

NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

# Best Practices in Energy Efficiency and an Introduction to NEEP

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First Meeting of the Delaware Energy Efficiency Advisory Council December 4, 2014

# TOPICS FOR TODAY



- Part 1: Introduction to NEEP
- Part 2: Foundations of energy efficiency (EE) policy
- Part 3: A look at the region, and where DE stands
- Part 4: NEEP resources & contact info

# NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS



#### **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.

#### **FUNDING**

Balanced mix of federal, foundation and ratepayer funds.

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

# NEEP'S Work in Building Energy



#### Support of Complementary Policies

- Building energy codes
- Building energy rating/disclosure
- High Performance Buildings
  - Schools
  - Public Buildings
  - Zero Net Energy
  - Communities
  - Multi-family housing



Regional Working Groups allow state participation in each of these projects

# NEEP Regional Evaluation, Measurement & Verification Forum (EM&V Forum)



#### **Steering Committee:**

PUC commissioners from 9 states, SEOs directors, air regulators

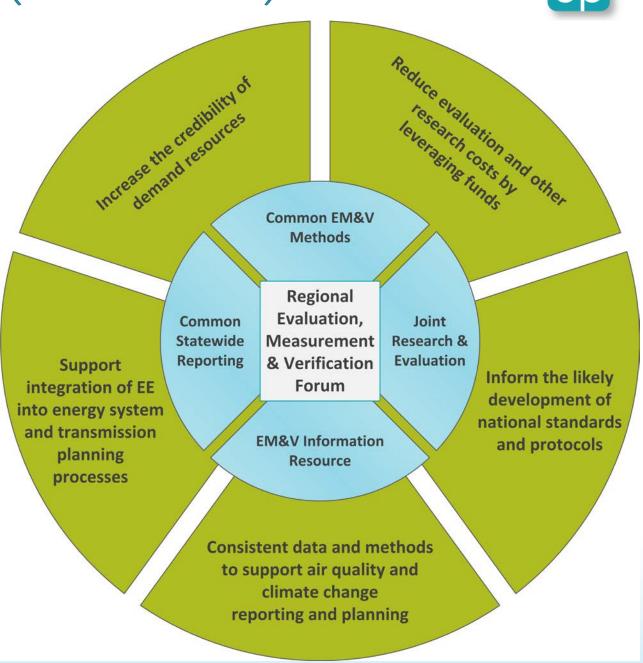
#### **Project Committees:**

PUC & energy office staff, program administrators

#### **Core Functions:**

- Protocol development
- Research & evaluation
- Education and information access

DNREC currently supports several EM&V Forum projects



# Efficient Products & Market Initiatives



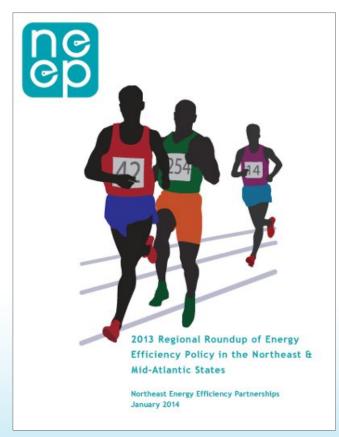
Regional energy efficiency program strategies

- Retail Products Reports & Working Group
   2013-2014 Residential Lighting Strategy Update
   Business & Consumer Electronics Strategy Report
- Emerging technologies
   Air-Source Heat Pump Strategy Report
   Heat Pump Water Heaters Strategy Report
- Commercial Lighting
  <u>DesignLights Consortium</u>, an internationally-recognized lighting fixture certification program
- > Appliance efficiency standards
  - Coordinated efforts to pass state standards in '08

# Public Policy Outreach & Analysis



- > Attend & monitor stakeholder meetings EEAC
- > Track legislative & regulatory proceedings on EE
- > Follow & comment on energy plans & strategies
- Advocate for EE as a first-order resource, strong & stable funding, comprehensive & coordinated program delivery
- ➤ Share best practices & communicate with state agencies, utilities/program administrators, advocates, EE practitioners & providers
- Provide state data and analysis on EE savings goals & progress
- News and insights on region & states
- Regional & federal engagement: energy markets, RGGI, Clean Air Act 111(d), etc.





# PART TWO: Foundations of Energy Efficiency Policy

## EE: AN UNBEATABLE VALUE PROPOSITION



#### **BENEFITS OF EFFICIENCY:**

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

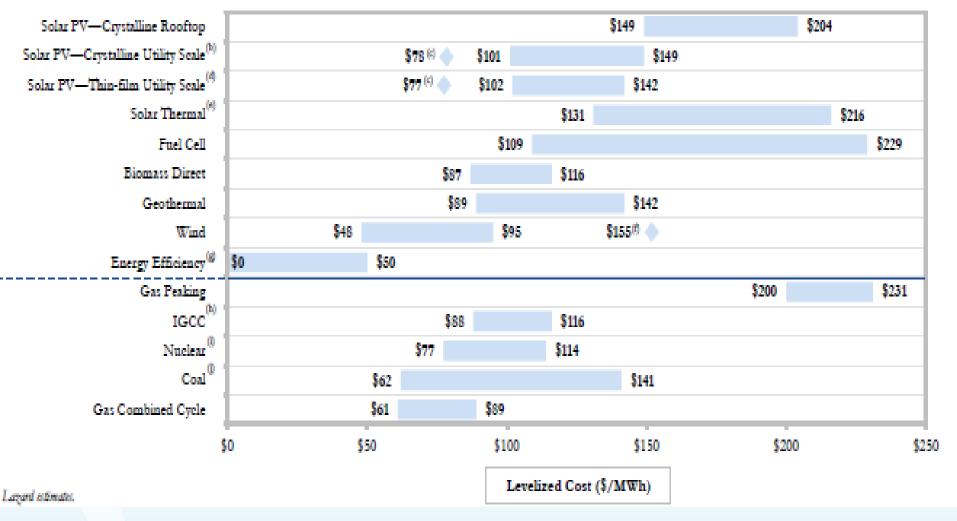
Energy Efficiency is THE most costeffective way of meeting demand Strong
investments in EE
are reducing the
need for T&D
investments

Energy Savings
Potential Study
cites **\$2.3B** in
economic benefits

Potential Study
projects up to
4,800 jobs
supported for each
year of EE
investments

# ENERGY EFFICIENCY: THE CHEAPEST ENERGY RESOURCE





source: Lazard, 2012

# MAKING EFFICIENCY WORK



Three key ingredients to effective implementation:

- 1. POLICY building the framework
- 2. <u>REGULATORY</u> getting the details right
- 3. PROGRAM STRATEGY delivering results

Congrats to Delaware for expanded EE legislation & adopting model building energy code!

# FOUR KEY ELEMENTS IN LEADING 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, DE)

#### 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

DE joins MA, CT, RI, ME in creating the new EEAC

- ✓ 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

#### **BEST PRACTICE IDEAS:**

Distinct yet complementary roles for the SEU, DNREC & utilities to avoid confusion, duplication of offerings; offer clear path for customers & market actors

- <u>SEU focus</u>: Central hub/gateway, education, coordination, market transformation, program gaps, financing
- <u>Utility focus</u>: whole building, tech assistance, product rebates, customer-facing programs
- <u>DNREC focus</u>: Oversight, special programs, Leading by Example, complementary policies - building codes, appliance standards, etc.

# 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.



NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

# PART THREE: A Look at the Region and Delaware's Progress

### THE REGION AS AN EFFICIENCY LEADER



Aggressive Savings Goals

Strong
Policy
Support for
Efficiency
Programs

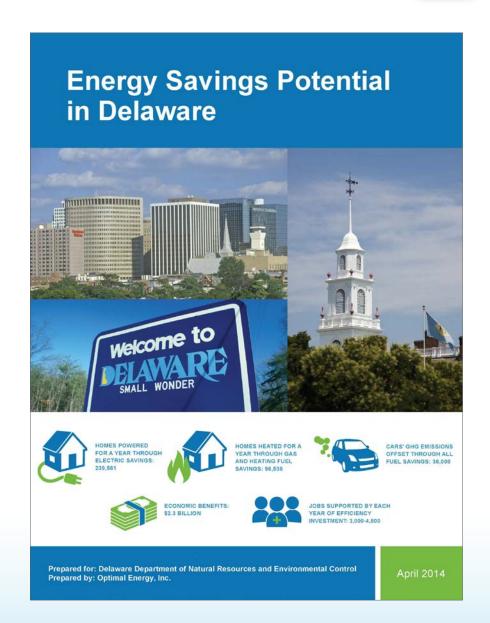
Leader in
High
Efficiency
Products
& Buildings

Innovative Programs & Policies

# Progress in Delaware



- EE Potential Study a great roadmap!
- Passage of HA #2 to SB 150 resulted in changes to Title 26
- DE Building Code Collaborative is increasing code compliance
- Much work ahead to implement legislation, create EE framework; stakeholder involvement is key
- Expect DE to move ahead in next NEEP <u>Regional Roundup report</u>, also ACEEE Scorecard.



# EE AS A RESOURCE POLICY EXAMPLES



State	Policy Type	Program Administrator	Energy Savings Goals
Connecticut	All Cost-Effective Energy Efficiency	Utilities	In process
<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

# EFFICIENCY POLICIES, NY AND MID-ATLANTIC

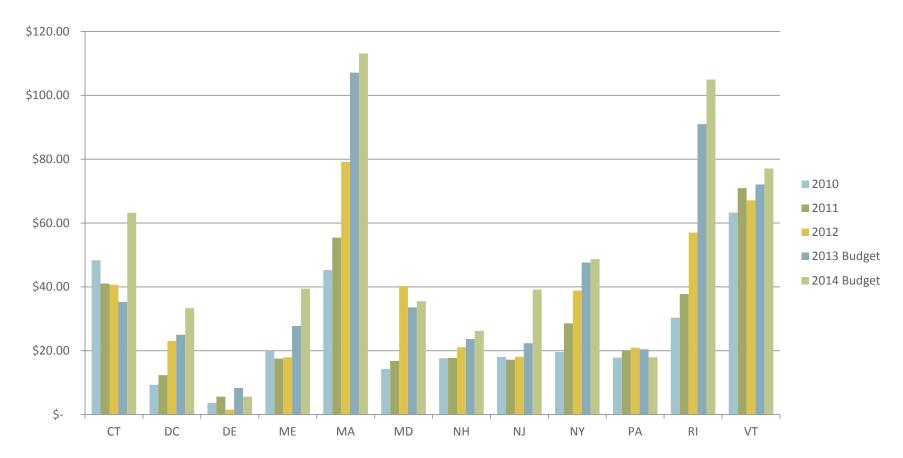


State	Policy Type	Program Administrator	Energy Savings Goals
<u>Delaware</u>	Energy Efficiency Resource Standard Not Yet Implemented	Sustainable Energy Utility, now utilities will join, expand programs	15% of electric & natural gas sales by 2015
<u>District of Columbia</u>	Efficiency Funding Only	Sustainable Energy Utility	No mandated savings goals
Maryland	Energy Efficiency Resource Standard	Electric Utilities	15% of per capita electric use by 2015
New Jersey	Efficiency Funding Only	Office of Clean Energy + Utilities	No mandated savings goals
New York	Energy Efficiency Portfolio Standard	NYSERDA + Utilities	15% of electric & natural gas sales by 2015
<u>Pennsylvania</u>	Energy Efficiency Resource Standard Funding Capped	Utilities	0.75% of annual electric sales through 2015

# STATE SPENDING ON ENERGY EFFICIENCY



#### COMPARISON OF 2010 TO 2014 PER CAPITA PROGRAM SPENDING



As DNREC, utilities and SEU move ahead, expect a good jump in EE investments.

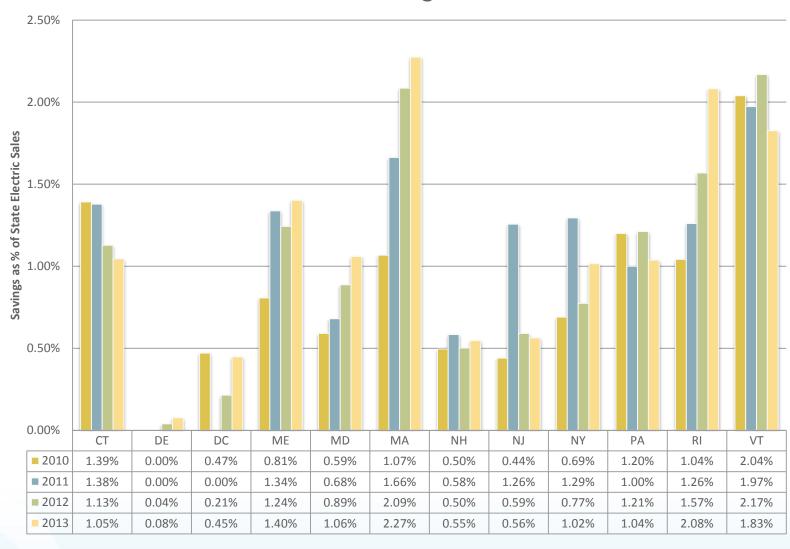
Expenditures include all electric and natural gas <u>ratepayer funding</u> and funding from RGGI and wholesale markets like the Forward Capacity Market. It does not include federal funding from the American Recovery and Reinvestment Act (ARRA) and the Weatherization Assistance Program (WAP) or any customer 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>.



NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

# PART FOUR: RESOURCES AND CONTACT INFO

# REPORTS & GUIDANCE MORE AT WWW.NEEP.ORG





Regional Policies Mandating High Performance State-Funded Public Buildings and How to Maximize Their Energy Efficiency

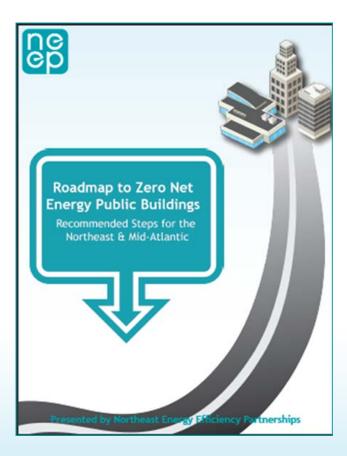


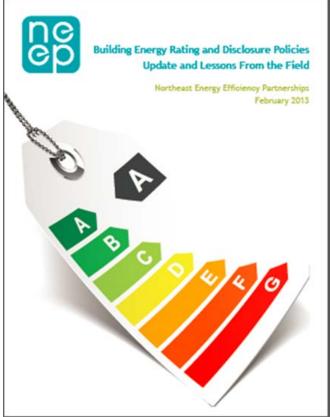






Northeast Energy Efficiency Partnerships October 2012





# RESOURCES FROM NEEP



We have an abundance of news, policy and program resources on our website, <a href="www.neep.org">www.neep.org</a>. 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

# NEEP CONTACTS



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