



NEEP 2016 QUARTERLY REPORT SECOND QUARTER

Executive Summary

Energy efficiency has often been referred to as the least-cost, first-order resource for achieving reduced energy use. In 2016, we're seeing a developing conversation about customer and market engagement to create new efficiency solutions. In the midst of this shift, NEEP will seek to continue bringing stakeholders together to find solutions for the challenges we face today.

We're proud that through collaboration, NEEP and our network of sponsors, allies, foundations, other funders, and stakeholders from across the region and nation have worked to embrace efficiency as the least-cost, first-order resource to meet economic, environmental, and energy system needs. As we move forward with an eye on Next Generation Energy Efficiency, NEEP shares this report to highlight some of our 2016 second-quarter achievements.

Advancing Efficiency Innovation

Home Energy Management Systems

- **The Home Energy Management System (HEMS) initiative launched several research efforts:** This included the HEMS Regional Market Transformation Strategy Report and Residential EM&V 2.0 Brief. These research efforts involve mapping out the steps the Northeast and Mid-Atlantic region can take in order to increase the market penetration of HEMS. The Market Transformation Strategy Report will look at energy efficiency opportunity, demand-response capabilities, and HEMS integration with distributed energy resources (DER). The report, expected to be finalized in the third quarter, will provide a tool for regional actors to succeed in the smart home space. The Residential EM&V 2.0 Brief, a related piece of research, will look at HEMS as both an energy savings widget that needs to be evaluated, as well as an evaluation tool to collect important data for programs. Additionally, with new advanced analytics, how residential efficiency programs are evaluated is changing, and the brief will help add clarity. To help in the launch of these efforts, NEEP hosted a HEMS Leadership Advisory Committee meeting on June 7. This meeting was an invitation-only virtual gathering of NEEP Sponsors and trusted experts in the HEMS space that will help guide these research projects.

Residential Air Source Heat Pumps

- **Finalized the [ccASHP Specification Version 2.0](#):** NEEP began discussing potential revisions to the Cold Climate Air Source Heat Pump Specification (ccASHP Specification) with the cold climate metrics sub-committee of the ASHP Working Group in the fall of 2015. The update was developed based on numerous discussions, survey results, and additional input received over the past six months from working group members and other interested stakeholders. The update includes a modest increase in Heating Seasonal Performance Factor (HSPF) levels (for multi-zone ductless products) as well as some future opportunities to gather more detailed information about the basis of performance measurements; this [memo](#) provides more detail. We anticipate that the updates will encourage increased use of the Specification to drive adoption of high performance ASHPs.



Residential Lighting

- **Completed 2016 ‘State of the Market’ Residential Lighting Brief:** This brief is pending release as we are awaiting announcement of new market-ready lower-lifetime, lower cost LED products, expected early in the third quarter. The brief includes updates on the market penetration of efficient lighting, analysis of smart lighting products, updates on federal standards, updates on efficiency programs, and information on new products certifying to ENERGY STAR. By tracking the transformation of the residential lighting market, NEEP has been able to show that efficiency programs are having a significant impact on the market, and according to recent socket saturation surveys, the uptake of LEDs has been even faster than originally anticipated. The brief will be released early in the third quarter and, along with the second brief expected in the fourth quarter, will be a helpful tool to show the progress of the residential lighting market and the technological developments therein.

Comprehensive Multifamily Retrofit

- **Convened Regional Multifamily Leadership Group Summit:** On June 23, NEEP hosted 20 in-person and 11 webinar attendees at the EPA Region 1 Headquarters in Boston, Mass. in a gathering of regional stakeholders working on multifamily retrofits to discuss the latest in program design best practices, financing strategies, and customer engagement. A slate of topical experts and a stakeholder-participant visioning session helped to determine a path to reaching a 20 percent energy reduction across the multifamily sector within 10 years. The major takeaways from the visioning session include the need for streamlined access to energy data, integration with other building improvement industries, increased visibility through rating and disclosure, and bundling with other distributed energy resources.

Industrial Efficiency

- **Published the [Northeast/Mid-Atlantic Industrial Sector Report: Market Assessment and Recommended Strategies to Accelerate Energy Efficiency](#):** This report provides an industry overview and quantification of industrial energy use, and paints a picture of tools and resources available from the U.S. Department of Energy (US DOE) as well as from utility and state programs in the region. It serves as a reference for concepts and terminology in the industry and Industrial Energy Efficiency, especially Strategic Energy Management (SEM). The report also includes recommended strategies for how to move industrial energy efficiency forward in the region through the expanded adoption of SEM.

Business Leader Recognition Program

- **Recognized Business Leaders at the 2016 Northeast Energy Efficiency Summit:** The Northeast Business Leaders for Energy Efficiency Program is a unique opportunity for energy efficiency program administrators ([sponsors of NEEP](#)) to profile a customer who demonstrates exceptional leadership and best practices in energy efficiency in the operations and maintenance of their business. These leaders are recognized at the annual NEEP Summit, and provide important examples of the economic and environmental benefits of energy efficiency. The 2016 Business Leaders Program highlighting six regional business voices in support of energy efficiency from a variety of specific projects and overall commitments to doing more with less energy use. Through their efforts to curb energy demand, these businesses – who collectively achieved an annual electricity savings of



over 18 million kWh, over 83,000 therms, and \$2.4 million – are exemplar cases of reaching environmental and budgetary goals via investments in efficiency. NEEP actively promoted its Business Leaders via written and video [case studies](#), an official [announcement](#), collaborative promotion via social media, and a celebratory dinner at the NEEP Summit.

High Performance and Zero Energy Schools and Public Buildings

- **Released the Roadmap to Zero Energy Public Buildings: Progress Report:** NEEP released the [Roadmap to Zero Energy Public Buildings: Progress Report](#) which serves as an update to the [Roadmap to Zero Net Energy Public Buildings: Recommended Steps for the Northeast & Mid-Atlantic](#). The report assesses the current state of zero energy construction and policies throughout the region in relation to the five “Critical Next Steps” outlined in the original report. This new resource offers updated guidance related to building energy codes, financing mechanisms, utility regulation, resiliency, and more. Zero energy buildings are the ultimate goal of NEEP’s work on buildings, and this report supports that goal by allowing states to assess their current standing and determine a path forward. A dissemination strategy is being utilized to allow the report to reach the highest number of regional stakeholders, and NEEP hosted a [webinar](#) for its regional buildings working groups to announce the release, with 31 participants representing nine different jurisdictions in the region receiving an overview of the updated content and snapshots of state leaders. By highlighting these leaders, stakeholders got a look at the considerable expansion of zero energy initiatives throughout the region. Additionally, NEEP is presenting at the [Getting to Zero National Forum](#) in October to further disseminate the report.

DesignLights Consortium and Advanced Lighting Controls

- **The DesignLights Consortium (DLC) continued to implement many program developments and changes:** The DLC released [Technical Requirements Version 4.0](#) on June 23. These are the final DLC requirements resulting from the revision proposals that were released for comment February 19, and subsequent discussions with DLC members and stakeholder commenters. Most notably, the efficacy changes have been revised (reduced) in several key areas from the February draft requirements largely in response to stakeholder feedback. Additionally, the DLC released its new Networked Lighting Controls Qualified Products List (NLC QPL). The NLC QPL equips lighting designers, specifiers, contractors, building owners, and utility energy efficiency programs with a valuable information resource to understand and evaluate Networked Lighting Control systems in this rapidly evolving sector. For lighting controls manufacturers and their customers, it provides access to efficiency incentives and greater product visibility in markets across North America.

Building Efficiency Markets

Home and Building Energy Rating, Labeling and Disclosure

- **Provided technical guidance toward development of New Hampshire’s home energy labeling program:** NEEP continued to participate in the Recognizing Efficiency Value through Energy Asset Labeling (REVEAL) project, an effort launched at the end of 2015 to promote the advancement of alignment of energy rating programs in New Hampshire and Vermont. NEEP participated in each of the project’s New Hampshire stakeholder group monthly meetings where staff continued to serve as a technical resource by providing answers to stakeholder questions about rating programs,



summaries of the activities of others states in the region, and updates on parallel efforts happening across the country. At the group's May meeting, NEEP presented on its [HELIX project](#) and how it could specifically align with the state's needs for managing the home energy information generated from burgeoning home energy labeling activities in the state. The REVEAL team is currently working toward compiling the contributions of NEEP and the other stakeholders into a roadmap for scaling up the use of DOE's Home Energy Score statewide and introducing a uniform New Hampshire label.

Contractor, Realtor and Design Community Tools and Training

- **Led ground-breaking Home Energy Labeling connection efforts in the Northeast:** NEEP formally kicked off its Home Energy Labeling Information Exchange (HELIX) project in April, a three-year initiative with the objective to create a highly accessible database for DOE Home Energy Score (HES) information for the Northeast states, which will enable automatic transfer of this information into local Multiple Listing Services (MLS). The HELIX team identified key stakeholders and began outreach to these audiences as well as research to scope the database itself. [Our new HELIX webpage](#) was viewed 30 times since its launch in May, and the project was cited in several presentations, plans (e.g. the [Tompkins County Home Energy Rating and Disclosure program implementation plan](#)), and conversations as an important component in the effort to transform the real estate market and leverage its actors and actions to drive energy efficiency retrofits.

Updating Baselines

Progressive Model Building Energy Codes

Supported efforts to increase energy code efficiency in Maine, Massachusetts, and New Hampshire:

[The region continues to lead the country in adoption of the 2015 International Energy Conservation Code \(IECC\)](#), the latest, most efficient version of the national model building energy code. Four of NEEP's states have already adopted the 2015 IECC, and NEEP guided three more towards adoption:

- First, NEEP continued to serve on Maine's Energy Technical Advisory Group (TAG) by providing regional and long-term context for a potential 2015 IECC adoption, countering potential amendments that would weaken the proposed code update, and clarifying the advantages of a stronger energy code in the context of current shortcomings in the state's code-built structures. This culminated in the [proposed adoption of the 2015 IECC for commercial buildings](#), which would decrease energy use by about 30 percent in buildings subject to the Maine Uniform Building and Energy Code (MUBEC).
- Second, NEEP provided updates on Massachusetts' complicated code update process to ensure stakeholder understanding. We also provided comments on the state's [proposed 2015 IECC / ASHRAE 90.1-2013 adoption](#), which features strengthening amendments.
- Finally, NEEP helped to organize support from New Hampshire energy code stakeholders for the [proposed 2015 IECC adoption](#) and assisted in the successful counter of two major proposed weakening amendments thereto.

State and Federal Appliance Standards

- **Tracked the General Service Lighting (GSL) Notice of Proposed Rulemaking (NOPR):** This is a particularly impactful federal standard as it represents the second phase of the Energy Independence and Securities Act (EISA) 2007 law and impacts most residential lighting products.



While the first phase of EISA effectively moved the minimum lightbulb from a traditional incandescent to a halogen bulb and resulted in about a 38% energy savings starting in 2012, the proposed second phase of EISA would effectively bring the minimum bulb for most general lighting applications up to a very efficient LED bulb in 2020. NEEP has been collaborating closely with efficiency stakeholders to ensure a strong standard is finalized. NEEP staff attended the April 20 public workshop hosted by the US DOE, in addition to active participation in several teleconferences organized by the Appliance Standards Awareness Project (ASAP). NEEP also submitted to DOE [joint comments](#) with six regional organizations, outlining independent research and analysis related to the standard, and contributed to and co-signed ASAP's [joint comments](#).

Tracking Efficiency Policies & Results

Regional Evaluation, Measurement and Verification Forum

- **The [Net Savings research report](#) culminated with the development of three resources:** These resources cover the topic of what constitutes appropriate and consistent use of gross and net savings in an energy efficiency policy framework. NEEP hosted a [webinar](#) to outline the objectives of the research and the results, including an in-depth explanation of the decision framework. This is the culmination of a multi-year effort that was preceded by two scoping papers and coordination with the development of DOE's Uniform Methods Project Net Savings Methods chapter. The three new resources include: 1) Guidance on Net and Gross Savings, which identifies and describes six core principles to guide stakeholders' decision-making to help ensure that net and gross savings definitions and applications are appropriately aligned with policy, transparent, and unbiased. It also provides a net and gross savings policy decision framework, which is a template to help with documentation of policymakers' decisions regarding net and gross savings; 2) A report on current and evolving trends, which provides snapshots of cases where net and gross savings issues have recently been explored. These include an overview of states' policies that pertain to net savings, as well as Clean Power Plan guidance, midstream programs such as the National Retail Products Platform, and applications of macroeconomic modeling of energy efficiency impacts, for example; and 3) A synopsis of net savings methods and associated pros and cons, which condenses material contained in the DOE Uniform Methods Project and summarizes pros and cons of evaluation methods applied to net savings in the context of common energy efficiency programs.

Regional Energy Efficiency Database

- **Developed two new Regional Energy Efficiency Database (REED) resources: [REED Renderings](#) and the [Energy Efficiency Snapshot](#):** In May, the first issue of a bi-monthly blog series titled REED Renderings was published. The purpose of these blogs is to bring attention to interesting trends seen in REED data and the stories behind those trends. The issues focus on current events within the energy efficiency landscape. The *Energy Efficiency Snapshot* (discussed further below) is intended provide policymakers, regulators, efficiency proponents, program administrators, and other stakeholders an easily accessible comparative snapshot of energy efficiency policies and programs across the Northeast - Mid-Atlantic region.



Public Policy Trends Analyses, Reports and Education

- **Published the semi-annual [Energy Efficiency Snapshot](#):** The *Snapshot* includes trends in efficiency program savings and spending at the state, portfolio, and program level. This edition includes an expanded focus to include data and analysis gleaned from REED, as reported above. This easy-to-access presentation is a valuable resource for anyone looking to compare state policies and progress, and includes new information on the integration of efficiency with other demand-side resources. For example, the consultants to the Connecticut Energy Efficiency Board requested use of several pages from the *Snapshot* for the Board's annual retreat in June.

Northeast Energy Efficiency Summit & 20th Anniversary Celebration

- **Hosted the 2016 Northeast Energy Efficiency Summit:** On June 13-14, 250 people attended the Summit, chaired by N.H. Public Utility Commissioner Bob Scott, at the Omni Mount Washington Resort. The Summit topic – [Next Generation Energy Efficiency](#) – was explored through roundtables on June 13 and Power Talks on June 14. The Summit also included a special celebration of NEEP's 20th Anniversary in addition to recognition of the 2016 Business Leaders for Energy Efficiency, and offered a special scholarship and mentoring program to introduce higher education students to the growing professional field of energy efficiency. The first day of the Summit included eight topical roundtables featuring stakeholders' presentations, special guests, and conversations moderated by NEEP staff. In addition, the Summit featured 24 exhibits featuring energy efficient products and services. At the evening's special dinner program, we celebrated NEEP's 20th Anniversary with special awards presented to NEEP's long-term sponsors, Board members, and four women for their extraordinary leadership for energy efficiency, including U.S. Environmental Protection Agency (US EPA) Administrator Gina McCarthy, Vermont Energy Investment Corporation's Co-Founder Beth Sachs, US DOE Deputy Assistant Secretary for Energy Efficiency Dr. Kathleen Hogan, and Meredith Hatfield, Director of New Hampshire's Office of Energy Policy and Planning. The second day of the Summit provided nine NEEP Power Talks, giving our attendees the opportunity to think about the future of energy efficiency through inspiring examples from the future, from abroad, and from cutting edge projects, along with thoughtful ideas on how to break through the public policy barriers to Next Generation Energy Efficiency.



Advancing Efficiency Innovation

Drive efficiency product, service, and program innovation to increase energy savings on a regional scale through multi-state research, analysis, and market transformation strategies; tools and resources such as qualified product lists, technical guidelines, and case studies; and best practice peer exchange and industry engagement.

Home Energy Management Systems

- **Helped NEEP Sponsors expand HEMS promotions:** NEEP leads a HEMS Working Group, whose goal is to set a path for HEMS technology to evolve with efficiency as a major component. The working group develops common objectives, terminology, and goals in the HEMS space. NEPE hosted a quarterly webinar on May 19 attended by 29 stakeholders. This webinar received a 4.7 out of 5 for “organization and facilitation” of meeting, 8 of 11 survey attendees listing HEMS Updates as the most important part of the working group, followed by 5 of 11 stating building relationships as the most important part of the working group.
- **Advanced HEMS research and analysis:** NEEP was contracted by the New York State Energy Research and Development Authority (NYSERDA) to develop a market characterization of smart thermostats. This project began in May and will continue into the third quarter as we work to develop market indicators to effectively track sales, market share, and promotion of smart thermostats, including baseline measurements and changes over time.
- **Hosted and planned for future HEMS workshops:**
 - On April 6 and 7, NEEP along with the Home Performance Coalition (HPC) hosted a [HEMS “workshop”](#) in conjunction with the ACI National Conference in Austin, Tex. ACI’s conferences focus on Home Performance, and by integrating a HEMS Workshop, the technology gained greater visibility with an important stakeholder group. In addition to working with conference organizers to have six HEMS-oriented sessions, three of which featured NEEP staff as speakers, NEEP and HPC organized a discussion lunch and an evening HEMS vendor showcase. Between the two sessions, 52 ACI attendees participated, with estimates of over 300 participating in at least one of the six other sessions.
 - NEEP made advances toward planning and setting an agenda for the September 21 HEMS workshop to be held at the EnergizeCT Center in North Haven, Conn. This event will be held in conjunction with the annual Residential Lighting workshop on September 20, with topics including a discussion of HEMS for low-income households, integration of HEMS with Home Performance, the role of the utility, the findings from the Market Transformation Strategy Report, and the intersection between HEMS, demand response (DR), and distributed energy resources (DER).



- **Demonstrated thought leadership through participation in regional and national meetings:** As part of the 2016 NEEP Summit, staff developed a roundtable discussion on the efficient homes of the future. Over 70 attendees joined the session, which shared different perspectives on the future of efficient homes, with an orientation to efficiency of the future and home energy management. The discussion spurred by the session led to a rich discussion throughout the two-day Summit, and will also be used to start off discussions at the September 21 HEMS workshop. The slides for this session have been posted at neep.org.

Residential Air Source Heat Pumps

- **Maintained the Cold-Climate Air Source Heat Pump (ccASHP) Specification:** The [ccASHP specification](#) provides stakeholders across the region with a model equipment and performance requirement specification. The specification and its associated metrics were developed to help regional stakeholders to better identify products that perform under low temperature conditions. By collaborating with program implementers, the list now houses a total of 149 units – up from the list’s initial launch of 17 in January 2015. There are currently 11 manufacturers represented on the list; their interest clearly demonstrates the value that a qualification provides to their business and subsequent participation in regional programs.
- **Cold-Climate ASHP Specification continues to draw interest:** Traffic remained brisk on the [ccASHP specification](#) webpage in the second quarter. The specification document was downloaded 97 unique times and the list of products meeting the specification was downloaded 199 times, showing that this is a valuable regional resource.
- **Planned for the regional ASHP workshop:** NEEP began organizing for the regional in-person [ASHP workshop](#) to be held in Southborough, Mass. July 21-22. NEEP will be convening a broad group of ASHP stakeholders from around the region to inform its update of the now three-year-old regional [ASHP Market Strategies Report](#).
- **Presented to the Clean Energy States Alliance’s renewable thermal working group:** On May 13, NEEP shared its perspectives on ASHPs with a working group of renewable thermal stakeholders from across the country via webinar. Roughly 20 stakeholders attended the webinar where NEEP provided an update on the NEEP ccASHP Specification, its intended use, and potential future directions.

Residential Lighting

- **Planned for the Residential Lighting workshop:** NEEP began planning for the 2016 Northeast Residential Lighting Workshop, to be held at the EnergizeCT Center in North Haven, Conn. on September 20. This workshop will be held in conjunction with a Home Energy Management Systems workshop the following day to allow for easier travel for stakeholders who may want to attend both meetings. NEEP began development of the agenda, which is expected to include updates on smart lighting pilots and products, revisiting the “ish” bulb discussion that dominated the 2015 workshop, discussing updates to the new ENERGY STAR Lamps and Luminaires specifications, and a discussion on the long-lasting impacts of federal lighting standards.
- **Submitting public comments on LED lamps:** Several states began to pursue promotion of LED lamps that had not met ENERGY STAR’s criteria, referred to as “ish” bulbs. This is a problematic trend as



quality is incredibly important for consumer satisfaction, and going outside of ENERGY STAR opens up opportunities for poor quality products to be promoted through efficiency programs. NEEP has been following the state trends in lighting and submitted comments to provide information regarding the difference between ENERGY STAR certified and “ish” bulbs to [Maryland](#) and [New Jersey](#) (p. 47) proceedings.

- **Convened Residential Lighting Leadership Advisory Committee:** NEEP held the second quarterly meeting for the 2016 Residential Lighting Leadership Advisory Committee. The Committee’s goals are to guide the development of two 2016 ‘State of the Market’ Residential Lighting Briefs and help collect information on changes to the residential lighting market. The meeting was held on May 13 with 10 stakeholders in attendance. The group discussed the forthcoming Residential Lighting Brief and began planning for the 2016 Northeast Residential Lighting Workshop. In a post-meeting survey, attendees rated the meeting as 4.7 out of 5.
- **Sponsors highly satisfied with Retail Products initiative:** In order to help NEEP sponsors’ Retail Products programs achieve significant energy savings, NEEP held the second quarterly Retail Products Working Group meeting on June 23, with eight individuals representing five states in attendance. In addition to sharing updates on various NEEP initiatives, the group had a robust discussion of current program administrator activities. Furthermore, NEEP led a discussion of several new program ideas or approaches which spurred a great deal of discussion. These meetings continue to be an important information sharing and idea generating component of NEEP’s sponsor relations with regards to retail products. In a post-meeting survey, participants rated the meeting as 4.3 out of 5 for meeting “organization and facilitation.”
- **Engaged with the ENERGY STAR Retail Products Platform (RPP):** NEEP engages with efficiency efforts in retail products including participation in the RPP process. This includes attending monthly teleconferences for the RPP EM&V and RPP Products task forces and bi-weekly teleconferences for the larger RPP organizers concerning the implementation of a nation-wide pilot of the RPP. NEEP staff held meetings to help develop a cost-effectiveness tool for potential participants and aided with targeted outreach to our sponsors by answering questions and building a connection to the RPP.

Comprehensive Multifamily Retrofit

- **Disseminated regional retrofit program data:** The [Comprehensive Regional Multifamily Program Matrix](#) details program design, delivery, outreach, and funding information for ratepayer-funded multifamily energy efficiency programs in the region. In addition to multiple requests for the matrix from national and international stakeholders, NEEP worked to disseminate this matrix to the Regional Multifamily Leadership Group in order to facilitate efforts to better design and implement their programs using best practices from other states in the region.
- **Created exemplary case studies to highlight best practices from the region:** NEEP convened and facilitated monthly teleconferences with our four Regional Energy Efficiency Organization (REEO) partners (SWEEP, MEEA, SPEER, and SEEA) as part of our REEO Multifamily Retrofit Project. Each REEO drafted case studies on different successful programs or initiatives from their respective regions that will be included in the final report of national best practices for multifamily retrofit efforts. Due for publication in September, the report will be publically available and will serve as a



resource by providing examples of what strategies are working to retrofit multifamily buildings toward the goal of achieving 20 percent energy savings across the sector.

- **Co-convened a stakeholder group working to facilitate access to energy data in multifamily buildings:** NEEP co-convened monthly teleconferences with a group of national stakeholders working in the affordable multifamily housing sector on strategies to streamline access to building energy data. This “Chew-Up-a-Challenge” group worked to identify information and resource gaps in order to inform future efforts to make this data available for the purposes of benchmarking and building energy management.
- **Updated the Multifamily Retrofit online resource center:** NEEP updated the [Multifamily Retrofit online resource webpage](#) with the latest research and data on multifamily retrofit efforts throughout the region. This page acts as a publically available collection of relevant and actionable resources that can inform energy efficiency program design, implementation, and policymaking efforts in the multifamily housing space.
- **Engaged the low-income multifamily housing community:** NEEP worked to engage stakeholders and disseminate resources at the Network for Energy Water and Health in Affordable Buildings’ (NEWHAB) annual meeting in Boston, Mass. NEEP, along with representatives from the other REEOs, worked to disseminate lessons learned from the regional retrofit project and NEEP supported a session with 33 in attendance on streamlining energy data access for affordable multifamily housing in order to assist building owners and managers with energy benchmarking and retrofit efforts.

Industrial Efficiency

- **Co-hosted a regional working group meeting:** In partnership with Greg Baker at Efficiency Vermont, NEEP helped organize and host a Northeast Regional Continuous Energy Improvement (CEI) Discussion Group teleconference on April 13. NEEP presented on a number of important topics including an update on the development of the regional market assessment, and further detail regarding NEEP industrial energy efficiency activities for 2016.
- **Developed draft Strategic Energy Management definition document:** NEEP is developing a two-page document that leverages existing materials to communicate a clearer definition of SEM (targeted to general marketplace, including energy efficiency programs). Marketplace stakeholders continue to lack basic understanding of what constitutes SEM, especially energy efficiency programs who are confused about the difference between SEM offerings and what Industrial programs have traditionally offered.
- **Attended the Better Buildings Summit to coordinate activities with US DOE and fellow REEOs:** NEEP joined DOE staff and representatives from a number of the REEOs to discuss 2016 activities to promote energy efficiency in the industrial sector. These discussions led to new opportunities for cross collaboration and identified activities that need adjustment.
- **Joined NEEA to learn about their suite of online SEM tools:** Warren Fish from NEEA hosted NEEP and SWEEP on April 6 to present an overview of the online SEM training/assessment tools NEEA has developed. NEEP is working collaboratively with US DOE to develop online tools that train interested industrial stakeholders on SEM and reported back to DOE the opportunities for leveraging of existing resources.



- **Attended ENERGY STAR's Energy Management Best Practices Network Meeting:** ENERGY STAR hosted their quarterly meeting on May 12 at the Smuttynose Brewery in Hampton, N.H. NEEP's Dave Lis and Jim O'Reilly attended to both provide insight based on NEEP's experience with energy management best practices but also to learn from other businesses how they are developing and incorporating best practices into their own operations. NEEP also highlighted opportunities for further discussion and learning by calling out our Annual Business Leaders Awards Ceremony that took place in June at our annual Summit.
- **Demonstrated thought leadership through participation in regional meetings:** As part of the 2016 NEEP Summit, NEEP staff developed a roundtable discussion on the emerging solutions in the commercial and industrial sectors. Over 50 attendees joined the session which highlighted a number of business solutions, including SEM. Cascade Energy contributed to the roundtable with a presentation on their approach to driving adoption of SEM in Industrial customers.

Business Leader Recognition Program

- **2016 Business Leaders take center stage at Summit Celebration & Anniversary Dinner at Mt. Washington:** The 2016 Business Leaders Recognition Program came to a culmination with the celebratory awards dinner at this year's Northeast Energy Efficiency Summit at the Omni Mt. Washington Resort in Bretton Woods, N.H. Six Business Leaders for Energy Efficiency were honored for their commitment and leadership in accelerating energy efficiency in the Northeast and Mid-Atlantic region. Visit the [Business Leaders section of our website](#) to read their inspiring case studies and watch videos that chronicle their stories. Also visit the [Summit section of our website](#) to see photos of the awards presentation.
- **Business Leaders received media attention as a result of their award:** Several Business Leaders were the topic of conversation in media coverage and partner outreach throughout the quarter. Here is a sample of those stories:
 - 5/24/16 – [Business Wire](#): NEEP Recognizes Monadnock Paper Mills as 2016 Northeast Business Leader for Energy Efficiency
 - 5/24/16 – [MFRTech](#): NEEP Recognizes Monadnock Paper Mills as 2016 Northeast Business Leader for Energy Efficiency
 - 5/24/16 – [WN.com](#): NEEP Recognizes US Office of Personnel Management as 2016 Northeast Business Leader for Energy Efficiency
 - 5/24/16 – [DCSEU news portal](#): NEEP Recognizes US Office of Personnel Management as 2016 Northeast Business Leader for Energy Efficiency
 - 5/24/16 – [TF Green Airport website](#): NEEP Recognizes Rhode Island Airport Corporation as 2016 Northeast Business Leader for Energy Efficiency
 - 6/2/16 – [VT Digger](#): Hannaford Supermarkets Named 2016 Northeast Business Leader for Energy Efficiency
 - 6/3/16 – [Progressive Grocer](#): Hannaford Garners Energy Efficiency Honor
- **Case studies and PR/marketing collateral tell story of efficiency as good business:** Inspiring [case studies](#), both written and video, were created to bring these Business Leaders' success stories to life. The stories highlight business investments in energy efficiency and participation in ratepayer-funded



programs. Specifically, they exemplify how Next Generation Energy Efficiency and Strategic Energy Management are the foundation for capturing all cost-effective energy efficiency in businesses across the Northeast and Mid-Atlantic.

- **Ongoing outreach to highlight Business Leaders in effort to create drum beat of business support for efficiency:** NEEP engaged with Business Leaders and NEEP Sponsors to promote achievements leading up to the NEEP Summit. NEEP created and shared a PR Tool Kit to assist in this coordinated outreach, providing press release templates and pre-made social media messaging. This outreach generated 368 page views of the NEEP website, including 252 visits from unique users.

High Performance and Zero Energy Schools and Public Buildings

- **Organized and led a NE-CHPS Training Workshop to promote the development of high performance schools in Massachusetts:** Through partnerships with the Collaborative for High Performance Schools (CHPS) and the Massachusetts Facilities Administrators Association (MFAA), NEEP in April held an all-day training workshop focused on the NE-CHPS criteria. The impetus for the training was the Massachusetts School Building Authority recent update to the Sustainable Building Design Guidelines to include NE-CHPS 3.1 as an option for new school construction and major renovation projects. In all, 115 attendees, including architects, engineers, facility and energy managers, utility program administrators, and more, gathered at Maynard High School to learn about NE-CHPS as a pathway for energy efficient, healthy school environments. Presentations from the workshop can be found on the NEEP website [here](#).
- **Planned and participated in the Municipal Energy Roundtable at NEEP Summit:** Staff developed a session for the [2016 NEEP Summit](#) entitled “Traversing the Municipal Energy Landscape: Solutions and Strategies for Success.” This session highlighted cutting-edge initiatives and community-based solutions that enhance resiliency, improve energy efficiency, and reduce climate impacts. Over 65 attendees gathered to hear from representatives at the local, state, federal, and grassroots levels about their experiences with these types of projects. This session served as a platform for dialogue between presenters and attendees to share best practices and lessons learned regarding municipal energy use. It also provided NEEP with a deeper understanding of the barriers that communities face and how NEEP can better assist them to reach their goals.
- **Developed two new high performance school exemplars:** An ongoing initiative of NEEP’s is to showcase schools that are built to high performance standards. [Maynard \(Mass.\) High School](#) and [Howe-Manning Elementary School](#) in Middleton, Mass. are two recent school improvement projects that were built to meet MA-CHPS Criteria. These case studies showcase the many high performance features of the two schools that make them high-quality learning environments. Creating exemplars helps promote the viability of high performance schools and the many benefits they provide.
- **Formed and convened a Regional Operations and Maintenance Guide Update Subcommittee:** NEEP began the update to the [Regional Operations and Maintenance Guide for High Performance Schools and Public Buildings in the Northeast and Mid-Atlantic](#) by forming and convening a subcommittee group to assist with the project. The group is comprised of stakeholders including facility and energy managers, state education officials, utility program administrators, and others. Via monthly teleconferences, the group is working through the guide and discussing necessary



updates to ensure the guide contains the most current information available to allow facility managers to operate their buildings at the optimal level.

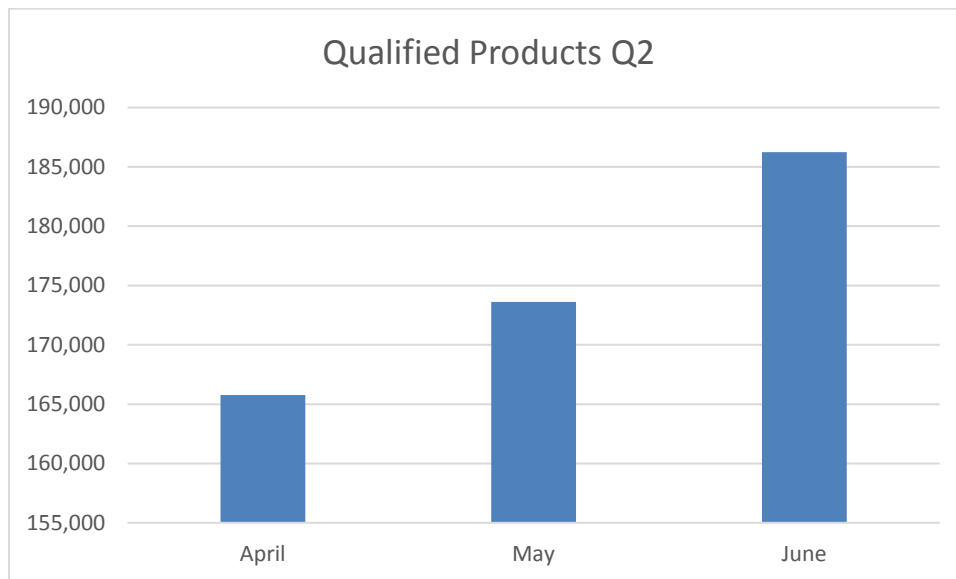
- **Planned for two state-specific high performance schools events:** In conjunction with state-specific working groups, NEEP is in the process of organizing two high performance schools summits for later this year. Rhode Island and New Hampshire Stakeholder groups each meet monthly to plan for these events and share best practices that promote operational savings through energy efficiency improvements to school facilities. Currently, each group is organizing an event that will appeal to a broad range of stakeholders and raise awareness of the benefits of high performance schools and NE-CHPS as a pathway.
 - The Rhode Island High Performance Schools Summit will take place on October 21 in Providence, R.I. at Rhode Island College. Recent activities of the R.I. High Performance Schools Working Group included brainstorming possible speakers and sponsors, developing an agenda, and mapping out the meeting space for the event. These meetings were attended by stakeholders spanning a diverse set of backgrounds including architects, facility managers, school administration, state education officials, and more.
 - The New Hampshire High Performance Schools Summit will be held on November 9 in Wolfeboro, N.H. at the Kingswood Regional High School. Presentation topics for the summit include highlighting funding opportunities, N.H. Department of Education overview, the multiple benefits of high performance schools, and N.H. school exemplars. The topics for this summit will help N.H. stakeholders understand the benefits of high performance school design and where to turn for funding and expertise for their project.
- **Engaged and collaborated with regional stakeholders to advance energy efficiency in schools and public buildings:** NEEP participated in various forums dedicated to advancing high performance building best practices in the public buildings sector.
 - Engaged with the [Massachusetts Facilities Administrators Association](#) to organize the energy track for the [2016 annual conference](#).
 - Collaborated with the Delaware Valley School Facilities Managers Association to address best practices in preventative maintenance issues.
 - Participated in the planning committee for the [Getting to Zero National Forum](#) hosted by New Buildings Institute.
 - Provided technical support to the [NH Local Energy Solutions](#) group regarding schools and public buildings projects.
- **Advanced zero energy buildings and homes in Rhode Island:** Throughout the quarter NEEP staff continued to be an active member of the R.I. Zero Net Energy Council. The council is using NEEP's [Zero Energy Roadmap](#) as guidance for what measures to include. NEEP staff participated in several meetings including helping to facilitate part of stakeholder forum which sought to gather feedback from a broader audience on the roadmap.
- **Maintained and updated online schools and public buildings resource center:** NEEP continually maintained and updated its [New Bulletin Board](#), [High Performance School's state pages](#), and [blog](#) to feature the latest news, events, and resources on high performance schools and public buildings. These resources provide easy access to information by interested stakeholders and assist with NEEP's dissemination strategy.



- **Staff served in leadership roles on national boards and working groups to advance energy efficiency:** Carolyn Sarno Goldthwaite continues to serve in leadership roles in two national groups:
 - Chairs the [Collaborative for High Performance Schools](#) Board of Directors; and
 - Co-Chairs the [SEE Action](#) Existing Commercial Buildings Working Group, a joint initiative of US DOE and US EPA.

DesignLights Consortium and Advanced Lighting Controls

- **Vetted products for inclusion in incentive programs and product performance data to inform program design strategies:** The [DesignLights Consortium](#) (DLC) served its members by maintaining the DLC Qualified Products List (QPL) via a publicly available, searchable, and comprehensive web-based listing of qualifying solid state lighting (SSL) products. The QPL and its technical requirements are the backbone of the DLC SSL project that members rely on to promote high efficiency lighting products and achieve energy efficiency program savings goals.
- **QPL Growth.** During the second quarter, the DLC QPL grew by 20.5%, leaving the product count at 186,243 by the end of June.



- **Revised technical requirements – raising the bar for quality to identify today’s best performing products:**
 - **SSL specification revisions:** To keep the requirements current and seek increased savings for the DLC membership, the DLC revised its specifications and released [Technical Requirements Table V.4.0](#) on June 1. The V4.0 revision focuses primarily on efficacy. While each DLC member efficiency program operates independently and has its own specific needs, this amount of revision is necessary for most programs to be able to differentiate product performance to continue offering incentives for DLC-qualified products. All submissions received starting on September 1, 2016 will be evaluated against the V4.0 requirements. Any products submitted between June 1 and August 31 will be subject to



- public identification on the QPL starting in January 2017, and will be removed from the QPL on April 1, 2017 if they do not meet the V4.0 requirements.
- **Announced draft proposal for pin-base LED (PL) replacement lamps:** The DLC released draft technical requirements for pin-base LED PL replacement lamps (LED replacements for pin-base CFLs) for comment on June 16. The proposal states that the DLC will accept QPL applications for 4-pin (G24q/GX24q) replacement lamps. At this time, only lamps that are intended to operate using the existing CFL ballast (“Type A” lamps) are included. Type “B” lamps (designed to operate directly using line voltage) and Type “C” products (which have the remote/non-integral driver), as well as products with other bases (including 2-pin products) remain under consideration for future development.
 - **QPL integrity – randomized product performance verification testing and logo use protection to defend against gaming and fraud:**
 - **Surveillance testing:** The surveillance testing program represents an initial effort by the DLC to ensure the validity of data submitted to the DLC SSL QPL pre- and post-qualification. In order to maximize the use of limited resources, surveillance will focus on identifying products with higher than average risk of non-compliance. The launch of the surveillance testing program has been pushed out until the fall.
 - **Strengthened logo compliance program:** In June, the DLC started another revision process for its logo compliance process. The new logo guidelines will allow for use of the DLC logo on general marketing materials that do not reference specific products. This will allow manufacturers to portray their participation in the program and decrease the number of logo violations due to general use of the logo.
 - **Launched Networked Lighting Controls Qualified Products List:** The DLC announced the launch of its Qualified Products List for Networked Lighting Control (NLC) Systems. The first product to meet performance specifications, the RAB Lightcloud system, was published on the list on June 27. The [NLC Qualified Products List](#) equips lighting designers, specifiers, contractors, building owners, and utility energy efficiency programs with a valuable information resource to understand and evaluate Networked Lighting Control systems in this rapidly evolving sector. For lighting control manufacturers and their customers, it provides access to efficiency incentives and greater product visibility in markets across North America.
 - **Developed framework for incentive design program for program administrators:** NEEP received commitments to pilot an incentive strategy. A key component of the Commercial Advanced Lighting Controls (CALC) project is to develop more effective energy efficiency program approaches and incentives strategies to support Advanced Lighting Control Systems that can be adopted across North America. Development of these strategies is a key component to improve leveraging and partnership with industry to accelerate adoption. In 2015, DLC developed a framework for this incentive strategy and in the first quarter of 2016, received formal commitments from Efficiency Vermont, National Grid, Eversource, and Xcel Energy to pilot the incentive strategy. Additional programs are expected to join in piloting the new incentive strategies later in 2016 and 2017.
 - **Demonstration projects and case studies of advanced controls application:** In 2015, the DLC began work to select 10 Advanced Lighting Control technologies and sites for demonstrations in partnership with US DOE. These demonstration projects will be used as deployment tools for DLC



member utilities and provide valuable experience and content to inform the CALC project training programs and other activities. In the second quarter, the third installation was completed and site selection is underway on projects 5-10.

- **Submitted funding proposal to Natural Resources Canada for new Advanced Control Data Analysis Project:** In June, DLC submitted a proposal to Natural Resources Canada (NRCan) to fund a new research project that will collect data and build a large database of advanced lighting control savings results. The goal of the project is to use the database to develop Advanced Lighting Control savings and cost assumptions to support members in developing program offerings. Secondary goals include refining savings assumptions of the ALCS Energy Estimator under development and to analyze the savings of luminaire level controls. DLC is currently in negotiations with NRCan regarding the proposal and seeking additional co-funders.
- **Hosted the Industry Advisory Committee meeting:** The DLC held its second in-person Industry Advisory Committee (IAC) meeting on June 10. The IAC includes a cross-section of the six largest manufacturers on the QPL, three small manufacturers, two lighting designers, and two controls manufacturers. The committee met to discuss strategic direction with respect to specification development, quality definitions, and the role of lighting specifiers and designers in the retrofit space.
- **Launched new website featuring an online forum, accessible information resource, added security, and API access to product data:**
 - **Increased web traffic:** During the second quarter, the [DLC website](#) received 612,256 page views by 53,790 users, 25.1% of which were new users. About 70% of the total sessions on the website came from the U.S., while roughly 13% came from China, and approximately 10% from Canada. The rest of the visits are made up from countries including Taiwan, South Korea, India, Hong Kong, United Kingdom, and Mexico. This shows the diverse and wide use of the DLC QPL as well as its continued relevance in the lighting market as more and more users make their way to the online resources.
 - **Improved web-based list functionality:** The DLC selected a web developer, ten24, to assist in redesigning the DLC website to increase functionality, ease of use, and overall stability of the site. The new website will be built on an e-commerce platform and is expected to be completed by January 2017.
- **Engagement of and representation at industry events and conferences:** DLC was represented at seven conferences and workshops, providing presentations on the DLC at many and broadening the reach of and interest in the program.
- **Held member meetings and provided regular newsletters updates:**
 - **Held regular member meetings:** There was no meeting held in April due to LightFair International, the largest lighting trade show in North America. Regular member meetings resumed in May. During these meetings, membership was informed about ongoing developments and feedback was collected on timelines, use of specs, the Premium tier, CALC, and the Stakeholder Meeting.
 - **New Social Media Followers:** [@DesignLightsSSL](#) gained approximately 50 new followers on Twitter as a result of tweets about industry news, conference outcomes and observations, as well as general updates from DLC.



- **Held three Technical Committee meetings:** The primary focus of these meetings was the finalization of Technical Requirements Table V4.0 and CFLED draft specification proposal. The June meeting included discussion of planning and prioritization for new category development from wish list items and new policy development.
- **Planned for the Annual Stakeholder Meeting and CALC Summit:**
 - **The 2016 DLC Stakeholder Meeting Approaches:** Planning for the 2016 DLC Stakeholder Meeting, scheduled for August 2-3 in Denver, Colo. was well underway. Agenda development, solicitation for sponsorship, as well as planning for an off-site reception was mostly completed. The conference website www.dlcmeeting.org was updated with the agenda and other important information.
 - **CALC Summit Planning Underway:** The CALC Summit will be held in the fall of 2016, and the DLC has been scouting for a location and hopes to hold the meeting in concurrence with DOE's SSL Market Development Workshop in November.



Building Efficiency Markets

Develop regional market capacities to value and deliver energy efficiency through outreach, guidance, and tools that provide common specifications, training, and frameworks to scale-up efficiency across states.

Home and Building Energy Rating, Labeling and Disclosure

- **Supported innovative building energy projects in New York:** NEEP continued to support NYSERDA-led residential and commercial building rating pilot programs. NEEP was referenced for its support of the [Tompkins County Home Energy Rating Disclosure pilot's](#) final [program implementation plan](#), which was published in May, and cited as one of its technical resources. The pilot was launched last year to investigate the feasibility of home energy information disclosure at the time of sale. Specifically, the plan cites NEEP's HELIX project as well as our web resources for real estate professionals.
- **Supported U.S. DOE's national collaboration efforts regarding home energy information:** NEEP continued to participate in DOE's [Home Energy Information Accelerator](#), representing the Northeast region as one of six hotbeds across the country which are actively expanding the use of this information in real estate transactions. Consequently, NEEP exchanged best practices with national leaders on regular teleconferences with national partners, including a June webinar regarding information systems. NEEP staff also participated in a workshop hosted by DOE before the ACI National Conference that convened leaders in building energy rating to share best practices and brainstorm future opportunities for deployment of home energy labeling.
- **Provided technical guidance to Rhode Island's Commercial and Residential Building Labeling Working Group:** NEEP continued to play a major role in propelling the state's Residential Building Rating Working Group toward a statewide labeling program. This quarter, NEEP provided timely updates on synergistic regional and national efforts and provided miscellaneous technical assistance to the state Office of Energy Resources to resolve final outstanding issues as the team prepares to incorporate DOE's Home Energy Score and a uniform Rhode Island label into National Grid's home performance program in 2017.
- **Presented on best practices for benchmarking to communities in Maine:** At the request of the Greater Portland Sustainability Council, whose membership includes 26 communities throughout Southern Maine, NEEP presented alongside a City Council member from Portland and two technology firms on best practices for benchmarking and tracking energy usage in buildings. NEEP outlined the tools that have been developed by the US DOE, such as the SEED Platform, as well as the Commercial Asset Score.
- **Initiated holistic residential market transformation discussions with Connecticut:** In June, NEEP and the Connecticut Department of Energy and Environmental Protection (DEEP) met to discuss



strategies for aligning the state's [nation-leading work in deploying DOE's Home Energy Score](#) through its utility programs with regional and national home energy labeling efforts such as HELIX and real estate outreach mechanisms. Bi-monthly communications between DEEP, US DOE, and NEEP will continue to ensure alignment.

- **Presented leading building energy rating strategies to several key market actors:**
 - In April, NEEP presented to approximately 20 stakeholders on home energy labeling programs and policies as well as the HELIX project at the Affordable Comfort Institute's National Home Performance Conference in Austin, Tex. This presentation was a first-of-its-kind look at the potentially symbiotic relationship of coupling home energy rating programs with HEMS to provide user feedback, verify energy savings, and spur further retrofit activity.
 - In addition, NEEP presented a session at ACI National to 40 attendees on *The Home Energy Data Huddle: Bringing the Right Folks Together to Build an Information Pipeline*.
 - Lastly, in May at the US DOE Better Buildings Summit, NEEP made a presentation to approximately 50 attendees on *Uncover the Hidden: Making Home Energy Data Accessible in the Real Estate Market*.
- **Supported implementation and improvement of US DOE's asset rating tools:** NEEP continued to act as conduit between the stakeholders throughout the region and DOE in order to ensure its Home Energy Score and Commercial Asset Score tools remain appropriate for use in our quickly-shifting building energy environment. For example, NEEP helped provide feedback to DOE on the need to streamline the rescoring of homes post-retrofit in order to help justify utility investment in home energy labeling programs.
- **Maintained regional and national network of energy rating allies:** NEEP included updated information on regional building energy rating activities through its Building Energy Codes and Public Buildings Leadership Groups. Staff continued to engage with our national and regional codes counterparts, most notably by providing updates on our region through coordination with allies such as the National Association of State Energy Officials (NASEO).
- **Maintained and updated the online rating resource center:** NEEP maintained and regularly updated its [Building Energy Rating Homepage](#) and [Resources](#) webpages to feature the latest news, events, and resources on commercial energy benchmarking and home energy labeling. These resources help to accelerate building energy rating efforts throughout the region by providing state and municipal officials with news on building energy rating initiatives underway throughout the region. For instance, a [blog assessing home energy rating data](#) for Northeast states which identified major trends and instances of regional leadership was viewed numerous times. One of the viewers, a member of the Town of Medfield (Mass.) Energy Committee, used the data compiled for this blog in their [successful attempt in April to adopt the Massachusetts Stretch Code](#)— on their third attempt.

Contractor, Realtor and Design Community Tools and Training

- **Convened a panel on increasing the visibility of energy efficiency:** NEEP assembled a diverse group of experts for a presentation entitled "Making the Invisible Visible: Valuing Home Energy Efficiency" for a roundtable discussion at [NEEP's 2016 Summit](#). Engaging with 28 attendees, the panel included presentations from two in the New England Real Estate community, a utility energy efficiency program administrator, and a NEEP staffer. The engaging discussion focused on the work that is



being done in the region to ensure the proper valuation of energy efficiency in the real estate market and identified what still needs to be done to fully transform the market and drive more energy efficiency in the housing market.

- **Disseminated educational resources for real estate professionals:** NEEP worked to educate the real estate community by disseminating the [Checklist for Real Estate Professionals](#) and the [Renter's Checklist for an Energy Efficient Home](#). These resources provide guidance for real estate professionals and prospective tenants looking to gain an understanding of the energy-consuming attributes of buildings in order to drive the demand for more energy efficient residential buildings. This quarter, the checklist was distributed to 25 real estate professionals via a presentation to the Women's Council of REALTORS® Northern Mass. Region chapter meeting in Reading, Mass. on June 28.
- **Advancing high performance schools construction best practices:** To further educate design professionals on best practices for school construction, NEEP:
 - Partnered with the Collaborative for High Performance Schools to develop a webinar series that will start in the third quarter; and
 - Collaborated with design professionals in both New Hampshire and Rhode Island to incorporate their needs in two summits that will take place this fall. In addition, each event will feature project showcases which will demonstrate exemplary projects throughout the region.
- **Worked to improve the operational performance of buildings throughout the region:** At the request of US DOE and the National Institute of Building Sciences (NIBS), NEEP's Carolyn Sarno Goldthwaite sits on the Board of Direction for the Better Buildings Workforce Guidelines, which are a set of national voluntary guidelines to improve the quality and consistency of commercial building workforce credentials. Ms. Sarno Goldthwaite participated in a Board teleconference where she provided an update on regional efforts and disseminated the guidelines to stakeholders at presentations and state-specific groups, such as the New Hampshire Association of School Business Officials who are looking into requiring credentialing for building operators.



Updating Baselines

Increase energy savings by aligning efficiency programs with advanced building energy code initiatives and appliance standards to lock-in the positive market impacts of successful efficiency programs.

Progressive Model Building Energy Codes

- **Led the Pennsylvania Energy Code Collaborative:** NEEP continued to facilitate the [Pennsylvania Energy Code Collaborative](#), which we have led since 2015. [State Energy Code Collaboratives](#) are effective vehicles for convening diverse stakeholders to promote energy code adoption and compliance through transparency, learning, and dialogue. NEEP convened a May teleconference and June in-person meeting in Harrisburg, Penn., the primary goal of which was to investigate the potential implementation of an Energy Code Ambassador Program in Pennsylvania. Developing such a network of leading building officials is a national best practice for enhancing energy code compliance and was identified as an element of the [Collaborative's roadmap to full compliance](#).
- **Provided support to Energy Code Collaboratives in Delaware and New Hampshire:** NEEP has played an active role in Delaware and New Hampshire's Energy Code Collaboratives since their inceptions in 2011 and 2012, respectively.
 - NEEP continued to provide technical support to the Delaware Energy Code Coalition. NEEP provided technical guidance pertaining to the 2015 IECC and HERS rating at the Coalition's meeting in April. NEEP also provided further assistance to the state Department of Natural Resources and Environmental Control regarding incorporating HERS rating into code and training opportunities.
 - NEEP continued to provide technical guidance to the New Hampshire Building Energy Code Compliance Collaborative, which convenes to advance strategies set in the state's [Code Compliance Roadmap](#). Specifically, NEEP contributed to the collaborative effort that was successful in guiding the state's Building Code Review Board away from accepting further weakening amendments at a May 2016 BCRB meeting.
- **Supported cutting-edge code compliance enhancement efforts in Rhode Island:** National Grid administers an innovative, robust energy code training program in partnership with the state Building Code Commission and NEEP through its [Code Compliance Enhancement Initiative](#). Rhode Island is one of the first states in the country that has allowed utilities to claim energy code program savings as part of its regulatory proceedings.
 - NEEP helped to assess and adjust the training and outreach activities the program delivers by providing regional insights and delivering resources to help the program prepare for the state's proposed 2015 IECC adoption in 2016. This quarter, the initiative delivered a



- program with similar totals as last quarter's eight classroom trainings sessions, which drew 210 attendees, and 11 energy code circuit rider calls, which yielded four site visit sessions.
- NEEP also supported the evaluation of the program to guide attribution of energy savings by addressing at the group's April meeting how new results from the state's code compliance assessment should be used to make adjustments to the attribution methodology.
 - **Assisted code compliance assessments in Connecticut, Maryland, and Pennsylvania:**
 - NEEP revisited and revised a code compliance assessment strategy for Connecticut that it had first developed in 2012, updating a proposal to work with the Connecticut Department of Energy and Environmental Protection and the Connecticut utilities (Eversource and United Illuminating) to develop a plan to establish and improve energy code compliance in the state.
 - NEEP also continued to support the two federally funded [residential code compliance field studies](#) awarded to states in our region last year in Maryland and Pennsylvania. For example, we have helped to disseminate Pennsylvania's resources and expand its outreach efforts as part of our leadership of the Pennsylvania Energy Code Collaborative.
 - **Extended knowledge and resources through NEEP's Codes Leadership Group:** NEEP continued to facilitate its Regional Building Energy Codes Leadership Group, a forum for information dissemination and exchange between building energy code stakeholders throughout the region, to accelerate adoption of and compliance with increasingly efficient energy codes. In June, NEEP organized and delivered this group's second webinar of the year to over 30 stakeholders. The meeting consisted of presentations and discussion focused on the 2018 IECC development process and how the region can help to improve the efficiency of the next edition of the national model energy code. In addition, NEEP provided the Group with relevant and timely state, regional, and national updates such as reminders about voting deadlines and helpful resources regarding the 2018 IECC development process.
 - **Supported new and existing stretch energy codes in Massachusetts, Rhode Island, and New York:**
 - Massachusetts' Stretch Energy Code was designed in 2009 as an overlay code which yields additional building energy savings, but it remains without update nearly two code adoption cycles later. This year, NEEP has supplied technical guidance to stakeholders interested in promoting a more efficient stretch energy code than the one currently proposed, which does not provide any energy savings for several buildings, most notably all renovations and retrofits.
 - A [2015 Executive Order](#) requires Rhode Island to develop a stretch code for nonresidential properties. To support this effort, NEEP is represented on a working group developing the stretch code. The stretch code will utilize the [2015 International Green Construction Code \(IGCC\)](#) as the basis, which will be customized for Rhode Island. NEEP is assisting with a comparison of the 2012 and 2015 versions of the IGCC.
 - NEEP also supported the development of NYStretch, a voluntary stretch code that aims to provide 10 percent savings beyond New York's base energy code for residential and commercial buildings and is projected for completion by this fall.
 - **Supported energy code compliance and adoption efforts in the District of Columbia:** In June, NEEP and several members of the District's Department of Consumer and Regulatory Affairs (DCRA)



discussed different options and resources available to help develop a pamphlet using a highly visual design to highlight common residential code compliance errors to streamline the permitting process and improve overall code compliance. NEEP also further addressed the District's desire to build a library of code compliant digital diagrams of building assemblies that could be inserted directly into building drawings. Finally, DCRA will use NEEP as a technical resource as needed in the District's current base and green energy code update processes occurring this year.

- **Guided building energy program strategy in Connecticut:** In NEEP's [comments](#) on Connecticut's Draft Comprehensive Energy Strategy (see the *Public Policy Trends Analyses, Reports and Education* section of this report), NEEP provided a section of technical guidance specifically relating to building energy issues. For energy codes, staff identified the benefits of potential state adoption of the 2015 IECC (instead of the 2012 version currently being pursued) and offered further support as we assist the state in launching a code compliance assessment. NEEP also provided comments on the importance of whole building data in commercial/multifamily buildings and leading by example in schools and public buildings.
- **Maintained national network of energy code allies:** NEEP continued to engage with its national and regional codes counterparts, providing updates on our region through monthly teleconferences with Responsible Energy Codes Alliance (RECA), National Association of State Energy Officials (NASEO), Building Codes Awareness Project (BCAP), and the Northeast HERS Alliance. NEEP also participated in meetings with the National Energy Codes Collaborative, a joint partnership of the US DOE, PNNL, BCAP, NASEO, and the other REEOs.
- **Maintained and updated the online resource center:** NEEP maintained and regularly updated its [Building Energy Codes Homepage](#), [News Bulletin Board](#), [Codes Tracker](#), and [Resources](#) webpages to feature the latest news, events, and resources on code adoption and compliance throughout the region.

State and Federal Appliance Standards

- **Convened Appliance Standards Working Group via webinar:** To facilitate regional stakeholder input and share information and best practices, NEEP convened the second quarterly meeting via webinar on June 7. Eleven stakeholders from across the region joined the call to discuss the ongoing General Service Lamp (GSL), Central Air-Conditioner/Heat Pump (CAC/HP), and Residential Gas Furnace standard rulemakings, as well as an in-depth discussion of upcoming states standards activities. To follow up to this meeting, a special summer state standards meeting is being planned for the third quarter, in addition to the quarterly working group meeting. This engagement promotes understanding and awareness of appliance standards as a valuable policy mechanism to achieve cost-effective energy savings. In a post-webinar survey, the meeting received a 4.3 out of 5 for "quality and logistics."
- **Provided comments to California computers standard:** The California Energy Commission (CEC) has a unique ability to pass and enforce state standards. Often, standards set by the CEC for California are used to inform federal or other state standards, so it can be very important to follow the CEC process to help ensure the standards passed are appropriate for the Northeast and Mid-Atlantic. NEEP tracked the standard for Computers, Computer Monitors, and Signage Displays, and participated in an ASAP call focused on this rule. Additionally, NEEP submitted [public comments](#) expressing support for the proposed standards.



- **Attended appliance standards training:** On May 17, NEEP staff attended a day-long training focused on successfully impacting appliance standards. This training was hosted by ASAP and took place in Washington, D.C. This training was thorough and addressed both key pieces of analysis and key timing to maximize impact of standards work. NEEP looks forward to using the skills and techniques explored in the training to improve both federal and state standards work into the future.



Tracking Efficiency Policies & Results

Keep stakeholders abreast of best practices in public policy to drive energy efficiency by tracking, comparing, and making accessible state efficiency policies, their implementation, and results, and by highlighting key trends and issues.

Regional Evaluation, Measurement and Verification Forum

- **The EM&V Forum planned, convened, and facilitated the following webinars:**
 - **Forum Participant Webinar presenting the Forum’s 2016 project plan:** This webinar brought together Forum state participants from across six states to review the 2016 project agenda and scopes, deliverables, schedule, and state priorities based on preceding discussions with states.
 - **EM&V 2.0 June 23 Webinar:** Participants in this [webinar](#) learned about how the use of more data (interval or volume), analytics, and computation at scale can help to streamline the M&V process through semi/automation (‘M&V 2.0’), and how this integrates with program evaluation (‘EM&V 2.0’). The webinar covered both commercial and residential examples, bringing together Energy Savvy and LBNL to share their insights on the residential and commercial aspects of EM&V 2.0. Participants also benefited from learning from a case study from PSEG - Long Island.
 - **EM&V Methods June 30 Webinar:** Participants in this [webinar](#) received a walkthrough on the EM&V Forum’s standardized reporting forms, learned about the relevance of EM&V documentation to the National Energy Efficiency Registry (NEER) project, and received an update on the US DOE’s Uniform Methods Project.
- **The Forum successfully completed the following projects:**
 - **The [Incremental Cost study](#):** This study examines 10 diverse categories of technologies, including residential, commercial, HVAC, lighting controls, water heating, refrigeration, and plug load. The information contained within this report is useful to a diverse audience – planners, program designers, policymakers, and evaluators. The report is also accompanied by various spreadsheets containing detailed data on the categories. The [webinar](#) on this topic walked through the background, results, and how to use the resources.
 - **Version 6 of the Mid-Atlantic Technical Reference Manual (TRM):** This iteration of the [Mid-Atlantic TRM](#) contains over eighty prescriptive residential and commercial/industrial electric and gas energy efficiency measures.

Regional Energy Efficiency Database

- **Discussed partnership development opportunities between [REED](#) and interested parties:** NEEP held a teleconference with ISO New England to discuss moving the Energy Efficiency Forecast



deadline to better align with REED stakeholders’ desire to have more current information. Staff also held a teleconference to discuss a possible partnership between ACEEE and REED that would reduce reporting burdens on stakeholders. By having REED data inform the ACEEE Report Card, stakeholders would only need to report to REED instead of both organizations.

- **Consultant Peregrine Energy Group completed work on REED:** These updates included minor form corrections, server upgrade, and adding a “Reports” tab to the drop-down menu.
- **Completed a rigorous QA/QC process for all data in REED:** This was done to ensure within a 90% confidence interval that the data in REED is in alignment with publicly filed data.

Public Policy Trends Analyses, Reports and Education

- Tracking trends in state energy efficiency investment and savings remains a mainstay of our work, as do our electronic communication resources including the [NEEP blog](#), [The Policy Tracker](#), and [Highlights](#). Below is a table detailing unique page visits for the policy team’s blogs during the second quarter of 2016:

Unique Views	Blog	Date
117	Can Maryland Hold the Line on Its Commitments to Energy Efficiency	5/26/16
96	Scaling the Peak: How Efficiency Programs Can Leverage the Growing Value of Peak Demand	5/19/16
81	The False Dichotomy Between Ratepayer Funded Programs and Private Markets	4/21/16
70	The Policy Tracker: May 2016	5/25/16
67	Born on the Bayou: The True Story of How NEEP Came to Be	5/11/16
66	Connecticut’s Proposed RGGI Fund Raid is No Way for a Leader to Act	5/03/16
46	Seeking Proof that Energy Efficiency Creates Jobs: Ask the U.S. Department of Energy	5/25/16
39	Collaboration, Expertise, and Working Regionally: State Officials Talk About the Value of NEEP	5/25/16

- **Promoted Next Generation Energy Efficiency:** NEEP continued to disseminate NEEP’s annual [Regional Roundup of Energy Efficiency Policy](#) during personal meetings, through public comments, in web links, and by mailing hard copies to key individuals in the states. With the theme of “Next Generation Energy Efficiency,” the *Roundup* continues to lend itself to citation in important state policy proceedings, such as the development of the next Comprehensive Energy Strategy in Connecticut, and the Grid Modernization Working Group in New Hampshire. The 2016 *Regional Roundup*’s landing page has received more than 650 unique views since March.



- **Provided direct technical assistance to regulators:** NEEP submitted comments in the following regulatory proceedings contemplating a wide range of subject matter related to energy efficiency:

Date	Proceeding Comments	Comment Focus
4/15/16	Maryland EmPOWER Programs Semi-Annual Hearing	<ul style="list-style-type: none"> • Value LEDs in 2016 program portfolios • Limited income program goals • Gas efficiency program goals
4/22/16	New York Clean Energy Standard	<ul style="list-style-type: none"> • Revision of Load Forecast Methodology • Accounting for non-regulated customers • Opportunities to maintain CES methodology
5/5/16	Delaware's Draft EM&V Regulations	<ul style="list-style-type: none"> • Cost-effectiveness screening thresholds • Neighboring states' quantification of non-energy benefits
6/7/16	Connecticut 2017 Update to Conservation & Load Management Plan	<ul style="list-style-type: none"> • Next Generation Energy Efficiency • Industrial Energy Efficiency Best Practices • Cost-effectiveness screening inputs
6/16/16	Connecticut Comprehensive Energy Strategy	<ul style="list-style-type: none"> • Strategic Electrification • Building Energy Issues • Appliance Standards
6/17/16	New Jersey Comprehensive Resource Analysis Straw Proposal	<ul style="list-style-type: none"> • Value LEDs in program portfolios

Note: NEEP does not advocate for specific policy positions in any state proceedings, rather it serves as a technical resource to provide data and other materials to inform such proceedings.

- **Provided in-person working group technical assistance in New Hampshire:** NEEP has played an integral role in New Hampshire's [Grid Modernization Working Group](#), participating in monthly meetings and stakeholder education and consensus building. Per Order IR-15-296 of the state's Public Utilities Commission, the group is charged with exploring options and developing recommendations on the policies and investments necessary to help New Hampshire modernize the electric grid. Recommendations are expected in early 2017.
- **Published "NEEP Issue Briefs:"** NEEP examined several key regulatory developments during the second quarter, publishing three issue briefs that summarize lengthy public utility commission documents in outline form. The issue briefs bring value to other stakeholders such as allies, sponsors, and other efficiency supporters who could benefit from understanding of the subject-matter in question, but lack the resources to review lengthy commission documents. In the second quarter of 2016, NEEP published three issue briefs:

NEEP Issue Brief	Regulatory Document Briefed
NY REV Track II Order (5 pages)	New York Public Service Commission (170 pages) Order Adopting Ratemaking and Utility Revenue Model Policy Framework
NY CEAC Working Groups (4 pages)	New York Public Service Commission (47 pages) Clean Energy Advisory Council Charter and Working Group Scopes
VT PSB Docket 8550 (4 pages)	Vermont Public Service Board (80 pages) Docket 8550 Final Order



- **Participated in stakeholder advisory meetings:** Throughout the quarter, staff participated in monthly stakeholder advisory meetings where such frameworks have been established, including the Mass. Energy Efficiency Advisory Council (EEAC), the Delaware Energy Efficiency Advisory Council (EEAC), the Connecticut Energy Efficiency Board (EEB), the Energy Efficiency and Resource Management Council (EERMC), Maryland EmPOWER Planning Group, and New York proceedings via the Clean Energy Advisory Council (CEAC).
- **Organized and facilitated NEEP Summit presentations:** Contributing to the substance of NEEP's 2016 Summit, the Policy team organized and facilitate two group presentations:
 - A roundtable on the integration of energy efficiency and other distributed energy resources. The roundtable's presentations are available here: [\[1\]](#)[\[2\]](#)[\[3\]](#)[\[4\]](#).
 - Power talks and a hosted discussion on approaches toward breaking through the public policy barriers to integrated energy efficiency. The power talks' are presentations available here: [\[1\]](#)[\[2\]](#)[\[3\]](#).
- **Collaborated with partner advocates:** NEEP collaborated with numerous allies, including the Acadia Center, Conservation Law Foundation, Natural Resources Defense Council, the Pace Energy and Climate Center, E4TheFuture, National Consumer Law Center, Interfaith Power and Light, Massachusetts Climate Action Network, Chesapeake Climate Action Network, Sierra Club, New York Clean Energy Organizations Coalition, and many others on policy developments in states across the region. NEEP sits on the policy committee of the Northeast Clean Energy Council, NECEC's Grid Mod Working Group, and the Massachusetts Global Warming Solutions Project.

Northeast Energy Efficiency Summit & 20th Anniversary Celebration

- The 2016 Northeast Energy Efficiency Summit at the Omni Mount Washington Resort hosted 250 attendees, the majority of which attended both days of the conference.
- In total, [35 sponsors](#) of different levels supported the Summit, with 24 exhibiting their products or services in the main hall of the resort, for a total funding of \$177,000.
- N.H. Senate Majority Leader Jeb Bradley joined our Summit on June 13 to welcome our attendees in the State of New Hampshire.
- [Seven roundtables](#) held on Monday, June 13, engaged dialogues about inspiring ideas for Next Generation Energy Efficiency. The rooms were packed with people participating in these topical conversations.
- Sam Evans-Brown from NPRA moderated a [special roundtable dedicated to New Hampshire Business Leaders](#).
- Nine keynote speakers gave a [NEEP Power Talk](#), with broad profiles including Bradford Swing from the City of Boston, Philip Barton from Schneider Electric, and Don Kreis from the New Hampshire Customer Advocate. This format inspired our audience and offered Q&A sessions to interact with all our speakers.
- The NEEP Olympics, implemented for the first time, was a great success! Fourteen of our Summit sponsors came to the stage for four minutes to talk about how their organizations is contributing to the future of energy efficiency. The winner was Philips Lighting with a bulb with three light settings.



- For the second year, NEEP welcomed nine students to the 2016 Summit as part of the annual Student Scholarship and Mentoring Program where students met industry professionals, learned about some conventional and unconventional career paths to the efficiency industry, and shared knowledge with other students interested in making Next Generation Energy Efficiency a reality.
- NEEP honored six companies from around the region as the [2016 Northeast Business Leaders for Energy Efficiency](#). These companies, and their utility partners, were highlighted for their collective efforts to incorporate concepts of Next Generation Energy Efficiency and Strategic Energy Management as the foundation for capturing all cost-effective efficiency within their businesses.



2016 NEEP SUPPORTERS

NEEP would like to recognize and thank our 2016 funders, including our [Sponsors](#), [Allies](#), [Regional EM&V Forum funders](#), [DesignLights Consortium Members](#), and [federal and foundation funders](#). We are grateful for their support, which makes this work possible.

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