NEEA 2019 Annual Report
SUCCESS STORY

LONG-TERM RELATIONSHIPS TO LOCK IN PERMANENT CHANGE

Influencing progressively effective energy codes is a key element of NEEA’s market transformation approach. After establishing more efficient products in the market, NEEA works to bring those technologies or building practices into code, permanently locking in the energy savings. This approach has led to the adoption of more efficient-energy codes in all four Northwest states.

“NEEA’s market transformation work was instrumental in bringing ductless heat pumps and heat pump water heaters into Washington code,” said Chuck Murray, Senior Energy Policy Analyst at the Washington State Department of Commerce. “Looking ahead, NEEA is currently working on options that will help our code move even further with products like gas heat pump water heaters and thin triple pane windows, for example.”

FLEXIBLE CODES INSPIRE CREATIVITY AND INNOVATION

During the 2015-2019 business cycle, NEEA’s approach to supporting code development evolved from a focus on individual measures to a more holistic approach targeting whole-building energy performance. This work paved the way for data and information to inform code development. Rather than requiring a prescriptive list of technologies or practices, performance-based codes give builders and designers flexibility in how they meet targets.

For example, NEEA provided technical data and information to support Oregon as one of the first states in the nation to adopt the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2016 commercial energy code requirement for buildings, which includes a new whole-building performance path option (Appendix G). And, in 2019, NEEA supported Washington State’s adoption of the HVAC Total System Performance Ratio (TSPR), which requires designers to consider HVAC system performance as a whole, rather than as a checklist of individual components.

According to Murray, “NEEA was the driving force behind TSPR, a very important enabling system that allows flexibility in design while making sure folks meet specific energy targets. TSPR essentially encourages market actors to go out and discover for themselves better ways to reduce energy through design.”
NEEA has built a lot of trust over the years with code developers and local agencies by taking great care with the code proposal process, providing technical and economic analysis, and demonstrating a commitment to follow through with the rigorous code-change process. Thanks to NEEA’s support, we’ve reduced new-building energy use by 35% since 2006. We have a state goal of achieving a 70% new-building energy reduction by 2030, and I have no doubt that NEEA will be a valuable partner in that pursuit.”

— Chuck Murray, Senior Energy Policy Analyst, Washington State Department of Commerce

“A LONG-TERM PROCESS TO DELIVER FUTURE SAVINGS

Elevating energy codes presents a powerful opportunity to reduce regional energy use, but it’s a long-term process. The most promising innovative and emerging technology opportunities must be paired with 5-to-10-year plans during which the market is prepared to adopt code changes.

For example, after being tested in Washington for five years, a NEEA-developed flexible energy credit will be adopted into the International Energy Conservation Code (IECC) in 2021. Like TSPR, this provision delivers flexibility to building designers and builders in how they meet performance targets. Once incorporated into the IECC, it will become an option for officials to adopt in states that use the national model code including Idaho, Montana and Oregon (residential provision only).