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, Spokane and satellite offices. Operating similar to a consulting firm, the WSU Energy Program is a self-supported department within the University.

Within WSU

We are part of the College of Agricultural, Human and Natural Resource Sciences. We report directly to the Dean of the College.

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WASHINGTON STATE UNIVERSITY

Washington State Farm Energy Program

Identifying savings opportunities for Washington's agricultural industry

Savings: Dairies that follow energy-saving recommendations can save approximately a quarter of their energy costs Software: Unique, customized tool maximizes the return on investment for energy-saving improvements Leverage: Help farm businesses pay for energy-saving technologies

The Washington State Farm Energy Program

can support our state's farm businesses by helping reduce their operating costs, fuel use and carbon footprint. The program can also energize the region's move toward conservation/ efficiency as an electric power resource.

During the Farm Energy Program pilot, 30 energy assessments were completed for dairies in Thurston and Yakima counties.

These assessments:

• Thoroughly analyzed all

systems and equipment at each dairy

- Provided energy-saving recommendations for maintenance changes and equipment investments
- Included estimated costs, potential savings and greenhouse gas reductions for recommended improvements
- Qualified the farm business to apply for federal funds to help pay for energy efficiency improvements

Savings

Dairy farms that participated in the pilot received energy-saving



recommendations that, if implemented, could save the producers about 25 percent on their energy bills.

One farmer received a national award for his sustainable approach to dairy farming. The Washington State University (WSU) Energy Program assessment identified some of the key measures that he installed to save energy and increase the efficiency of his business.

Software

The WSU Energy Program developed and is continually refining an energy use assessment tool to identify and analyze energy-saving opportunities. This software – *CAFÉ Dairy* – continues to evolve as WSU Energy Program engineers build on experience from the pilot program.

Lessons Learned

- Train local agency staff so they can address the specific needs of each producer
- Share technical expertise and provide demonstrations of energy-saving technologies and practices that work well on farms
- Provide follow-up support to interpret assessment results and help producers choose which energy-saving measures to implement
- Provide a path to funding by identifying funding sources and preparing technical reports that meet the requirements of funding programs

Leverage

The Farm Energy Program can leverage federal dollars to help pay for assessments and energy-saving measures.

Looking ahead

Washington's farmers would benefit from continued support of the Farm Energy Program as articulated in Executive Order 14-04 issued by Governor Jay Inslee.

The WSU Energy Program would build on our success with dairies and address the energy needs of agricultural enterprises statewide. This would include efforts to:

- Develop and implement an expanded energy efficiency program for the agricultural sector statewide
- Address the lack of awareness of efficiencies that can be gained, money that can be saved and funding opportunities that are currently available to Washington farmers
- Provide training and demonstrations to farmers and local agency staff on energy-saving practices and technologies

- Perform agricultural assessments statewide to help farmers pre-qualify for funding
- Continue to grow the team of professionals who can perform assessments using the technical platform created by the WSU Energy Program
- Refine the assessment tool so it incorporates insights learned in the field

Program partners

In the Farm Energy Program pilot, the WSU Energy Program partnered with energy and agricultural experts from federal and state agencies, Washington State University, state agricultural associations and participating utilities. It also worked with:

- The Washington State office of the USDA Natural Resources Conservation Service
- The Washington State office of USDA Rural Development
- Washington State
 Conservation Commission
- Washington State
 Department of Agriculture
- Washington State Dairy Federation
- WSU Center for Sustaining Agriculture and Natural Resources

A Farm Energy Assessment can help farmers get additional funding

A farm energy assessment is the necessary first step in accessing funds to help pay for energy-saving improvements.

The WSU Energy Program and other stakeholders can help match the farmer to funding sources – USDA Natural Resources Conservation Service, USDA Rural Development and utilities – to help cover the costs of implementing one or more of the energy-saving improvements recommended in the Farm Energy Assessment.

The farmer decides which recommendations to implement.

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