CHARTING A COURSE: Next Generation Energy Efficiency



NEEP's Policy Outreach and Analysis team is pleased to present our Fifth Annual *Regional Roundup of Energy Efficiency Policy*. The *Regional Roundup* offers policymakers, regulators, program administrators and other stakeholders a comparative view of the progress of energy efficiency policies and programs across the Northeast/Mid-Atlantic region. This year's *Roundup* is through the lens of "Next Generation" Energy Efficiency. What are the most advanced states doing, and what steps can policymakers take to keep their states moving forward? The *Roundup* sheds light on these topics and more.

What you'll find most interesting:

- An overview of state progress including regulatory updates and most recent data on investments and savings for gas and electric efficiency programs;
- An assessment of what makes for leading states and who's trailing the pack;
- A retrospective of energy efficiency history and milestones for the nation and the region;
- Deep dives into trends including strategic electrification, new financing and ratemaking models, EM&V 2.0 and the integration of efficiency and other demand side resources;
- Insights into emerging building energy and technologies;
- An array of links and resources from NEEP and others.

STATES AT A GLANCE

Based on several indicators — sustained support of efficiency programs and policies by gubernatorial administrations, new regulatory, legislative or programmatic initiatives to advance Next Generation themes, and inclusion of complementary policies such as building energy rating and leading by example — NEEP offers its view of how states are doing in policy commitments and related savings results.

LEADING:

Connecticut | Massachusetts New York | Rhode Island | Vermont

All of these states are taking notable steps to embrace Next Generation themes, including grid modernization/utility of the future proceedings; serious examinations of the integration of efficiency, distributed resources and storage; and strong, sustained support for efficiency program investments. Critical decisions regarding the future of energy efficiency are still pending in New York, where its Reforming the Energy Vision regulatory proceeding may result in strong, binding energy efficiency savings goals, or may leave open to untried forces a transition to greater reliance on market actors for the delivery of efficiency savings. Vermont gets credit for initiating no less than an "Energy Transformation," including strategic electrification. Massachusetts maintains a commitment to nationleading energy savings goals, while urging innovations from its program administrators. Rhode Island exhibits strong executive leadership on energy and climate issues.

ADVANCING:

Delaware | New Hampshire | Maine Maryland | District of Columbia

Both New Hampshire and Delaware are making solid progress on efficiency policies — New Hampshire working towards its first Energy Efficiency Resource Standard, and Delaware for laying the framework for the first broad statewide, ratepayer-funded efficiency programs. Maryland continues on with EmPOWER programs, despite concerning trends at the highest levels of state government that seem to question the value of energy efficiency. The District of Columbia continues to see leadership on building energy from the mayor's administration and the Sustainable Energy Utility. Maine broadened its natural gas programs significantly this year, with the Efficiency Maine Trust proposed targets in the next Triennial Plan that exceed two percent of retail sales.

TRAILING:

New Jersey | Pennsylvania

Under Governor Chris Christie, energy efficiency and climate policies have suffered in New Jersey. Repeated diversion of energy efficiency funds to the state's general operating budget and a lack of support for the Regional Greenhouse Gas Initiative (RGGI) have limited energy efficiency's role as a resource in New Jersey. Pennsylvania is making notable strides thanks to leadership from Governor Wolf, whose administration has voiced support for energy efficiency and its role in the Clean Power Plan. However, Pennsylvania remains the only jurisdiction in the NEEP region without comprehensive gas efficiency programs. Further, a recent order extending Act 129's electric efficiency programs until 2021 failed to address the constraints of the noninflation adjusted funding level prescribed more than a decade earlier, and therefore limited savings targets to about .8 percent of retail sales.

Top Trends in Next Generation Efficiency, and States that are Embracing or Exploring Them

TREND	NEXT GENERATION EFFICIENCY POLICY	STATES
Grid Modernization	Examining new utility frameworks responsive to emerging technologies/ societal challenges and anticipating proliferation of multi-directional power flows, while also emphasizing greater customer engagement.	MA, NY, CT, RI, DC, NH
Strategic Electrification and Geo-targeting	Planning to procure savings from energy systems as a whole — across all fuels — with an emphasis on targeting distributed energy resources and their capabilities to defer or limit the need for further investments in distribution and transmission system assets.	VT, RI, NY, MA, ME
Advanced Building Policies	Shifting toward a whole-building approach to efficiency emphasizing advanced building energy codes, code compliance mechanisms, and building energy rating and labeling practices that drive toward "zero energy."	RI, MA, CT, VT, DC, NY, DE
New Program Strategies	Harnessing new technology and policy innovations within utility program plans to enhance customer understanding around energy usage through expanded energy data access, information communication technologies, and strategic energy management strategies.	MA, VT, CT, NY
Integrating Energy Efficiency and Demand Response	Pairing energy efficiency program planning with opportunities for demand response in a manner that enhances cost-effectiveness and reduces peak load growth.	MD, CT, RI, MA, PA
EM&V 2.0	Coupling new data collection technologies and software-as-a-service analytic tools with traditional evaluation, measurement, and verification strategies for real-time feedback of efficiency program impacts that is less costly and sufficiently accurate.	Many states exploring, none fully implementing
Ongoing Evolution of Financing Tools	Leveraging private capital investments to increase funding available for energy efficiency programs through the use of Green Banks and related credit facilities, while also preserving proven program structures.	NY, CT, PA, NJ

"Change is coming quickly. For the innovators in markets and programs, it's hard to be in the current regulated structure as these new markets develop. We are trying to figure out answers to questions like: What is the role of the grid? Who will pay for the grid that will enable the future we want to see?" — Sue Coakley, NEEP Executive Director



NEEP'S VIEW: Policy Strategies To Advance Next Generation Efficiency

- **1.** Put consumers at the center of the energy/utility relationship, thoughtfully integrating new technologies and policies to so that price signals, information and behavior aligns to advance the efficient use of energy.
- 2. Via law or regulation, establish binding policy directives for utilities to capture all cost-effective energy efficiency, and provide a regulatory framework to allow for the integration of these programs with other demand side resources, including demand response, storage, on-site renewable generation, combined heat and power and electric vehicles.
- **3.** Create utility rate structures aligned with broader public policy goals, including mitigating the need for new infrastructure, lowering peak and overall energy use, supporting carbon reduction goals, fostering climate resiliency, growing the clean energy economy, and helping consumers save energy and reduce costs.
- **4.** Ensure adequate, stable, long-term funding for efficiency programs, with private financing to complement but not supplant ratepayer program funding.
- **5.** Allow for robust stakeholder input and engagement ideally through a standing advisory board with expert consultants to help states plan, deliver and evaluate methods to achieve long term savings goals.
- **6.** Advance policies and programs that promote comprehensive all-fuel strategies, including building energy and operational savings en route to "zero energy buildings."
- **7**. Support complementary public policies such as building energy codes, building energy rating and disclosure, appliance efficiency standards, and state and local governments "leading by example" through progressive energy efficiency strategies in schools and other public buildings.
- 8. Integrate energy efficiency into long-range state energy and air quality planning, and ensure that energy efficiency and other demand resources are fully accounted for and considered equally through robust and comprehensive analyses whenever new infrastructure investments are contemplated.
- **9**. Foster a flexible regulatory framework to address the opportunities and challenges of new information and communication technologies and continue supporting transparency and consistency in evaluation, measurement and verification of program savings.
- **10**. Highlight and share regionally and nationally energy efficiency success stories and learn from best practices to ensure continued progress in capturing cost-effective efficiency and moving towards Next Generation Energy Efficiency policies and programs.



Northeast/Mid-Atlantic Region Continues to Lead in Efficiency



The total annual avoided CO₂ from 2014 electric energy savings across the NEEP region is 2,784,429 tons. That is equivalent to taking 531,788 passenger vehicles off the road annually, or enough electricity to power 347,454 homes for a year.

Region's Combined Energy Efficiency Investments 2011-2014*



* Data compiled from state energy efficiency program expenditures from state annual energy efficiency reports from 20011-2014, data submitted to ISO-New England for its annual energy efficiency forecast, and to NEEP for its Regional Energy Efficiency Database (REED).

"The collaborative platform that NEEP has built over the past 20 years has truly enhanced the work of all the partners in the industry. If NEEP didn't already exist, we'd need to create it."

- Stephen Cowell, President E4TheFuture and founding board member of NEEP



NEEP CELEBRATES 20

ABOUT NEEP



Northeast Energy Efficiency Partnerships (NEEP) is a non-profit that supports the expansion and implementation of policies and programs to accelerate energy efficiency in the Northeast and Mid-Atlantic region. Founded in 1996 as a collaborative of utilities, government and the private sector, we work in four key areas: speeding the adoption of high-efficiency products, reducing building energy use, advancing knowledge and best practices and generally increasing the visibility of the benefits of efficiency.

Our vision is that the region will fully embrace energy efficiency as a cornerstone of sustainable energy policy to help achieve a cleaner environment and a more reliable and affordable energy system. NEEP is available to assist state energy offices, legislators, regulators or administration officials in any of these areas. NEEP works through funded partnerships with the U.S. Department of Energy (DOE), as well as with utilities, third-party program administrators, public officials, various non-governmental groups, businesses and foundations.

FURTHER INFORMATION

Northeast Energy Efficiency Partnerships (NEEP) maintains and updates an abundance of news materials and policy and program information resources on our website, www.neep.org, where you can also download this full report. We encourage you to subscribe to our blog and newsletters, and contact us if we can be of assistance in any way.

For more information, please contact:

Natalie Treat	ntreat@neep.org	781-860-9177 x121
Brian Buckley	bbuckley@neep.org	781-860-9177 x152
Jim O'Reilly	joreilly@neep.org	781-860-9177 x118



