

Creating Energy Solutions



WSU Energy Program staff assist at a wastewater treatment facility

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:

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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 moisturetransport 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.



Plant Operations Support Consortium

Supporting public facilities professionals in the Pacific Northwest

The **Consortium** is a self-sustaining, membership-based organization within the WSU Energy Program. The Consortium's mission is to connect facilities professionals – from state agencies, schools, higher education, ports, tribes, nonprofits, utilities and municipalities – with a wealth of technical information and expertise.

Benefits Far Outweigh Membership Dues

The Consortium is your on-call team of experts, ready to offer solutions and suggestions.

Energy Advisory Services

- Research and answer queries
- Perform audits and assessments
- Provide data tracking and interpretation

Facility Management Assistance

- Assist with strategic planning
- Perform condition assessments
- Assist with consultant selection and procurement
- Provide interview assistance
- Review design options and contracts
- Provide construction management

Custodial Operations Support

- Assess effectiveness of custodial programs
- Provide staff training
- Assist with workload and job card development
- Provide research and consultations

Recent Examples of Support Provided to Consortium Members

- Defined and explained the use of Energy Utilization Index (EUI)
- Located low-cost, high-quality kitchen equipment needed by a Consortium member
- Researched property setback and zoning questions
- Compared and identified differences between two contractor-generated roofing bids
- Developed a replacement schedule for floor coverings and cost estimates
- Researched the costs of ongoing facility maintenance and compared these with facility replacement costs
- Investigated odor issues on the second floor of an occupied building
- Completed a facility condition assessment and developed the capital needs assessment



Consortium custodial expert evaluates school cleaning equipment

Technical Assistance and Consultation

 Provide research, referrals, surveys and recommendations to help answer technical questions

No-Fault Effectiveness Assessments

- Assess facility maintenance and operations
- Evaluate security concerns
- Conduct staffing surveys
- Prepare equipment and preventive maintenance plans

Equipment Brokering and Locating

 Locate affordable new or usable pre-owned equipment, mechanical systems, modular buildings and more

Let Us Know How the Consortium Can Help

Plant Operations Support Consortium 360-956-2230 plantops@energy.wsu.edu www.energy.wsu.edu/PlantOperations