





State Annual Electric Savings as Percent of Sales



Electricity savings are taken from state annual efficiency reports from 2010 to 2012, available through the <u>NEEP website</u>. States without reported savings data for particular years are left blank. Electricity sales data are taken from the <u>EIA's State Electricity Profiles website</u>.

A SHARED VALUE, "THE NEW HAMPSHIRE WAY"



Reducing waste, getting the cheapest, cleanest local energy resource:

It's not 'red' or 'blue'

...it's 'green!'







THANK YOU! NEEP IS A RESOURCE TO HELP STATES ADVANCE SMART EE POLICIES

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RESOURCES FROM NEEP



We have an abundance of news, policy and program resources on our website, www.neep.org. These include:

- <u>Highlights</u>, a bi-monthly policy news and analysis e-newsletter
- Energy Efficiency Matters, our blog, including our Policy Tracker
- The Efficiency Policy Snapshot the states "by the numbers"
- <u>The Regional Roundup</u>, Annual comparison of states' progress on EE policies <u>The Regional Evaluation</u>, <u>Measurement and Verification</u>
 <u>Forum</u>, which supports the development and use of common protocols to evaluate, measure, verify, and report the impacts of energy efficiency.
- Regional Energy Efficiency Database "REED"
- General support on all aspects of energy efficiency policy or programs
- Link to federal programs, contacts in other states, etc.
- Resources for winter price spikes: <u>www.neep.org/warm-winter</u>