

Northeast Energy Efficiency Partnerships

A Regional Roundup of Energy Efficiency Policy in the Northeast & Mid-Atlantic States

Northeast Energy Efficiency Partnerships November 2012



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Introduction

Welcome to the second-annual *Regional Roundup of Energy Efficiency Policy* in the Northeast and Mid-Atlantic states. In this report, Northeast Energy Efficiency Partnerships (NEEP) provides its view of major policy developments in the NEEP states over the approximate timeline of November 2011 through October 2012.

The aim of the *Roundup* is to gauge progress in the Northeast and Mid-Atlantic states toward capturing energy efficiency as a resource. While looking at the region as a whole, we also provide summary and analysis of some of the biggest building energy efficiency successes and setbacks in individual states from Maine to Maryland, including key energy efficiency laws and regulations, and changes in funding levels for energy efficiency programs.

The *Roundup* is intended to give policymakers, efficiency advocates, program administrators and other stakeholders a comparative view of efficiency progress and pitfalls across the region. Along with state-level highlights, this paper reveals regional trends and shared challenges in harnessing the potential of energy efficiency to meet today's pressing energy and environmental challenges – controlling energy costs, improving system reliability, strengthening the economy, growing jobs, improving public health and curbing emissions of greenhouse gases and other pollutants.

Format

Along with listing the key policy developments in each of the NEEP states, this report provides analyses of the major successes and hurdles by state. Some definite trends emerge, and these are discussed in the Summary Analysis section, with further information provided in the Appendices.

The table on page 4 calls out some of the most impactful developments in each of the NEEP states.¹ A Look at the States examines what we see as some of the major issues and key data points from each state. The Appendices have information on the status of key policies and programs, and illustrations of where investments and savings stand across the region.

Our report uses icons of runners to denote the general policy trend of each state, in keeping with the theme from our 2010 study, From Potential to Action, which analyzed the remaining energy efficiency potential in the region. These categories include:



1 NEEP focuses our work in VT, NH, ME, MA, CT, RI, NY, PA, NJ, MD, DE & DC.



These icons are meant to provide our take of the state's overall progress in terms of some of the accepted best practices in efficiency policy² and important advances or setbacks as compared to the state's own recent history. Each state has had its bright spots and frustrations in the last year - leaders and laggards included. When the NEEP Policy Team discussed how to rate each state, we acknowledged that sometimes attitude and leadership from policymakers are as important as immediate progress, especially for those that have more recently joined the cadre of states that are serious about energy efficiency.

While we have done our best to seek input from stakeholders in each of the states and to understand developments as we've described them in our narrative, the ranks are purely subjective. We are encouraged that the region as a whole continues to embrace the promise of energy efficiency, as evident by increasing savings targets and realized savings, as seen in the tables and graphs at the end of this report.

Movement in the Pack

While most states received similar grades to last year, we decided to rename the category of "Struggling" to "Falling Behind." The fact is, with so many states racing forward and ramping up with their efficiency programs and policies, the ones that are not moving forward could be characterized as losing ground to the leaders. Take New Hampshire: while it still lacks an adequate policy framework

States Submit Historic Energy Plans

Several Northeast states were just submitting their multi-year gas and electric plans at time of writing. Massachusetts, Connecticut, Maine and Rhode Island's stakeholder advisory boards help craft the plans that are ultimately submitted for approval by each state's regulatory agency. Massachusetts, Connecticut and Rhode Island are continuing their upward trajectories of seeking all cost-effective efficiency. Maine has laid forth a scenario for Maximum Achievable Cost-Effective Efficiency should the legislature fund the programs fully. As a leading efficiency consultant has noted, states cannot get double the savings by doing twice of what they've been doing. These types of ground-breaking goals - upwards of 2.5 percent electric and 1.2 percent gas savings targets, in the case of Massachusetts - call for innovative policies, new regulatory frameworks, more whole-building approaches and more focused customer engagement strategies.

Below are links to the most recent versions of these state energy efficiency plans:

Connecticut: Connecticut Energy Efficiency Fund's Conservation and Load Management Plan for 2013 through 2015

Massachusetts: Joint Statewide Three-Year Electric and Gas Energy Efficiency Plan, 2013-2015

Maine: Draft Efficiency Maine Triennial Plan for Fiscal Years 2014-2016

Rhode Island: National Grid Energy Efficiency Plan for 2013

2 See the Policy Recommendations in *From Potential to Action*, pg. 27: http://neep.org/public-policy/policy-outreach-and-analysis/potential-study



and funding mechanism to capture cost-effective efficiency, the state is making progress on some key issues. These include adopting the latest model building energy code and efforts to incorporate suggestions that came out of last year's Independent Energy Policy Study into the CORE efficiency programs. While it's a partial win that the legislature voted to stay in the Regional Greenhouse Gas Initiative (RGGI), we are disappointed that they limited the amount of RGGI proceeds that flow directly to energy efficiency — which independent analysts found to be the most economically beneficial use of these funds. Pennsylvania and the District of Columbia moved from "Still in the Starting Blocks" to "Keeping Pace." The District's Sustainable Energy Utility recently completed its first full year of offering programs, and the District Department of the Environment is working on implementing complementary public policies, including building energy codes and commercial building benchmarking. Pennsylvania receives credit for the planned extension of its Act 129 Energy Efficiency programs into a second phase, along with meeting their one percent annual electric savings targets last year.

Trending Issues

Each state has its own challenges and opportunities, its own political landscape, policy framework and program delivery structure. Yet there are many more circumstances that states have in common. These include the shared challenges of:

- How to scale up multiple year integrated electric and gas programs with adequate and stable funding in order to meet state energy savings goals.
- How to improve upon regulations meant to ensure cost-effectiveness of program spending.
- The lack of a dedicated funding source to serve customers who heat with a delivered fuel like oil or propane, even as oil prices continue to rise.
- How the falling price of natural gas changes the equation for energy efficiency, and how it can make combined heat and power projects more attractive.
- What federal lighting standards and stricter building codes are doing to program savings goals.
- How to ensure that other policy tools such as energy codes, appliance standards, and building energy rating can leverage and enhance customer efficiency programs.
- How to attract outside financing to complement, but not replace, energy efficiency programs and expand their reach.



Overview of State Energy Efficiency Policy for 2012

Following is a quick take on what we see as the major issues in play in each state over the last year, from November 2011 through October 2012. Please see A Look at the States for a detailed explanation, acronyms and citations.

State	Key Developments			
Connecticut	 DEEP approval of 2012 Expanded Plan in IRP Conservation Adjustment Mechanism to treat energy efficiency as a resource Commercial/Industrial PACE financing 			
Delaware	 Legislation to reform Energy Efficiency Resource Standard fails DNREC prepares for EE potential study, hopes to inform new legislation 			
Maine	 Significant savings realized under first Efficiency Maine Trust Triennial Plan Budgets remain inadequate due to legislatively enacted cap Mainers still left in cold without funding for heating fuel efficiency 			
Maryland	 First state to adopt 2012 International Energy Conservation Code (IECC) Electric utilities behind on energy savings goals Extension of EmPOWER Maryland Efficiency programs considered 			
Massachussetts	 GCA 2.0 legislation passes, but excludes oil heat funding while also allowing some large users to "opt out" Second joint three-year efficiency plan is developed as state sees record electric and gas savings Innovative new approaches target communities and markets Stretch building code implementation delayed 			
New Hampshire	 Independent study makes energy policy recommendations RGGI legislation reduces revenue for efficiency programs, changes funding allocation 2009 IECC adopted Legislature eliminates high performance school funding 			



State	Key Developments			
New Jersey	 Clean Energy programs shifting to third-party administrator Governor diverts funds from Clean Energy to state budget Possible adoption of the 2012 IECC 			
New York	 PSC regulations constrain program savings Utilities, NYSERDA show difficulties in meeting 2015 EEPS goals New York City completes first round of building energy benchmarking 			
Pennsylvania	 PUC extends Act 129 efficiency programs through 2015, pending utility petitions Progress on building energy code stalls Philadelphia adopts building energy benchmarking 			
Rhode Island	 Second three-year efficiency plans underway New support for combined heat and power (CHP) projects Innovative energy code efforts advance 			
Vermont	 New cost-effectiveness screening approved Electric utility merger increases funding for efficiency programs Building energy disclosure bill falls short 			
Washington, D.C.	 Strong first year for SEU Energy benchmarking for private buildings underway Adoption of 2012 IECC 			



A Look at the States



Connecticut Leading the Pack

The current landscape in Connecticut is very positive for energy efficiency, and bodes well for a strong and sus-

tained commitment to policies and programs that will help the state in a number of ways. After years without significant executive leadership on energy efficiency, the administration of Governor Dannel Malloy has been working in partnership with the electric and gas utilities and a variety of stakeholders to help the state act on the long-standing goal of capturing "all cost-effective efficiency," as described in Public Act 07-242 and more recently in Public Act 11-80. Governor Malloy talks of a "doubling down" on efficiency, with his eyes set on the top spot in the ACEEE State Energy Efficiency Scorecard by the end of his first term in 2014.

In early October 2012, the Department of Energy and Environmental Protection (DEEP) released a draft of its Comprehensive Energy Strategy for the state, described as "a more systematic basis for addressing energy opportunities and challenges." In it, the Malloy administration lays out a broad and aggressive vision for more fully realizing a clean energy future for the state. (See sidebar for plan highlights on energy efficiency policy.)

Connecticut Puts Efficiency First in New Comprehensive Energy Strategy

The Draft Comprehensive Energy Strategy for Connecticut released this fall calls for an expanded commitment to "all cost effective" energy efficiency through programs that:

- Reach all sectors and all buildings with special focus on groups that have not been fully reached by past efficiency programs such as small businesses and the low-income community.
- Go beyond a traditional focus on upgraded lighting and weather stripping to deliver deeper efficiency as well as process efficiencies in the manufacturing sector.
- Leverage private capital through innovative financing mechanisms including the Clean Energy Finance and Investment Authority and the state's new Commercial Property-Assessed Clean Energy program.
- Reinvigorate and broaden the existing Home Energy Solutions program to ensure that additional ratepayer dollars achieve maximum reach and impact.
- Incentivize the state's utilities to deliver on efficiency goals through "decoupling" and performance-based rates of return.
- Establish building efficiency standards for both new construction and retrofits as well as a mechanism for benchmarking building efficiency and disclosing efficiency scores at the time of rental or sale.

See http://www.ct.gov/deep for more.



On Track to Double Program Funding

The Department of Energy and Environmental Protection (DEEP) released the 2012 Integrated Resources Plan (IRP), a guiding document which calls for a doubling of energy efficiency program funding. In July DEEP released its final determination to approve the 2012 Expanded Conservation & Load Management Expanded Plan and Budget, which greatly expands energy efficiency programs in the state. While the Energy Efficiency Board (EEB) and the utility program administrators continue to work under the 2012 plan, progress is being made on efforts to make sure the next plan integrates electric and gas programs and is a multi-year plan, with the 2013 plan due to Public Utility Regulatory Authority (PURA) in early November of this year. At time of writing, the state is awaiting PURA's ruling on these matters under Docket 12-02-01, as well as a ruling on how the state should fund an expanded efficiency scenario.

Putting Efficiency in the Rates

Under a proposal by the electric utilities and endorsed by the EEB, the majority of funding to supplement the systems benefit charge in order to capture all cost-effective energy efficiency will come from a new electric conservation adjustment mechanism (CAM³). While utilities will continue to collect a systems benefit charge (SBC) at the 3 mil level, the CAM will allow the state to make up the difference in what has been judged as available and cost-effective efficiency measures, treating efficiency as a resource to be procured through customer rates in a manner similar to generation resources – but at a much lower cost. The CAM will function akin to the Energy Efficiency Reconciliation Factor (EERF) that has been in place in Massachusetts through the duration of its three-year efficiency plan. Both states have committed to conducting customer bill impact analyses to assess the costs and benefits of a robust funding scenario.

Clean Energy Finance Authority

The Connecticut Clean Energy Finance and Investment Authority (CEFIA) was also created last year under Public Act 11-80. CEFIA bills itself as the nation's first full-scale clean energy finance authority, working to leverage public and private funds to drive investment and scale up clean energy deployment in Connecticut. The Authority offers incentives and innovative low-cost financing to encourage homeowners, companies, municipalities, and other institutions to support renewable energy and energy efficiency. One of its most anticipated programs is Commercial and Industrial "PACE," or Property-Assessed Clean Energy financing. PACE loans can be financed and re-paid through property tax assessment over 20 years. The CEFIA model is innovative because it allows municipalities to opt-in to the state program rather than administer their own program. The Commercial and Industrial PACE program, like all of CEFIA's initiatives, is meant to leverage ratepayer-funded program with private capital to put clean energy and efficiency projects within reach for customers.

³ For more on the CAM, see pg. 31 of DEEP's determination on the 2012 C&LM Plans: http://www.ctenergyinfo.com/7-19-12%20 Final%20Determination%20Expanded%20Plan.pdf



Connecticut at a Glance (2011)⁴

Electric Program Expenditures: \$125 million

Gas Program Expenditures: \$19.4 million

Per Capita Expenditures: \$41

Electric Savings: 394,000 MWh

Gas Savings: 4.8 million therms

2012 Savings Goals: No binding savings goals

Buildings Policies

The Malloy administration has begun to deliberately address its policies regarding building energy use, and has included several very high profile recommendations in its Comprehensive Energy Strategy - see page 6. In particular, the Strategy includes a reminder that the state is bound by law to update its building energy codes to reflect the 2012 International Energy Conservation Code (IECC) within 18 months of its publication. Given a July 2011 IECC publication date, the chances of the state meeting this deadline would seem remote - particularly since the state's code adoption process itself has historically been arduous and overly complex, resulting in significant delays between code updates. Nonetheless, the administration appears very committed to using its Comprehensive Energy Strategy to improve its energy code and other buildings policies, including implementing a system for rating and disclosing building energy use.

⁴ Data available from 2011 annual energy efficiency report & 2012 program plans. Savings are expressed in annual terms.





Delaware

On the Starting Blocks

The situation in Delaware is little changed since last year, with strong demand for efficiency programs that suffer from inadequate funding. The Energy Conservation and Efficiency Act of 2009 designated efficiency as a priority resource to be turned to before new electricity generation. The Act set ambitious gas and electric savings targets through an Energy Efficiency Resource Standard (EERS). The Division of

Climate and Energy of DNREC is evaluating various regulatory and rate structure changes, including ways to encourage utilities to take a leadership role in driving program success.

As it stands, the Sustainable Energy Utility (SEU) remains without an appropriate funding mechanism, essentially reliant on a revolving loan fund using federal Recovery Act funding and proceeds from Regional Greenhouse Gas Initiative (RGGI) auctions, in which Delaware participates. Consequently, the SEU is falling far short of its goals, has had to suspend some programs and only offers financing for business customers. Additionally, the state has not yet begun to implement its Energy Efficiency Resource Standard (EERS) that calls for 15 percent energy savings by 2015.

Legislative Attempt to Fix Efficiency Funding Fails

In a late-session attempt to provide Delaware with adequate and stable funding for efficiency and engage utilities with program delivery, the legislature considered SB 264, An Act to Amend Title 26 of the Delaware Code Relating to Energy Efficiency Resource Standards and Renewable Energy Portfolio Standards. The bill contained some very good provisions, including establishing a stake-holder advisory board, allowing utilities to recover lost revenues, incorporating complementary policies like codes and standards, establishing a three year planning cycle and adequately funding evaluation, measurement and verification. Getting such a bill enacted next year would be a major step forward for the state.

DNREC Undertakes Efficiency Potential Study

Delaware is committed to learning from the experiences and best practices of other states to get its efficiency programs on track, and is considering legislative and regulatory reforms to enable success. Currently, DNREC is in the process of undertaking an analysis of the cost-effective energy efficiency potential in the state, and plans to use the report to as a platform for advancing policies that will adequately fund efficiency as a resource.

An Advancing Building Energy Code Effort

Delaware officials have been pro-active in establishing a "Code Collaborative" in the state to bring stakeholders together to jointly strategize and leverage forces to address issues with the



Delaware at a Glance

Delaware continues to offer customer efficiency programs through its Sustainable Energy Utility (SEU). We await further results for their efficiency programs in the near future. advancement of energy codes in the state, including compliance efforts. In addition, the state used federal Recovery Act funding to undertake a gap analysis of code compliance, including a targeted residential assessment, to help better target and assess its code trainings. Delaware's "Gap Analysis" report is available here.





Maine Falling Behind

The Energy Future Act of 2009 created the Efficiency Maine Trust and designated the Trust as recipient and administrator of several funding streams to deliver efficiency programs to the state's residential and business customers. The Act also set an ambitious goal of weatherizing all of the state's homes and half of its businesses by 2030, and achieving 30 percent savings in electric and natural gas use by 2020.

The Trust board, staff and associated partners have made great strides in delivering efficiency to customers across the state during the first triennial plan, with the lifetime savings benefits programs totaling \$449 million in FY 2011.

Yet the programs remain woefully underfunded compared to what they could be doing, and the level needed to reach Maine's ambitious goals. In 2012, Maine is projected to have among the lowest per capita efficiency spending compared with other states in the region, at only \$27.90 for electric and gas programs. Without legislative approval raising the base assessment — as had been originally planned for — Maine's efficiency budgets are some \$24 million short of the amount necessary to fulfill Maine's goal of acquiring all cost-effective energy efficiency opportunities.

The Efficiency Maine Trust board of directors approved the second Triennial Plan (2014-2016) on October 24, 2012, and has submitted it to the Public Service Commission for approval. In the Plan, the Efficiency Maine Trust staff put forth both a "base funding case" and a "Maximum Achievable Cost-Effective" (MACE) funding level for its proposed energy efficiency programs. Unfortunately, the state legislature has thus far refused to fund the programs at a level that would allow the state to meet the goals laid forth in the act, or to meet the energy needs of Mainers in the lowest-cost manner.

Aside from continuing with scaled back programs that pick the low-hanging fruit of efficiency, Maine's best hope is that the Public Utilities Commission will take a more active role in protecting the interest of ratepayers by setting policies that will treat efficiency as a capacity resource. A bright spot: the Efficiency Maine Trust board voted to propose a longterm contract for efficiency resources, an idea now being considered by the PUC. The plan would generate \$6 million for large-scale efficiency projects, at a price of 3 cents/kWh.⁵

Enormous Opportunities to Save on Heating

Perhaps the greatest harm - and cost - to Mainers is due to the lack of funding for thermal efficiency projects to weatherize and upgrade old, inefficient heating equipment.

⁵ See www.maine.gov/sos/cec/rules/65/407/407c316.doc



Maine	at a	Glance	(2011) ⁷
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Electric Program Expenditures: \$22.82 million

Gas Program Expenditures: \$349,474

Per Capita Expenditures: \$17.70

Electric Savings: 173,534 MWh

Gas Savings: 101,645 therms

2012 Annual Savings Goal: No binding savings goals

Lost Opportunities for Building Energy Codes

With more than two-thirds of the state's residents depending on delivered fuels like oil and propane, and with oil prices forecast to rise again this winter, the legislature has the opportunity to create a funding mechanism to help Mainers save on heating, consistent with the state's ambitious goals relative to weatherization and saving heating fuel.⁶ The Trust is exploring ways to help more Mainers weatherize their homes and businesses by using U.S. Department of Energy monies to create a revolving loan fund. With an expanded budget scenario, the Trust could offer incentives to cover part of the cost in addition to loans, making it much more palatable for consumers to invest in weatherization.

The anti-regulatory stance of Governor Paul LePage's administration has been particularly harmful to building energy codes in the state. After eliminating the mandatory statewide building energy code in early 2011 by making it mandatory only for communities of more than 4,000 people – effectively exempting two-thirds of the state from a building code – the administration took yet another step back when it eliminated the Bureau of Building Codes and Standards and moved the administration of the building code to the state fire marshal earlier this year. This move significantly hinders the training and implementation efforts for those jurisdictions where the code is not in effect.

⁶ See Title 35-A: Chapter 97: EFFICIENCY MAINE TRUST ACT, \$10103, 4(F)

⁷ Data available from FY 2011 annual energy efficiency report & FY 2012 program plans. Savings are expressed in annual terms, based upon a 20-year measure life.





Maryland Keeping Pace

Maryland will end 2012 facing important decisions about the future of their energy efficiency programs. On the one hand, it has entered into the second phase of its EmPOWER Maryland energy efficiency programs, which requires the utilities and state agencies to reduce per capita electricity consumption by 15 percent by 2015. It also became the first state to adopt the latest national model building energy code, a major step forward. On the other hand, the electric utilities are

not expected to meet their energy savings goals, despite significant improvements in recent performance. Absent revisions to state policy, the state may fall short of important and reachable energy savings.

Evaluation of EmPOWER Maryland Act Underway

Maryland's energy efficiency programs enter their second phase with momentum, seeing savings in 2011. Refining state energy policy can help build on these goals. This year, the Maryland Energy Administration (MEA) must evaluate the progress under the EmPOWER programs and make recommendations to the Maryland General Assembly as part of its EmPOWER 2020 Planning Report. While the utility companies expect to meet their peak demand targets, they are significantly behind on their energy savings targets. A recent evaluation by MEA expects them to reduce electricity use by 8.4 percent by 2015, a little more than half of mandated goals. The report offers an opportunity to recommend ways to improve utility performance in phase two, including revising the current per-capita savings target. The state may also explore natural gas energy efficiency programs which are not currently in place. A recent potential study suggests that significant costeffective savings opportunities exist for natural gas customers in Maryland as well. The report will be released in late 2012.

First State to Adopt 2012 IECC

Maryland also continues to make good use of building energy codes as a tool to provide for enhanced energy efficiency in buildings. Last fall, Maryland became the first state in the U.S. to adopt the 2012 International Energy Conservation Code (IECC) as part of Maryland's Building Performance Standards, which became effective in January of this year.



Maryland at a Glance (2011)⁸

Electric Program Expenditures: \$95.86 million

Per Capita Expenditures: \$16.82

Electric Savings: 421,344 MWh

2012 Annual Savings Goals:2.28 percent of electric sales

Looking ahead, we expect that Maryland will continue to tackle the following important matters within their energy efficiency programs:

• Reevaluating its regulatory methods for screening its programs, particularly with regard to cost-effectiveness;

• Investigating new customer program opportunities, including in the areas of consumer electronics, building energy codes support and schools; and,

• Entertaining strategies for increasing program participation, especially among commercial and industrial customers.

⁸ Data available from 2011 annual energy efficiency report & draft EmPOWER Planning report. Savings are expressed in annual terms.





Massachusetts Leading the Pack

Thanks to leadership in state government and hard work by countless partners, Massachusetts has retained its top spot in the 2012 ACEEE State Energy Efficiency Scorecard. The state's electric and gas program administrators (PAs) operate under some of the most aggressive savings targets in the country, and are preparing their second three-year plan to continue on the path toward all cost-effective efficiency. On a

programmatic level, the PAs are driving to reach more customers through market segmentation, community outreach, and alliances with local organizations. They are striving to reach deeper savings with their programs, but also developing ways of integrating complementary programs, such as building energy code training and compliance.

Evolving the Regulatory Framework

As program administrators strive to capture all cost-effective efficiency, it has become increasingly clear in a number of states that some regulatory methods used to evaluate efficiency programs are outmoded. Under Order 11-120, the Massachusetts Department of Public Utilities opened an investigation into updating its energy efficiency guidelines, looking specifically at issues of cost-effectiveness net vs. gross savings calculations, and the calculation of performance incentives.⁹ Unfortunately, a final ruling was not in place in time to be included in the state's three-year efficiency plan, completed in late October.

While the state seems to be making progress in evolving some parts of its frameworks, many parties were dismayed that the Department staff proposed abandoning the robust method that had been used to calculate the bill impacts of energy efficiency programs and instead recommended a prior method that largely focuses on program costs without examining the full range of benefits. The Department issued its order in D.P.U. Docket 08-50D eliminating the method, which could have significant implications in eroding the state's leading policy framework for treating efficiency as a first order resource that offers myriad benefits to participants and all ratepayers.¹⁰

GCA 2.0 Legislation Passes

As a follow-up to the landmark Green Communities Act of 2008, S. 2395 was enacted in August 2012 with a goal of improving the policy framework for renewable energy and energy efficiency, while answering criticisms from some circles that the Commonwealth's energy policies were costing ratepayers too much. Unfortunately, while the bill was widely hailed as a victory for clean energy, there are some disconcerting elements to it, such as the provision allowing the

⁹ See NEEP presentation at DPU technical session: http://neep.org/uploads/policy/NEEP%20Slides%20-%20DPU%20Net%20Savings%20Mtg%203.28.12.pdf

¹⁰ See NEEP article on bill impacts issue: http://neep.org/news/newsletters/policy-highlights/analysis/if-sept-2012



state's largest commercial and industrial energy customers to opt-out of the gas and electric efficiency programs for self-directed programs. Supporters of all-fuel efficiency were also disappointed that the bill did not include language to create a funding mechanism for oil heat customers.

Building Energy Codes/Building Energy Rating

There was both good news and not-so-good news in Massachusetts this year when it came to advancing policies to address building energy use as a complement to ratepayer funded efficiency programs. After being hailed as one of the most progressive states in the nation for its enactment of a first-of-its-kind 'stretch' energy code, the state was poised in 2012 to enMassachusetts at a Glance (2011)¹¹

Electric Program Expenditures: \$269.3 million

Gas Program Expenditures: \$96.2 million

Per Capita Expenditures: \$78.50

Electric Savings: 790,000 MWh

Gas Savings: 15 million therms

2012 Annual Savings Goal: 2.4 percent of electric sales & 1 percent of gas sales

act its second edition of that code upon adoption of the 2012 International Energy Conservation Code (IECC). However, as the spring hearing dates approached, it became apparent that political pressures were forcing the Executive Office of Energy and Environmental Affairs to back off its adoption schedule. It now appears that the new code won't be taken up until the spring of 2013. Still, as of this writing, 122 of the Commonwealth's 351 cities and towns have adopted this local option code, representing well more than half of the state by population. This strong endorsement of the stretch code indicates a willingness by communities to address their local building energy use by progressive, yet highly-achievable and practical public policy mechanisms.

In addition, the state has moved ahead with two innovative pilot programs to create mechanisms for rating and disclosing residential and commercial building energy use as a means of providing consumers with information needed to make more informed real estate choices, and, ultimately, to drive building energy retrofits. Massachusetts led the region by proposing energy efficiency program activities to both leverage and support advances in building energy codes and appliance efficiency standards. Though it appears these program activities will first be undertaken as a pilot — without the program administrators being allowed to claim savings from their efforts — they signal an important recognition and advancement in the goal to link efficiency programs with other energy efficiency public policies.

¹¹ Data available from 2011 annual energy efficiency report & 2012 program plans. Savings are expressed in annual terms.





New Hampshire Falling Behind

New Hampshire's Energy Efficiency and Sustainable Energy Board (EESE) has spent a great deal of time this year reviewing and developing a very thorough report and recommendations based on the Independent Study of Energy Policy Issues, a major comprehensive study conducted as directed per 2010 legislation. While some in state leadership seem

set against an overarching policy statement to treat cost-effective efficiency as a first-order resource, the state does seem to be making headway on a number of fronts. The electric and gas utilities have submitted their first-ever joint two-year plans, seeking to integrate electric and gas program delivery across service territories, and offer fuel-neutral residential programs as approved under Public Utilities Commission Order 25,402. The 2013-2014 CORE filing notes that several other recommendations of the Independent Energy Study are already being addressed, such as setting higher performance goals, better aligning and coordinating programs, providing and improving education and training programs, and working to overcome market barriers.

Legislation Changes RGGI Funding

After an all-out attempt to pull New Hampshire out of the Regional Greenhouse Gas Initiative in 2011, the legislature this year instead passed HB 1490, which became law without the signature of Governor John Lynch. The bill effectively cuts funding for energy efficiency nearly in half by diverting all RGGI auction proceeds above the first \$1 per ton to customer rebates, as opposed to reinvesting those proceeds in energy efficiency programs. The legislation directs all revenue to the CORE energy efficiency programs, and makes New Hampshire's participation in RGGI contingent on Massachusetts and Connecticut remaining in the program. While this change will allow the RGGI proceeds to be better leveraged by being added to the overall state energy efficiency programs budget, it nonetheless represents an overall reduction in energy efficiency funding for New Hampshire, while also signaling continuing strong resistance to clean energy policies at the legislative level.

Building Codes: 2009 IECC Adopted, Code Collaborative Helpful

Two positive developments took place in the state in the last year in that the legislature finally ratified the state's building energy code update to reflect the 2009 International Energy Conservation Code (IECC). In addition, New Hampshire developed an Energy Code Compliance Roadmap, and, along with it, launched a new collaborative to help guide the state in meeting its goals and objectives related to energy codes. Both represent steps in the right direction to more fully realize the benefits of a comprehensive building energy code strategy.



School Construction

Unfortunately, the state took a significant step backward this year by enacting legislation that would eliminate state incentives to local communities to construct high performance schools. Eleven high performance schools have been built or are under construction in New Hampshire under the previous regulations, making the state a showpiece in the region for its embrace of high performance school construction. The act by the legislature, however, will make it financially infeasible for most school districts to undertake such high performanace projects in the future, and sets back significantly the opportunities for greening such an important slice of the public buildings stock.

New Hampshire at a Glance (2011)¹²

Electric Program Expenditures: \$17.6 million

Gas Program Expenditures: \$4.4 million

Per Capita Expenditures: \$16.60

Electric Savings: 64,172 MWh

Gas Savings: 721,144 annual therms

2012 Annual Savings Goals: No binding savings goals

¹² Data available from NH PUC website and 2011-2012 CORE energy efficiency program plans. Savings are expressed in annual terms.





New Jersey Falling Behind

While New Jersey was an early leader in energy efficiency, its programs have suffered greatly over the last two years, due in no small part to the diversion of funding from its programs by Governor Chris Christie in order to patch major shortcomings in the state's general operating budget. The Governor has also significantly weakened the state's goals

set forth in the 2011 Energy Master Plan (EMP). This, along with the lack of a clear policy from the Christie administration in support of energy efficiency, has kept New Jersey from realizing the level of energy savings called for by its original Energy Master Plan.

To add to the uncertainty with regard to energy efficiency programs, the state is slated to undergo some significant changes in program administration this year and into next. First, its EMP evaluation has recommended the use of a single third-party program implementation contractor to design, implement, and manage the state's energy efficiency programs. In order to facilitate the transition, the Board of Public Utilities is conducting a competitive bidding process, with a contractor slated to be selected by the end of the year. New Jersey is also widely expected to reduce its energy efficiency budgets as part of its next three-year budget proceeding. While a number of clean energy advocates have called for binding energy savings goals via an energy efficiency portfolio standard (EEPS), prospects for such a policy appear unlikely at this time.

Finally, the Department of Community Affairs has begun a proceeding to adopt the 2012 International Energy Conservation Code (IECC). While New Jersey was slow to adopt the 2009 model energy codes, this move could put New Jersey in a leadership position on the codes front.

New Jersey at a Glance (2011)¹³

Efficiency Program Expenditures: \$227.7 million

Per Capita Expenditures: \$17.19

Electric Savings: 443,612 MWh

Gas Savings: 7.83 million therms

2012 Energy Savings Goal: No binding savings goals

¹³ This represents only programs run by the Office of Clean Energy and not those run by individual utilities. Data available from NJ Clean Energy Program website. Savings are expressed in annual terms.





New York Leading the Pack

New York is a big state with big ideas — and big goals to match. It is a leading efficiency state, as evident by its consistently strong ranking in the ACEEE State Energy Efficiency Scorecard. The New York State Energy Research and Development Authority (NYSERDA), the state's utility program administrators, as well as the Long Island Power Authority (LIPA) and New York Power Authority (NYPA) continue to deliver

an array of programs to help business and residential customers save energy and money, while developing the state's green economy and keeping more energy dollars in state. Yet New York is not on pace¹⁴ to meet its energy efficiency portfolio standard (EEPS) goal of saving 15 percent of electricity by 2015.¹⁵

Governor Andrew Cuomo and the legislature have demonstrated strong support for efficiency and clean energy programs, with efficiency again expected to play a central role in the state's forthcoming Energy Plan.¹⁶ Missing from this equation, however, is a supportive regulatory environment that allows flexibility in how the program administrators meet their goals while protecting ratepayer interests.

New York's Public Service Commission (PSC), for example, has significantly hindered the energy savings potential of the state's EEPS programs by requiring individual program measures to screen cost-effectively under the Total Resource Cost test (as opposed to overall programs); diminishing the carrot of performance incentives for the investor-owned utilities; and generally micromanaging the functions of program reporting and evaluation to a level not seen in other states. This has led to long administrative delays in program approval. Add to that the ongoing confusion due to various program administrators targeting the same customers, and New York's ability to reach its energy efficiency savings targets are seriously in jeopardy.

NYSERDA, for example, recently requested that their savings targets under the EEPS be adjusted downward by 30 percent.¹⁷ New York has the leadership and the history of developing, administering and delivering award-winning efficiency programs. What appears to be missing are a regulatory framework and statewide structure of program delivery that are aligned with policy goals.

¹⁴ Pace Energy and Climate Center, "Energy Efficiency in New York: Midcourse Status Report of '15 by 15'," October, 2012, available at http://www.law.pace.edu/sites/default/files/PECC/Energy%20Efficiency%20in%20New%20York%2015x15.pdf.

¹⁵ In May 2007, Public Service Commission Order 07-M-0548 set a directive to achieve a reduction in forecast statewide electricity usage by 15% by 2015 (the '15 X '15 goal).

¹⁶ Expected to be released late fall of 2012

¹⁷ See PSC Cases No. 07-M-0548 and 10-M-0547, http://www.dps.ny.gov



LIPA Scales Up

Not all programs in the state have suffered due to regulatory inflexibility. LIPA, since it is not regulated by the PSC, has latitude to develop its own programs and determine what delivers value to its customers. LIPA does not exclusively apply the Total Resource Cost test (TRC) to measure cost-effectiveness of programs, but also uses the Program Administrator test. While the TRC guides policy decisions, LIPA takes a broader look at what programs are worth delivering, offering programs that may not screen under a strict test but offer important benefits that may be harder to measure. LIPA's Efficiency Long Island is a 10-year, \$924 million energy efficiency initiative that will make a wide array of incentives, rebates and initiatives available to LIPA's residential and commercial customers to assist them in reducing their energy usage and thereby lowering their bills.

Building Energy Codes and Building Energy Rating

With regard to other energy policies, New York continues to move toward the adoption of the 2012 International Energy Conservation Code (IECC) as the basis of its statewide construction code. The state also took an important step with the completion in June 2012 of its statewide baseline energy code compliance assessment, which will help identify gaps in code compliance to allow for not only better measurement, but for targeted training to address those compliance gaps. New York at a Glance (2011)¹⁸

Efficiency Program Expenditures: \$692.16 million

Per Capita Expenditures: \$35.42

Electric Savings: 1,878,804 MWh

Gas Savings: 9.65 million therms

2012 Energy Savings Goal: ~2.5 percent of electric sales

Finally, and perhaps most notably, New York City this year completed its first year of the Greener, Greater Buildings ordinance, which requires commercial and government buildings over a certain level to be energy benchmarked using the U.S. EPA's ENERGY STAR® Portfolio Manager tool, with those ratings loaded into a publicly available database. The program's first year saw nearly 1.8 billion square feet of building space benchmarked. As the largest collection of benchmarking data gathered for a single jurisdiction, it will help New York City identify opportunities to gain even greater efficiencies in its building stock.

¹⁸ Data represent estimates of expenditures and savings in New York based upon NEEP staff review of 2011 NYSERDA annual reports, Utility Energy Efficiency Portfolio Standard (EEPS) annual scorecards, and EIA File 861 data. Numbers may be revised when final 2011 annual reports are made available. Savings are expressed in annual terms.





Pennsylvania Keeping Pace

With the enactment of Act 129 in 2008, Pennsylvania joined the majority of Northeast states in implementing ratepayer funded energy efficiency programs. The Act calls on the state's electric utilities to achieve three percent cumulative energy savings by 2013, in coordination with designated conservation service providers. There remains significant room for improvement, though, as the Act does not have

mandatory natural gas programs or a revenue decoupling mechanism in place. Additionally, Pennsylvania has sought to use its building energy code to promote improved energy performance, though changes to the code adoption process may significantly limit the potential energy savings the state will realize from building codes.

PUC Extends Act 129 Programs into Phase II

This year, the Pennsylvania Public Utility Commission (PUC) took an important step in extending the Act 129 programs into a second phase through 2015, demonstrating utility regulators view energy efficiency as an important component of its energy policy. However, the savings targets are lower than those in Phase I, falling to around 0.75 percent of electric sales, far below levels in leading states. The state's electric utilities, however, do not appear to be on board with even these modest goals, filing petitions challenging the order. The PUC rejected petitions for reconsideration by FirstEnergy and PPL, but evidentiary hearings on specific elements of utility Phase II plans are ongoing.

Disappointment with Building Energy Codes

In the area of building energy codes, the Pennsylvania Department of Labor and Industry Review and Advisory Council (RAC) has the authority to consider updates to the state's Uniform Construction Code (UCC). However, a 2011 legislative change not only altered the process — making it more onerous on the RAC to approve a code update — but the composition of the RAC itself, loading it heavily with interests from the home building industry, which has traditionally been in opposition to updated building energy codes. The RAC began a review of code updates in the fall of 2011, but ultimately declined to update the code. Despite openings on the RAC and recommendations to appoint several new members with deep understanding and appreciation of the role of energy in the building code, Governor Tom Corbett refused to act on these recommendations. Thus, the future of energy codes in the Keystone State does not look bright at the moment.



Progress on Building Benchmarking and Schools

On a decidedly more positive note, the Philadelphia City Council – along with Mayor Michael Nutter – showed great policy leadership when they enacted a building energy benchmarking ordinance for commercial buildings, following in the footsteps of New York City and Washington, D.C. The ordinance passed in June of 2012 stipulates that beginning next July, all buildings larger than 50,000 sq. ft. must disclose energy and water use to the city government or face fines. This demonstrates a growing commitment to finds ways to help place a value on the energy efficiency buildings throughout the Northeast region.

Pennsylvania at a Glance (2011)¹⁹

Electric Program Expenditures: \$252.1 million

Per Capita Expenditures: \$20

Electric Savings: 1,489,749 MWh

2012 Annual Savings Goal: 1.0 percent of electric sales

Lastly, in another hopeful development, Pennsylvania recorded the highest number of applicants in the region to the Green Ribbon Schools program, administered by the U.S. Department of Education and the Environmental Protection Agency.

¹⁹ Data available from 2011-2012 Act 129 energy efficiency reports. Savings are expressed in annual terms.





Rhode Island Leading the Pack

Rhode Island has emerged as a leading state in energy efficiency for the Northeast region, and continues to move ahead with aggressive energy savings goals. Since passage of the Energy Conservation, Efficiency and Affordability Act of 2006, the state has sought to prioritize energy efficiency as a first order energy resource. Rhode Island's programs are run by National Grid with oversight from the Rhode Island

Office of Energy Resources (OER) and the Energy Efficiency and Resource Management Council (EERMC). Last year, National Grid, the state's predominant electric and gas utility, moved ahead with its second Energy Efficiency and System Reliability Plan. The plan calls for 2.5 percent annual electric savings and one percent annual gas savings by 2014.

Investments Climb, Along with Savings Goals

National Grid is set to spend over \$61 million on electric efficiency programs and \$13.7 million on natural gas efficiency programs in Rhode Island this year, bringing overall expenditures to almost \$70 per person — one of the highest levels in the nation. This marked increase is in line with this year's aggressive energy savings goals of two percent of sales and 0.6 percent of natural gas sales. Early reports indicate that Rhode Island may fall slightly short of these levels, partly because of a sluggish economy. While savings goals will be even higher for 2013, increased cooperation between OER, National Grid, and the EERMC has made observers in the state optimistic that the Ocean State will make even more strides towards all cost-effective efficiency in future years. While increased staff stability at OER and innovative new programs are likely to improve overall performance, next year's plans include even higher savings goals, demonstrating that challenges lay ahead for Rhode Island.

Using Buildings Policies to Complement Efficiency Programs

Rhode Island has instituted several progressive public policies regarding building energy use. The state is one of the few in the country that mandates that all new school construction meet the criteria laid out in the Northeast Collaborative for High Performance Schools (NE-CHPS) protocol, and is building a zero net energy school in the city of Newport. Rhode Island also mandates that the new International Green Construction Code (IGCC) govern all new construction for publicly-funded non-school buildings in the state.

With regard to energy codes, Rhode Island has employed a code collaborative which has served as a model for other states. The collaborative brings together state code officials, utility representatives and advocates like NEEP to help devise and deliver code training programs, while working in concert on the update to the next building energy code. Because National Grid has led the effort in both Massachusetts and Rhode Island to devise a proposal for integrating activi-



ties to advance the codes and standards into their energy efficiency programs, the knowledge from one state has transferred easily to the other. As a result, Rhode Island will likely become the first state in the region to make savings from codes a part of its ratepayer energy efficiency programs.

New Emphasis on Combined Heat and Power

Sensing an opportunity to save energy and cut energy costs, the Rhode Island legislature enacted H. 8233, requiring its electric utilities to provide greater support for combined heat and power (CHP) projects at commercial, industrial, and institutional facilities. Given the presence of such buildings in the state, there may be opportunities for significant savings through CHP projects. National Grid will include new incentives and guidance on CHP development in its 2013 energy efficiency plan, though negotiations between National Grid, OER, and the Division of Public Utilities on the final form of the program will likely extend until the end of this year. Rhode Island at a Glance (2011)²⁰

Electric Program Expenditures:

\$34.84 million

Gas Program Expenditures: \$4.06 million

Per Capita Expenditures: \$36.90

Electric Savings: 96,009 MWh

Gas Savings: 1.19 million therms

2012 Annual Savings Goal: 1.7 percent of electric sales & 0.6% of gas sales

²⁰ Data available from 2011 annual energy efficiency report & 2012 program plan. Savings are expressed in annual terms.





Vermont Leading the Pack

Vermont continues to be a leader in energy efficiency policy and program innovation. In 2011, the state achieved electric savings of about two percent of electric sales — one of the highest levels in the nation. Vermont's unique policy and program infrastructure includes third-party administration, with its energy efficiency programs run by Efficiency Vermont and the Burlington Electric Department (BED) through 12-year

orders of appointment. Efficiency Vermont also runs efficiency programs for heating and processfuel customers. This model may be extended to natural gas customers in the near future, as the Vermont Public Service Board (PSB) is considering such a structure for natural gas efficiency programs through Vermont Gas Systems.

New Cost-Effectiveness Screening Procedures Approved

The PSB approved significant changes to cost-effectiveness screening for certain energy efficiency programs. Stakeholders in Vermont recognized that traditional cost-effectiveness screening tools may not work well with residential and low-income programs, particularly for unregulated fuels. The order, part of a workshop on heating and process-fuel efficiency measures, creates adjustments that allow for proper valuation of non-energy benefits (NEBs), including a 15 percent adder for NEBs, a 15 percent adder for low-income benefits, and use a societal discount rate of three percent. Programs for residential and low-income customers, such as comprehensive home retrofit program, may benefit from the new screening rules.

Building Standards

Vermont also moved forward with a more stringent building energy code, as called for by Act 61 of 2005. Its Residential Building Energy Standard (RBES) and Commercial Building Energy Standard (CBES) move the state beyond the 2009 International Energy Conservation Code, which served as a baseline, with elements of the new 2012 IECC also included.

Utility Merger Settlement Yields New Energy Efficiency Investments

As part of a merger between Green Mountain Power (GMP) and Central Vermont Public Service (CVPS), the PSB ruled that \$21 million in ratepayer benefits from the merger should be directed towards energy efficiency programs in the form of a new Community Energy Efficiency and Development (CEED) Fund for former CVPS customers. The CEED Fund monies, part of a windfall-recovery mechanism, will be divided between three customer efficiency programs; \$10 million for weatherization programs, \$2 million in thermal efficiency programs, and the use of the remaining \$9 million to be determined through a stakeholder advisory process. The order from Docket No. 7770 can be found here.



Building Energy Disclosure Falls Short in Legislature

Vermont entertained legislation to create a statewide energy consumption disclosure program for residential buildings. S. 143, informed by Building Energy Disclosure Working Group, would have required sellers to disclose energy use information at the request of a potential buyer. The measure did not pass this session, but it seems likely to be discussed again next session, with broad support from a variety of stakeholder groups.

Vermont at a Glance (2011)²¹

Electric Program Expenditures: \$42.8 million

Gas Program Expenditures: \$1.86 million

Per Capita Expenditures: \$67.60

Electric Savings: 116,204 annual MWh

Gas Savings: 1.11 million therms

2012 Annual Savings Goal: ~2.0 percent of electric sales

²¹ Data available from 2011 annual energy efficiency reports & 2012 program plans. Savings are expressed in annual terms.





Washington, D.C. Keeping Pace

The Clean and Affordable Energy Act of 2008 created the District of Columbia's Sustainable Energy Utility (SEU), a contracted entity overseen by the District Department of the Environment. The SEU has a stakeholder advisory board that meets quarterly, and it releases extensive quarterly reports to the D.C. Council which must approve the programs. The SEU launched "quick-start" programs just six months

after the contract with Vermont Energy Investment Corporation was signed in March 2011 to operate the SEU. The SEU has been ramping up from an initial combined electric and gas budget of \$7.5 million, and will hit its budget cap of \$20 million in fiscal 2014 (starting October 2013). The SEU is focused on lowering energy use and peak demand, increasing renewable energy generation, and promoting green jobs among District residents and businesses.

The SEU has another layer of challenges above and beyond any other program administrators that we know of, with mandates to direct opportunities to so-called Community Business Enterprises located within the district, as well as to meet aggressive job creation goals. It also must comply with an anti-deficiency law, which stipulates that all program funds must be spent each fiscal year or they are forfeited to the District's general budget. No program funds may be carried or borrowed from one year to another. The DC SEU's goals are as much about economic development in the District as they are about energy savings. While these goals are not necessarily competing, the SEU must walk a fine line in how it spends ratepayer funds collected to deliver efficiency and renewable energy solutions to the District.

D.C. has also implemented a strong energy benchmarking law that requires public buildings and large private buildings over 50,000 square feet to disclose their energy use, an important measure that can provide a market value for energy savings measures. The District is currently pursuing the adoption of the 2012 International Energy Conservation Code as well as the energy provisions of the 2012 International Green Construction Code. Combined, these measures are poised to capture significant savings in new and existing buildings in the nation's capital.

Washington, D.C. at a Glance (2011)

Washington, D.C.'s Sustainable Energy Utility (SEU) is ramping up, entering its second year of operations. In 2011, the SEU put a number of residential and commercial programs into operation, investing \$7.5 million in efficiency. More information on savings will be available starting next year.



Summary Analysis

2012 has been a year of continued growth and maturation for energy efficiency across the region. We've witnessed ISO-New England develop its first ever energy efficiency forecast, a testament to efficiency's real impact on the regional power grid. We've seen leading states like Massachusetts, Connecticut, Rhode Island and Vermont strive for deeper savings and more advanced programs, while the gap is widening with states like New Jersey, Maine and New Hampshire whose leadership has not championed a path towards all cost-effective efficiency. Big questions remain for states like New York and Maryland as to whether they can meet their aggressive savings targets, despite substantial strides forward this year. A bright spot: voters have elected new leadership in two key states. In January, the house and senate will be Democrat-controlled in Maine and the house in New Hampshire. While we like to think of saving energy as neither a red nor a blue issue, many Tea Party-backed legislators have been less willing to see the conservative side of energy efficiency. We hope that these changes will give our northern states a boost when it comes to policies that advance efficiency, and the funding that will enable it.

What Makes Efficiency Work in Leading States?

We continue to see some common ingredients:

- Strong executive leadership and an educated legislature
- Regulatory flexibility that aligns with broader public policy goals and empowers program administrators to run successful programs
- Statewide coordination on elements such as program development, marketing, administration and evaluation
- Regional coordination on evaluation, measurement and verification studies and projects as well as market and product engagement.
- The ability to plan and deliver programs over multiple years, as well as respond and adjust to changing market realities.

For more best-practices, please see the Recommendations for Policymakers section of NEEP's most recent regional energy efficiency study, From Potential to Action.

States with mature energy efficiency programs are now trying to tackle the tough issues of how to continue improving complementary polices like building energy codes, building rating, and appliance standards — while ensuring they really do complement and not compete with ratepayer funded efficiency programs. They are also grappling with issues like how to serve businesses and residential customers who heat with unregulated fuels like oil and propane and therefore have limited or no access to thermal efficiency program assistance. How to align and coordinate efficiency programs with demand response and distributed generation initiatives is another important area to watch, with efficiency and renewable energy integration key to achieving the ultimate goal of zero net energy buildings.



Another big issue has been working with utility commissions to evolve their regulatory frameworks so that they are better aligned with state public policy goals as well as the customer needs and realities of today's markets. Increasingly, states are bumping up against the limits of the Total Resource Cost Test²², searching for new ways of ensuring that ratepayer dollars are well spent, but also supporting broader interests of program participants and society at large.

We are seeing a growing trend of multi-year efficiency plans, with states like New Hampshire and Connecticut joining neighbors whose program administrators plan and evaluate together and strive to deliver integrated electric and gas programs smoothly across service territories — seamlessly from year to year. Vermont now has a 12-year order of appointment, which allows it to take an even longer view in program planning, which benefits both consumers and program contractors. Some states, like New York and New Jersey, are still grappling with clear and coordinated program delivery models that are aligned with broader policy goals. Improved synchronization in messaging, delivery and program evaluation are helping to improve customer service, increase certainty in the marketplace and reduce administrative waste.

The last year has not been without its challenges for the region, still recovering from a weak economy as federal Recovery Act funding comes to an end, creating reluctance among many customers to undertake substantial energy efficiency projects. As New Hampshire flirted with pulling out of the Regional Greenhouse Gas Initiative (RGGI) and ultimately passed a mixed bag of legislation²³, leading states and efficiency advocates discussed how and when the cap on emissions allowances might be reduced to get the auction price up off the floor – and do more to curb emissions while generating more money to invest back into energy-saving projects.

To help customers overcome barriers to efficiency, program administrators are becoming even more innovative with how they target and reach customer segments, and states and program administrators are developing creative financing tools to augment the ratepayer-funded incentive programs. Connecticut's Commercial and Industrial PACE program is creating a great deal of buzz, while Massachusetts' HEAT Loan program steadily churns out loans through a network of community banks.

Issues to Watch

Oil Heat Energy Efficiency Programs

Policymakers and efficiency advocates continue to grapple with how to expand energy efficiency programs to customers who heat with unregulated fuels, particularly oil. A significant portion of homes in the Northeast still use #2 heating oil for their homes and do not have full access to energy efficiency programs available to those who heat with natural gas. Despite a final push in Massachusetts before the end of the session, legislative leadership rejected H. 3897, which sought to create a new fund for oil heat energy efficiency program. Connecticut, Rhode Island, and Vermont con-

²² See a recent paper by Synapse Energy Economics: http://www.nhpci.org/images/NHPC_Synapse-EE-Screening_final.pdf

²³ See New Hampshire section on page 15



sidered similar legislation this year, and Maine continues to search for ways to finance its thermal efficiency programs. One bright spot is in New Hampshire, where the Public Utilities Commission has approved the continuation of a fuel-blind pilot for residential customers to weatherize and upgrade heating equipment as part of the 2013-2014 CORE efficiency programs filing.

Natural Gas Prices as Wildcard

The boom in domestic natural gas extractions has driven prices below \$3 dollars per thousand cubic feet , helping to moderate energy prices, which is good news for ratepayers. But the falling prices have a complicated effect on efficiency programs, which are tied to the price of supply-side energy resources. States may be tempted to invest less in energy efficiency, despite the fact that gas prices will, inevitably rise again, as well as the fact that gas-powered electricity's contribution to climate change and air pollution is unclear. And that's to say nothing of overall environmental impacts of the hydraulic fracturing, or "fracking" techniques used to extract natural gas from shale formations, which have still not been fully exposed or understood. Inexpensive gas makes big projects like combined heat and power more attractive, and energy efficiency can help smooth out the price volatility that customers face. Policy decisions based on recent drops in natural gas prices are far from certain, particularly in light of intense opposition to the hydraulic fracturing in New York and Pennsylvania where much of the drilling is taking place.

Building Energy Disclosure

More and more jurisdictions in the region are beginning to embrace policies to promote transparency in building energy consumption, which NEEP has long advocated for. This year, Philadelphia joined New York City and Washington, D.C., as well as several other cities across the nation in adopting a commercial building energy benchmarking and disclosure policy, with implementation to begin next summer. Boston Mayor Thomas Menino also announced support for a building energy disclosure ordinance for large commercial buildings last June, with the City Council expected to take up the proposed ordinance later this fall. In addition, Massachusetts has moved ahead with two pilot programs — one residential, one commercial — aimed at investigating and advancing tools and methodologies for rating home and building energy use in a cost-effective manner. And in Connecticut, the state's recently released Comprehensive Energy Strategy specifically calls for the development of a building labeling and disclosure program, albeit on a pilot basis.

Regional Greenhouse Gas Initiative: Legislative Changes, a Moving Cap?

New Hampshire and New Jersey legislators this year engaged in extensive debate about whether to continue participating in the Regional Greenhouse Gas Initiative (RGGI). The results demonstrate that RGGI will continue, albeit under what are sure to be continuously contentious circumstances. New Hampshire enacted HB 1490, which preserves the state's participation in RGGI on the condition that no two other states in the region leave the pact. The act also dedicates a higher portion of the RGGI auction proceeds to the state's CORE energy efficiency programs, but diverts a large share of those proceeds to direct rebates. In New Jersey, Democratic members of the Assembly pushed for New Jersey's return to RGGI after Governor Chris Christie halted the



state's participation last year. The Assembly passed S. 1322, which would require that New Jersey the re-enter the program, but it could not secure enough votes to override the governor's veto.

RGGI may undergo further changes as the states commence their 2012 Program Review this fall. Many stakeholders have called for revisions to state CO2 budgets, or RGGI "cap," as actual emissions have fallen significantly below those forecasted when the program began. Updating the emissions cap could potentially increase revenues available for energy efficiency programs, which recent analysis has found yields significant benefits for electric customers. The Program Review is expected to run until the end of 2012.

Conclusion

Together, the Northeast and Mid-Atlantic states plan to invest over \$2.5 dollars in electric and gas efficiency through 2013. This has led to unprecedented savings levels, with many states meeting 1.5 and 2 percent of electric needs through energy efficiency. Investing in efficiency has meant growing good jobs in the region and keeping energy dollars circulating in our local economy, instead of going overseas. It's no accident that states that have the most aggressive goals and stable climate for energy efficiency are seeing big job gains.²⁴ While states are investing in retrofitting homes, businesses and public buildings, they are also promoting policies that encourage cleaner, greener new buildings, and are using information like building energy rating and disclosure to send clear signals to the market that efficiency makes long-term financial sense.

²⁴ In Massachusetts, clean energy jobs are up 11% over 2011: http://masscec.com/index.cfm/page/2012-Massachusetts-Clean-Energy-Industry-Report/cdid/13909/pid/11170.



Appendix A



Figure 1: Energy Efficiency Investments in the Northeast, 2007-2013²⁵

Expenditures on energy efficiency programs in New England, New York, and the Mid-Atlantic states are expected to climb to nearly \$2.5 billion next year as a result of policy choices, tripling investment levels from six years ago.

²⁵ Expenditures include all electric and natural gas ratepayer funding and funding from RGGI and wholesale markets like the Forward Capacity Market. Data is gathered from state annual efficiency plans reports from 2007 to 2013 and represent an approximation of state expenditures in a given year. 2007 to 2011 are year-end reported data while 2012 & 2013 are forecasted data that are subject to change.





Figure 2: Per Capita Energy Efficiency Investments in the Northeast, 2010-2013²⁶

State energy efficiency policy has driven increases in per capita expenditures in states across the Northeast and Mid-Atlantic, with some reaching levels \$50/person or more. That said, significant room exists for growth in states that have not yet fully valued energy efficiency as a resource.

²⁶ For information on sources, see Footnote 25 on page 33. Data include expenditures from both electric and natural gas programs. Investments in natural gas efficiency vary widely in the region, and Maryland and Pennsylvania do not offer natural gas customers at present.



Figure 3: Regional Electric Efficiency Investments & Retail Electric Revenue, 2011²⁷



While the increase in energy efficiency expenditures has been impressive, total spending remains just 2.3 percent of electric sales revenue in 2011.

²⁷ See footnote 16 above for electric efficiency program expenditure sources. Electric Revenue data represents the total for all the states in the Northeast and Mid-Atlantic region taken from EIA File 861, available at http://www.eia.gov/electricity/data/state/.







This level of expenditures has allowed states to capture higher levels of savings, but a number of jurisdictions have either approved or are proposing even higher levels of electricity savings this year and beyond, with many having targets near 2 percent of annual retail sales or higher. Natural gas programs are not included this year because of data limitations and the lack of states with mandatory gas savings goals.

^{28 2010} and 2011 electric energy savings data compiled from state annual reports. 2012 state savings targets are estimate of expected savings based upon 2012 program plans or from the 2012 ACEEE Scorecard (p. 33) compared with the 2012 ISO-NE CELT Report and EIA state electricity consumption figures. Connecticut and New Hampshire do not have mandated electricity savings targets at this time, while Maine's figures include ARRA funding, possibly increasing its total savings in comparison with other states.



Appendix B

Further Information

NEEP maintains and updates an abundance of news materials and policy information resources on our website, www.neep.org. You will find information on building energy codes and high performance buildings, appliance efficiency standards, regional work on market strategies to advance efficient lighting and other products, and more. We encourage you to subscribe to our newsletters, and contact us if we can be of assistance in any way. Please check out the following:

- Highlights, our bi-monthly policy news and analysis e-newsletter
- Policy Tracking Brief, our monthly round-up of legislative and regulatory happenings
- The Efficiency Policy Snapshot, focuses on New England investment and savings data.
- From Potential to Action, a report on New England's electric efficiency potential with policy recommendations on how to capture it.
- The Regional Evaluation, Measurement and Verification Forum, which supports the development and use of common and/or consistent protocols to evaluate, measure, verify, and report the savings, costs, and emission impacts of energy efficiency. Stay tuned for the release of the Regional Energy Efficiency Database (REED) early next year.

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NEEP verified the data in this report to the best of our ability based upon available data from state efficiency plans and reports, regional transmission organizations, and the U.S. Energy Information Administration (EIA). The assessment of state progress is purely our own, and does not reflect the opinions of NEEP's Sponsors or Board of Directors. Please contact us if you have questions or need source information.

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Northeast Energy Efficiency Partnerships (NEEP) is a non-profit organization that works to accelerate energy efficiency in the Northeast and Mid-Atlantic States. NEEP provides support to the region in four key areas: speeding the adoption of high-efficiency products, reducing building energy use, advancing knowledge through best practices and generally increasing the visibility of the benefits of efficiency.