

Creating Energy Solutions



WSU Energy Program staff have assisted in developing and preparing a clean energy workforce.

The **Washington State University (WSU) Energy Program** is a self-supported department within the University. Operating much like a consulting firm, we provide expert technical assistance to help our customers address energy challenges.

Our Expertise

Building Efficiency • Provide technical support on residential sections of the Washington State Energy Code. Design and evaluate energy-efficient homes. Support residential and small commercial energy efficiency retrofits and upgrades.

Industrial Efficiency • Provide technical assistance to maximize the efficiency of industrial resource use. Lead the Northwest CHP Technical Assistance Partnership, promoting technologies and practices useful for industrial and commercial facilities.

Our Mission • To advance environmental and economic well-being by providing unmatched energy services, products, education and information based on world-class research.

About Us • Our staff of energy engineers, energy specialists, technical experts, software developers, and energy research librarians work out of our Olympia and Spokane offices. To learn more about the WSU Energy Program, contact:

Jake Fey, Director
feyj@energy.wsu.edu • 360-956-2000

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Agricultural Efficiency • Implement the Washington Farm Energy Program with federal, state and industry partners. Perform energy assessments for agricultural operations and develop farm energy software that identifies energy-saving measures.

Renewable Energy • Help certify solar energy systems that qualify for state production incentives. Lead the Pacific Region Bioenergy Partnership. Support the use of biofuels and electric vehicles.

Public Facilities Support • Home of the Plant Operations Support Consortium, which advocates best practices, organizational standards and use of surplus/salvage materials. Facilitate Resource Conservation Management programs. Assist schools and Pacific Northwest tribes in improving energy efficiency and indoor air quality.

Software and IT Services • Develop software to evaluate potential energy savings and greenhouse gas emissions reductions. Design and implement websites and databases.

Workforce and Economic Development • Evaluate workforce, education and training policies that support energy workforce development. Guide state-wide Community Energy Efficiency Programs that provide energy-efficiency upgrades and develop the energy workforce.

Research and Evaluation • Contract with the Bonneville Power Administration to identify new technologies that save electric energy. Research cost-effective ways to upgrade and prepare biogas to meet standards for use as vehicle fuel. Partner with the WSU Composite Materials and Engineering Center's laboratory to test the heat, air and moisture-transport characteristics of exterior walls.

Energy Information • Home of one of the nation's few full-service energy libraries. Operate national and regional energy information centers. Compile research about emerging energy trends of interest to industrial, agricultural, and public sector customers.



IN THE SPOTLIGHT

Building a More Efficient Future in Washington State

Using applied building science techniques to reduce energy demand

Buildings consume more energy than any other sector of the U.S. economy. Our building sciences team is finding ways to reduce energy use by helping homeowners and small businesses understand what they can change and help them finance improvements.

Energy Code Support

Our energy code specialists provide training and support for the residential sections of the Washington State Energy Code (WSEC). They teach industry and building department personnel around the state about code requirements, and how to build and test houses that meet these requirements. They also answer questions on the WSEC Hotline.

Our website offers tools and publications to help users understand and comply with energy code requirements.

- The *Builder's Field Guide* contains practical descriptions and illustrations of building methods that meet the energy code standards.
- Prescriptive and component performance worksheets are available for designers and builders to document compliance with the energy code for building permit applications.
- Our specialists developed two videos for builders:
 - *Duct Sealing for Comfort, Energy and Indoor Air Quality*
 - *Air Leakage in Homes: The Invisible Thief.*



An air sealing test is now required for new homes built in Washington.

Developing National and State Standards

Our energy code specialists assist with developing national indoor air quality and home energy efficiency retrofit standards. They were also instrumental in developing Washington's solar energy rule, which expedites permitting for residential solar energy projects.

Community Energy Efficiency Program

Energy efficiency is the cheapest way to reduce pollution, and targeting low-income households and small business lends relief where it is needed most.

The WSU Energy Program was designated by the Washington State Legislature to oversee the Community Energy Efficiency Program. Projects in communities across the state are helping residents and small businesses make energy efficiency improvements.

Northwest ENERGY STAR Homes

The national ENERGY STAR program encourages the use of energy

efficient technologies. The regional Northwest ENERGY STAR Homes project promotes the construction of energy efficient homes to meet Environmental Protection Agency guidelines in Washington, Oregon, Idaho and Montana. Our specialists administer the Northwest ENERGY STAR program and inspect homes built to meet ENERGY STAR standards.



Building America Builders Challenge

We partner with manufacturers of ventilation equipment on heat recovery and non-heat recovery ventilation systems to encourage builders to "build tight and ventilate right." This includes working with not-for-profit organizations and military family housing projects to offer education on properly commissioning ventilation equipment and related issues.

Certification Training

Our specialists offer training opportunities for Home Energy Raters, Performance Tested Comfort Systems, Building Performance Institute Auditors and Infrared Building Applications. Participants who complete the training become certified professionals in the specialty area.

Questions about the Residential Energy Code?

Contact our team at
360-956-2042

[www.energy.wsu.edu/
BuildingEfficiency/EnergyCode.aspx](http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode.aspx)