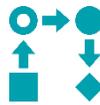




NEEP 2017 QUARTER-TWO REPORT

Executive Summary – Quarter-Two Highlights

In 2017, NEEP cast its eye on the lofty goal of assisting the Northeast & Mid-Atlantic region in reducing total carbon emissions 80% by 2050. While NEEP's focus may have pivoted in response to the changing industry landscape, one thing remained constant – our work to bring stakeholders together to engage around energy solutions. We're proud that through collaboration, NEEP and our network of state and federal partners, allies, foundations, and other stakeholders from across the region and nation have worked to embrace next generation energy efficiency as a core strategy to meet energy needs in a carbon-constrained world.



Facilitate Market Transformation for Advanced Solutions



Northeast Industrial Strategic Energy Management Initiative

Published a new report on Strategic Energy Management (SEM) Evaluation, Measurement and Verification (EM&V) Best Practices: The [report](#) identifies best practices for measuring savings from SEM programs, evaluating those measured savings, and screening for cost effectiveness. SEM in the industrial sector is an emerging opportunity to achieve significant energy savings through both increased capital projects as well as operations and maintenance (O&M). To inform the report, NEEP circulated draft reports with several leading stakeholders including the U.S. Department of Energy (US DOE), national laboratories, energy efficiency program administrators, and other SEM experts. We anticipate the report will be used by states and energy efficiency programs to inform their consideration of launching SEM offerings.



Home Energy Management Systems (HEMS)

Published a new resource, [Claiming Savings from Smart Thermostats: Guidance Document](#): The guide, which was among the top five NEEP resources for May 2017, provides a step-by-step process for energy efficiency program administrators to claim more reliable, accurate, and likely larger savings from their promotion of smart thermostats. We encourage stakeholders to use the ENERGY STAR Smart Thermostat specification as qualifying criteria for their programs, which has [several products already certifying](#). The guide is also intended to help solve larger issues in market transformation – e.g., how can we be sure control devices are saving energy? The guide was peer reviewed by device manufacturers, the U.S. Environmental Protection Agency (US EPA), program implementers, and program administrators. Ultimately, our hope is that it will help bring more smart thermostats to the region.



Emerging Commercial-Sector Business Models for Efficiency

NEEP’s work on emerging business models in the commercial sector continued: Our research and discussions on this topic identified a fundamental challenge: sophisticated financing models already exist, and there are organizations focused on bringing them to commercial customers. There are also advanced technological solutions for commercial efficiency with realistic payback periods. The barriers preventing deep commercial efficiency from occurring are not the insurmountable market barriers typically found in efficiency. Instead, the root of the issue is that in general, a commercial customer’s motivation to move forward with such projects is sufficiently lacking. The opportunities for scale in deep commercial efficiency, therefore, are limited by the customer base’s resistance to taking on these efforts. As such, NEEP reassessed and further refined our project scope, which now has a deeper focus on how to get customers sufficiently motivated to say “yes” to efficiency projects.



Regional EM&V Forum (EM&V 2.0 Focus)

Delivered two in-person EM&V Forum events on timely, diverse topics: These events covered issues affecting the entire Northeast and Mid-Atlantic region, and included: 1) the [EM&V Forum Spring Conference](#) in Washington, D.C.; and 2) the [EM&V Forum Summer Workshop on Cost-effectiveness](#) in Hartford, Conn.



State and Federal Appliance Efficiency Standards

Refocused appliance efficiency standards efforts toward opportunities for state standards in our region: NEEP began discussions with several stakeholders – including utilities, state energy offices, and other environmental groups – in several states including Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, and Vermont. We also participated in a newly formed national group, convened by the Appliance Standards Awareness Project (ASAP), focused on coordinating opportunities in state standards. Additionally, NEEP staff reviewed ASAP’s draft report, which explores new products for consideration by states. This report will serve as the foundation for NEEP’s state standards model package for 2018.



Promote Resilient, High Performance Buildings & Communities



High Performance & Zero Energy Buildings, Homes, and Communities

Hosted a school tour on National Healthy Schools Day: NEEP organized a tour of the [Francis T. Bresnahan Elementary School](#), a high performance school in Newburyport, Mass. Completed in 2014, the school achieved the Collaborative for High-Performance Schools (CHPS) Verified Leader status and is a great model for a healthy, energy efficient building. The tour was led by the school’s facility director as well as the architect. Tour leaders were able to showcase the

various high performance features of the building while answering questions from the 15 participants. Tours present a great opportunity to learn about the characteristics that define a high performance school and why they are important in a community’s decision to embrace sustainability. The tour also highlighted the school’s unique feature of bringing in community sponsorship to help fund the project. An [exemplar](#) highlighting the school’s features was also developed.



Building Energy Codes

Supported Rhode Island’s residential stretch code to advance zero energy construction: The [state of Rhode Island](#) residential stretch code committee will utilize the [Department of Energy’s Zero Energy Ready Home](#) (DOE ZERH) program as the basis for its residential stretch code. NEEP proposed the utilization of the DOE ZERH program, prepared informational documentation, and presented program benefits to the committee. Using the ZERH program to inform the stretch code supports implantation of the state’s zero energy roadmap to advance its [zero energy and greenhouse emission reduction goals](#).



Home Energy Labeling Information Exchange (HELIX)

Selected an IT contractor and began building the HELIX database: After receiving five responses to the [HELIX RFP](#) last quarter, the HELIX team selected ClearlyEnergy as the contractor to build the HELIX database. NEEP then organized a kick-off meeting for the HELIX technical sub-team to establish guidelines for managing the development of the database and to begin discussing early design elements. An alpha version of the database is scheduled to be completed by fall 2017.



Building Energy Rating and Disclosure

Published an exemplar on South Portland, Maine’s benchmarking ordinance: In partnership with South Portland’s Sustainability Coordinator, NEEP developed an in-depth look at the city’s benchmarking ordinance. The resulting [exemplar](#) highlights the unique characteristics of the city’s policy and provides a question-and-answer format discussion on how the city moved things forward. The exemplar shows that passing benchmarking ordinances is possible in smaller cities and attempts to answer some of the critical questions surrounding barriers that prohibit ordinances from being enacted elsewhere.



Share Best Practices to Advance Strategic Electrification & Next Generation Energy Efficiency



Regional Strategic Electrification Assessment

Hosted a [Regional Strategic Electrification Summit](#): The event was held on June 29 at Schneider Electric’s Boston One Campus in Andover, Mass, with a group of over 100 stakeholders in

attendance. The morning session featured a keynote presentation from David Cash of the University of Massachusetts Boston's McCormack Graduate School of Policy and Global Studies, a presentation by the project consultant on their regional assessment findings, and a "reaction" panel with several stakeholder groups represented. The event concluded with an afternoon session featuring a discussion of necessary actions that the region should prioritize related to strategic electrification.



Cold Climate Air-Source Heat Pumps (ccASHPs)

Hosted the [Regional Air-Source Heat Pump Market Transformation Workshop](#): Held June 27-28 in Andover, Mass., the event gathered over 90 key stakeholders from across the air-source heat pump (ASHP) market – including manufacturers, program administrators, installers, technology experts, state and local policy makers, and others – to coordinate effective implementation of regional market transformation strategies. Attendees interacted through a series of sessions exploring topics such as in-field performance, integrated controls, installer education, and NEEP's [cold climate ASHP specification](#), among others.



Advanced Efficiency Leadership Network



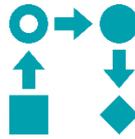
Regional Energy Efficiency Database (REED)

Published the fifth issue of [REED Renderings](#): Posted to NEEP's blog in April, this installment covered how energy efficiency leads to carbon reduction, and highlighted leading states and the types of energy efficiency programs that draw the most carbon savings.



State and Local Policy Tracking, Analysis, and Technical Assistance

Provided technical assistance to New Hampshire: To support the N.H. Public Utilities Commission, NEEP produced a [report on non-energy impacts](#) (NEIs) and current practices across the country to support the Commission's decision on whether the state will use adder- or evidence-based measures to value NEIs. As a part of this technical assistance, a presentation was given to the Energy Efficiency Resource Standard (EERS) Committee of the state's Energy Efficiency and Sustainable Energy (EESSE) Board.



Facilitate Market Transformation for Advanced Solutions

Help to transform markets with advanced energy efficiency technologies and solutions through public policy, research and collaboration, and public-private partnerships that deliver regional-scale impacts.

Events & Stakeholder Engagement

- **Co-led the regional Strategic Energy Management Collaborative Working Group:** In partnership with Efficiency Vermont, NEEP organized and hosted a regional working group focused on program implementation of Strategic Energy Management (SEM). The group met via teleconference on April 18 and June 19, with approximately 20 stakeholders attending each discussion. The group offers a structured information exchange between SEM service providers and regional industrial program administrators either implementing or exploring SEM as a program measure.
- **Attended US DOE's Better Buildings Summit in Washington, D.C.:** NEEP participated in a number of sessions related to the effective implementation of SEM in commercial and industrial facilities, as well as an introductory workshop on the details of DOE's new SEM resource, [50001 Ready](#). NEEP will be working with regional partners to utilize the resources available through this program, making promotion and adoption of SEM simpler to potential stakeholders.
- **Demonstrated thought leadership on the topic of Smart Energy Homes:**
 - NEEP staff was invited to lead a panel exploring evaluation of smart devices at the [2017 EM&V Forum Spring Meeting](#). NEEP not only organized the well-reviewed panel, but also presented draft analysis from the newly published [Claiming Savings from Smart Thermostats: Guidance Document](#).
 - NEEP staff was invited to present strategies on the Smart Energy Home to the Connecticut Energy Efficiency Board at their [annual retreat on June 15](#). This presentation was catered to help Connecticut stakeholders understand the short- and longer-term opportunities in the smart energy home.
- **Hosted a HEMS Working Group meeting:** NEEP hosted a meeting of the HEMS Working Group on May 24. With over 30 participants, including representatives from NEEP partner states Vt., N.Y., Conn., R.I., as well as the EPA, DOE, and NREL, the meeting was a successful convening of regional and national HEMS stakeholders. Following the meeting, NEEP provided a comprehensive summary of new activities in this space in our *Smart Energy Home Newsletter*.
- **Engaged with commercial efficiency stakeholders:** In May, NEEP attended the [ACEEE Energy Efficiency Finance Forum](#) in Chicago. This two-day conference, preceded by an energy efficiency finance 101 session, was a critical chance for NEEP staff to meet stakeholders in this space, learn from the cutting edge of innovation in emerging efficiency business models, and gain support for our research. NEEP also attended a session at the Consortium for Energy

Efficiency (CEE) Summer Meeting in May focused on the challenge of utilities in getting participation in commercial efficiency programs.

- **Delivered the [EM&V Forum Spring Meeting in Washington, D.C. in April](#):** Panels discussed various ways in which evaluation, measurement, and verification intersect with policy and technology, including cost-effectiveness issues, M&V 2.0 tools as evaluation resources, smart thermostat impacts, and evaluation approaches to market transformation.
- **Shared information about Advanced Metering Infrastructure (AMI) and cost-effectiveness at two events:**
 - A [webinar](#) co-hosted by Green Tech Media (GTM): To begin collaboration with GTM, NEEP summarized its research on the status of AMI and cost-effectiveness in the Northeast region. GTM provided a forward looking national and international perspective on AMI trends.
 - A [presentation](#) at the EM&V Forum Summer Workshop on Cost-Effectiveness.
- **Participated in the inaugural webinar of the DOE M&V 2.0 Pilot:** This was the first opportunity for the entire project team (US DOE, the Connecticut Department of Energy and Environmental Protection [CT DEEP], Eversource, United Illuminating, NEEP, the Lawrence Berkley National Laboratory (LBNL), and representatives of N.Y., R.I., Vt., N.H., Del., D.C., and Penn.) to share information about the goals and upcoming tasks in this three-year project.
- **Hosted a quarterly Appliance Standards Working Group meeting:** With nearly 20 organizations participating, the meeting looked deeply into the recent standards bill that passed in Vermont and explored opportunities for standards with a broad range of stakeholders.
- **Developed a survey to identify stakeholders' key barriers and opportunities to market transformation for commercial efficiency:** NEEP developed an online survey for market actors in the commercial efficiency space to help identify the primary barriers and opportunities to deep retrofits. The survey was developed through discussion with market actors, and is intended to be shared with a wide range of stakeholders including program administrators, energy service companies (ESCOs), other service providers, financiers, and more.
- **The region weighed in on the value of federal appliance standards:** NEEP worked with the Appliance Standards Working Group to generate support for the federal appliance standards program in response to a request for information on opportunities to minimize regulatory burden from the US DOE.

Research, Analysis, Reports, and Case Studies

- **Released a white paper on [EM&V Best Practices and Recommendations for Strategic Energy Management](#):** A NEEP [blog](#) summary of the report was also released.
- **NEEP guidance on [Claiming Savings from Smart Thermostats](#) was released in April:** This document provides guidance for program administrators, evaluators, regulators, and other efficiency stakeholders to take a data-driven approach to claiming savings from Smart Thermostats.



- **Smart thermostat blog highlighted new partnership:** NEEP released a [blog](#) focused on the data analysis opportunities from a new partnership with ecobee, called “Donate Your Data.” This partnership between ecobee and NEEP is important to our research on smart thermostats.
- **Conducted an ENERGY STAR smart products analysis:** NEEP completed an analysis looking at the smart or connected functionality of a range of ENERGY STAR products. ENERGY STAR has been incorporating an optional connected functionality into several specifications for years, and NEEP’s analysis set out to understand how many products and manufacturers were taking advantage of the option, as well as any energy implications. The full results will be compiled and published in the third quarter.
- **Research continued on innovative new approaches for commercial efficiency:** NEEP continued to conduct research on several new and innovative approaches towards commercial efficiency, as well as look into non-energy benefits associated with commercial efficiency upgrades. This research will be compiled into a report on the topic.
- **Completed a new report on non-energy impacts:** The report, [Non-Energy Impacts Approaches and Values](#), delivered to New Hampshire stakeholders in June, summarized research on current practices in estimating and applying NEIs for cost-effectiveness in the Northeast and beyond.
- **Continued research in support of the M&V 2.0 pilot project:** This research included: 1) updating the inventory of building automation tools and case studies; and 2) characterizing state partners’ program experience with M&V 2.0-related programs and products.
- **Planned for a webinar on non-intrusive load monitoring:** NEEP gathered information for a July [public webinar on non-intrusive load monitoring \(NILM\)](#), featuring case studies and technology definitions as the space is evolving.
- **Participated in Uniform Methods Protocol (UMP) Steering Committee Meetings:** NEEP participated in these meetings to stay informed of ongoing and planned UMP updates.
- **Contributed to ENERGY STAR specification development:** NEEP participated in the ENERGY STAR specification process for products of interest for appliance standards. This included submitting comment letters on [uninterruptable power supplies \(UPS\)](#), which had a recent federal standard, to help advance the efficiency of the UPS market.
- **Brought appliance standards understanding to new stakeholders:** NEEP collaborated with evaluators from NMR Group to prepare a poster for the [IEPEC - International Energy Program Evaluation Conference](#). The poster is focused on the General Service Lighting standard that NEEP has been following closely, but which is complicated and has confused many stakeholders. NEEP worked with NMR to finalize the content for the poster to be presented to evaluators and program administrators at the IEPEC conference in August.

Technical Assistance and Resource Centers

- **Delivered the [Version 7 Update of the Mid-Atlantic Technical Reference Manual](#):** The update was shared with stakeholders in Del., Md., and D.C.



- **Delivered the [EM&V Forum Summer Workshop on Cost-Effectiveness](#):** The workshop, co-funded and facilitated by Connecticut stakeholders, shared information about the National Standard Practice Manual which was released in May, examples of states' current cost-effectiveness practices from across the nation, and invited discussion across regulatory, consumer advocate, industry, and program administrator perspectives.
- **Provided technical assistance to states on appliance standards:** Earlier in 2017, the Rhode Island legislature introduced an appliance standards bill based on ASAP's 2017 model package. NEEP helped Rhode Island stakeholders understand appliance standards through education and technical assistance, including preparing a fact sheet to provide more information on the potential impacts of the bill.

Regional Market Transformation Strategies

- **Advanced the conversation on smart water heating:** Following one of the strategies from [NEEP's Smart Energy Home market transformation report](#), the desire to host a stand-alone conversation on smart water heating emerged. In June, NEEP organized a meeting to take place in July focused on the existing activity for smart retrofit and new water heaters, as well as the range of energy benefits from efficiency, demand response, and integration with distributed energy resources.



Promote Resilient, High Performance Buildings & Communities

Provide guidance and technical assistance to support the development of resilient, healthy, high-performance and zero energy buildings and communities at the local and state level.

Events & Stakeholder Engagement

- Convened the Regional High Performance Schools and Public Buildings Leadership Groups:** NEEP hosted a webinar for the High Performance Public Buildings Working Group that was also made available to the public. The focus of this webinar was to provide a case study on a small community's approach to improving energy throughout their municipal infrastructure. Small municipalities tend to lack resources to take on major improvement projects but this model shows how local stakeholders can lead an energy reduction initiative. The webinar also provided attendees with information on financing these projects by highlighting DOE's Energy Services Performance Contracting (ESPC) Toolkit – a suite of resources for communities to learn and benefit from the work of the ESPC Accelerator.
- Presented at National Grid's Municipal Energy Summit:** NEEP participated in the 2017 National Grid Municipal Energy Summit, a gathering of local-level stakeholders to learn about improving efficiency in schools and street lighting. NEEP presented on two topics, including our [Operations and Maintenance Guide](#) and [Northeast-CHPS \(NE-CHPS\)](#). The summit was a valuable forum for the exchange of best practices and resources related to energy efficiency in schools and street lighting.
- Maintained national network of partners:** NEEP continued to play an active role in the [National Code Collaborative](#) as well as provide monthly updates to groups assembled by the Responsible Energy Codes Alliance (RECA) and the National Association of State Energy Officials (NASEO) in order to coordinate energy code support activities across the country. We also continued to guide the efforts of the Northeast Home Energy Rating System (HERS) Alliance, informing its network of energy professionals across the region by identifying resources to promote increased code compliance.
- Helped organize the DOE National Energy Codes Conference.** NEEP staff served as planning committee members, panel moderators, and presenters for several of the breakout sessions offered at the [DOE's National Energy Codes Conference](#) in July.
- Provided technical guidance on behalf of Pennsylvania for two events:** NEEP represented Pennsylvania in a meeting of all of the energy Code Collaboratives, a regular information sharing opportunity between the Collaboratives located throughout the country. NEEP also provided technical guidance to the Central Pennsylvania chapter of the U.S. Green Building Council (USGBC) to ensure that materials shared as part of the June [icehouse demonstration event](#), which was held to encourage a greater focus on supporting and updating the state's energy code, were accurate.



- **Continued to engage the HELIX Advisory Committee:** The HELIX Advisory Committee is a forum for information dissemination and exchange between real estate professionals, state energy offices, utilities, and other stakeholders within the states participating in the project. NEEP coordinated and hosted its second HELIX Advisory Committee meeting in April to gain insights from interested stakeholders on the development of HELIX, with a particular focus on information to inform the team's choice of an IT contractor.
- **Continued to participate in the New Hampshire Home Energy Score working group:** NEEP contributed to the quarterly meeting of the working group, as we have since its inception in 2015, by providing project updates on our HELIX project. We also provide this group with technical guidance from both the regional and national perspective on the importance of educating the real estate community on energy rating for high performance homes.
- **Presented to New York stakeholders on the value of home energy rating:** In April, NEEP presented alongside our partners in the City & Town of Ithaca to public officials and community task force members for New York's [Climate Smart Communities webinar on Ithaca's Residential Energy Score Project](#). NEEP has assisted Ithaca with this project since its inception in 2015, and in this webinar provided a simple overview of the value proposition for home energy rating and the current state of the market.
- **Hosted the HELIX year-two kick-off meeting:** In June, the core HELIX project team convened to kick off year-two of the project to set priorities, develop action items, identify collaboration opportunities, and set clear tasks for the year ahead. The team identified an opportunity to host a virtual summit this fall to build on existing resources and marketing and education needs from the real estate community.

Research, Analysis, Reports, and Case Studies

- **Published an exemplar on the Town of Wayland, Massachusetts' energy improvements:** NEEP collaborated with the Town of Wayland, Mass. to produce a community-level [exemplar](#) highlighting the various energy improvement projects the town has undertaken. Since becoming a Massachusetts Department of Energy Resources (Mass. DOER) designated Green Community, the town has undertaken several measures to reduce its energy consumption, including converting to LED street lights, upgrading building equipment, and installing solar photovoltaics (PVs). Wayland's successful approach is attributable to the formation of a dedicated energy committee and their ability to seek out key partners, and the exemplar shares the success of a small community and how their approach can be replicated.
- **NEEP's Rater Variation Study Report sent to US DOE:** Early in 2017, NEEP conducted two studies on behalf of the US DOE. The studies focused on two homes in two states to determine if there is variation in building diagnostic testing results from one [Home Energy Rater](#) to the next. A report of NEEP's findings was sent to DOE to be combined with similar studies by the five other [Regional Energy Efficiency Organizations \(REEOs\)](#).
- **Researched HELIX governance and ownership frameworks, privacy considerations, and funding structures:** The HELIX team continued to investigate these issues and developed final recommendations related to how the components of any future HELIX database should be

owned and operated. These recommendations will guide the development path of HELIX toward one that: 1) allows for fair decision making considering stakeholders across the Northeast; 2) maintains all privacy restrictions associated with the stored data; and 3) is configured to operate as a scalable, replicable long-term asset with an adequate funding or revenue stream.

Technical Assistance and Resource Centers

- **Provided the Town of Amherst, Mass. with technical assistance on zero energy buildings:** NEEP staff met with Amherst green buildings advocates and town officials to discuss the cost and operation of zero energy buildings. Amherst will be building new municipal buildings including a library, police station, EMS, fire stations, and a school. NEEP will continue to provide zero energy building and CHPS technical assistance on an as-needed basis.
- **Led the Pennsylvania Energy Code Collaborative:** In April, NEEP organized a meeting of the [Pennsylvania Energy Code Collaborative](#) in Harrisburg, Penn. This meeting focused on improving the impact of the energy code training program underway as part of the Residential Energy Code Field Study, adapting a simple resource for improved commercial code compliance in Colorado for use in the Commonwealth, and preparing to further engage local stakeholders in coordination with the National Energy Codes Conference.
- **Provided technical guidance to the Delaware Energy Code Coalition:** In June, NEEP provided information regarding adoption of the 2015 International Energy Conservation Code (IECC) versus the 2018 IECC and [Energy Rating Index \(ERI\)](#) during the [Delaware Code Coalition](#) meeting. In advance of this meeting, NEEP had multiple meetings with the state's [Department of Natural Resources and Environmental Control \(DNREC\)](#) to discuss in depth strategies for proceeding with this code update.
- **Provided additional support to Pennsylvania and Delaware:** In Pennsylvania, NEEP provided guidance to help inform how to best use funding to make a presentation to advance energy code awareness and support. In Delaware, NEEP answered questions from DNREC staff regarding the application of air leakage testing requirements for building additions.
- **Served on Rhode Island's Code Adoption and Compliance Groups:** NEEP continued to work in partnership with National Grid and the state Building Code Commission on Rhode Island's Code Compliance Enhancement Initiative, which is the only program in our region that allows utilities to claim savings for code support activities. Specifically, NEEP provided technical guidance while participating in the quarterly meeting of the Evaluation working group of this effort. NEEP also continued to serve on the Rhode Island Residential and Commercial Stretch Code Committees, which meet monthly, developing an updated commercial stretch code and a new residential stretch code.
- **Provided New York with energy code savings guidance:** NEEP responded to an inquiry from the New York State Energy Research and Development Authority (NYSERDA) regarding strategies for measuring energy and carbon savings from energy code compliance support activities. NEEP also connected NYSERDA to National Grid - Rhode Island staff to discuss their approach for attributing these savings to their market interventions. This guidance should help New York



proceed toward a future where utilities provide support for the energy code and are allowed to claim energy savings for their efforts.

- **Coordinated with national leaders in the real estate/energy information space:** In May, NEEP participated in the first meeting between representatives of HELIX, EMPRESS (focused on harmonizing DOE's Home Energy Score and RESNET's HERS programs), and PV Auto-Pop (focused on guiding the successful incorporation of solar energy information into listings). These meetings will allow us to solve various issues surrounding energy information transfer to real estate interests, encouraging uniformity throughout the country.
- **Provided technical guidance to assist synergistic efforts in Vermont and New Hampshire:** NEEP strengthened relationships with Vital Communities (of N.H. and Vt.) and Downstreet Housing & Community Development (of Vt.), meeting with these groups to provide information to help guide their related efforts.
- **Provided technical guidance to support Providence, R.I.'s benchmarking ordinance:** The City of Providence, R.I. is in the process of developing a building energy benchmarking ordinance. NEEP has participated in the stakeholder process by attending meetings, providing technical assistance on specific questions, and giving a presentation about other similar ordinances in the region. These efforts help inform stakeholders about common elements of a benchmarking ordinance and provide key information to questions they will need to answer in order to adopt a successful policy.

Regional Market Transformation Strategies

- **Organized a regional review of NEEP's Building Energy Codes Market Transformation Strategy report:** In May, NEEP leveraged its Building Energy Codes Leadership Group to provide a review of our upcoming *Building Energy Codes Market Transformation Strategy* report. NEEP collected this input and incorporated it into the forthcoming report in order to ensure it meets the needs of stakeholders across the entire region.



Share Best Practices to Advance Strategic Electrification & Next Generation Energy Efficiency

Support the region's move to strategic electrification of buildings and transportation – backing out of carbon-based fuels, and pairing deep energy efficiency with distributed renewable power, energy storage and demand response.

Events & Stakeholder Engagement

- **Convened the third Strategic Electrification Leadership Committee meeting:** Thirty members of the committee gathered at the Barr Foundation office in Boston, Mass. to discuss the project consultant's draft opportunities assessment report, as well as the program for the [2017 Regional Strategic Electrification Summit](#). The Leadership Committee has provided valuable guidance on the project and key deliverables, and will be an important vehicle to move forward a forthcoming regional action plan.
- **Served as facilitator for a session on [Strategic Electrification](#) at DOE's Better Buildings Summit:** NEEP's Director of Technology & Market Solutions, Dave Lis, led a breakout group on air-source heat pumps (ASHPs) in discussion about the technology's role in strategic electrification.
- **Presented an overview of NEEP's Strategic Electrification project to the [Renewable Thermal Alliance \(RTA\)](#):** The RTA is focused on developing stronger markets for renewable thermal technologies including air-source and ground-source heat pumps, solar thermal, and biomass. Staff attended the RTA's in-person meeting to share our ASHP initiatives, including activities related to our Strategic Electrification project, with renewable thermal stakeholders.

Research, Analysis, Reports, and Case Studies

- **Cold Climate ASHP specifications grew:** The [specification and associated list](#) expanded to include 450 products by the end of the second quarter. Product manufacturers must submit complete applications to NEEP to be listed, and the specification continues to be used by stakeholders throughout the region including the Massachusetts Clean Energy Center (MassCEC), Rhode Island efficiency programs, Efficiency Vermont, and NYSERDA.
- **Disseminated two new guides for ASHP installers:** The resources, [A Guide to Sizing & Selecting ASHPs in Cold Climates](#) and [A Guide to Installing ASHPs in Cold Climates](#), provide practical, best practice guidance related to sizing, selecting, and installing ASHPs in cold climates. NEEP held numerous discussions with regional stakeholders to brief them on using the guides. NEEP also attended the CEE Summer Program Meeting in Boston in June to share the guides with program administrator audiences.



Technical Assistance and Resource Centers

- **Continued to populate our [Strategic Electrification Project webpage](#) with current project content.**
- **Provided technical assistance to regional program administrators:** NEEP provided direct input to program planners in Massachusetts, Rhode Island, Connecticut, and New York.

Regional Market Transformation Strategies

- **Consultants for the Strategic Electrification project developed a draft Regional Strategic Electrification Opportunities Assessment Report:** in preparation for the project's 2017 summit, consultants Synapse Energy Economics and Meister Consulting Group developed the draft, which included a technology and market assessment, a regional scan of policy/program activity related to strategic electrification, electrification impact modeling analysis, and potential near-term actions and key issues to resolve. The NEEP team, in consultation with the project's Leadership Committee, provided feedback to the consultant team to inform updates to the draft report.



Advanced Efficiency Leadership Network

A regional center for learning and sharing best practices and a dashboard of state and local progress on energy efficiency and integrated clean energy solutions. Bringing together thought leaders on policy, programs and market-based solutions, the Advanced Efficiency Leadership Network (AELN) is working to drive progress towards an energy-efficient, resilient, and accessible low-carbon economy.

Events & Stakeholder Engagement

- **Distributed a REED Renderings blog:** The blog, [REED Renderings Issue #5: Changes in the Air](#), discussed how energy efficiency leads to carbon reduction, and highlighted leading states and which types of energy efficiency programs draw the most carbon savings.
- **Presented at the ACEEE/CEE Market Transformation Conference in Washington D.C.:** NEEP, along with representatives from many of the other REEOs, participated on the Regional Roundup panel, which provided an overview of current regional energy efficiency policies and programs.

Research, Analysis, Reports, and Case Studies

- **Researched metrics for energy efficiency in buildings and for carbon reduction to expand REED:** NEEP began exploring how REED can be used as a tool to measure success of our other projects and initiatives. This will further REED's purpose and scope and enable NEEP to incorporate new data points into the database.
- **Published a new resource on the latest energy efficiency policies in the NEEP region:** The [Policy Tracker](#) was completed in May to provide an update on current policy and regulatory developments in states throughout the region, including Maryland, New York, Rhode Island, Vermont, Massachusetts, Delaware, and Washington, D.C., as well as updates at the federal level.
- **Submitted a letter to Connecticut on the 2017 update to the Conservation and Load Management Plan:** The letter encouraged the continued leadership of Connecticut, as well as continued collaboration between NEEP and the state to achieve the goals set out in the plan.

Technical Assistance and Resource Centers

- **Provided technical assistance on the [Regional Energy Efficiency Database \(REED\)](#):** NEEP responded to requests for background information regarding the contents of and sources for REED, meeting with staff of Greentech Media and the Energy Information Administration (EIA). We also provided insights from REED to NYSERDA that contributed to development of metrics revisions.



- **Provided technical assistance to regional stakeholders:** NEEP assisted the Energy Futures Group at the request of the Vermont Public Service Board by providing utility-level data and emissions data, and answering questions in relation to information available in REED.
- **Developed a spreadsheet of state energy plans, energy efficiency program plans, and Energy Efficiency Resource Standard (EERS) policies for each state in the NEEP region:** This resource will be useful for understanding where each state is in its planning process, as well as the current political state around energy efficiency.