Pacific Northwest
NATIONAL LABORATORY

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ENERGY TECHNOLOGY MARKET ADOPTION TEAM

Residential Building Efficiency

The Energy Technology Market Adoption Team is part of the Energy Policy & Economics (EP&E) Group at the Pacific Northwest National Laboratory (PNNL). Our team helps clients understand and address the challenges and issues associated with the performance, adoption, and deployment of new technologies, resulting in faster and stronger market acceptance. This brochure highlights the solutions, services, and results delivered by the team in support of **Residential Building Efficiency**. Other key focus areas served by the team include:

- Commercial Building Efficiency
- Renewable Energy Assessments
- Technology Adoption.

The team's work in support of Residential Building Efficiency provides customers with expertise in the areas of third-party technology impact assessments, software development for technology deployment, and best practice guidance for contractors, home owners, and other stakeholders.

RECENT IMPACTFUL RESULTS

Our staff support the U.S. Department of Energy's Building America program, conducting residential building science research and facilitating the transfer of research findings to the home building industry. Staff have developed climate-specific guides and climate-optimized packages of energy-efficiency measures for new home builders. Team members have put together popular retrofit guides for home performance contractors on topics such as insulation, HVAC, and air sealing upgrades. PNNL staff created the Building America Solution Center to provide the building industry with easy access to the Building America Program's wealth of building science information.

Team staff determined the performance and grid-integration potential of water heaters and evaluated the energy savings of other building technologies using PNNL's matched pair of Lab Homes. Find more information at: ***http://LabHomes.pnnl.gov***

Members of our team helped establish important connections between DOE's Building America and residential codes programs. Collaboration between the programs has resulted in significant residential code innovations.

PNNL's work for the DOE stationary fuel cell program included facilitating the collaboration of stakeholders to address the timely acceptance of safe technology applications. These activities resulted in the development of standards to test and certify the safety of fuel cells (ANSI Z21.83 now CSA FC1) and fuel cell installations (NFPA 853).

Team staff designed a new online tool that provides home builders, contractors, and code officials with easy access to the DOE Building America Program's vast library of building science research. The Building America Solution Center is accessed by more than 10,000 visitors each month: https://basc.energy.gov

U.S. DEPARTMENT OF
ENERGY

Key contributors to the Residential Building Efficiency focus area include:

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RESIDENTIAL BUILDING EFFICIENCY

Our team is comprised of engineers, scientists, analysts, and code specialists with up to 30 years' experience in the residential buildings industry. This cross-cutting team excels at everything from R&D to deployment, but specializes in integrating all of these factors for a successful project.

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