



2024 PORTFOLIO SUMMARY

- VISION:** We envision the region's homes, buildings, and communities transformed into efficient, affordable, low-carbon, resilient places to live, work, and play.
- MISSION:** We drive regional collaboration so that the Northeast and Mid-Atlantic can equitably and affordably reduce building sector greenhouse gas emissions through energy efficiency, electrification, and grid integration.
- GOAL:** Assist the Northeast and Mid-Atlantic states to equitably and affordably reduce building-sector greenhouse gas emissions in alignment with their goals.

Decarbonizing the building sector requires continued innovation and rapid scaling of energy efficiency solutions. To decarbonize with equity, we must prioritize marginalized communities in the transition and improve the health, safety, comfort, and affordability of homes and buildings while creating valuable, well-paid local jobs. This work requires new partnerships, program models, and goals.

Many of the solutions to get to scale are available now. NEEP focuses on the components key to rapid, equitable decarbonization of the regional buildings sector – strong policies and regulations to lower emissions in new and existing buildings, market transformation for electric space and water heating, community-led solutions to ensure equity and inclusion of traditionally marginalized voices, and a diverse and experienced workforce. NEEP works through strategic regional collaboration¹ with state and local governments, businesses and manufacturers, utilities and program administrators, and community leaders across the Northeast and Mid-Atlantic region. These collaborations help to scale up public policy and market solutions, innovate, and facilitate the knowledge to reduce building sector energy consumption and emissions while transitioning to a robust, equitable clean energy economy.

NEEP is uniquely positioned to combine national expertise with local knowledge to assist states and communities in reaching their climate and clean energy goals. For nearly 30 years, NEEP has worked to transform the energy efficiency market in areas where industry, the workforce, program administrators, and other segments of the marketplace benefit from a collaborative, multi-state approach. The combination of cross-cutting skillsets, experience, and relationships – typically only available through multiple vendors – makes NEEP uniquely capable of delivering this ambitious project scope.

In 2024, NEEP will support the region to prepare for and implement the market transformation opportunities associated with federal funding from the Bipartisan Infrastructure Law and the Inflation Reduction Act, and to ensure that the programs that result will endure long beyond this temporary but significant infusion of dollars. This is reflected in all program areas.

¹ NEEP serves 13 Northeast states and jurisdictions including ME, NH, VT, MA, RI, CT, NY, NJ, PA, DE, MD, DC and WV.



NEEP Approach

Our approach is to drive market transformation regionally by fostering collaboration and innovation, developing research and tools, and disseminating knowledge. NEEP advances rapid, equitable decarbonization of the regional buildings sector by ensuring successful implementation of:

- 1** Strong policies and regulations to reduce building emissions, including advanced building codes, appliance efficiency and emissions standards, energy efficiency and building electrification targets for utilities and state agencies, building performance standards, clean heat standards, and energy justice policies.
- 2** Market transformation strategies for energy efficiency and electric space and water heating, including innovative program models that activate consumer demand, midstream approaches that drive contractor and distributor participation, and workforce development that prioritizes a diverse and experienced workforce.
- 3** Community-led solutions, including replicable program and business models for low-carbon retrofits, strategies to improve efficiency in multifamily affordable housing, and locally-driven workforce development programs.

NEEP drives these priorities through research, analysis, technical assistance, and collaboration among government, businesses, utilities, community groups, academia, and advocates to drive long-term regional change. Strategic collaboration allows NEEP to engage leaders and first-movers across the region to innovate, develop the right tools, scale up public policy and market solutions, and access the knowledge needed to reduce building sector energy consumption and emissions while transitioning to a robust, equitable clean energy economy



NEEP Programs

NEEP's 2024 program portfolio offers four initiatives to engage regional leaders in collaboration to equitably transform our homes and buildings to be efficient and low-carbon through innovative public policy, technology, market, and consumer engagement solutions.

Public Policy and Programs – A successful transition to zero carbon buildings will require a suite of complementary equitable and innovative policies. Policies are evolving to support industry, consumers, and other market actors to achieve the level of equitable decarbonization articulated in our states' climate goals. States have an important role to play in catalyzing a just transition to decarbonized buildings and a flexible, reliable grid through utility regulation, building codes and standards, environmental regulations, and enactment of new building decarbonization policies, such as clean heat standards and statewide building decarbonization clearinghouses. NEEP works with stakeholders across the region to identify and disseminate best practices and to enact policies that tackle building efficiency and grid flexibility. NEEP collaborates across state agencies to harmonize housing, environmental, and energy policies to achieve building decarbonization.

In 2024, NEEP will help states identify and implement statewide policies to achieve equitable building decarbonization and ensure a clean, flexible grid to power our homes and buildings. This includes technical assistance on implementation of federal funding, ensuring that this funding grows programs and provides a strong base for continued investment. NEEP researches and advances innovative policy solutions, such as clean heat standards and building decarbonization programs, that invest in efficiency and beneficial electrification and facilitate market transformation.

Building Energy Codes and Appliance Standards – Building energy codes, building performance standards, and appliance standards ensure that buildings and homes meet and exceed minimum energy efficiency performance, are low-carbon emitters, and lock in priorities like electrification from the outset of a building's lifecycle. NEEP facilitates state code collaboratives and updates stakeholders and communities about adoption and implementation debates and progress. NEEP provides technical assistance and educational resources on the benefits and cost savings of electric-readiness, electrification, and zero energy codes. NEEP supports the nation's leading states and communities in advancing the adoption, implementation, and compliance with advanced building codes and appliance standards that meet climate and affordability goals. NEEP also helps states and communities ensure they have enough code officials equipped to enforce these more stringent energy codes.

In 2024, NEEP will conduct a code official workforce training gap analysis that is coordinated with state energy offices to help states create training programs to recruit and train diverse candidates. NEEP will also embark on a three-year field study to evaluate energy code compliance through an equity lens in Delaware and Pennsylvania to inform the development of a targeted training map to educate builders and code officials. NEEP is also leading two regional cohorts to advance building performance standards for existing buildings. NEEP will assist states in promoting the adoption, implementation, and enforcement of energy- and water efficient appliances through the State Appliance Standards Database (SASD), which features a streamlined manufacturer certification system, and through its appliance standards working group.



NEEP Programs

Community Solutions – Community-level initiatives can engage underserved populations and often offer innovative, agile, locally tailored solutions. However, communities lack sufficient capacity – including expertise and bandwidth – to advance energy efficiency and decarbonization in buildings. NEEP deploys a two-pronged approach to assist local governments and communities with their climate goals. First, we go broad by providing multiple communities with just-in-time, relevant information so that they can implement their own strategies. Second, we go deep by supporting a few strategically selected communities in implementing significant pilot activities and then documenting and sharing lessons learned through case studies and exemplars. In each instance, NEEP seeks to ensure that community members have opportunities to participate equitably in the process by providing compensation stipends, wraparound services, and additional support as needed. This helps ensure procedural, distributive and structural equity.

In 2024, NEEP will implement several targeted initiatives. NEEP will work with almost 40 communities throughout Connecticut, Vermont, and New Hampshire to conduct transportation audits, develop plans to decarbonize transportation systems and identify priority actions. This project will feature stipends for individuals and community-based organizations to ensure they are compensated for bringing their expertise to the table. NEEP will also work with a low-income housing authority in Connecticut on a plan to deploy networked geothermal heating and to train local contractors in the workforce to support such a plan. NEEP will also offer stakeholder engagement, technical assistance, and cohort learning opportunities to nine teams across the Northeast to develop plans to launch retrofit programs within their campuses, communities, or jurisdictions. A fourth major initiative is to advance the decarbonization of multifamily and rental housing. Due to factors such as deferred building maintenance and inadequate investment in capital improvements, multifamily properties tend to be energy-inefficient and emission-intensive to operate. Because this sector includes subsidized and unsubsidized properties in historically underserved communities, promoting energy efficiency in multifamily housing advances equitable decarbonization for buildings.

Heating Electrification Market Transformation – Replacing building technologies that use fossil fuels with those that use electricity is critical for states to achieve their aggressive long-term GHG reduction goals. Heat pump technologies offer households and businesses opportunities to reduce and eliminate these emissions. Electrifying heating also improves indoor air quality, and reduces risks related to combustion, creating safer and healthier buildings. NEEP’s heating electrification initiative accelerates market adoption of high-efficiency residential and commercial heat pumps for space and water heating through multi-sector stakeholder collaboration. Informed by this collaborative network, NEEP develops strategies, tools, and resources for key stakeholders such as policy makers, program administrators, advocates, and industry to implement through their unique market channels.

In 2024, NEEP will advance regional market transformation strategies including driving workforce awareness and competence, improving heat pump performance specifications, reducing upfront costs, and validating emerging heat pump solutions. NEEP will provide research and analysis, coordinated stakeholder engagement, tools, and technical assistance. Incentive programs offer important opportunities to reduce the upfront costs of heat pump systems. Partnering with regional programs, NEEP will develop several best practice guides to improve the effectiveness of programs, including those focused on income-eligible customers and midstream approaches. These activities will support the adoption of practices, and programs that enable heating electrification for all, particularly those from historically marginalized communities who bear a disproportionately high energy burden.



2030 Market Transformation Goals and Outcomes

NEEP sets ambitious goals that mark changes in the market, policy and regulatory landscape, and program implementation necessary for the region to achieve its 2030 climate goals. NEEP marks progress towards these goals with annual program outcomes rather than outputs (i.e., change in the market at large, rather than the number of NEEP products). These metrics track both NEEP's impact and the region's progress towards its decarbonization commitments. To guide our work and drive the region to achieve its climate goals, NEEP has set 2030 market transformation goals in four major areas. This framework provides an umbrella under which we set our annual outcomes. Our 2030 market transformation goals are:

- The region prioritizes energy efficiency as the core approach to building decarbonization, achieving consistent all-fuel emissions reductions with a focus on approaches that reduce energy burden in disadvantaged communities.
- The regional market shifts to primarily efficient, electric building and transportation technologies with an emphasis on equitable uptake in underserved communities.
- States and utilities are implementing policies and scalable, equity-informed programs that effectively engage homes, buildings, and vehicle charging to serve as flexible load.
- The region is growing and retraining the energy efficiency and building and transportation electrification workforce with workers reflecting the region in race, ethnicity, and gender diversity.

NEEP's 2024 program portfolio supports multi-year market transformation goals to dramatically reduce building energy consumption through energy efficiency and to rapidly electrify homes and buildings, all while training and expanding a local building decarbonization workforce. The portfolio builds on NEEP's successful work to accelerate energy efficiency and bring high performing technologies to market, while highlighting the growing importance of innovative programs and policies. Across the Northeast and Mid-Atlantic, NEEP pursues four types of activities to drive regional market transformation across each of our programs:

Stakeholder Engagement and Collaboration: NEEP has a long track record of developing cross-sector, cross-jurisdiction partnerships and bringing stakeholders together to develop and advance solutions to decarbonize the building sector. These forums also serve as a way for states and communities to develop new partnerships and put together teams that can access federal funding and sustain long-term success. In 2024 NEEP will:

- Convene a focused State Energy Office Working Group on the implementation of **IRA Rebates and Contractor Training Grants**. NEEP will bring state energy offices together to share challenges models and information from NEEP and other experts to support the implementation of effective, enduring programs.
- Convene a regional initiative on **energy savings attribution** in energy efficiency programs to provide guidelines for states with ratepayer-funded energy efficiency programs on how to braid federal and other funding to ensure compliance and maximize impact of the funds.
- Convene and participate in state and **advocate-led energy working groups**, such as Future Programming Working Group in Maryland, New Jersey Energy Efficiency Workforce Working Group, and a New Hampshire Stakeholder Working Group to advise on the implementation of IRA funds and the evolution of state energy efficiency programs.
- Participate in and/or facilitate **statewide building code collaboratives** in Maine, Massachusetts, and New Jersey to provide technical support, support development of and identify and address barriers to adoption and implementation of stronger base and stretch/zero/electrification codes.
- Develop and facilitate working groups that advance building decarbonization programs at the local level. These cohorts focus on specific, shared opportunities **including workforce development, building performance standards, and regional networked geothermal heating**.
- Engage with stakeholders to inform a strategy for equitable decarbonization in **rental housing and multifamily housing sector**, including market rate, naturally occurring affordable housing, and subsidized affordable housing communities.
- Expand multi-year **heating electrification working groups** beyond residential and commercial working groups to support targeted areas of opportunity such as low- and moderate-income programs, contractor best practices, workforce development, and midstream program design.

Technical Assistance: NEEP serves as a technical expert – and brings other technical experts to the table – on energy efficiency potential, best practices, impacts, evaluation, and integration with other low-carbon demand side resources essential to a low-carbon future. NEEP provides customized technical assistance to government officials through one-on-one customized support and through cohorts, which are linked by geography or topic. Both models are necessary to drive change rapidly and serve regional consistency to transform the market. In 2024 NEEP will:

- Deliver resources, technical assistance, regulatory comments and advisory input to states, regulatory agencies, and advocates in all 13 jurisdictions. Focus areas will include **increasing equitable access** to energy efficiency benefits, aligning energy efficiency programs with state climate policies, and advancing beneficial electrification. Assist with **multi-state or regional grant application** design and submission.
- Support states to work across energy and environmental offices on implementing IRA and long-term building decarbonization policies together, including developing a **building decarbonization playbook** on the design and implementation of policies such as clean heat standards and cap-and-invest programs, building performance standards, appliance standards, and others.
- Develop and disseminate guidance and provide technical assistance so that at least 10 Northeast and Mid-Atlantic states access available **building code IRA funds**, including Section 50131(b) Latest Building Energy Code and Section 50131(c) Zero-Energy Code.
- Develop and disseminate research, case studies, and briefs to advance **efficient and electrified building codes**, building standards, and appliance standards, such as meeting stretch/above-base codes affordably, electric-ready codes, next-gen embodied carbon and resiliency codes, and a Massachusetts case study.
- Work in Delaware and Pennsylvania on a **building energy codes field compliance study** using an equity framework to be developed by NEEP and partners. The project will also develop and deploy training resources to underserved communities as determined by the study's results.
- Conduct outreach on **emissions-based appliance standards** as a building decarbonization tool and the potential for energy efficiency programs to support affordable, equitable standards regulations.
- Contribute technical expertise and regional know-how to **national code dialogue**, including with the U.S. Department of Energy and its national labs (PNNL) and the International Code Council (ICC), to develop a strong national model code and support adoption and compliance efforts of current national model code.
- Support workforce development programs that **grow the contractor workforce for whole-building retrofits**. Work with states and other partners to create a “Total Energy Pathways” general contractor training certificate program to ensure there is a contractor base that can support these types of programs.

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Tracking, Analysis, Tools, Models, and Reports: NEEP conducts independent analysis and develops actionable toolkits, web-based resources, online policy and program trackers, case studies, and reports to advance regional initiatives that drive innovative and integrated energy efficient and electrification solutions. With the flood of programs within the IRA and BIL, relevant, timely, and actionable resources are more critical than ever. NEEP focuses on resource development driven by partner priorities and impactful dissemination of them. In 2024 NEEP will:

- Develop and disseminate research on topics including **accessing energy data** to enable equitable building decarbonization, a building decarbonization workforce, funding the clean energy transition, and virtual power plants.
- Maintain and expand the **NEEP State Appliance Standards Database (SASD)** to assist states with implementing and enforcing appliance standards for water and energy efficiency. Partner with manufacturers and the Environmental Protection Agency (EPA) to build regional consistency around appliance standards to accelerate market transformation.
- Produce actionable resources for states and communities including a heat pump coach training toolkit, IRA and BIL funding guidance for communities, and **case studies on community decarbonization and networked geothermal** heating and cooling.
- Develop and disseminate case studies and that communities can use to advance equitable and rapid decarbonization initiatives, such as **DOE's regional Buildings Upgrade Prize**, and a replicable framework for developing and advancing community-owned clean transportation implementation plans in Connecticut, New Hampshire, and Vermont.
- Develop and update tools and resources that support more effective heat pump design, sizing and installation practices. Partner with contractors and other regional partners to build these tools and practices into their program offerings with the goal of eventually making them standard practices. Build out and market a sizing tool to the heat pump product list, develop HVAC workforce development program best practices and program and contractor best practices guidance.
- Develop and disseminate resources to meet regional needs for **heat pump market transformation**, including an income-eligible program implementation best practices guide and a heat pump midstream program best practices guide. Develop **emerging tech** (including RTU heat pumps, air-to-water heat pumps, and window heat pumps) and support NEEP's Cold Climate ASHP Product List. Partner research projects including variable refrigerant flow (VRF), commercial heat pump water heaters, and networked geothermal systems to provide the market with validation performance data.



2024 Activities

Thought Leadership: NEEP helps advance energy efficiency and building decarbonization by providing consistent, reliable expert sources of information and resources, prioritizing topics of highest-need for the region, championing leadership across the region, and elevating voices of those who are delivering best-practice programs and strategies. We provide thought leadership and support for the evolution of energy efficiency programs to incorporate beneficial electrification, and measure success beyond energy savings such as equity metrics.

Events: NEEP convenes a series of in-person and virtual events to gather a diverse network of energy efficiency and building decarbonization leaders and problem solvers to learn, connect, and collaborate. These signature events combine national expertise with local knowledge while providing a venue to highlight the solutions and relationships necessary to understand, access, and utilize resources to meet immediate building decarbonization goals and achieve a clean energy economy.

NEEP Summit	June 11-13	Weehawken, New Jersey
Heating Electrification Workshop	Fall 2024	TBD, New York
Communities Workshop	Fall 2024	TBD