## 2022 PORTFOLIO: SCALING UP

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 seek to 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 at least three percent per year and carbon emission at least 40 percent by 2030 (relative to 2001).

Decarbonizing the building sector requires continued innovation *and* rapid scaling of existing solutions. In order to decarbonize with equity, marginalized communities must be prioritized in the transition, and solutions that reduce energy and carbon must also improve the health, safety, comfort, and affordability of homes and buildings and create 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 works through regional collaboration<sup>1</sup>, engaging state and local governments, industry and manufacturers, efficiency programs, and other leaders across the Northeast and Mid-Atlantic region to develop and advance scalable energy efficiency solutions. In 2022, alignment on climate goals from the local to the federal level will bring new resources and support to ramp up successful models across the region so that pilots can become programs, technology can be disseminated at scale, successful policies can be replicated, and regional action creates market change. In other areas, continued innovation, new models, and ongoing market priming activities are needed to overcome the barriers to deeper efficiency and the transition away from the use of fossil fuels in buildings. Through peer-to-peer networks, technical assistance, and independent analysis and solution developments, NEEP supports regional cooperation to accelerate the development and dissemination of new solutions.

NEEP is uniquely able offer an approach that combines national expertise with local implementation knowledge to assist states in reaching their climate and clean energy goals. For 25 years, NEEP has worked to transform the energy efficiency market in areas where industry, the workforce, program administrators, and other components of the marketplace benefit from a collaborative, multi-state approach. The combination of cross-cutting skillsets, experience, and existing relationships – typically only available through multiple vendors – makes NEEP uniquely capable to deliver this ambitious project scope and workforce efficiencies.

NEEP's 2022 portfolio focuses on the components key to rapid, equitable decarbonization of the regional buildings sector – strong policies and regulations to address building emissions, market transformation for electric space and water heating, community-led solutions, and replicable program and business models for low-carbon retrofits. Embedded in each of these is workforce development and equity.

<sup>&</sup>lt;sup>1</sup> NEEP serves thirteen Northeast states and jurisdictions including ME, NH, VT, MA, RI, CT, NY, NJ, PA, DE, MD, DC and WV.

NEEP's 2022 program portfolio offers six initiatives to engage regional leaders in collaborate 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** - Successful transition to zero carbon buildings and homes will require market transformation with advanced technological solutions and equitable and fair policy mechanisms. Critical policy areas include comprehensive state and utility policy, building regulation, federal regulation, and alignment with evaluation, measurement, and verification (EM&V).

**Building Energy Codes and Appliance Standards** - Building energy codes and appliance standards are an essential pathway to reduce demand, energy consumption, and greenhouse gas emissions, drive high performance building practices, protect consumers, and grow local economies. These cost-effective regulatory tools ensure that buildings and homes meet and exceed minimum energy efficiency performance, resulting in communities that are comprised of healthy and resilient homes that are safeguarded against expensive and disruptive future retrofits.

**Solutions for Low-Carbon States and Communities** - Working at the community level empowers local governments to take action against climate change in a way that is specific to their building stock and population's priorities. Communities can often be more nimble than state or federal government, and can incubate innovative ideas that move faster than what is happening at a state or national level. NEEP supports communities to advance equitable energy and carbon reduction policies and programs, and shares these solutions to accelerate progress regionally.

**Retrofit Models** - Most of the homes and buildings that will be in our communities in 2050 have already been built, so in order to achieve 2030 decarbonization goals, scalable, cost-effective models are needed to retrofit the existing building stock. At the same time that homes and buildings are retrofit for energy efficiency, other critical needs can be addressed, improving housing affordability, health and comfort, indoor air quality, and resilience to the impacts of climate change.

**Heating Electrification Market Transformation** – Heating efficiently with renewable electricity instead of directly burning fossil fuels for space and water heating can reduce pollution, lower costs, and support economic development. Improved heat pump technologies, coupled with a decarbonizing grid and state and local government mandates, have created new opportunities to focus policy and programs to significantly reduce the energy and carbon footprint of existing homes and buildings in the Northeast and Mid-Atlantic.

**Grid-Interactive Homes and Buildings -** Grid-connected or grid-interactive buildings have the ability to shed, shift, or modulate energy use in response to grid communication signals. If used as flexible sources of energy, homes and buildings could have reduced operating costs, increased building value and security, improved comfort and resiliency, and provide grid operators with clean distributed resources and increased reliability.

## **NEEP's Approach**

**Engage and Empower Stakeholders**: NEEP forges partnerships and brings stakeholders together to learn about, develop, advance, accelerate, and integrate advanced energy efficiency and low carbon building-sector solutions with coordinated efforts, learning exchange, and resource leveraging.

Advance Regional Market Transformation Opportunities: NEEP leads, recommends, engages support for, assists, tracks, and reports progress of regional market transformation initiatives that drive innovative advanced building energy efficiency and decarbonization opportunities.

**Provide Independent Analysis and Technical Expertise:** NEEP conducts independent analysis and serves as a technical expert on building energy efficiency and low-carbon opportunities, policies, programs, technologies, best practices and resources including integration with other demand side resources.

Advance Knowledge and Best Practices: NEEP develops and distributes regional best practice guidance, tools, information and educational resources, and facilitates regional peer exchange for leading edge building efficiency and low carbon solutions.

**Demonstrate Thought Leadership**: NEEP helps influence the narrative around energy efficiency and building decarbonization by positioning NEEP and its partners as consistent, reliable expert sources of information and resources.

## **NEEP's Products and Services**



NEEP is a mission driven nonprofit motivated core values that underpin everything we do. These values are:

## **Collaboration – Commitment – Community – Continuous Learning**