# The 2007 Annual Report of the West Penn Power Sustainable Energy Fund



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# **INTRODUCTION AND HIGHLIGHTS**

In 2007, the West Penn Power Sustainable Energy Fund (WPPSEF) entered its sixth year of providing funding to:

- Promote the use of renewable and clean energy;
- > Promote energy conservation and energy efficiency; and
- Promote the start-up, attraction, expansion, and retention of sustainable energy businesses.

The WPPSEF activities continued to increase from previous years as its programs and initiatives became more visible within the West Penn Power (WPP) service region and across the Commonwealth.

During 2007, the WPPSEF Board approved \$1,974,716 to co-fund 31 funding commitments. Key accomplishments in 2007 include:

*Investing in clean energy*. The WPPSEF committed \$500,000 to Advanced Recycling Equipment (ARE) located in St. Marys, PA to expand their biomass furnace manufacturing facility. The biomass furnaces produced by ARE are capable of burning a wide variety of solid biomass feedstocks which enables the end user to switch fuel types and sources depending on availability and pricing. These fuel-flexible boilers have been installed in numerous commercial and industrial settings throughout Pennsylvania and the U.S..

*Investing in energy efficiency*. The largest single investment by the WPPSEF in 2007 was to develop and deploy a residential ENERGY STAR building program which uses ENERGY STAR Qualified Homes for new home construction and Home Performance with ENERGY STAR to service existing housing stock. The program is branded as PA Home Energy. The WPPSEF committed approximately 57% (\$1,140,000) of its 2007 funding to this residential program.

In addition to PA Home Energy, the WPPSEF continues to support the Keystone Home Energy Loan Program (Keystone HELP) through loan procurement and consumer awareness marketing. The WPPSEF is exploring other funding commitments to support and expand Keystone HELP. *Investing in education and public outreach.* In 2007, the Solar Decathlon was held on the National Mall in Washington D.C. The WPPSEF provided a total of \$50,000 (approved in 2006) to support both of the Pennsylvania Solar Decathlon entries – Carnegie Mellon University (CMU) and The Pennsylvania State University (PSU). Supporting and showcasing new innovative solar technologies in large public events such as the Solar Decathlon is important to increase public awareness and acceptance. The CMU solar home will be located at the Powdermill Nature Reserve (Rector, PA) and the PSU entry located at Penn State's University Park campus. Figure 1 provides overview photographs of the 2007 Solar Decathlon homes.

The WPPSEF also provided \$38,400 in co-funding to support a 2008 Going Green campaign being conducted by WTAJ-TV throughout central Pennsylvania. WTAJ-TV will air 52 weekly segments throughout the 2008 calendar year to educate their viewers on the importance of green technologies (e.g. ENERGY STAR Homes, conducting an energy audit, solar PV and hot water, indoor air quality, etc.). WTAJ-TV will work closely with the WPPSEF to showcase other clean energy technologies and programs, such as PA Home Energy, throughout the year.





Figure 1. 2007 Solar Decathlon on National Mall in Washington, D.C.

# **FINANCIAL APPROVALS**

The WPPSEF financial approvals in 2007 can be broken down the following categories: loans, strategic initiatives developed by the WPPSEF, and grants (includes grants, sponsorships, memberships).

#### Loans

Business	Amount	Comments
Advanced Recycling Equipment	\$500,000	Expansion of biomass boiler manufacturing facility located in St. Marys, PA.
Envinity	\$25,000	Purchase of diagnostic equipment to perform whole house energy audits.
Investment Total	\$525,000	

### Strategic Initiatives

Business	Amount	Comments
PA Home Energy	\$1,140,000	WPPSEF is developing and deploying an ENERGY STAR construction program that utilizes a comprehensive whole house approach to improve the energy efficiency of new and existing homes while improving homeowner comfort. The WPPSEF will use ENERGY STAR Qualified Homes for new home construction and Home Performance with ENERGY STAR for existing homes. PA Home Energy will train Service Providers to both RESNET and BPI standards and will offer performance based homeowner incentives for a limited time. The program is being developed for statewide expansion.
PA Biomass Working Group	\$30,000	The PA Biomass Working Group is a coalition of professionals that are focused on the use of Pennsylvania biomass for clean power, heat, and transportation fuels. This Group base funding provided by the U.S. Department of Energy was discontinued. The WPPSEF provided interim funds to co-fund meeting expenses.
Greene Team	\$15,625	Full-scale production run (150 tons) of native grass pellets for testing by various U.S. based residential stove manufactures.
Envinity and West Media	\$27,000	WPPSEF is working with Envinity and the West Media Group to raise awareness of ENERGY STAR projects within the WPP service region.
Total Strategic Initiatives	\$1,212,625	

# Grants/ Memberships/ Sponsorships

Business	Amount	Comments
McKeever Environmental Learning Center	\$25,000	Support the installation of small-scale wind and solar hot water heating (2 separate grants).
Powdermill Nature Reserve	\$25,000	Support for LEED certified building components (graywater recycling/ reuse, Solar D home installation)
Wilson College	\$66,000	Support for LEED certified building components (Dedicated outdoor air system, solar hot water)
Green Building Alliance	\$2,575	2007 and 2008 calendar membership (2 separate grants)
Penn State Public Broadcasting (WPSU)	\$9,800	Duplication and distribution of ENERGY@home public broadcast
Energy from Biomass & Waste Expo	\$10,000	Support for a biomass conference and expo.
American Wind Energy Association (AWEA)	\$500	2007 and 2008 calendar membership (2 separate grants)
Alternative Fuels Renewable Energy Council	\$1,500	2007 and 2008 calendar membership (2 separate grants)
PA Housing Research Center (Penn State)	\$1,000	2008 calendar membership
Clean Energy States Alliance (CESA)	\$5,246	Membership dues (June 2007 to May 2008)
Home Energy Magazine	\$10,000	Sponsorship for Special Issue Climate Solutions which highlights Home Performance
WTAJ-TV	\$38,400	Sponsorship for 2008 Go Green campaign
AFC First Financial	\$25,000	Grant to develop PA Home Energy energy audit protocol in Keystone HELP/ PHFA loan programs
American Solar Energy Society	\$200	2008 calendar membership
Green Building Association of Central PA	\$1,000	2008 calendar membership
Pellet Fuel Institute	\$770	2007 and 2008 calendar membership (2 separate grants)
Pennsylvania Association of Sustainable Agriculture	\$100	2008 calendar membership
Penn Future Center for Sustainability/ Clean Energy Meeting	\$15,000	Membership/ clean energy meeting (2 separate grants)
Grants/ memberships/ sponsorship Total	\$237,091	

## **WPPSEF ADMINISTRATION**

The WPPSEF administration consists of a seven-member board of directors that provides oversight to the Fund and an administrative staff that oversees the day-to-day operations. Individual board members are selected by the Fund through a search process and then are nominated for approval by the Pennsylvania Public Utility Commission. All board members serve on a volunteer basis.

The WPPSEF Board of Directors as of December 31, 2007, was:

- > Michele Ponchione, *President* 
  - World Kitchen
- > Cassandra Robinson, Vice President
  - Allegheny Power
- Rob Hosken, Secretary
  Three Rivers Association for Sustainable Energy
- > Pat O'Brien, *Treasurer* 
  - WesBanco Washington
- Ed Johnstonbaugh
  - New York Power Authority
- Jim Stark
  - Fayette County Community Action Agency

As of December 31, 2007 the WPPSEF has one Board Seat vacancy. This position is currently being filled using the Best Practice Guidelines for the Nomination, Election, and Approval of Directors developed by the Pennsylvania Sustainable Energy Board.

The WPPSEF Board of Directors selected The Pennsylvania State University Energy Institute to serve as the Fund's administrator and the Economic Growth Connection of Westmoreland County to provide financial services to the Fund. In addition, the Fund utilizes the services of external consulting firms on an as-needed basis.

The WPPSEF staff as of December 31, 2007, was:

- > Joel Morrison and Barbara Robuck
  - The Pennsylvania State University (The EMS Energy Institute)
- John Skiavo and James Smith
  - Economic Growth Connection of Westmoreland County

## WPPSEF BOARD MEETINGS

The WPPSEF schedules its board meetings at the beginning of each calendar year. Full board meetings are scheduled for every two months. In addition, the WPPSEF Board has developed three working groups (administrative, investment, and grantmaking) that meet on an as-needed basis.

In 2007, the WPPSEF Board of Directors met on:

- February 8 (Greensburg, PA)
- > April 12 (Charleroi, PA)
- June 7 (Belle Vernon, PA)
- ➢ June 21 (Greensburg, PA)
- August 9 (Greensburg, PA)
- October 4 (Farmington, PA)
- December 13 (Charleroi, PA)

## WPPSEF WEB SITE

The WPPSEF Web site is updated throughout the calendar year as new projects are funded and programs developed. The WPPSEF Web site is at <u>http://www.wppsef.org</u>.

## PLANNED 2008 ACTIVITIES

The WPPSEF will focus on two broad categories in the 2008 timeframe. They are:

**Bioenergy.** The WPPSEF will continue to seek out projects that use Pennsylvania indigenous biomass resources for the production of clean power/ heat generation. The WPPSEF will expand its efforts to seek out investment opportunities in residential, commercial, and light industrial applications for bioenergy. The WPPSEF will specifically work to explore the use of native grass as biomass feedstocks.

**Energy Efficiency.** The WPPSEFs will continue to work on laying a solid foundation for the PA Home Energy program in 2008, and if appropriate, expand it beyond the 23-county West Penn Power service region. The WPPSEF will work with AFC First Financial and

the Pennsylvania Finance Housing Agency to develop and expand their energy efficiency programs.

During the Fall 2008 timeframe, the WPPSEF will have its annual strategic planning meeting. The WPPSEF will develop it strategic plan for a 2-year timeframe (2009-2010). It is anticipated that the WPPSEF efforts on energy efficiency will be expanded.