# Building Energy Codes and Appliance Standards

Building energy codes and appliance standards ensure that buildings and homes meet and exceed minimum energy efficiency performance. In the NEEP region, the energy savings potential from adopting model energy codes and appliance standards is more than \$74.61 billion in energy cost savings. Adopting model energy codes and appliance standards would provide \$3.24 billion in annual energy cost savings and 18.50 MMT in annual avoided CO2 emissions (annually by 2030). Adopting updated codes and standards is essential to ensure that our communities are comprised of healthy and resilient homes that prevent expensive and disruptive retrofits in the future.

There is a need for holistic and equitable solutions for improving the adoption and implementation of codes, electrification, appliance standards, and related policies like zoning. NEEP's regional building energy codes and appliance standards work helps ensure that NEEP states continue to be national leaders in building decarbonization. NEEP provides technical assistance to states and other stakeholders to adopt and advance leading-edge, cost-effective energy and carbon savings codes and standards that center equity. NEEP brings together key stakeholders, resources, and research data to build knowledge and understanding to propel the equitable adoption and implementation of building energy codes, electrification/zero energy codes, and appliance efficiency standards policies and programs.

### **NEEP's 2022 Project Outcomes**

- 1. Four additional Northeast and the Mid-Atlantic states adopt electrification/zero energy stretch codes (DE, MA, NY, RI); Two additional Northeast and the Mid-Atlantic states adopt stretch codes (CT, NJ)
- 2. Municipalities in six states (CT, DE, MA, MD, NH, WV) adopt zero energy building codes
- 3. Three additional states (CT, NH, PA) adopt code and standards attribution requirements and improve code compliance through workforce development, specifically code official retention and training
- 4. Five states (CT, MD, NY, PA, VT) adopt appliance standards, and four (MA, ME, NJ, RI) implement adopted standards

## **NEEP's 2022 Strategies and Activities**

Stakeholder Engagement and Collaboration: NEEP brings together key stakeholders, resources, and data to build knowledge and understanding to advance the adoption and implementation of updated building energy codes, zero energy codes, and appliance efficiency standard policies and programs. NEEP will leverage state, federal, and national resources with community perspectives to inform state plans and policies that address equity barriers within energy codes and appliance standards.

- Convene and facilitate NEEP's Regional Building Energy Codes and Northeast/Mid-Atlantic Appliance Standards stakeholder groups; includes quarterly working group meetings, topical webinars, and email updates
- Convene and facilitate a Massachusetts Achieving Zero Energy (MAZE) building energy codes stakeholder group; includes quarterly working group meetings, topical webinars, and email updates
- Convene and facilitate codes collaboratives in New Jersey, New Hampshire, Maine, and Pennsylvania;
  includes quarterly working group meetings, topical webinars, and email updates
- Monitor, communicate, collaborate, present, and coordinate with national and regional organizations (e.g., Regional Energy Efficiency Organizations (REEOs), National Association of State Energy Officials (NASEO), Appliance Standards Awareness Project (ASAP), Responsible Energy Codes Alliance (RECA), International Code Council, Inc. (ICC)), US Climate Alliance, NAACP CESBS, and Green and Healthy Homes Initiative)

### **NEEP's 2022 Strategies and Activities Continued**

**Technical Assistance:** NEEP provides direct technical assistance to states and communities, including model energy codes, stretch codes, zero energy codes, zoning regulations, and appliance efficiency standard policies and programs.

- Provide recommendations, comments, and technical reference materials on code adoption, amendments, and proposals to state code boards
- Support baseline code compliance studies
- Furnish model language, tools, and resources for state appliance standards adoption and implementation.
- Offer technical assistance to states and municipalities on zoning, code legislative alignment, model sustainable zoning language, and virtual inspections
- Impart training and education best practices for codes and appliance standards
- Conduct research and analysis to support states' codes and appliance standards adoption, compliance, and enforcement

*Tracking and Analysis:* NEEP tracks and analyzes leading efforts and progress across the region and facilitate peer exchange to inspire and transfer learning.

- NEEP web-based <u>State by State Energy Code Tracker</u>, <u>Energy Code Policy Resource Center</u>, <u>and State by State</u>
  Appliance Standards Tracker
- Tracking of existing and emerging decarbonization policies through building energy codes (e.g., zoning and municipal ordinances)
- Tracking of emerging building performance standards and state energy code alignment

**Tools and Reports:** NEEP's works to advance strategies, tools, and best practices for state and local government leaders to adopt and effectively implement updated building energy codes and appliance standards. NEEP will produce briefs and white papers on the decarbonization of the built environment for codes and standards.

- Maintain <u>online resource center</u> and toolkits (<u>adoption toolkit</u>, <u>compliance toolkit</u>, appliance standards toolkit)
- Maintain and update NEEP's State Appliance Standards Database
- Briefs and white papers on topics to be determined by stakeholder needs (topics could include energy storage, all electric buildings and homes, insurance underwriting, building performance standards, and air regulations)

**Thought Leadership:** NEEP influences the narrative around building energy codes and appliance standards by positioning NEEP and its partners as consistent, reliable expert sources of information and resources.

- NEEP 2022 Summit and other events to share work and influence decision makers
- Develop communications program (blogs, interviews, articles, joint papers) to broadcast work, building a broader cohort of engaged partners
- Highlight and champion solutions in regional and national forums
- Representation on national committees, and regional and state boards and committees

# **Project Staff**



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