

Northeast Energy Efficiency Partnerships

2018 Q2 Report

Events & Stakeholder Engagement

- Hosted the EM&V Annual Public Meeting: Advancing EM&V in the Region and the Industry in Nashua, N.H. on May 8 to discuss the opportunities and challenges associated with planning and assessing impacts of energy efficiency in the changing landscape of the energy industry.
- Hosted three high performance schools tours as a part of <u>Healthy Schools Day</u> in Maine, New Hampshire, and Massachusetts to showcase building features that improve occupant health, energy efficiency, and productive learning.
- Co-hosted the <u>Renewable Heating and Cooling Workshop</u>, in Saratoga Springs, N.Y. on June 18-19 with the Renewable Thermal Alliance to explore how the region can work more collaboratively to accelerate the adoption of renewable heating and cooling technologies.
- Published the blog, A Drumroll for the Future of EM&V covering topics for the 2018 EM&V Annual Public Meeting such as avoided cost trends, technical reference manuals, expanding roles for control technologies, the need to evaluate non-wires alternatives, and the integration of efficiency with demand response and storage.
- Participated in panel discussion at the <u>International Energy Program Evaluation Conference (IEPEC)</u> focused on the harmonization of energy efficiency information and sharing of Northeast products and experience with protocols development and standardized reporting tools.
- <u>Co-hosted a quarterly M&V 2.0 project update webinar for state partners to present a progress</u> report on the commercial M&V 2.0 pilot that is now underway and an outreach plan to reach key stakeholders through webinars, a workshop, etc.
- Engaged with the other regional energy efficiency organizations (REEOs) and the California Efficiency + Demand Management Council in a quarterly teleconference to share information and resources, and to identify areas of common interest among REEOs' policy work.
- Distributed a survey to program administrators to gather information about their measure incentives and costs, program implementation, and program design.
- Engaged with state energy efficiency boards and councils as well as environmental advocacy organizations to stay informed of state and local updates on legislative and regulatory policies, including New York's Clean Energy Organizations Collaborative, Maryland Energy Efficiency Advocates, the Massachusetts Global Warming Solutions Group, and others.
- Provided weekly policy updates to <u>NEEP Allies</u> to keep them apprised of what is happening both legislatively and in the regulatory landscape.
- Presented on the status of ongoing EM&V research at the <u>2018 EM&V Annual Pubic Meeting</u>, where staff participated in a panel discussion on National Standard Practice Manual cost-effectiveness outreach and ongoing non-energy impact research.
- Convened the New Hampshire High Performance Schools Working Group where we focused on increasing the number of schools being benchmarked in the U.S. Environmental Protection

Events & Stakeholder Engagement

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Agency's (US EPA's) Portfolio Manager, as well as the need for fact sheets for community-level stakeholders to highlight the benefits of high performance schools and key questions to ask design teams.

- Presented at a US DOE Zero Energy Schools Accelerator meeting on resources for schools including the Northeast Collaborative for High Performance Schools (NE-CHPS), NEEP's <u>Regional Operations</u> <u>& Maintenance Guide</u>, and the Community Action Planning for Energy Efficiency (<u>CAPEE) tool</u>.
- Shared resources such as CAPEE with Massachusetts communities primarily town energy committee members – during a webinar where we also heard from community members on the barriers to implementation of energy efficiency projects at the local level.
- NEEP was featured at the US EPA's Best Practices Network World Café where we presented on <u>zero</u> <u>energy buildings</u>, carbon reduction, and energy codes to representatives of companies such as Coca Cola, Harvard University, and non-profit organizations.
- Facilitated two <u>Pennsylvania Energy Code Collaborative</u> meetings focused on sharing best practices around green and energy <u>workforce development</u> to increase code compliance.
- Facilitated a webinar for our Regional Building Energy Codes Working Group with a focus on strategic electrification and energy codes. Strategic electrification is powering end uses with electricity instead of fossil fuels to ensure efficiency and reduce carbon emissions.
- A NEEP staff member partook in a DOE Zero Energy Ready Program builder training and trainthe-trainer event to enable NEEP to offer our own half- to full-day seminar/training on <u>DOE's Zero</u> <u>Energy Ready Home Program</u> and certification.
- Convened a regional stakeholder meeting to discuss residential labeling efforts with state energy
 offices and utilities to inform efforts of our Home Energy Labeling Information eXchange (HELIX)
 project by identifying the needs of states to advance voluntary and/or mandatory policies and
 programs.
- Planning for the 2018 <u>HELIX Summit</u> began with drafting of an agenda that was shared with the HELIX project team for review. The Rhode Island Office of Energy Resources (RI OER), National Grid, and E4TheFuture are signed up as sponsors of this event.
- Hosted a webinar on <u>The Emerging Green Homes Marketplace: Fear, Challenges, and Opportunities</u> focused on educating the real estate community on green data fields and the value of HELIX autopopulating multiple listing service (MLS) listings with this information.
- Participated in a residential home energy scorecard <u>panel discussion</u>, where HELIX was highlighted as a tool that states and cities can use to drive market transformation of the residential real estate market.

Events & Stakeholder Engagement

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- Convened our Home Energy Management Systems (HEMS) Working Group, attended by 28
 participants across 24 organizations representing states including N.Y., MA, R.I., VT, WI, as well
 as the Midwest Energy Efficiency Alliance (MEEA), US EPA, and the National Renewable Energy
 Laboratory (NREL).
- Helped organized the Smart Home track at the <u>Home Performance Coalition's (HPC's) National</u> <u>Conference</u>, and presented on our recent brief on <u>smart home resources for contractors</u> and on upcoming research into the integration of HEMS with strategic electrification and distributed energy resources (DERs).
- Attended the Air-to-Water Air-Source Heat Pump (ASHP) Summit where discussion focused on the basics of these systems, comparison of air-to-water heat pumps with other options, and the importance of low-temperature distribution systems.
- Hosted a Strategic Energy Management (SEM) Collaborative webinar, which provided a platform for collaboration with policy makers, program administrators, and commercial and industrial energy managers in the Northeast with the hope of accelerating the adoption of SEM.
- Participated in the Consortium for Energy Efficiency's SEM Committee meeting, which convened program administrators and SEM practitioners to collect and analyze the growing data set on SEM implementations to identify facility profiles where SEM has proven effective and replicable.
- Participated in <u>US DOE's 50001 Ready Utility Network Series</u>, a facilitated forum for SEM stakeholders to interact and learn from each other.
- Hosted the second quarterly Appliance Standards Working Group meeting of the year, attended by 13 representatives from N.Y., VT, D.C., MA, and R.I. The meeting agenda was split between updates on federal activities and on state standards progress.
- Planning began for an in-person meeting of the Appliance Standards Working Group to strategize on moving forward state standards. The meeting will take place on October 1 in conjunction with the <u>NEEP Summit</u> in Middletown, R.I.
- Presented the key aspects of NEEP's <u>Action Plan to Accelerate Strategic Electrification in the</u> <u>Northeast</u> to the Climate and Energy Funders Network, stressing the opportunity and need for foundation funding to support the implementation of key aspects of the plan.
- Participated in an invitation-only panel, Driving Decarbonization in the Northeast, hosted by National Grid in Boston. The panel was part of National Grid's <u>Northeast 80x50 Pathway</u> report introduction.

Research, Analysis, Reports & Case Studies

- Submitted a paper for peer review to be presented at the <u>ACEEE 2018 Summer Study on Energy</u> <u>Efficiency in Buildings</u>. It discusses the integration of energy efficiency, strategic electrification, and clean energy and identifies the steps to integrate and achieve deep decarbonization.
- Published an update to our paper, <u>Construction Codes in the Northeast: Myths and Realities of</u> <u>Energy Code Adoption</u>. The new analysis addresses the myth that updated energy codes cause construction projects to slow down, pause, or move to areas with less progressive energy codes.
- Submitted a data request to the Residential Energy Services Network (RESNET) to gain access to home energy data. Upon review and approval, RESNET will provide access to this data for all seven of the pilot states in HELIX, which will then move into the full pilot phase.
- Posted a blog on National Standard Practice Manual (NSPM) cost-effectiveness best practices to highlight progress in the Northeast including development of the Rhode Island test per Docket 4600, along with expressions of interest in reviewing cost-effectiveness in New Hampshire and Connecticut.
- Completed an update to the <u>Advanced Building Analytics Tools List, an</u> online spreadsheet that contains links to companies offering M&V 2.0-related resources.
- Kicked off a project to assess state energy office information resources and needs for planning and forecasting for strategic electrification. This included research and completion of a survey to be distributed to state energy offices.
- <u>Posted a blog titled Let's Get the 'Auto' in Auto M&V Pointed Down the Right Road</u>, which discussed auto M&V opportunities and challenges. You can read more about this topic on the <u>newly published report from Opinion Dynamics</u>.
- <u>Published a REED Renderings issue</u> focused on opportunities for low-income communities and connecting the emerging understanding of health and environmental benefits with untapped efficiency potential of the low-income sector in the region.
- Published a <u>policy tracker</u> to highlight the latest trends in legislative and regulatory proceedings. The May tracker highlighted New York and the release of the long awaited energy efficiency targets and <u>New Efficiency: New York plan</u>.
- Completed invited peer review of an ACEEE paper that discusses benchmarking energy efficiency program performance and reviews program performance nationwide, making use of data from the <u>Regional Energy Efficiency Database (REED)</u>.
- Produced a new exemplar of a high performance school the <u>Christa McAuliffe School</u> in Concord, N.H. – that highlights the wide-ranging sustainability features of the school, which has experienced reduced absenteeism rates since its opening.

Research, Analysis, Reports & Case Studies

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- <u>Published a new blog, Pennsylvania Rings the Bell of Energy Efficiency</u>, <u>which</u> highlights the accomplishments of the state in updating their energy code to the 2015 International Energy Conservation Code (IECC), and Philadelphia in updating their code to the 2018 IECC for commercial only.
- Published a new blog, Step Up to the Plate and Benchmark Your Building Energy Usage, which
 relates benchmarking building energy usage to baseball. Just as fans of baseball evaluate players
 and teams year to year to track progress, the same should be done for public and commercial
 buildings.
- Coordinated group of five REEOs and others to identify opportunities for collaboration around building energy codes, current resources being developed, scheduling a teleconference around benchmarking, and scheduling monthly REEO discussions to continue sharing of best practices.
- Played a major role in planning the annual <u>US DOE National Energy Codes Conference</u> along with the U.S. Department of Energy (US DOE), the Pacific Northwest National Laboratory (PNNL), the Energy Foundation (EF), and the National Association of State Energy Officials (NASEO).
- One-page resources were developed to outline the benefits of HELIX as a solution and tool for_ <u>MLSs, appraisers</u>, the <u>real estate community</u>, and <u>states</u>.
- The HELIX governance team researched the cost and revenue basis for HELIX to better understand a potential business model that would enable HELIX to be self-sufficient after current US DOE funding expires.
- Began research on integrating the smart home with strategic electrification and DERs to inform a whitepaper in development. We conducted research through stakeholder interviews to inform case studies as well as trends and strategies to include in the paper.
- Continued development of an ACEEE Summer Study paper focused on the opportunity that ASHPs present for the U.S. for the advancement of energy efficiency, pulling from our experience managing a <u>regional market transformation</u> initiative to inform the paper.
- Continued work on the Northeast and Mid-Atlantic R&D Connector Report, which takes the reader through NEEP's journey to achieve the objectives of the project, with the ultimate goal of accelerating the R&D commercialization pipeline.
- Along with the Appliance Standards Awareness Project (ASAP), we began development of fact sheets with key information about state-level appliance standards, working with stakeholders in N.Y., N.J., D.C., R.I., MA, and VT

Technical Assistance & Resource Centers

- Created content for our <u>CAPEE</u> tool to educate users about SEM, adding information on the <u>ISO</u> <u>50001 standard</u>, US DOE's <u>50001 Ready program</u>, and DOE's <u>50001 Ready Navigator tool</u>. NEEP is in the process of convening SEM program administrators to discuss implementation of DOE's 50001 Navigator tool.
- Completed the <u>Version 8 update of the Mid-Atlantic Technical Reference Manual</u>, jointly funded by in-kind assistance from District of Columbia stakeholders and financial support from the Delaware Department of Natural Resources and Environmental Control and Maryland utilities.
- Updated our <u>online policy tracking tool</u> to include new 2018 policies. The tool was modified this year to make it simpler to understand by updating when the policy passes a chamber, both chambers, passes and fails, and when it is signed by a governor.
- Worked with the towns of Belmont, Mass. and Burlington, VT. to provide resources and technical assistance on high performance school projects. Belmont is pursuing a zero energy school while Burlington is considering using NE-CHPS as their pathway forward.
- Provided technical assistance to Providence, R.I., which recently launched a program called_ <u>RePowerPVD, a</u> voluntary program that challenges large buildings in the city to save energy and money. This type of challenge program could serve as a model for other cities going forward to drive energy efficiency upgrades in commercial buildings.
- Continued to provide technical assistance to the <u>Delaware Codes Coalition</u>, which is in the process of adopting the <u>2018 IECC</u>. Delaware may incorporate beyond code provisions directly into the base code or possibly enact a stretch code.
- Provided the <u>N.H. Department of Environmental Services</u> with resources and technical information to inform their adoption of new residential and commercial codes. The result of our assistance led to planning for a webinar to be hosted by <u>NH Local Energy Solutions</u>, which will focus on code adoption, costs, compliance, and the energy code as a life safety code.
- Provided technical assistance in Maryland, who is in the process of adopting the 2018 IECC.
 We provided technical assistance to the <u>Maryland Division of Labor and Industry</u> related to diagnostic testing requirements of the code.
- Connecticut's <u>Codes and Standards Committee</u> finalized a draft of the 2015 IECC code adoption, after adopting the 2012 IECC just over a year ago. The new code is slated to become effective October 1, 2018, and NEEP will provide technical assistance to the state throughout the process.
- Pennsylvania moved from the 2009 IECC and adopted the 2015 IECC, and the city of Philadelphia adopted the 2018 IECC for commercial buildings. NEEP attended code hearings, provided technical assistance to the state's <u>Review & Advisory Council</u>, and coordinated technical assistance with other code advocates.

Technical Assistance & Resource Centers

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- A standard memorandum of understanding was developed for HELIX to access data, which can be used to engage data providers for access to their data, which will enable HELIX to have a consistent form across providers and save time in developing new ones.
- HELIX was beta tested with Rhode Island Home Energy Score, a Massachusetts pilot program, and Vermont home energy and solar data, as well as with CRS and the New England Real Estate Network (NEREN), a data aggregator and regional multiple listing service.
- Began to improve the <u>best practice guides for sizing</u>, <u>selecting</u>, <u>and installing ASHPs in cold</u> <u>climates</u>. To inform the updates, we circulated a survey that received 25 responses and began planning for the development of video versions of the installer guides.
- Engaged stakeholders to drive awareness and usage of NEEP's ASHP installer guides, presenting "Improving the Field Performance of Heat Pumps in Cold Climates" at April's Home Performance Coalition Conference, with approximately 100 stakeholders in attendance.
- Informed an ASHP integrated controls pilot, which is studying the effectiveness of the technology in managing the operation of ductless heat pumps in concert with other heating systems – a key strategy area for NEEP's ASHP Initiative.
- Informed development of next generation rating methods for ASHPs through engagement in a group facilitated by ACEEE. We contributed insights into the benefits of a new rating method being developed by CSA, as well as perspectives gained through management of <u>our ccASHP</u> <u>specification</u>.
- NEEP was invited to participate on a panel as part of the California Energy Commission's_ <u>Integrated Energy Policy Report (IEPR)</u> Workshop on Zero Emission Buildings. The panel included a discussion on design practices and technology solutions.
- Continued to collaborate closely with R.I. stakeholders to build understanding of appliance standards through education and technical assistance. NEEP was asked to provide educational testimony on the <u>Senate</u> version of a standards bill. While ultimately unsuccessful in 2018, momentum has been built for new standards to be enacted in 2019.

Regional Market Transformation Strategies

- Published the <u>Action Plan to Accelerate Strategic Electrification in the Northeast</u>, which outlines a series of actions that regional stakeholders can take in order to move strategic electrification forward over the next three to five years. We hosted a <u>webinar</u> and published a <u>blog</u> to present the key elements of the plan.
- Began updating <u>NE-CHPS Criteria</u> to advance the baseline energy efficiency requirements of the criteria and streamline the documentation requirements associated with the energy and acoustics sections.
- Data collection progressed for the Connecticut <u>Residential Energy Code Field Study</u> and is anticipated to conclude in October. We will publish a final report based on PNNL's analysis of the data, which will be utilized to design code training to enhance compliance toward increased energy efficiency.
- Working with the <u>ccASHP specification</u> sub-committee, NEEP is developing a revised specification – version 3.0. The process will include an opportunity for public, stakeholder review and comment before any changes to the specification are finalized.
- NEEP's ccASHP products list continued to grow, with the <u>specification and associated products</u> <u>list</u> now including over 1,000 products. Seven leading programs have adopted the specification, and it is a mechanism for the market to differentiate ASHP systems that can operate efficiently in cold climates.
- Began market assessment of variable refrigerant flow (VRF) technology, with the ultimate goal of developing a Regional VRF Market Transformation Strategy whitepaper. We are planning to host an in-person stakeholder meeting to discuss opportunities to leverage greater VRF adoption, and to inform development of the Regional VRF Market Transformation whitepaper.
- Worked with ASAP to develop joint comments on the Notification of Proposed Rulemaking for dishwashers as well as contributed to joint comments to the California Energy Commission on closing the loophole for federally exempted linear fluorescent lamps.
- Educated regional stakeholders in the Q2 Appliance Standards Working Group meeting on the range of product specifications being updated by ENERGY STAR.

Q2 Web Metrics

Q2 2017 Unique Visitors

14,425

Q2 2018 Unique Visitors 19,681 (36.44%)

Q2 2017 Unique Visitors

45,883



Inbound Traffic

Organic Search

Traffic sourced without the use of paid advertisements.

Direct

Typing a URL directly into the browser, using a bookmark, or non-tracked links in emails, PDFs, etc.

Referral

Traffic originating from another website.

E-Blasts

Impressions directed from tracked links in our email communications

Social

Traffic originating from social media outlets e.g. Twitter, Facebook, LinkedIn, Pinterest, etc.



Q2 Web Metrics

Q2 2017 Total Downloads

5,549



9,656 ^{**^**(74%)}







Top Blogs

- 1. A Look Inside NWA Projects & Policies
- 2. A Conference, A Movie, A Revelation (HELIX)
- 3. Policy Tracker (Aug 2014)
- 4. Winter-proof Heat Pumps
- 5. Policy Tracker (May 2018)

Top Media Hits

Top Downloads

- 1. ccASHP Spec Listing (04/18/18)
- 2. ccASHP Manufacturer Application
- 3. ccASHP Installers Guide
- 4. ccASHP Sizing & Selecting Guide
- 5. Mid-Atlantic TRM v7

<u>Utility Dive</u> (April 19, 2018) – EPRI assesses expanding US electrification <u>EE News</u> (May 30, 2018) – There's one climate policy Trump might not hate <u>Newscenter 25</u> (June 13, 2018) – Fraunhofer CSE Hosts Expert Discussion on Residential Energy Scorecards

Q2 Web Metrics



Leaders By State

- 1. Massachusetts
- 2. New York
- 3. Virginia
- 4. Oregon
- 5. California

Leaders By City

- 1. New York
- 2. Ashburn
- 3. Boardman
- 4. Boston
- 5. Washington

Top Cities in Massachusetts

- 1. Boston
- 2. Waltham
- 3. Cambridge
- 4. Concord
- 5. Arlington