



Workshop helps rural Wyoming

Situation:

Wyoming has a vast abundance of natural and renewable energy resources. Many rural landowners would like to take advantage of these resources and gain energy independence. In east-central Wyoming, including Natrona, Converse, and Niobrara counties, wind and solar energy resources are prevalent and have received media attention. However, most attention is centered on “Big Wind” projects such as the commercial wind farms along Interstate 25 between Douglas and Casper.

A random survey was sent to residences in Converse and Natrona counties to determine what types of renewable energy citizens would be interested in learning about. The survey also asked for questions they had about small-scale, home, or farm renewable energy projects. Not surprisingly, solar and wind energy were major areas of interest. Educators from the Converse County and Natrona County offices of the Cooperative Extension Service partnered with the University of Wyoming, School of Energy Resources, the Converse County Conservation District, and SunPower Energy to host a workshop and field tour showing the economics and installation of wind and solar power renewable energy projects for the home and farm/ranch.

The workshop not only covered renewable energy options available and the economics but also energy-saving techniques, selecting a contractor, and grant programs available. The 35 participants toured a small-scale wind and solar installation near Douglas and were able to interact with the contractor and the landowner.

Impacts:

Ninety-six percent of participants gave the classroom portion of the workshop an excellent-to-good rating. Particular areas rated excellent included instructors’ response to questions, material presented was useful and understandable, and the instructors’ knowledge of their particular topics. Comments from participants included:

- Very well-presented
- I am more aware of how Wyoming rates with the rest of the country in renewable energy
- We appreciate the presenters’ truthfulness in answering questions.
- Interesting and very informative.

A survey about the workshop’s impacts and outcomes was sent to a sample of participants approximately six months later. The following energy-saving techniques were reported to have been implemented as a result of the workshop:

- Compact florescent lighting
- On-demand hot water heater
- Timer for furnace thermostat
- Light-emitting diode (LED) lights
- Double pane windows in garage
- Fully insulated roof
- Low-energy garage door openers
- Wiring was brought up to code
- Installed new doors and windows
- Upgraded appliances
- Insulation of crawlspace

The following renewable energy generation mechanisms have been installed after the workshop:

- Solar panels by four participants
- Solar electric fence
- Solar yard lights
- Solar water well pump
- Wind turbine

Participants increased their knowledge of renewable energy options available to them as well as energy-saving techniques that could potentially save money. They implemented several energy-saving techniques and renewable energy generation mechanisms to help save money, gain independence, and decrease carbon footprints.

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