

NEEP 2014 QUARTERLY REPORT THIRD QUARTER

EXECUTIVE SUMMARY

Energy efficiency has often been referred to as the least-cost, first-order resource for achieving reduced energy use and improving air quality. In 2014, NEEP continues to play its role—bringing stakeholders together to find solutions for the climate and economic challenges we face today. In this report, NEEP will share some recent achievements toward the goals in our annual <u>Business Plan</u>. With the support of our sponsors, partners, and funders from across the region and nation, NEEP continues to keep the region a national efficiency leader by advancing innovation and best practices, supporting leading-edge policies, programs, and strategies, and collaborating on development of regional strategies that deepen, broaden, and accelerate energy efficiency on a regional scale. Some highlights of our work this quarter include:

NEEP MISSION

Accelerate energy efficiency in homes, buildings & industry in the Northeast - Mid-Atlantic region.

Make Energy Efficiency Visible

- Save the Date for the 2015 NEEP Summit: The 2015 Northeast Energy Efficiency Summit will be held on June 15-16, 2015 at the Omni Mt. Washington Resort in Bretton Woods, New Hampshire. The event will once again feature the popular NEEP Power Talks, and will play host to workshops, recognition of Business Leaders for Energy Efficiency, a tour of a high performance school, and exhibits of the efficiency technologies and services. Stay tuned for details in the coming months.
- Business Leaders continue to be recognized for their energy efficiency efforts: We continued to partner with Businesses Leaders for Energy Efficiency to showcase their achievements and success stories. These businesses were added to NEEP's <u>archive of Business Leader case studies</u>, which can all be found on NEEP's website, organized by state.
- Engaged Sponsors and Partners in joint projects: NEEP continued to engage our funders in numerous joint projects in support of our common goal to keep the region a national leader in efficiency. You can find examples of this collaboration throughout the following report.
- NEEP gains media attention to position the region as a national efficiency leader: NEEP appeared in several media stories that brought attention to the region as a national energy efficiency leader, while also demonstrating the value of efficiency as a critical energy resource. NEEP received 13 placements throughout the quarter, including in the Boston Globe, New York Times, and Hartford Business Journal.

Reduce Building Energy Use

- Hosted Building Energy Codes Leadership Group meeting: NEEP hosted its annual Leadership
 Group meeting, engaging stakeholders from across the region on a number of topics including
 future codes opportunities, the intersection of codes and building asset rating, introduction of
 NEEP's online Codes Adoption and Compliance Toolkits, and new code compliance developments.
- Completed Phase 2 testing of innovative building asset rating methodologies in Massachusetts: NEEP and the Massachusetts DOER continued to lead the Massachusetts Raising the BAR (Building Asset Rating) Pilot. This quarter, the Pilot team compiled data collected in the latest round of tests into reports for the building owners. Phase 3 of the Pilot will focus on extending the program beyond the state to inform and shape the national asset rating conversation.
- Engaged and supported Portland, Me. with municipal energy efficiency efforts: NEEP staff visited the city at the request of municipal officials to support their efforts to lead the state



toward more efficient energy usage policies. Officials requested that NEEP help communicate <u>Portland's energy reduction efforts</u> to the broader region.

Speed Adoption of High Efficiency Products

- Northeast Residential Lighting Strategy (RLS) research completed: NEEP made significant progress toward preparation of the third update to the RLS. With data collection from program administrators and contractor research complete, the majority of the analysis has been accomplished. This information will inform program planning, provide analysis of developments in the lighting landscape, and aid in the comparison to the original RLS recommendations.
- The DesignLights Consortium® continues to grow and improve processes and features: The Qualified Products List (QPL) grew by 16%, ending the quarter with 57,020 products. To improve the QPL, NEEP presented proposals for two new DLC member-requested services for member comment—tiering of the QPL Technical Requirements and a Product Verification Testing Program.
- NEEP receives award from the US DOE to fund demonstration projects for Commercial Advanced Lighting Controls: NEEP was successful in its application to the US DOE for funding for demonstration projects to support the <u>CALC initiative</u>. The data and experience collected through the demonstration projects will build stronger confidence in the technology and expected energy savings for energy efficiency programs.
- Hosted an Air Source Heat Pump Cold-Climate Metrics Subcommittee meeting: NEEP hosted an
 <u>air source heat pump</u> subcommittee meeting to help stakeholders identify products that perform
 under low temperature conditions. The meeting resulted in a draft proposal "Cold-Climate Air
 Source Heat Pump Specification," and prompted planning for a follow-up meeting.
- Developed project scope to conduct research on Home Energy Management Systems (HEMS):
 This effort will update the analysis presented in NEEP's <u>Business and Consumer Electronics</u>
 <u>Strategy Report</u> to help energy efficiency programs understand the savings potential and EM&V opportunities of HEMS technologies. The project will produce a white paper covering inventories of products, an assessment of program potential, and the policy and EM&V opportunities of HEMS.
- NEEP's Northeast Appliance Standards Project provided leadership to states: NEEP engaged
 with state-level stakeholders to provide resources and guidance regarding opportunities associated
 with state appliance standards. NEEP also worked closely with the Appliance Standards Awareness
 Project to develop a list of products for which states could consider establishing minimum
 standards. These efforts will help prepare states as they look to the legislative sessions of 2015.

Advance Knowledge & Best Practices

- EM&V Methods Standardized Reporting Forms adopted by Steering Committee: The Forum Steering Committee adopted the <u>Standardized Reporting Forms</u>, which were developed in collaboration amongst Forum stakeholders and partners. This effort supports greater transparency of EM&V practices used in energy efficiency savings calculations, and provide a model for other states to use in the country to support a range of state policy needs.
- NEEP is a leading voice for advancing energy efficiency across the region: Efficiency can help
 customers mitigate winter price spikes, is the most cost-effective way for states to comply with
 the coming US EPA regulations on carbon, supports growth of local jobs, and can help the region
 avoid costly new electric and gas distribution projects. NEEP continues to <u>support states' efforts</u>
 to harness efficiency as a first-order resource and adopt best practices in policies and programs,
 as presented in the report below.

We hope you enjoy reading about these achievements and many more in the following report. Thank you for your engagement and support in 2014—we look forward to many more successes and our continued partnership.



NEEP 2014 STRATEGIES AND PROJECTS

Keep the region a national efficiency leader by advancing innovation and best practices, and leading-edge policies, programs and strategies that deepen, broaden and accelerate energy efficiency on a regional scale.

STRATEGIES	OUTCOMES	PROJECTS
VISIBILITY	 Increased media coverage and public understanding and support of energy efficiency as a critical energy resource Northeast & Mid-Atlantic region widely recognized as national energy efficiency leader Visible business leadership for energy efficiency policies and programs 	 Northeast Energy Efficiency Summit Northeast Business Leaders Recognition Program NEEP Sponsorship & Partners Program NEEP Strategic Marketing & Communications
BUILDINGS	 The region leads the nation in adoption of, and compliance with, progressive building energy codes Markets value high efficiency homes, buildings States, municipalities commit to maintaining, building high performance schools, public buildings Model programs and resources address market barriers to energy efficiency retrofits in key market segments 	 Building Energy Regulation Market Valuation of Building Energy Performance Building Energy Best Practices
PRODUCTS	 Northeast leads in penetration of high efficiency products Higher baselines through appliance standards lock in market gains Regulatory policy supports new technologies and strategies to advance high efficiency options 	 High Efficiency Residential Lighting DesignLights Consortium® SSL Qualified Products List Commercial Advanced Lighting Controls High Efficiency Emerging Technologies High Efficiency Business & Consumer Electronics Appliance Efficiency Standards
KNOWLEDGE	 States and local government commit to energy efficiency - top energy priority Build greater transparency and consistency in EM&V and reporting practices NEEP secures funding for regional best practices project to advance industrial efficiency (tent.) 	1. Regional Evaluation, Measurement & Verification Forum 2. Public Policy Outreach & Analysis





MAKE ENERGY EFFICIENCY VISIBLE

Position the Northeast and Mid-Atlantic region as the national efficiency leader with efficiency as a critical and tangible energy resource with significant and immediate impact on the economy, the region, and the planet.

All NEEP staff contributes to our *Visibility* strategies, but the projects and objectives listed within this strategy relate specifically to our annual Summit, and the organizational marketing, communications, and development efforts of the Strategic Marketing & Communications Team. This work supports the strategies outlined in NEEP's 2014 Business Plan and maximizes NEEP's capacities for gaining visibility for efficiency and for promoting the Northeast and Mid-Atlantic region as a national leader in energy efficiency.

Northeast Energy Efficiency Summit

- Planning for the 2015 Summit begins: Following the successful 2014 Northeast Energy Efficiency Summit held in Newport, RI the Strategic Marketing and Communications team turned its focus to planning for the 2015 event. NEEP's commitment to showcasing energy efficiency leadership from across the region encourages us to find new locations to hold the event each year. This year's search led us to Bretton Woods, New Hampshire and we are pleased to announce that the ninth annual Northeast Energy Efficiency Summit will take place at the Omni Mt. Washington Resort on June 15-16, 2015. We are excited to bring the Summit to the Granite State for the first time and look forward to sharing New Hampshire's natural beauty and vision for a clean energy future with Summit attendees. The 2015 Summit will once again feature the popular NEEP Power Talks, an effort that will begin in November with launch of a Call for Speakers to attract high-quality speakers from a variety of fields. As in years past the Summit will play host to topical workshops, recognition of the 2015 Northeast Business Leaders for Energy Efficiency, a tour of a high performance school, and exhibits of the latest and greatest in efficiency technologies and services.
- Save the Date for the 2015 NEEP Summit: The 2015 Northeast Energy Efficiency Summit will be hosted on June 15-16, 2015 at the Omni Mt. Washington Resort in Bretton Woods, New Hampshire. Stay tuned for details in the coming months.

Northeast Business Leaders for Energy Efficiency

- Business Leaders continue to voice support for energy efficiency: Following another
 successful year of the Business Leaders Recognition Program where NEEP honored 14 Business
 Leaders for Energy Efficiency at the 2014 Summit, we continued to partner with these
 businesses throughout the year to showcase their achievements and success stories. This year's
 strong sample of regional business voices in support of energy efficiency highlighted a variety
 of specific projects and overall commitments to doing more with less energy. These businesses
 were added to NEEP's archive of Business Leader case studies, which can be found on the new
 NEEP website, organized by state.
- More media attention for Business Leaders as a result of their award: Although the lion's share of media coverage came in the second quarter, coverage continued to trickle in. Stories on Business Leader Firestone Building Products can be found here, here, and here.
- NEEP and partner wrap up Business Leaders Communication Initiative in Connecticut: NEEP
 and Cater Communications completed a project funded by a grant from the Emily Hall Tremaine
 Foundation to highlight business case studies and outline critical issues for business leaders
 related to energy efficiency and clean energy policies in Connecticut. We worked with past
 Business Leaders from the state to update their case studies on the details and impact of their



energy efficiency improvements. These case studies were shared with numerous organizations, including Energize Connecticut for use on its website. Lastly, NEEP prepared a profile on a program administrator from United Illuminating, which will be placed as the winter months approach.

• Launch of the next round of Business Leaders: NEEP began planning for the 2015 Business Leaders Recognition Program and will kick-off the new program in November. After the initial solicitation to NEEP Sponsors and previous participants, we will actively promote the program in January 2015.

NEEP Sponsorship & Partners Program

- Engaged Sponsors and Partners in joint projects: NEEP continued to engage our funders in numerous joint projects in support of our common goal to keep the region a national leader in efficiency. You can find examples of this collaboration throughout the following report.
- Published NEEP's 2013 Annual Report: Our 2013 Annual Report presents highlights of our 2013 initiatives—undertaken with our sponsors, partners, and funders from across our region and the nation to accelerate energy efficiency in homes, buildings, and industry.
- Hosted a webinar for Sponsors, Partners, and federal and foundation funders: NEEP hosted an exclusive webinar for our 2014 supporters to present highlights of recent activities and achievements. NEEP staff shared project highlights, followed by an open Q&A session.
- Shared news and success stories from regional and national stakeholders: NEEP regularly updates its <u>online news resource</u> to provide readers with the latest in energy efficiency—including news from our Sponsors, Partners, and other stakeholders.

NEEP Strategic Marketing & Communications

- NEEP gains media attention to position the region as a national efficiency leader: NEEP appeared in several media stories that brought attention to the region as a national energy efficiency leader, while also demonstrating the value of efficiency as a critical energy resource. NEEP and partners provided credible information to media through 13 placements throughout the quarter, including placements in the Boston Globe, New York Times, and Hartford Business Journal. Highlights include:
 - o July 7: Fierce Energy SB 150 expanding cost-effective utility energy efficiency options
 - o July 19: Zondits NEEP Applauds Passage of Landmark Legislation in Delaware
 - July 28: <u>Today's Energy Solutions</u> DOE Invests \$6M to Support Commercial Building Efficiency
 - July 30: <u>Green Building Elements</u> Cambridge, Mass. Passes Energy Benchmarking Ordinance
 - August: <u>Facilities Management</u> Managing Multiple Lighting Options with one Control System
 - August 25: <u>3BL Media</u> LG Ecohybrid Heat Pump Dryer Earns 2014 ENERGY STAR Emerging Technology Award
 - September 11: <u>Newswire</u> Amerlux adds complete family of VARIETA architectural high performance LED Outdoor Flood Lights to DLC Qualified Products List
 - September 18: <u>Green Building Law</u> Can Utility Energy Efficiency Programs Make "MPGs" for Homes Mainstream?
 - o September 24: Carlisle Mosquito Heat Pumps for Cold Climates? Yes, Indeed
 - September 25: NECN Massachusetts' Electric Rates Soar
 - o September 25: WCVB National Grid Warns of Much Higher Electric Costs This Winter



- NEEP shares its story with local, regional, and national media outlets: NEEP issued four <u>press</u> <u>releases</u> in the third quarter. Of these releases, two shared project news/policy movement on issues where NEEP engaged and offered expertise, and two announced events in which NEEP was involved. Highlights include:
 - o July 2: Energy Efficiency gets a major boost in Delaware
 - September 29: The Alliance and NEEP co-host Energy 2030 On the Road event in NYC

NEEP "Visibility" Project Staff

Susan Coakley - Executive Director scoakley@neep.org

Northeast Efficiency Summit / Communications

- Alicia Dunn Marketing Communications Manager adunn@neep.org
- John Otterbein Marketing Communications Associate jotterbein@neep.org

NEEP Sponsorship and Partners Program

 Laura De Angelo - Development & Partner Alliance Manager ldeangelo@neep.org

Strategic Marketing & Communications / Business Leaders

 Lisa Cascio - Public Relations Manager <u>lcascio@neep.org</u>





REDUCE BUILDING ENERGY USE

Make possible a future in which all homes and buildings are zero net energy, through incremental yet aggressive improvements to building energy policies and programs.

NEEP's *Buildings* strategies support the reduction of wasteful energy use in commercial, residential, and multifamily properties through support for public policies, incentive programs, advanced building energy codes and rating, and expansion of high performance schools and public buildings. The built environment is one of the largest users of energy, and improving home and building energy efficiency provides benefits to the economy, environment, and society.

Building Energy Regulation

- Hosted full-day Leadership Group meeting to extend knowledge and resources across the region: In September, NEEP hosted its annual Regional Building Energy Codes Leadership Group meeting in Philadelphia, Penn. to approximately 30 in-person attendees and another 40 attendees participating virtually. The meeting focused on four main topic areas. First, the group discussed future codes opportunities, including lighting controls and linking codes with product standards. Second, the group explored the intersection of codes and building asset rating through progress reports on residential and commercial programs from the U.S. Department of Energy (US DOE) and Massachusetts' Department of Energy Resources (DOER). Third, NEEP provided a preview of its online Codes Adoption and Compliance Toolkits, which, upon their release in the fourth quarter, will serve as a comprehensive and continuously-updated collection of tools, best practices, case studies, etc. to inform code adoption and compliance in the region. Lastly, new code compliance developments both in the region and beyond were introduced, with Pennsylvania, Maryland, and the Pacific Northwest National Laboratory (PNNL) providing updates related to the residential compliance assessment funding granted by DOE this summer. In addition, NEEP delivered other updates of consequence and arranged a tour of the new GridSTAR Zero Net Energy Demonstration Structure.
- Facilitated Energy Code Collaboratives in Delaware, New Hampshire, and Pennsylvania: NEEP supports State Energy Code Collaboratives as effective vehicles for bringing together stakeholders to promote transparency and dialogue concerning energy code adoption and compliance. NEEP has played an active role in Delaware, New Hampshire, and Pennsylvania's Code Collaboratives since their inceptions. During this quarter, NEEP:
 - Worked closely with Delaware's Energy Code Coalition as the state, which completed its 2012 IECC/ASHRAE 90.1-2010 adoption last quarter, continued development of a training program and code support resources. NEEP also worked with the Delaware Department of Natural Resources and Energy Conservation (DNREC) on the development of technical code field guides, briefing the Collaborative on this effort at a September meeting. In addition, NEEP continued to provide technical support regarding the state's code amendments.
 - o Provided technical guidance to the New Hampshire Building Energy Code Compliance Collaborative, which now convenes bi-monthly to advance strategies set in the state's Code Compliance Roadmap. As part of this collaborative, NEEP advised on two committees—one focused on enhancing code compliance and the other on engaging the real estate community and greening the Northern New England Real Estate Network. This quarter, NEEP also led the Collaborative's pursuit of a home energy labeling program.
 - Supported the Pennsylvania Energy Code Collaborative's efforts to measure and achieve full code compliance, educate consumers, and incentivize energy efficiency. At this quarter's meeting, NEEP met with representatives from the state Department of Environmental Protection, the Governor's Green Government Council, and several others to



discuss strategies for assessing current energy code compliance and innovative methods for improving code compliance in the Commonwealth.

- Provided code development, adoption, and compliance support to Vermont: NEEP continued to assist Vermont in its 2015 IECC-based energy code update as well as the development of its first stretch code. After attending stakeholder meetings hosted by the Public Service Department (PSD) earlier in the year, NEEP testified at a September public hearing and submitted written comments on updated versions of the state's proposed Residential and Commercial Building Energy Standards in support of 2015 IECC adoption but in opposition to significant proposed weakening amendments on the residential side. Vermont would be the first state in the region and perhaps the first in the nation to adopt the 2015 IECC if the adoption process continues as scheduled.
- Provided technical support to code adoption efforts in New York State: In August, NEEP delivered testimony at two New York State Department of State (DOS) hearings supporting the proposed adoption of 2012 IECC/ASHRAE 90.1-2010 for commercial construction, followed by written comments. The state is expected to adopt this code with amendments made through an exhaustive code review process. For residential buildings, New York plans to bypass its previously planned 2012 IECC adoption and instead pursue the 2015 IECC. To aid this effort, NEEP facilitated a prioritized residential 2015 IECC New York state cost-effectiveness analysis to help the state in its adoption process. Additionally, NEEP continued to provide technical support to NYSERDA staff on building code adoption, implementation, and enforcement—notably online permitting.
- Provided technical commentary for code adoption across the region:
 - New York: In August, NEEP staff appeared before the New York DOS Division of Building Standards and Codes in Albany to provide guidance and technical assistance as they look to adopt their next energy code.
 - Vermont: In September, staff provided comments before the Vermont PSD in Montpelier offering testimony to support the adoption of new building codes. Additionally, Vermont has proposed an update to its residential stretch code and a set of five prescriptive tracks for easy compliance, known as the "fast track" package. NEEP submitted written comments to the PSD in support of this, along with recommendations for reinstatement of important deleted provisions concerning diagnostic testing.
 - Maryland: NEEP provided direct technical assistance to the Maryland Department of Housing and Community Development to assist in the early stages of the state's 2015 IECC adoption process. Staff responded to questions raised in submitted comments on the new code and discussed strategies for an October public hearing.
- NEEP supports electric vehicles: NEEP offered ongoing technical assistance to several regional
 organizations (e.g., Sierra Club, Alter Action Consulting) regarding building codes and electric
 vehicles. We provided an overview on the code adoption process as it relates to adopting electric
 vehicle provisions into the IGCC, IRC, IBC, IECC, ASHRAE 189.1, and NAHB ICC700 standards. NEEP
 tracks and informs partners of upcoming electric vehicle code actions. Electric vehicles are
 currently a small portion of the car market; however, a change in code to require Class One and
 low-cost Class Two recharging stations could significantly shift electric car use.
- Supported cutting-edge code compliance enhancement efforts in Rhode Island: National Grid, in partnership with the Rhode Island Code Commission, NEEP, and a contractor team, administers programs (the savings from which it is allowed to claim as part of its regulatory proceedings) through its Code Compliance Enhancement Initiative. NEEP participates in both its Implementation and Evaluation Working Groups. This quarter, the Implementation Working Group assessed and adjusted the training program being delivered in conjunction with the state's adoption of the 2012 IECC. Both the residential and commercial training programs, which feature in-field sessions and a circuit rider program, have drawn approximately 530 attendees this year. NEEP also assisted this group's efforts to establish rules for third-party energy specialists, draft documentation tools, and



develop a stretch code. The Evaluation Working Group, which did not convene this quarter, continues to review the program's checklists and key performance indicators.

Additionally, NEEP staff is currently conducting a comparison of Rhode Island's version of the International Green Construction Code (which was finalized this quarter) with the national edition of Collaborative for High Performance Schools (CHPS) Core Criteria and the USGBC's Leadership in Energy and Environmental Design (LEED) for New Commercial Building standard. NEEP provided a code book to every building code office in the state to advance this new code.

- Maintained national network of energy code allies: NEEP continued to engage with our national
 and regional codes counterparts, providing updates on our region through monthly teleconferences
 with RECA, NASEO, IMT, and BCAP. NEEP also participated in meetings with the National Energy
 Codes Collaborative, a joint partnership of the US DOE, PNNL, BCAP, NASEO, and the other
 regional energy efficiency organizations (REEOs). The National Collaborative, whose common goal
 is promoting state code adoption and enforcement policies set by DOE, convened monthly to
 discuss energy code issues, best practices, and opportunities to streamline efforts.
- **Upgraded online codes resource center:** With the launch of NEEP's new website at the end of the quarter, we rolled out new versions of the <u>Buildings Bulletin Board</u>, <u>Codes Tracker</u>, and <u>Resources</u> pages. NEEP regularly updates the Bulletin Board, which features the latest news, events, and resources on building energy code adoption and compliance throughout the region. NEEP also tracked the status of state building energy codes and maintained a page of code resources, and contributed a <u>mid-year building energy codes update to NEEP's blog</u>.
- Working to address workforce capacity concerns in Massachusetts: During the September monthly meeting of the state's <u>Board of Building Regulations and Standards</u> (BBRS), a proposal was debated to require proof of credential criteria for the performance of dialogistic testing as required by the 2012 IECC. Massachusetts has adopted the 2012 IECC, which contains a requirement that buildings be tested for air leakage, air changes, and duct tightness by an approved third party. Some BBRS members were concerned that there are not adequate numbers of professionals with certifications issued by the Residential Energy Services Network (RESNET) or the Building Performance Institute (BPI)—the two organizations that certify "raters" to perform the type of testing required. As the proposal would have established proof that was not equivalent to RESNET or BPI certification, NEEP and local code officials objected to the weak burden of proof and persuaded the committee to table the vote until the issue could be properly vetted. NEEP will work with the BBRS to demonstrate that there are adequate raters to meet demand, and that RESNET or BPI certification is required of raters.
- Provided regional support at the International Green Construction Code hearings: In late September, NEEP's Building Energy Code Manager, Darren Port participated in the International Code Council (ICC) Annual Meeting and International Green Construction Code (IGCC) 2015 hearings. NEEP offered testimony in support of proposals that would improve the energy efficiency and renewable energy requirements of the IGCC, make the code easier to apply, and compliance and enforcement more straightforward. Specific proposals that would enable the use of cool roofs in climate zone 4 and increase the effectiveness of demand response applicability were also supported. New ICC online voting procedures offer the opportunity for voting members to vote remotely within 30 days of the hearings, and we will therefore not know the final results of the hearings until November.

Additionally, the Sustainability Membership Council of the International Code Council met at the ICC Annual Meeting where Mr. Port presented an overview of regional code adoptions of the IGCC. Within the NEEP region there are six IGCC adoptions. Washington, DC has adopted the IGCC for buildings greater than 10,000 sq. ft., and Maryland has adopted it statewide for all state buildings, schools, and community colleges. Local jurisdictions within the state of Maryland may also elect to adopt the IGCC; to date, the city of Baltimore and Montgomery County have done so. Rhode Island, the first state in the country to adopt the code, utilizes the IGCC for commercial



buildings 5000 sq. ft. or greater and the design and construction of all public facilities. Finally, a jurisdictional adoption in Keene, N.H. requires the use of the IGCC for projects awarded with urban development zone incentives.

Market Valuation of Building Energy Performance

- Completed Phase 2 testing of innovative building asset rating methodologies in Massachusetts: NEEP and the Massachusetts DOER continued to lead the Massachusetts Raising the BAR (Building Asset Rating) Pilot, the second phase of which was launched last year. Two of the innovative methodologies tested in Phase 1 were more broadly deployed across a sample of approximately 30 commercial office buildings in the Greater Boston area. After spending the first half of the year refining project protocols and finding solutions to modeling challenges (with a particular focus on developing uniform methods for adequately gauging energy consumption in certain special use spaces like data centers, kitchens, and retail spaces), the BAR Pilot team compiled the collected data into reports for the building owners. In addition to delivering these reports, the team held individual meetings with the building owners, operators, etc. to more directly deliver these findings and collect feedback. Additionally, the two contractor teams performing the modeling completed final reports logging lessons learned in this phase of the pilot. After the remaining meetings are completed, NEEP and DOER will embark on Phase 3 of the Pilot, which will focus on extending the program beyond the state to help inform and shape the national asset rating conversation.
- Supported Cambridge, Massachusetts' Building Energy Use Disclosure Ordinance: Following
 NEEP's stakeholder outreach and support efforts earlier in the year, Cambridge, Mass. enacted a
 Building Energy Use Disclosure Ordinance on July 28, 2014. NEEP disseminated news of the
 enactment via social media broadcasts, a blog on events leading to passage, and the contribution
 of NEEP's Executive Director, Sue Coakley, to an article discussing the ordinance. This ordinance is
 important because it creates a system that will send previously unavailable signals about building
 energy usage to market actors, creating a market-based mechanism to encourage investment in
 building energy efficiency.
- Developed collateral highlighting benchmarking and disclosure strategies in the Northeast: Following the recent passage of building energy reporting and disclosure ordinances in several regional municipalities, NEEP developed a resource brief to educate stakeholders on the benefit of building energy benchmarking, while also highlighting the different approaches taken throughout the region to mandate building energy usage disclosure in municipal, commercial, and multifamily buildings. The brief contributes to the building energy reporting and disclosure debate by organizing ordinance requirements, disclosure data, and disclosure reports from municipalities throughout the region into one resource.
- Built partnership with the Green & Healthy Homes Initiative (GHHI): In July, NEEP staff met with Mark Kravatz, Outcome Broker for the Rhode Island division of the Green & Healthy Homes Initiative, in an effort to develop collaborations with health organizations to support energy efficient building policies. The GHHI is dedicated to breaking the link between unhealthy children and unhealthy housing, offering an integrated whole house approach to produce green and safe homes. NEEP and GHHI initiatives to support multifamily housing retrofit are aligned, and each organization will support each other's initiatives in Rhode Island and beyond.
- **Updated building energy rating resource center:** With the launch of NEEP's new website, we rolled out new versions of the <u>Buildings Bulletin Board</u> and <u>Resources</u> pages. NEEP regularly updated the Bulletin Board, which features the latest news, events, and resources on building energy rating throughout the region, as well as a complete list of disclosure ordinances throughout the country.



- NEEP engaged in national discussions to advance energy efficiency terminology: The US DOE, in collaboration with Lawrence Berkley National Laboratory, hosted the final Technical and Strategic Building Energy Data Exchange Specification (BEDES) Working Group meeting. NEEP has participated in this important discussion to support analysis of the measured energy performance of commercial, multifamily, and residential buildings, by providing a common data format, definitions, and an exchange protocol for building characteristics, efficiency measures, and energy use. BEDES will launch in March of 2015. Several pilot programs are being planned, including one in California that will link BEDES data and building permits. NEEP will track this pilot to examine the linkages for states considering electronic permitting and building rating and disclosure.
- Supported residential labeling efforts in New Hampshire: Due to interest from the N.H. Building Energy Code Compliance Collaborative in pursuing a home energy labeling program, NEEP led the establishment of a Residential Labeling Subcommittee earlier this year. This subcommittee aims to develop recommendations for a home energy labeling program for the state's fall legislative sessions. NEEP headed this effort by refining a matrix surveying existing labeling efforts nationwide, developing the first draft of formal recommendations, and organizing subcommittee communications. NEEP arranged for US DOE to join the most recent meeting of the subcommittee to provide insight on how DOE's Home Energy Score tool could be used to promote code compliance in the state.
- Provided technical guidance to a new building energy rating initiative in Delaware: NEEP
 provided technical guidance on appropriate third-party tools to set targets for Delaware's
 Downtown Development District grants for both residential and commercial buildings. We provided
 DNREC with information on RESNET's HERS as well as EPA's ENERGY STAR Target Finder as it
 worked with the State Housing Authority to develop criteria to prioritize funding for these grants.
- Collaborated with Boston Society of Architects' Committee for the Advancement of Sustainability: NEEP continued to participate in monthly meetings of the Committee, which assembles Massachusetts community stakeholders to share ideas and best practices in meeting their energy and climate goals.
- Disseminated rating and disclosure guidance for small multifamily properties: NEEP continued
 to disseminate our paper, "Increasing Energy Efficiency in Small Multifamily Properties:
 Recommendations for Policy Action," which contains information on market characterization and
 data analysis, market barriers, current policy, and recommendations. Most recently, the paper
 was distributed to the Energy Foundation's Multifamily Stakeholder Network. The network is
 composed of leading affordable multifamily and energy efficiency retrofit practitioners throughout
 the country.
- Helped shape future outcome-based building energy policies: In August, NEEP was invited to
 participate in New Building Institute's <u>Getting to Outcome-Based Performance Summit</u>. Here,
 NEEP and other leaders in building energy rating and disclosure ordinances and outcome-based
 building energy codes developed guidance for developing and promoting outcome-based policies.
 These policies help to capture long-term energy savings opportunities by establishing a building's
 target energy use level and providing for regular measurement and reporting of energy use to
 assure that the building performs—and continues to perform—at that level.

Building Energy Best Practices

• Engaged and supported Portland, Me. with municipal energy efficiency efforts: NEEP staff visited the city at the request of municipal officials to support their efforts to lead the state toward more efficient energy usage policies. Officials requested that NEEP help communicate Portland's energy reduction efforts to the broader region. To this end, NEEP partnered with the city's Sustainability Coordinator, Ian Housel, and created a fact sheet summarizing Portland's Municipal Energy Efficiency Efforts. NEEP also organized a Public Buildings Regional Leadership



<u>Group webinar</u> featuring Mr. Housel's perspective on benchmarking, performance contracting, green building, and a number of other energy efficiency efforts. The webinar, facilitated by the New Hampshire Local Energy Solutions Group, reached more than 60 participants.

NEEP also helped facilitate Portland's <u>enlistment</u> in the US DOE's High Performance Outdoor Lighting Accelerator, through which they've pledged to convert a significant portion of their outdoor lighting to LEDs in the next two years. This endeavor represents NEEP's effort to shift guidance and technical assistance efforts toward the community level, and build a knowledge base that will contribute significantly to the development of our 2015 Communities Program.

- Developed recommendations for the US DOE regarding street lighting LED conversions in the NEEP region: After an extensive research process involving both quantitative and qualitative analysis, NEEP developed a comprehensive assessment of LED street lighting opportunities and barriers throughout the Northeast and Mid-Atlantic. This assessment focused on technical, regulatory, and financial LED conversion barriers, and provides recommendations for circumventing these barriers. It also provides a collection of every utility-owned LED street lighting rate in the region, which can be used by a consumer advocate or municipality to identify best practices. A final draft is forthcoming.
- Facilitated meeting of the High Performance Schools Regional Leadership Group: On August 6,
 NEEP organized and facilitated an in-person meeting of their High Performance Schools Regional
 Leadership Group in Concord, NH at the <u>Abbot-Downing Elementary School</u>, a <u>Northeast</u>
 <u>Collaborative for High Performance Schools</u> (NE-CHPS) verified school. The meeting was attended
 by nearly 40 stakeholders, including state energy officials, utility representatives, school
 construction officials, and industry professionals. Following the meeting, the facility manager and
 architect of Abbot-Downing led a <u>tour of the school</u>.
- Disseminated high performance school construction best practices to Connecticut air quality advocates: NEEP presented an overview of NE-CHPS to the Connecticut School Indoor Environment Resource Team (CSIERT), a group of approximately 20 health advocates, school construction experts, and other industry professionals. The engagement focused on the relation of <u>indoor</u> <u>environmental quality and of high performance school construction</u>, as well as how NE-CHPS fits within Connecticut's <u>School Construction</u> and <u>Renovation regulations</u>.
- Evaluated utility data access efforts in the Northeast and Mid-Atlantic: NEEP provided peer review for two chapters of a forthcoming US DOE paper on streamlining municipal utility data access and provided input to Rhode Island Public Energy Partnership's data access efforts. NEEP also continued development of a regional assessment of municipal utility data access options, laying the foundation for a draft whitepaper on the topic.
- Began outreach related to state-specific NE-CHPS addenda: NEEP continued to promote high
 performance school construction through outreach efforts for <u>NE-CHPS</u> state-specific addenda
 including activities in:
 - Rhode Island, where staff developed a draft proposal for a state NE-CHPS addendum. With this preliminary draft, NEEP solicited input from key stakeholders—such as the Rhode Island Department of Education—and will next solicit input via a formal public comment period.
 - Massachusetts, where staff began coordinating with the Massachusetts School Building Authority for prospective adoption of NE-CHPS 3.0 as a replacement for MA-CHPS.
- Updated the online High Performance Schools Exchange to expand best practice resources: With the launch of NEEP's new website, we rolled out new content for our High Performance Schools pages, including the addition of pages dedicated to Pennsylvania, Maryland, Delaware, and the District of Columbia. This expands the resource by 50 percent, creating more valuable assistance for municipalities, school districts, and industry professionals.



- Advanced best practices for operations and maintenance: NEEP's Carolyn Sarno co-presented with the Massachusetts DOER to 70 members of the Massachusetts Facilities Administrators Association on Green Ribbon Schools, NEEP's Operation and Maintenance Guide, and resources available from DOE to support energy reduction in local communities.
- Creating sustainable high performance buildings in Delaware: At the request of the Delaware
 Valley Green Building Council, NEEP <u>presented</u> to stakeholders on resources available from NEEP
 and the US DOE to reduce energy consumption in buildings.
- Advancing zero net energy (ZNE) buildings: At the request of New Buildings Institute, NEEP's Carolyn Sarno is participating as an advisor for NBI and NASEO's 2nd annual <u>Getting to Zero National Forum</u> scheduled for February 2015. The forum will showcase leading programs and policies that are transforming energy use in buildings.
- Collaborated and shared information/best practices in multiple stakeholder settings: NEEP
 engaged in efforts dedicated to high performance building best practices in state and federal
 government including:
 - US Green Building Council, Massachusetts' Green Schools Working Group
 - New Hampshire Partnerships for Healthy Schools
 - Rhode Island Sustainable Schools Summit
 - Rhode Island Public Energy Partnership (Schools and Public Buildings)
 - Boston Society of Architects, Committee for the Advancement of Sustainability
 - State and Local Energy Efficiency Action Network, Existing Commercial Buildings Working Group
 - US EPA working group on Health, Indoor Air Quality, and Energy Efficiency

NEEP "Buildings" Project Staff

Jim O'Reilly - Director of Public Policy joreilly@neep.org

Carolyn Sarno - Senior Program Manager, High Performance Buildings csarno@neep.org

Building Energy Regulation

- Darren Port Building Energy Codes Manager dport@neep.org
- Kevin Rose Building Energy Technical Associate krose@neep.org

Market Valuation of Building Energy Performance

 Kevin Rose - Building Energy Technical Associate krose@neep.org

Building Energy Best Practices

- Darren Port Building Energy Codes Manager dport@neep.org
- **Brian Buckley** High Performance Buildings Associate bbuckley@neep.org





SPEED ADOPTION OF HIGH EFFICIENCY PRODUCTS

Accelerate the adoption of high-efficiency residential and commercial lighting and consumer products through education, incentive programs and public policies.

NEEP's *Products* strategies promote adoption of high efficiency lighting, consumer electronics, emerging technologies, and myriad other appliances. Many of the products currently on the market are inefficient, and their use is a major driver of electricity consumption and resulting greenhouse gas emissions. NEEP's regional efforts are essential to engage and leverage the marketplace and keep the region a national leader in the sale of high efficiency, market-ready products.

High Efficiency Residential Lighting

- Northeast Residential Lighting Strategy (RLS) research completed: Originally published in spring 2012, the RLS is a critical document that requires annual updates, and NEEP made significant progress in the third quarter toward preparation of the third update. NEEP contracted with Energy Futures Group to continue our joint effort to achieve energy savings through residential lighting. Additionally, NEEP contracted with Ecova to research LED pricing trends and program transition strategies from CFLs to LEDs.
 - With data collection from program administrator stakeholders and contractor research complete, the majority of the analysis has been accomplished. This information will inform program planning and projections of savings potential, provide analysis of developments in the lighting landscape, and aid in the comparison to the original RLS recommendations. NEEP reconvened the Leadership Advisory Committee (LAC) on September 15 to provide input and comments to the 2014 RLS preliminary results. The findings will clarify the opportunities for and strategies to achieve critical success in the promotion of efficient lighting, thus keeping the region a national leader.
- **Provided comments on EM&V guidance report:** NEEP's Market Strategies team supported the Regional EM&V Forum's post-EISA report, currently in development, by providing input into the content and data used for the analysis. This report is part of the longstanding Market Lift project shared between NEEP's Residential Lighting initiative and the Forum. These efforts aim to keep the region a leader in lighting promotions by exploring new program designs and data-gathering mechanisms. The report is expected to be finalized in the fourth quarter.
- Planning for our annual Residential Lighting Workshop: NEEP finalized plans for the annual Residential Lighting Workshop, scheduled to be held at the Lighting Research Center in Troy, NY on October 7. We convened stakeholders at a subcommittee LAC meeting on August 8 to identify topics, speakers, and other elements of the workshop.
- Provided input to federal and international activities: NEEP collaborated and participated in ENERGY STAR and NEMA's July 31 and August 28 lighting <u>roadmapping sessions</u>. As national groups, they seek to increase consistency and collaboration in consumer education strategies for residential lighting programs. Additionally, NEEP participated in Super-efficient Equipment and Appliance Deployment (SEAD's) <u>Lighting Award</u> process concerning the recently launched competition.
- Presented at the ACEEE Summer Study: NEEP presented a paper at the ACEEE Summer Study in conjunction with numerous program administrators. The paper, titled "All in on LEDs: The Northeast Residential Lighting Strategy," presented research and analysis from the <u>2013-2014</u> <u>Update to the Northeast Residential Lighting Strategy</u> and outlined the region's evolution to LED promotion.
- Regional residential lighting coordination: NEEP holds quarterly Retail Products Working Group meetings to discuss regional strategies in residential lighting programs, among other topics. At the September 10 meeting, project Sponsors discussed lighting opportunities, the future of lighting

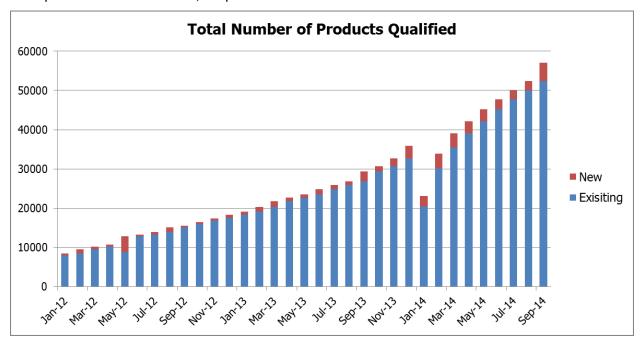


programs, and potential programs models for NEEP to investigate further. Additionally, NEEP provided monthly updates to members of its Retail Products Working Group that included updates on activities and findings that relate to the 2014 RLS Update.

Participation in regional and national events: NEEP staff attended the Annual E Source Forum,
which was widely attended by other energy efficiency experts. Planning for and attending national
meetings broadens our directory of program administrators and trade allies who ultimately
support the increased market share of residential lighting. Additionally, NEEP staff attended a
Lutron informational session on July 15 to learn about the expanding residential lighting control
options.

DesignLights Consortium® Solid State Lighting Qualified Products List

- The DesignLights Consortium® continues to grow and improve processes and features: The Qualified Products List (QPL) grew by 16%, ending the third quarter with 57,020 products. To improve the QPL, NEEP presented policy proposals for two new DLC member-requested services for member comment—tiering of the QPL Technical Requirements and a Product Verification Testing Program. Tiering may add higher technical requirements to distinguish products that perform particularly well in certain areas. To begin, DLC staff proposed restructuring the Technical Requirements Table to consolidate similar categories, making it easier to add new product application categories while giving member programs added flexibility. The Product Verification Testing Program will provide a process to ensure that products listed on the QPL perform as their testing data indicates. Ultimately, these strategies are intended to drive energy efficiency, quality, and performance as top priorities for SSL product development and adoption.
- **DLC SSL Qualified Products List growth:** The DLC QPL grew by 9,242 products in the second quarter to now include 57,020 products from 859 different manufacturers.



• New features and active use of the DLC website and database: The <u>DLC website</u> now has full functionality to process applications online and provides access to a members-only portal. These new features will be available to stakeholders and DLC members before the end of the year. The DLC website continued to be a valuable resource, receiving 222,818 page views by 37,986 users (34.8% new) during the quarter. Approximately 74% of users came from the U.S., 12% from China,



and 8% from Canada, with the remaining coming from countries including Taiwan, South Korea, India, Hong Kong, the United Kingdom, Germany, and Mexico. This shows the diverse and wide use of the DLC QPL as well as its continued relevance in the lighting market. NEEP also made regular updates related to <u>US DOE SSL Technical Information</u>, incorporated into both the DLC and NEEP websites.

- Updated and expanded QPL product categories: NEEP finalized a policy proposal for the Restructuring of the Technical Requirements Table (RTRT) effort. Following input from the Technical Committee and Members, the proposal was released for industry input and discussed indepth at the July DLC Stakeholder Meeting. At the conclusion of the industry comment period, NEEP again discussed the policy with Members and the Technical Committee and is now preparing a final draft policy proposal for distribution to all stakeholders for comment in the near future. NEEP followed a similar process to vet an initial proposal for Product Verification Performance Testing (PVPT) with stakeholders, and will soon distribute a final draft proposal for DLC Member and industry comment.
 - DLC Annual Stakeholder Meeting a great success: Feedback on the 2014 DLC Stakeholder Meeting was overwhelmingly positive. Over 200 people from across the lighting industry attended this year's event to discuss important issues such as the value of the DLC to manufacturers, commercial lighting efficiency programs from across the country, restructuring of the DLC Technical Requirements Table, the DLC PVTP, and dimming and other features. Save the date for next year's meeting, to be held in Washington, DC.
 - DLC Member meetings and communications encourage engagement and keep stakeholders informed: NEEP held regular Member meetings throughout the quarter to build understanding and support strategic use of DLC resources and processes, and to discuss issues such as the 2015 DLC plan and funding process. We also distributed regular DLC Member Updates, which included program updates, general information, and program announcements. These updates allow members to inform their colleagues and customers about program developments.
 - DLC staff participate in briefings, presentations, webinars, and receptions to broaden recognition of the DLC SSL QPL:
 - July 29-30: NEEP and the DLC hosted the third annual DLC Stakeholder Meeting in San Diego, Calif.
 - August 6-7: Commercial Programs Manager Irina Rasputnis attended the West Coast Utility Lighting Team (WCULT) Meeting in Seattle, Wash. There, she presented on DLC developments as well as an update on NEEP's new Commercial Advanced Lighting Controls (CALC) initiative.
 - August 17-22: NEEP attended ACEEE's Summer Study in Monterey, Calif. where the DLC networked with representatives from the efficiency and lighting communities.
 - September 2-4: Irina Rasputnis attended the IES Southwest Chapter Meeting in Albuquerque, N. Mex. During her stay, she also met with PNM, the local utility, to give an overview of the DLC and to encourage them to join as a DLC Member.
 - September 14-17, DLC was represented at the IES Street and Area Lighting Conference in Nashville, Tenn. in order to learn more about street lighting efforts that may relate to DLC developments.
 - September 16-18: Irina Rasputnis attended the LED Show in Los Angeles, Calif. At this conference, Irina co-presented with Taylor Jantz-Sell of the EPA ENERGY STAR program and Marci Sanders of the DOE LED Lighting Facts Program on the role and value of qualification and truth-in-advertising programs for the lighting industry. While in the area, Irina met with and provided updates to the engineering and market transformation teams at SCE, a long-standing DLC Member.



- September 18-19: Irina Rasputnis and DLC Associate Fritzi Pieper attended the CEE Industry Partners Meeting in Sal Lake City, Utah to participate in the discussion about their commercial lighting initiative.
- September 25: Irina Rasputnis presented on the DLC program as part of a trade-ally training provided by PG&E.
- September 29-October 2: Irina Rasputnis and Fritzi Pieper attended the E Source Forum in Denver, Colo. where DLC expanded its network of manufacturers and efficiency programs through networking and participation in sessions, increasing recognition within the lighting industry.
- Development of the 2013 DLC Annual Report and the Industry Update keep stakeholders informed: NEEP began preparing the first-ever DLC Annual Report for distribution in the fourth quarter. NEEP also distributed the Industry Update, a newsletter to keep Industry up-to-date on the latest DLC developments. This edition included updates on PVPT, Tiering, and DLC's Dimming and Stairwell Policies.
- Continued development of a long-term strategic plan for the DLC: The plan is intended to strategically position and garner multi-year support for the DesignLights Consortium as a valued resource to accelerate energy efficiency by supporting ratepayer-funded efficiency programs to achieve significant energy savings through the market adoption and use of high quality, high efficiency lighting solutions for the commercial, institutional, and industrial sectors across the US and Canada. Plan development is guided by a DLC Long-Term Plan Advisory Committee of NEEP Board members and DLC members, and supported by consultant TRC. In the third quarter, TRC presented findings from Phase I (Assessment) and conducted Phase II (Business Plan). This included assessing the current audiences and services DLC provides and how these and others can be leveraged going forward to meet DLC member. Recommendations included managing the DLC as a multi-year project, and adding initiatives to: 1) support the market introduction and adoption of quality advanced lighting controls to maximize the efficiency of lighting system use; 2) advance best practices in lighting design and integration with building systems overall; and 3) expand the audiences served to include others that could benefit from and help build market adoption of DLC-qualified products and best practices (e.g., procurement officials and other members of the international community).

Commercial Advanced Lighting Controls

- NEEP receives award from the US DOE to fund CALC demonstration projects: The third quarter brought great news that NEEP was successful in its application to the US DOE for funding of demonstration projects to support the Controls (CALC) initiative. DOE will provide NEEP with funding as well as measurement and verification services for ten demonstration projects that will be installed across the Northeast region. The data and experience collected through the demonstration projects will build stronger confidence in the technology and expected energy savings for energy efficiency programs.
- Project launch and engagement of the CALC Advisory Committee: NEEP officially launched the CALC project in July, hosting a meeting of the Advisory Committee via webinar that was well attended by project sponsors and industry experts from the Northeast region and beyond. The project meets an important need in the market that NEEP is well-positioned to provide, and interest and support continues to be high—growing far beyond initial expectations. Following the launch, we held additional Advisory Committee meetings in August and September and delivered several webinars and presentations to utilities across the Midwest, West, and Canada.
- **Development of Savings Estimation Tool:** In July, NEEP issued an RFP to develop a Savings Estimation Tool for Advanced Lighting Controls. Development of this tool is a critical need for energy efficiency programs to be able to promote and deploy the Advanced Lighting Control



technology at scale. NEEP awarded the contract to TRC Energy Solutions who is also currently building the same tool for the California utilities. Once complete, the tool will offer a single, consistent methodology for programs across the country to use to estimate savings of advanced lighting controls.

• Planning for the Advanced Lighting Control Summit: NEEP began planning for a Summit on Advanced Lighting Controls that would bring together the lighting control industry, energy efficiency programs, and technology experts to discuss the NEEP CALC project and ways that industry and energy efficiency programs can work together to realize shared objectives. The Summit is planned for October 9, 2014 in Burlington, Vt.

High Efficiency Emerging Technologies

Hosted an ASHP Cold-Climate Metrics Subcommittee Meeting: On August 7, NEEP hosted an <u>air source heat pump</u> (ASHP) cold-climate metric subcommittee meeting in Springfield, Mass. Metrics are being developed for a new specification to help regional stakeholders better identify products that perform under low temperature conditions. The goal of advancing cold climate performance in heat pump technology has prompted planning for another meeting to be held in the fourth quarter.

The subcommittee meeting resulted in a draft proposal "Cold-Climate Air Source Heat Pump Specification," which was circulated to manufacturers for feedback. Additionally, there were a number of direct discussions with manufacturers and regional stakeholders regarding the proposal. The specification is intended to be used broadly by energy efficiency program administrators as a model equipment and performance requirement specification. It also is intended for engineers, contractors, and other practitioners who need assurance that the equipment they select will have the required heating capacity at certain temperatures without unnecessary oversizing, and will serve the load efficiently throughout the ambient temperature range. The specification is a tool for promoting ASHPs that will provide better assurances that installed ASHPs are performing during the coldest parts of the winter season. Low-temperature performance will strengthen the reputation of ASHPs in the Northeast and Mid-Atlantic region and drive accelerated adoption of the technology.

- Web-based visibility for emerging technologies: NEEP updated our online <u>Emerging Technologies Resource Center</u> with relevant resources, such as the ASHP report. We also posted two entries on our blog: Air Source Heat Pumps a Hot Topic at NEEP's Pre-Summit Workshop on August 8; and The ASHP Magic Trick: Creating Warmth from Thin (Freezing) Air on September 29.
- Regional emerging technologies coordination: NEEP holds quarterly Retail Products Working Group meetings to discuss regional strategies in residential emerging technologies programs, among other topics. At the September 10 meeting, project Sponsors discussed emerging technology opportunities, the future of programs, and potential programs models for NEEP to investigate further. Additionally, NEEP provided monthly updates to members of its Retail Products Working Group that included updates on activities and findings that relate to clothes dryers and NEEP's regional heat pump water heater (HPHW) & ASHP Strategies.
- Regional ASHP Strategy recommendations are implemented: NEEP's ASHP Strategy Report recommends that efficiency programs be allowed to offer incentives in cases of fuel switching. To support this, NEEP participated in a Vermont Department of Public Service Initial Docket Workshop (Docket 8311) entitled, "EEU Funding to Reduce Fossil Fuel Use" on September 30. The hearing was focused on the issue of ratepayer energy efficiency resources being used to support the adoption of ASHPs in "fuel switching" scenarios.
- Presented at the ACEEE Summer Study: NEEP co-hosted a session at the ACEEE Summer Study in conjunction with numerous efficiency stakeholders. The session—titled "Heat Pump Water



Heaters: Ready for Prime Time!"—discussed how to leverage adoption of HPWHs and findings from NEEP's regional Heat Pump Water Heater Strategy Report.

- Input to federal and regional processes: NEEP has been a regular contributor to a group of advocates from across the nation, facilitated by Appliance Standards Awareness Project (ASAP). NEEP, in-turn, coordinates regional activities with activities happening in other parts of the country. This engagement allows for opportunities to share best practices from our regional perspective, as well as learn about successes around the country.
- **Heat pump water heaters gain market share:** Connecticut and Vermont efficiency programs implemented upstream promotions targeted at the retailer and distributor level. NEEP's HPWH Working Group has encouraged the development of these types of programs for the past year, as they identified mid-stream actors as crucial in the promotion of this emerging technology.
- Provided comments on EM&V guidance report: NEEP's Market Strategies team supported
 development of two Regional EM&V Forum reports: "The Emerging Technology Field Research
 Report on Ductless Heat Pumps;" and an "ASHP Meta-study," providing input into the content and
 data used for the analysis. These reports are part of longstanding projects shared between NEEP's
 Emerging Technologies initiative
 and the Forum. These efforts aim to keep the region a leader in
 product promotions by exploring new program designs and data-gathering mechanisms. The
 reports are expected to be finalized in the fourth quarter.
- Efficiency programs promote efficient dryers: As an active partner of Super Efficiency Dryer Initiative (SEDI), NEEP participates on SEDI's Technical and Next Tier Working Groups. In the third quarter, NEEP was quoted for a <u>press release</u> announcing LG as the first company to have a clothes dryer to earn the ENERGY STAR Emerging Technology Award. These activities will enable program promotions that will ultimately improve the market share of efficient dryers.
- NEEP leads transition of TopTen USA: NEEP continued to have a leadership role with TopTen USA, enabling a number of regional efficiency programs to continue their promotional work through the <u>TopTen USA website</u>. NEEP played a key role in the development and overhaul of TopTen USA's new website, as a new data management platform was implemented. The website will provide new functionalities that will improve promotions offered by several regional efficiency programs.

High Efficiency Business & Consumer Electronics

- Developed project scope to conduct research on Home Energy Management Systems (HEMS):
 This work will update the analysis presented in NEEP's <u>Business and Consumer Electronics Strategy Report</u> to help energy efficiency programs understand both the savings potential and the EM&V opportunities that HEMS technologies present. Given the early stage and diversity of products, the purpose of this project is to conduct secondary research to:
 - understand what the technologies are;
 - identify the experience with these technologies to date;
 - o conduct an assessment of the opportunities that are present; and
 - o provide recommendations for further, prioritized study of one or more measures in 2016.

The result of this project will be a white paper covering inventories of products, an assessment of program potential, and the policy and EM&V opportunities of HEMS. By focusing on an integrated approach, and the efficient use of these electronics as key paths to achieve program and state energy efficiency goals, the HEMS research project will help the Northeast and Mid-Atlantic continue to be a leader in energy efficiency.

• Successful Advanced Power Strip Working Group stakeholder engagement: NEEP manages an Advanced Power Strips (APS) Working Group that has successfully developed resources for regional



and national stakeholders. The group last convened on September 29 to discuss how the collaborative work has produced numerous valuable resources over the years, and the remaining needs for the industry. NEEP also finalized planning for an in-person meeting of this group at the ENERGY STAR Products Partners Meeting, scheduled for October 27-29.

- Successful Home Energy Management Systems (HEMS) Working Group stakeholder engagement: NEEP manages a HEMS Working Group with the objective to develop relationships with stakeholders, manufacturers, and program administrators to move this technology into efficiency programs. On August 5, both subcommittees—"HEMS in Programs" and "HEMS and EM&V"—held their first meetings.
- Influenced national product specifications: NEEP submitted comments to ENERGY STAR for the Television 7 Specification Draft 2, cosigned by project sponsor Efficiency Vermont. Additionally, NEEP reviewed and signed onto joint comments regarding computers with ASAP and the Natural Resource Defense Council (NRDC).
- Regional consumer electronics coordination: NEEP holds quarterly Retail Products Working
 Group meetings to discuss regional strategies in residential electronics programs, among other
 topics. At the September 10 meeting, project Sponsors discussed opportunities, the future of
 electronics programs, and potential programs models for NEEP to investigate further. Additionally,
 NEEP provided monthly updates to members of its Retail Products Working Group that included
 updates on activities related to consumer electronics.
- Opportunities for focused program advancement identified: NEEP is working with ENERGY STAR
 and national stakeholders regarding the Retail Products Program (RPP). RPP seeks to transform the
 way energy efficient products and energy efficiency messages are delivered to residential
 customers using an omni-channel retail approach. NEEP is coordinating with Northeast sponsors, a
 Northwest organization, and California program administrators to develop a 2015 national pilot
 with engagement from the Northeast.
- Provided social media visibility for consumer electronics: NEEP updated the <u>online Business & Consumer Electronics Resource Center</u> with relevant resources. In addition, we published the blog, Should the S in HEMS Stand for 'System' or 'Stabilizer'? on August 6.

Appliance Efficiency Standards

• NEEP's Northeast Appliance Standards Project provides leadership to states: NEEP convened several meetings with state-level stakeholders in the third quarter to provide information, resources, and guidance regarding opportunities associated with state appliance standards. NEEP worked closely with the Appliance Standards Awareness Project (ASAP) to develop a preliminary list of products for which states could consider establishing minimum standards. Other considerations when it comes to successfully adopting state standards—such as potential local advocacy partners, potential industry pushback, and local political environments—were shared with stakeholders. The meetings with National Grid (MA/RI), the Rhode Island Office of Energy Resources, Efficiency Vermont, and the New York State Energy Research and Development Authority (NYSERDA) will help prepare these states as they look to the legislative sessions of 2015.

One of the long-term goals of this effort is to develop a stronger regional infrastructure of stakeholders to develop, promote, and adopt strong appliance standards. NYSERDA is one of the region's few agencies with some authority to adopt state-level appliance standards unilaterally. NEEP provided guidance to NYSEDRA as it worked to develop a plan for how to leverage that authority most effectively.

NEEP also continued to track California's <u>appliance standards rulemaking process</u> in preparation for further action when the state adopts new standards for a range of electric and water products later this year and early next year.



- Convened the Appliance Standards Working Group: To facilitate regional stakeholder input and share information and best practices, NEEP convened its third quarterly meeting via webinar on September 25. This meeting engaged stakeholders from across the region to review key elements of our annual strategy and prepare for upcoming appliance standards opportunities. This engagement promotes understanding and awareness of appliance standards as a valuable policy mechanism to achieve cost-effective energy savings.
- Comments submitted to US DOE regarding "smart" appliances: As the US DOE works to develop more standardized definitions, measurements, and protocols for connected or "smart" appliances through a rulemaking entitled Appliances, NEEP developed a series of comments to inform the process. NEEP is interested in the growth of smart appliances for their potential ability to save energy and be a pathway for demand control.
- New federal standards for refrigerators and freezers will achieve significant savings: New minimum efficiency standards for refrigerators and freezers that went into effect on September 15 will provide roughly a 25 percent increase in efficiency compared to the previous standard. This standard was proposed by DOE based on the consensus agreement efficiency advocates and industry representatives from the Association of Home Appliance Manufacturers (AHAM) reached in 2010, which included a package of household products. NEEP is proud to have been a party to the negotiations that led to the agreement and strong standards.
- Coordinated regional efforts with national players: NEEP co-led an informal session at ACEEE's Summer Study on the long-term market success of heat pump water heaters (HPWH) entitled "HPWHs: Ready for Primetime!" The meetings allowed NEEP to share regional strategies that could be implemented on a national scale, and also take back insights from the broad group of national stakeholders with our regional allies. National success of the HPWH market will encourage the DOE to set strong minimum standards for electric water heaters during their next rulemaking
- Maintained the online <u>Appliance Efficiency Standards Resource Center</u>: NEEP's online resource center was updated with new resources, providing stakeholders—including efficiency program administrators, regulators, policy makers, and the media—with access to key information.



NEEP "Products" Project Staff

David Lis - Director of Energy Efficiency Strategies djlis@neep.org

High Efficiency Residential Lighting

- Claire Miziolek Residential Program Manager cmiziolek@neep.org
- Samantha Bresler Market Strategies Associate sbresler@neep.org

DesignLights Consortium Solid State Lighting Qualified Products List

- Jon Linn Senior Commercial & Industrial Advisor jlinn@neep.org
- Irina Rasputnis Commercial Program Manager irasputnis@neep.org
- Fritzi Pieper DesignLights Consortium Associate fpieper@neep.org

Commercial Advanced Lighting Controls

 Gabe Arnold - Market Strategies Program Manager garnold@neep.org

High Efficiency Emerging Technologies

- Claire Miziolek Residential Program Manager cmiziolek@neep.org
- Samantha Bresler Market Strategies Associate sbresler@neep.org

High Efficiency Consumer Electronics

- Claire Miziolek Residential Program Manager <u>cmiziolek@neep.org</u>
- Samantha Bresler Market Strategies Associate sbresler@neep.org

Appliance Efficiency Standards

 David Lis - Director of Energy Efficiency Strategies djlis@neep.org





ADVANCE KNOWLEDGE & BEST PRACTICES

Promote knowledge and the use best practices that support the expansion, implementation and evaluation of policies and programs to increase and accelerate energy efficiency.

NEEP's *Knowledge and Best Practices* strategies support the expansion of policies and programs to accelerate energy efficiency. NEEP advocates for sustained public policy support, expanded financial resources, full integration of efficiency into energy planning, enduring efficiency infrastructure based on leading knowledge and best practices, and consistent standards across the region to measure, evaluate and report the impacts and benefits of energy efficiency.

Regional Evaluation, Measurement & Verification Forum

- EM&V Methods Standardized Reporting Forms adopted by Steering Committee: The Forum Steering Committee adopted version 1.0 of the EM&V Methods Standardized Reporting Forms at their July 24 quarterly meeting. Various Forum stakeholders and partners—including state PUC, DEP, and SEO agencies, as well as US EPA and ISO New England—contributed to the development of the templates, which represent a regional effort to support greater transparency of EM&V practices used in energy efficiency savings calculations. NEEP plans to provide training to stakeholders on use of the forms in the final quarter of 2014 and is seeking funding for continued support on this effort in 2015. The forms are a model for other states to use in the country to support a range of state policy needs, and potentially standardized reporting of EM&V to support EPA's CAA 111(d) proposed rule.
- Released final deliverables for several Forum projects:
 - Variable Speed Drive Loadshape Project Final Report: This report describes the Variable Speed Drive (VSD) Loadshape study commissioned by the EM&V Forum and its sponsors to determine the hourly energy and demand impacts of variable speed drives installed on heating, ventilation, and air conditioning (HVAC) equipment in existing nonresidential buildings throughout the Northeast and Mid-Atlantic. These primary results could support regulatory filings for energy efficiency programs, demand resource values submitted to forward-capacity markets, and air quality research.
 - REED Program Year 2012 Annual Report: The Regional Energy Efficiency Database (REED) report provides an overview of the high-level impacts of 2012 energy efficiency programs at the state and regional level. It also provides comparisons across states that can help strengthen the credibility of energy efficiency as a resource by increasing our understanding of similarities and differences in results across programs by type, sector, and state.
 - <u>Early Replacement Measures Scoping Study: Phase 1 Research Report</u>: This scoping study represents the first phase of a study meant to fill knowledge gaps around issues related to early replacement retrofits, equipment remaining useful life (RUL), and the potential use of multiple baselines for energy savings calculations.
 - Residential Lighting Market Lift Pilot Final Report: The Forum and the Bonneville Power
 Administration recruited organizations in Massachusetts, Oregon, and Vermont to sponsor
 a pilot consisting of three coordinated demonstration programs in residential lighting
 using Market Lift, an innovative upstream program design.
 - Model EM&V Methods Standardized Reporting Forms for Energy Efficiency: The Forum embarked in 2013 to create a model template that supports greater transparency of program administrator/state EM&V practices used to calculate energy efficiency savings via a straightforward, standardized EM&V methods 'check list.' This type of document is



intended to help energy and environmental policy and market players readily understand and compare EM&V approaches used to estimate reported energy efficiency program savings to inform their specific needs. This <u>first version of the forms</u>, formally adopted by the Forum Steering Committee in July, is <u>available online</u>.

- Draft comments to US EPA on its CAA 111(d) EM&V requirements and guidance: NEEP, with ACEEE, launched an effort to coordinate comments to EPA on its 111(d) EM&V requirements with energy efficiency stakeholders from across the country, and will continue to lead the effort to encourage alignment on comment on key issue areas with stakeholders including Forum members, leading up to the December 1 comment deadline to EPA.
- Forum 2015 project planning moves forward: The EM&V Forum developed a detailed list of potential 2015 projects early in the third quarter, followed by a survey of participating stakeholders for interest in the projects in August. This list of projects represented areas of research and guidance development in which Forum states had previously expressed interest. The 2015 project agenda will also continue work on standardized regional reporting tools including REED and its newly development standardized EM&V methods reporting forms. The Forum team met individually with representatives from all Forum states to review the survey of projects and answer questions or clarify project scopes. NEEP will refine the 2015 project agenda and budget with all nine Forum jurisdictions early in the fourth quarter prior to bringing a proposed agenda and budget to the Steering Committee at its planned November 7 quarterly meeting, at which time the 2015 agenda and budget will be considered for adoption.
- NEEP visibility at SEE Action webinar on energy efficiency cost studies: NEEP contractors Mike
 Sherman of Navigant Consulting and Denise Rouleau of Rouleau Consulting, as well as NEEP
 project manager Elizabeth Titus, presented on <u>A Regional Approach to Estimating Incremental
 Costs</u> to a wide audience on September 24.
- Active Forum member participation: Participants from across the Forum region continued to
 participate actively in Forum committees and project subcommittees. Representatives from nine
 jurisdictions participated in the quarterly Steering Committee meeting on July 24, and
 representatives from eight Forum states participated in the quarterly Project Committees
 meeting on September 18. Forum staff also facilitated numerous well attended project
 subcommittees.

Public Policy Outreach and Analysis

- NEEP is a leading voice for advancing energy efficiency across the region: Energy efficiency is a tool to help customers mitigate winter price spikes, the most cost-effective way for states to comply with the coming US EPA regulations on carbon, a way for states to grow local jobs, and can help the region avoid or defer costly new electric and gas distribution projects. As presented in the points below, NEEP continues to support states efforts to harness efficiency as a first-order resource and adopt best practices in policies and programs.
- Supporting emerging energy efficiency leaders in Delaware: NEEP staff traveled to Delaware in September where the stage has been set for a dramatic increase in energy efficiency investments, thanks to legislation passed this summer that will create utility-run efficiency programs, administered in coordination with the state's Sustainable Energy Utility (SEU). Staff made presentations to the Delaware Valley Chapter of the U.S. Green Building Council and the Green and Better Building Advisory Council, a group charged with advising the legislature and administration on policy matters. NEEP also met with staff from the state's Division of Energy and Climate, the director of the SEU, and efficiency NGOs to learn about Delaware's experience and provide insights and guidance as the state charts new territory in coordinated statewide efficiency programs.



- Continued support to New Hampshire: NEEP has consulted with the N.H. Public Utilities Commission about the construct and operations of an energy efficiency portfolio standard, something the state is exploring under the directive of HB 1129. A report to the legislature is due this November. NEEP also provided public comments to the Office of Energy and Planning on the draft State Energy Strategy, which included an emphasis on efficiency and the need for savings targets and a strategy to get there. These points were echoed by Governor Maggie Hassan at the New Hampshire Energy Summit on September 29, in which Natalie Treat, NEEP's Senior Public Policy Outreach Manager, participated. It is anticipated that legislation establishing an energy efficiency resource standard for the state will be filed in 2015.
- Evolving the regulatory framework in Maryland: Josh Craft, NEEP's former Manager of Policy Analysis, played a leading role in working with the Maryland Energy Administration (MEA) and other key stakeholders to provide comment on the energy efficiency plans in Maryland for the 2015-2017 plan year. Most recently, he supported the MEA and other advocacy groups, including NRDC, NCLC, Earthjustice, Efficiency First, and Sierra Club, on joint comments aimed at strengthening the state's energy efficiency programs.
- Outreach to Massachusetts regulators: NEEP hosted staff from the Electric Division of the Mass. Department of Public Utilities (DPU) for an information sharing meeting in July, presenting to DPU staff the various means of support NEEP can offer. This meeting was so well-received that the DPU asked NEEP to visit its offices to make a presentation to staff from the electric, gas, and legal divisions as well as the three Commissioners. Scheduled for October 8, the meeting was intended to inform DPU personnel about the policy, program, and EM&V work of NEEP, its engagement with state agencies and program administrators, and the ways in which NEEP can serve as a resource.
- Energy efficiency and section 111(d) of the Clean Air Act: NEEP continued to work closely with the EM&V Forum and our advocacy allies around the country—particularly the other REEOs—to ensure that efficiency plays an important role as the US EPA finalizes guidelines for states as part of its Clean Power Plan under Section 111(d) of the Clean Air Act. NEEP has provided feedback to EPA reflecting the belief that the Regional Greenhouse Gas Initiative (RGGI) and the state energy efficiency programs, goals, and policies can form the basis of compliance strategies for Northeast states in response to the new regulations on carbon emissions from existing power plants.
- Facilitating regional efforts on winter peak issues: Well before utilities announced proposed rate hikes to deliver electricity this winter, NEEP and the Northeast regional representatives of the National Association of State Energy Officials (NASEO) joined forces to foster interstate dialogue and cooperation on a public communications plan. NEEP invited New England and New York stakeholders to develop shared messages for consumers and businesses about the need to take advantage of energy efficiency opportunities in advance of the winter season. NEEP partnered with Cater Communications to aid in the drafting of a common messaging platform that states can then use, if they choose, to develop more specific outreach to their residents and businesses. The final communications plan was planned for release in mid-October.
- Driving efficiency through partnership efforts: NEEP continues to represent energy efficiency on a number of stakeholder groups in the region. Public Policy Director Jim O'Reilly serves on the Massachusetts Global Warming Solutions Project, which met in late September to assess remaining clean energy opportunities in Massachusetts via the state's Clean Energy and Climate Plan. He also represents NEEP on the New England Clean Energy Council Public Policy Committee. NEEP staff are also continually in contact with partner organizations from across the region. In the third quarter, staff met in Philadelphia with the executive director of the Keystone Energy Alliance to strategize over opportunities to advance efficiency, and also worked extensively with New York clean energy advocates on the Reforming the Energy Vision proceeding, among other outreach activities.



- Engaging in key New York energy proceedings: New York is in the midst of some of the most
 momentous energy policy proceedings in recent memory, beginning with the ambitious and allencompassing "Reforming the Energy Vision" (REVE) docket. NEEP has participated through
 hearings, regular discussions with clean energy advocates, and by submitting <u>public comments on
 Track 1 of the REV</u>. NEEP also submitted <u>comments</u> in support of PSEG Long Island's Utility 2.0
 Plan, praising the organization for their focus on efficiency and clean energy in the context of a
 modernizing grid, and their view of the evolving role for utilities.
- Participating in energy stakeholder meetings: NEEP continued to actively participate in state energy efficiency stakeholder board meetings throughout the region. Staff participated in monthly meetings of the Mass. Energy Efficiency Advisory Council, the Rhode Island Energy Efficiency and Resource Management Council, the N.H. Energy Efficiency and Sustainable Energy Board, and the newly formed New York E2 Working Group. Staff also participated in ISO-New England's conference on the Regional System Plan, which included an emphasis on efficiency's role in controlling load growth.
- Tracking and commenting on trends in state energy efficiency policies and savings: NEEP communicated the latest efficiency information through the <u>NEEP blog</u>, <u>Twitter</u>, <u>Highlights</u>, the <u>Policy Snapshot</u>, and the <u>Policy Tracker</u>. Monitoring, engaging, and sharing information on legislative and regulatory proceedings in the states, regional developments with the ISOs, and federal developments remains a mainstay of our work.

NEEP "Knowledge" Project Staff

Regional Evaluation, Measurement & Verification Forum

- Julie Michals Regional EM&V Forum Director jmichals@neep.org
- **Elizabeth Titus** Senior Research and Evaluation Manager, EM&V Forum etitus@neep.org
- Patrick Wallace EM&V Forum Manager pwallace@neep.org
- **Danielle Wilson** EM&V Forum Associate dwilson@neep.org

Public Policy Outreach and Analysis

- Jim O'Reilly Director of Public Policy joreilly@neep.org
- Natalie Hildt Treat Senior Manager, Public Policy Outreach ntreat@neep.org



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NEEP would like to recognize and thank our 2014 funders, including our <u>Sponsors</u>, <u>Partners</u>, <u>Regional</u> <u>EM&V Forum funders</u>, <u>DesignLights Consortium® Members</u>, <u>federal and foundation funders</u>, and <u>Summit Sponsors</u>. We are grateful for their support, which makes this work possible.

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