

# ne ep 2019 Program Portfolio

The devastating impacts of rapid climate change – including extreme weather, increased flooding, and loss of biodiversity – are presenting an increased challenge to the public health, safety, and economic wellbeing of residents in the Northeast. In response, states and communities have adopted aggressive goals to reduce carbon emissions by 40 percent by 2030. In addition to replacing carbon-intensive power plants with clean, renewable resources, state strategies are increasingly focused on reducing building sector energy use which constitutes more than 40 percent of current regional carbon emissions.

Fortunately, the Northeast region is well positioned to take on this sustainability challenge as it consists of a rich nucleus of research, business development, policy leadership, environmental stewardship, cutting-edge clean energy policy and advocacy for a sustainable equitable future that is driving new solutions, exciting examples, and new business opportunities for energy efficient, low-carbon energy solutions.

In that context, in 2018, the NEEP Board of Directors adopted a new strategic frame for NEEP to address this:

## VISION

We envision the region's homes, buildings, and communities transformed into efficient, affordable, low-carbon, resilient places to live, work, and play.

## MISSION

Accelerate regional collaboration to promote advanced energy efficiency and related solutions in homes, buildings, industry, and communities.

## GOAL

Assist the Northeast and Mid-Atlantic region to reduce building sector energy consumption three percent per year and carbon emission 40 percent.

NEEP's 2019 Program Portfolio responds to this by offering 11 initiatives focused on engaging regional leadership to overcome market barriers in the regional transformation to efficient, low carbon home and building energy use. These projects are part of an overall three-part strategy focused on:



### ADVANCED EFFICIENCY & DECARBONIZATION LEADERSHIP NETWORK

A virtual regional center for learning and sharing best practices among thought leaders on policy, programs, and market-based solutions to drive progress towards an energy-efficient, resilient, and affordable low-carbon economy, with state and local progress dashboards and exemplars to highlight successes and opportunities for collaboration.



### EFFICIENT, RESILIENT BUILDINGS & COMMUNITIES

To rapidly scale up market momentum across the region for low carbon solutions, and support the expansion and success of community initiatives for resilient, healthy, efficient, low carbon buildings and communities across the region to achieve major energy savings.



### SMART, EFFICIENT LOW CARBON ENERGY SOLUTIONS

Engage stakeholders and collaborate with others to catalyze market transformation for advanced efficiency, smart strategic electrification technologies, and other building decarbonization solutions through public policy, research, collaboration, programs, and partnerships to leverage regional-scale impacts.

## 2019 PROGRAM SUMMARIES



### Advanced Efficiency & Decarbonization Leadership Network

**NEEP Summit and Building Decarbonization Leadership Forum:** Engages a diverse cross-section of leaders from business, government, academia, community, and advocacy to inspire, learn, and catalyze regional-scale efforts to accelerate smart efficient building decarbonization. The 2019 NEEP Summit expands this regional dialogue to engage a broader, public in-depth conversation to drive regional scale progress and market transformation for advanced efficiency and building decarbonization.

**Advanced EM&V, Forecasting & Planning Solutions:** Advances new approaches and information to forecast, assess, and evaluate the impact and value of efficient, demand-side resources, programs, and policies to address growing interest in building decarbonization, electrification and buildings as grid assets. It includes U.S. DOE and state-funded collaboratives to update building end-use loadshapes, and to use automated data to measure, verify, and optimize demand-side resource impacts.

**State & Local Policy Tracking and Technical Assistance:** Regional tracking and analyses of key metrics, state and local policies, program impacts, and successes with reports, analysis, and technical assistance to inform public policies to accelerate advanced energy efficiency in support of decarbonization including updates to NEEP's Regional Energy Efficiency Database (REED).



### Efficient, Resilient Buildings & Communities

**Efficient, Resilient Community Pathways and Resources:** Best practice guidance, peer information exchange, and technical assistance to support the rapid growth of community initiatives in Northeast states to advance resilient, energy efficient, low-carbon public buildings and communities.

**Building Energy Codes and Benchmarking:** Best practice resources and technical assistance to states and communities to save energy, reduce costs, decrease emissions, improve resiliency, and strengthen workforce development through building energy code adoption, enforcement, compliance benchmarking, and home energy labeling.

**Home Energy Labeling Information eXchange (HELIX):** Final year of a three year U.S. DOE-funded initiative to automate the availability of home energy scores and ratings for use in residential real estate listings, and to educate real estate professionals and appraisers on the value proposition of home energy information that distinguish energy efficient, clean energy homes.



### Smart, Efficient Low Carbon Energy Solutions

**Air Source Heat Pumps and Smart Controls:** Regional market transformation initiative to accelerate market adoption of high-efficiency residential and commercial air source heat pumps, smart controls and services with thermal efficiency improvements that provide deep energy savings and carbon reduction while enabling real-time load management to support efficient, reliable grid operation.

**Smart Energy Homes:** Regional research, best practices peer exchange, and technical guidance and resources to enable residential decarbonization by transforming homes to be efficient and flexible grid assets.

**Smart, Low Carbon Commercial and Industrial Solutions:** Regional research, analysis, technical guidance, pilots and best-practices peer exchange to accelerate adoption of high efficiency technologies, practices and business models that provide integrated commercial and industrial sector solutions that increase efficiency and productivity, reduce costs and carbon emissions, and respond to grid needs.

**R&D Connector – Buildings as Grid Assets:** Supports the advancement of smart, energy efficient homes and buildings as flexible grid assets through shared learning and coordinated research and development.

**Federal and State Appliance Efficiency Standards:** Informs, tracks, and engages regional learning, dialogue and provides technical assistance to support minimum product efficiency standards that lock in long-term energy and carbon emission savings enabled by regional and national market transformation activities.

## NEEP'S APPROACH

### Engage and Empower Stakeholders

NEEP forges partnerships and brings stakeholders together to develop, advance, accelerate, and integrate advanced energy efficiency solutions with coordinated efforts, regional learning, and resource leveraging.

### Advance Regional Market Transformation Opportunities

NEEP engages support for, recommends, tracks, and reports progress of regional market transformation initiatives that drive innovative advanced energy efficiency opportunities.

### Independent Analysis and Technical Expertise

NEEP conducts independent analysis and serves as a technical expert on energy efficiency potential, best practices, impacts, evaluation, and integration with other demand side resources.

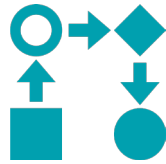
### Advance Knowledge and Best Practices

NEEP develops and distributes regional best practice information resources, and serves as a regional peer exchange network to advance next generation energy efficiency.

## NEEP'S 2019 PRODUCTS & SERVICES



Events, Stakeholder Engagement, Learning Exchange



Regional Market Transformation Strategies



Research, Progress Tracking, Analysis, Reports, Case Studies



Best Practice Guidelines, Tools, Technical Assistance and Resource Centers