

<http://www.idwr.idaho.gov/energy/>



Treasure the Valley's Air

The Idaho Energy Division, the Idaho Department of Environmental Quality and others submitted an application to become a Clean City, using the name Treasure Valley Clean Cities Coalition and the U.S. Department of Energy approved the designation.

The TVA program also provided CommuterRide, the ride-sharing agency, with peel-off stickers and bumper stickers to promote clean air.

The Energy Division co-sponsored Alternative Energy Week, September 12-18, Boise, and the Treasure the Valley's Air program.

- ◆ A geothermal display/exhibit at Boise City Hall, which is heated by geothermal water
- ◆ A proclamation signed by the Governor declaring an Alternative Energy Week
- ◆ Geothermal heat pump workshop
- ◆ Green Tuesday at the local Stinker stations – E-85 promotion that lasted the entire month
- ◆ Tours of Idaho Power's rooftop PV system
- ◆ Biodiesel utilization and production conference
- ◆ Displays of alternative fueled vehicles
- ◆ Hands-on activities on energy efficiency, conservation, clean air and alternative energy for children
- ◆ Workshop for teachers on how to incorporate renewables in their various energy tracks
- ◆ Via radio/TV spots during the summer, fall and winter, the partnership promoted Anti-Idle zones near schools, the use of ethanol-blended fuels and informed Idahoans of the dangers of ozone.

Alternative Financing Demonstration Program

The loan program funded 30 projects last year (25 residential, 5 commercial) for a total of \$241,945.00.

Agriculture and Renewable Energy

Agriculture:

Idaho Energy Division:

- ◆ Demonstrated the use of AM400 soil moisture data loggers to several farmers.
- ◆ Provided logistical support for legislative luncheon hosted by the Idaho Farm Energy Association on January 24, 2006.
- ◆ Joined with representatives from Idaho Power, Rocky Mountain Power, and the Public Utilities Commission on May 5 to help Medicine Lodge Creek farmers lower irrigation pumping costs.
- ◆ Serves as a co-host of the seventh annual Harvesting Clean Energy conference in Boise in January 2007 and to participate in monthly planning meetings.
- ◆ Worked with the agriculture community to help members obtain money under the Farm Bill Section 9006 grants.

Renewable Energy:

The division provided a \$50,000 contract with Intrepid Technology of Idaho Falls to install equipment at a Magic Valley dairy to allow the plant to sell its pipeline quality methane to Intermountain Gas.

The Energy Division conducted numerous outreach efforts, including:

- ◆ Ground source heat pump workshop, Boise
- ◆ GeoPowering the West summit, Reno
- ◆ Powering your economy with wind workshop, Pocatello
- ◆ Idaho PURPA wind power stakeholder workshop, Boise
- ◆ Farm Bill road show meetings, Boise, Twin Falls, Pocatello, Idaho Falls and Cascade
- ◆ Geothermal power generation workshop for utilities, Boise
- ◆ Seminar on wind energy advances using controls to improve turbine operation, Boise State University

Buildings:

Idaho Energy Conference

The Energy Division co-hosted the 19th Annual Idaho Energy Conference organization and presentations. Five staff attended the Conference and had a booth marketing all the Energy Division's programs. Dr. Joseph Lstiburek was a featured speaker at the 19th annual Idaho Energy Conference. Dr. Lstiburek spoke on "Building America for Code Officials".

Energy-Efficient Manufactured and Modular Homes

Idaho produced 890 certified energy efficient HUD Code homes during the fiscal year of which 610 had Energy Star labels. The program is transitioning from Super Good Cents to Energy Star. Also certified were 37 Energy Star modular homes.

Energy Star High Performance New Site Built Homes

381 Energy Star® Homes were rated, certified and labeled during the fiscal year. This increased number compares to 249 rated, certified and labeled Energy Star the previous year for an overall increase of 53%.

The Energy Division recruited 93 new builder partners during the fiscal year, bringing the total of active building partners to 170. A Quality Assurance Contractor was hired to perform inspection and testing on homes selected for QA. Every 10th home initiated is flagged for Quality Assurance.

Home Performance with Energy Star Existing Homes

The Energy Division continued to commercialize Home Performance with Energy Star in Idaho. During the fiscal year staff did the following:

- ◆ Completed HPES retrofits under 6 low interest loans.
- ◆ Provided administrative support to a Home Performance Specialist that organized a retrofit consortium comprised of insulators, a window replacement company, and an HVAC company. They tested and inspected 30 homes, and performed retrofits on 2 homes. They also provided HPES inspection and testing services to 2 remodeling companies that each completed one project.
- ◆ Encouraged Idaho Power to initiate a program for existing homes.

Regional Technical Forum

The RTF is an advisory group to the Bonneville Power Administration and hosted by the Northwest Power and Conservation Council. The RTF discusses, reviews and votes on conservation and renewable measures for BPA's conservation and renewable discount program. It performs functions such as certifying providers for performance tested HVAC training, certification and quality assurance and develops and recommends policy on green tags to the Bonneville Environmental Foundation. Ken Eklund, IED Principal Energy Specialist, is a voting member of the Regional Technical Forum.

Certified Ducts and HVAC Systems

The Energy Division has authority to certify HVAC systems in Idaho under the Pacific Northwest's Performance Tested Standards administered by the Regional Technical Forum. During the fiscal year the Energy Star program produced 381 site-built Energy Star homes with duct systems meeting the PT standards. In addition, 890 HUD Code manufactured homes built during the fiscal year in Idaho were constructed and certified under specifications requiring mastic at all duct seams and connections—the Energy Division tests duct tightness quarterly and provides training and technical assistance.

Idaho Builder Conference

Community Facility Program

The Energy Division:

- ◆ Assisted Idaho State University in Pocatello in the development of The Center for Advanced Energy Studies (CAES). It will be a premier international facility for promoting, performing research and revitalizing education and training in energy-related science, engineering, technology, and related disciplines. The overall sustainability goal for this building is LEED Silver, with an emphasis placed on the use of local materials and products where feasible. The goal for energy efficiency is 50% better than the 2003 IECC or ASHRAE 90.1 2001.
- ◆ Assisted the City of Post Falls design an RFQ to use energy performance contracting for construction of a new City Hall Complex.
- ◆ Assisted the Nampa School District to develop two high performance classrooms at two new schools and install the necessary equipment to monitor the rooms against two ordinary school classrooms.

Industrial Efficiency

The Energy Division accomplished the following:

- ◆ The Energy Division facilitated the development of and co-sponsored an Industrial Training Assessment Center application workshop for university engineering departments interested in applying in the next solicitation round.
- ◆ This was the first year of the Energy Division's pump and steam project. Through this project, the Division conducted kickoff meetings with Amalgamated Sugar Company and J.R. Simplot Company in conjunction with the Industrial Efficiency Alliance—the industrial program of the Northwest Energy Efficiency Alliance.
- ◆ As part of the pump and steam project, Energy Division staff conducted 3 pump assessments at industrial food processing plants in Idaho.
- ◆ Three reports for pump assessments conducted were prepared, delivered and discussed with plant management and energy champions.
- ◆ Process steam improvements were initiated at Amalgamated Sugar Company.