# Pennsylvania Sustainable Energy Board 2008 Annual Report

June 2010

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### **FOREWORD**

This Pennsylvania Sustainable Energy Board (PASEB) report provides a review of the activities of the regional sustainable energy funds (Regional Funds) during 2008. Collectively, the Regional Funds loaned nearly \$7.4 million and provided over \$2.6 million in grants and strategic investments during this period. Since their inception eight years ago, the Regional Funds have led and continue to lead in the development of and investment in clean energy technologies such as wind, anaerobic digesters, fuel cells, and solar. However, the future focus of the Regional Funds will include energy efficiency and demand resources, which will complement recent statewide energy initiatives.

The Regional Funds are primarily public finance entities which make loans, investments, and grants for the benefit of ratepayers and the Commonwealth. Four of the Regional Funds, Metropolitan Edison, Pennsylvania Electric Company, Sustainable Energy Fund (PPL), and the Sustainable Development Fund (PECO), have ceased receiving ratepayer funding. The challenge for these funds is to meet their fund mission and remain financially sustainable.

### Background

The electric utility industry restructuring process in Pennsylvania brought together stakeholder groups representing residential consumers, large commercial and industrial customers, environmental parties and other interested participants. These groups contributed to the development of the restructuring settlements for Metropolitan Edison Company and Pennsylvania Electric Company (Met-Ed and Penelec)<sup>1</sup>, PECO Energy Company (PECO), PPL Electric Utilities Inc. (PPL) and Allegheny Power/West Penn Power Company (WPP). These settlements provided new opportunities for renewable and sustainable energy production services and enterprises.

Specifically, each of the four settlement agreements established a separate and independent sustainable energy fund to promote:

- The development and use of renewable energy and clean energy technologies,
- Energy conservation and energy efficiency,
- Renewable energy business support, and
- Projects which improve the environment in the companies' service territories, related to the transmission and distribution facilities (Met-Ed and Penelec only).

# **Funding**

Under terms of the settlements, approximately \$55 million was collected through these companies' distribution rates to promote the development of sustainable and renewable energy technologies. The Sustainable Development Fund (SDF in PECO Energy's territory) received an additional \$18.5 million in funding over a five-year period as a result of the PECO/Unicom merger. On June 14, 2001, the Commission approved the merger of GPU Energy and FirstEnergy. As a result of that merger

<sup>&</sup>lt;sup>1</sup> While Met-Ed and Penelec represent different service territories and in fact, have separate boards of directors and administrators for purposes of this report and in other matters, they are considered a single regional fund. For example, they share the same governing bylaws and they are entitled to only one seat on the PASEB.

settlement, the Met-Ed and Penelec funds received an additional \$5 million (\$2.5 million each) in funding. During PPL's most recent rate case, the Commission agreed to continue funding the SEF through December 31, 2006. The funding level that was included within the distribution rates for 2005 and 2006 was 0.01 and 0.005 cents per kWh, respectively.

### **Regional Board Administration**

The settlements provided that a seven-member board, nominated by the parties to the agreements, and approved by the Commission, would manage each fund. The board for each fund drafted bylaws that address the responsibilities and powers of the Board and the fund administrators. The bylaws require that directors represent a cross-section of interests: the financial community, consumers, environmental interests, business and industry, Electric Distribution Companies (EDCs) and Electric Generation Suppliers (EGSs). The bylaws also address project selection and the funds' investment strategies.

The Commission approved the individual bylaws for each Regional Fund on the following dates:

- SDF December 2, 1999,
- Met-Ed and Penelec SEF January 27, 2000,
- SEF June 2, 2000, and
- WPP SEF June 2, 2000.

### **Regional Fund Administrators**

- The Reinvestment Fund Sustainable Development Fund,
- Berks County Community Foundation (Met-Ed),
- Community Foundation of the Alleghenies (Penelec),
   o Met-Ed and Penelec follow the same funding approach and guidelines,
- The Sustainable Energy Fund of Central Eastern Pennsylvania (PPL), and
- The Energy Institute of Penn State University (West Penn Power).

The Regional Fund Administrators charge an annual fee for their services. These services and fees vary by Regional Fund and contract. A breakdown of the various charges is listed below:

- Berks County Community Foundation
  - o Management fees represent 1.5 percent of assessed value of Fund.
  - o Fees for 2008 were \$124,994.76.
- Community Foundation of the Alleghenies
  - o Management fees represent 1.5 percent of assessed value of Fund.
  - o Fees for 2008 were \$126,426.02.
- The Sustainable Energy Fund of Central Eastern Pennsylvania
  - o Management fees represent 0.67 percent of assessed value of the Fund..
  - o Fees for 2008 were \$308,186.

- The Sustainable Development Fund
  - Administrative costs included in each annual budget, approved by Board.
  - o Fees for 2008 were \$473,525.
- The Energy Institute of Penn State University and the Economic Growth Connection
  - Management fee by contract.
  - o Fees for 2008 were \$202,915.

The Regional Funds' boards meet on a regular basis, with Commission staff attending as liaisons. The boards are required to submit annual and semiannual reports to the Commission on the activities, expenditures and investments of the Regional Funds.

# **Statewide Activities**

By Commission Order dated July 1, 1999, the PASEB was created to "provide oversight, guidance and technical assistance to the regional boards". Statewide coordination of the Regional Funds was viewed as essential to establish Pennsylvania as a leader in renewable energy technologies. In its Order, the Commission noted that the success of the renewable power initiative required a partnership between the regions and the state. The Commission held that the PASEB should operate in conjunction with the Regional Funds in identifying opportunities, prioritizing objectives and developing an outreach plan to garner further support for the initiatives.

On August 7, 2003, the Commission adopted an Order further defining the role of the PASEB. The Commission directed the PASEB to hold annual meetings, establish bylaws and develop a "best practices" business model for each of the Regional Funds. The Order also modified the reporting obligations of the Regional Funds.

In addition to the Commission designee, the PASEB members include a board member of each of the four Regional Funds, as well as designees for the Department of Environmental Protection (DEP), Department of Community and Economic Development (DCED), Office of Consumer Advocate (OCA), and Pennsylvania Environmental Council.

The PASEB held its annual meeting in Harrisburg on December 3, 2008. The purpose of the meeting was to address the PASEB's obligation to complete the Fund's best practices. Additionally, the PASEB has addressed issues stemming from AEPS.

In addition to the PASEB meeting, the Regional Funds met as a group on April 7, 2008 in Pittsburgh and on October 24, 2008 in New Kingston. The meetings are an essential means of discussing projects of mutual interest and better coordinating future activities.

### **2008 Approvals of Regional Funds**

The following table summarizes the Regional Funds' approvals of loans and grants for 2008. As shown, the Regional Funds approved slightly more than \$10 million in support of renewable energy activities. Approximately \$7.4 million was distributed in the form of loans and over \$2.6 million was provided in grants. The West Penn Power SEF includes 'strategic initiatives' as a

category of financial approval. This category is not used by the other funds. In the following table, West Penn Power's strategic initiative financial approvals have been added to their grants and reported as such. (In 2008 WPP SEF strategic initiative approvals totaled \$1,888,240 and grants totaled \$296,000.)

2008 Approvals						
FUND LOANS GRANTS TOTAL						
Met-Ed/Penelec	\$207,000	\$216,500	\$423,500			
PECO	\$3,887,627	\$51,918	\$3,939,545			
PPL	\$531,899	\$180,000	\$711,899			
West Penn	\$2,769,000	\$2,184,240	\$4,953,240			
TOTALS \$7,395,526 \$2,632,658 \$10,028,184						

# **End of Year Regional Fund Balances**

The following table presents the Regional Fund balances as of the end of 2008. These balances were calculated based upon the Regional Funds' annual audits and the commitments that are tracked. Certain balances do not include long-term staffing expenses and leases. Finally, some of the balances do not include tentative grant commitments that have been made but not disbursed.

FUND	BALANCE
Met-Ed	\$5,890,967
Penelec	\$7,542,652
PECO	\$12,878,514
PPL	\$18,393,810
West Penn	\$13,121,465

### Metropolitan Edison Company/Pennsylvania Electric Company

### **Sustainable Energy Fund**

http://www.bccf.org/pages/gr.energy.html

### **Introduction and Highlights**

From Jan. 1, 2008, to Dec. 31, 2008, the Metropolitan Edison Company/Pennsylvania Electric Company Sustainable Energy Fund (Met-Ed/Penelec SEF) approved financing totaling \$423,500.

The Met-Ed SEF's marketing/networking activities included the fund's website, through the Berks County Community Foundation's website (<a href="www.bccf.org">www.bccf.org</a>).

The Penelec SEF website can be accessed through the Community Foundation for the Alleghenies website (<u>www.cfalleghenies.org</u>).

These websites are an essential means of distributing information regarding the Met-Ed and Penelec SEF. The website contains information about financial products, program offerings, application request forms, background information, reports and links to related websites.

During 2008, Met-Ed/Penelec staff participated in numerous conferences and meetings as speakers and active participants to raise awareness of Met-Ed/Penelec SEF activities, including:

- A teleconference of the American Bar Association's Renewable Resources Committee;
- Renew PA;
- Saint Francis University Anemometer Lending Program Landowners' Seminar;
- Participation in PennFuture events;
- Member of the regional advisory board of Ben Franklin Technology Partners;
- Board membership of Johnstown Industrial Development Corp.;
- Meetings with other Regional Funds in Pennsylvania. These meetings are an essential means
  of discussing projects of mutual interest and better coordinating future activities;
- Board Member of the Green Building Association of Central Pennsylvania;
- Pittsburgh Green Building Alliance/Laurel Highlands Affiliate Steering Committee;
- LEED EB workshop and tour, CJL Engineering;
- Sustainable Pittsburgh Sustainable Business Network;
- Participation in the development of a Green Building Association of Central Pennsylvania chapter in Berks–Lancaster counties;
- Programs and activities of Funders Network For Smart Growth;
- Southern Alleghenies Planning and Development Commission's wind energy economic impact meeting;
- Fuel Cell Testing Center, tour at Concurrent Technologies Corporation;
- Program Investment Activities of the Council on Foundations

# **Financial Approvals**

### Grants

Project	Amount	Comments
Conservation Consultants, Inc.	\$60,000	Solar Technician/Installers Training Program
Pittsburgh Zoo & PPG Aquarium	\$10,000	Biomass Burner in Somerset County
Green Building Association of Central PA	\$5,000*	Membership
St. Francis University	\$21,000	Develop Community Wind Financial Models
City of Johnstown/Johnstown Area Heritage Association	\$25,000	Installation of LED Lighting on Stone Bridge
Juniata College Founder's Hall	\$25,000	LEED EB
Hillcrest Racquet Club	\$2,000	LED Lighting
Mission Critical Solutions	\$25,000	Build Campus Electric Vehicles
BosWell Pharmacy – Nursing Home Division	\$6,000	T-5 Lighting
City Of Reading	\$25,000	LED Lights on the PAGODA
Crawford Central School District	\$12,500	Districted CHP Biomass Study

<sup>\*</sup> The 2008 report for the Met Ed/Penelec SEF submitted to the Commission December 9, 2009 contained a typographical error for the grant amount provided to the Green Building Association of Central PA. The table above includes the correct amount.

### Loans

Project	Amount	Comments
Conservation Consultants, Inc.	\$200,000	Solar Technician/Installation Program
Hillcrest Racquet Club	\$7,000	LED Lights

Since inception, the Met-Ed/Penelec SEF has approved 85 grants totaling \$1,699,827.32; 36 loans totaling \$16,417,552; and two equity investments totaling \$1,500,000. The fund denied 36 grant requests, 20 loan requests and five investment opportunities. Denials occurred because the proposed projects did not meet the Regional Fund's mission or had technological, financing and/or market difficulties.

To review the annual audit of the Berks County Community Foundation and/or the Community Foundation for the Alleghenies, please visit the respective websites. If you would like a written copy of the audit, contact Richard Mappin at Berks County Community Foundation, 610-685-2223 or Michael Kane at Community Foundation for the Alleghenies, 814-536-7741.

### **Board Activities**

The Met-Ed/Penelec SEF Advisory Committee consists of seven members, whose two year terms are staggered so the terms of approximately half of the members end each year. Current members can run for re-election. During the course of the year, two members resigned from the Advisory Committee. Public notice regarding the seeking of nominations to the Advisory Committee was given by a variety of means, including:

- A written notice to the Commission and the joint petitioners and
- A notice posted on the Berks County Community Foundation and the Community Foundation for the Alleghenies websites.

The following individuals responded to the request:

- John W. Ubinger Jr., Environmental Lawyer;
- Samuel E. Hepfer Jr., Energy Conservation Professional

The board approved Mr. Hepfer & Mr. Ubinger, and sent a letter to the Commission for final approval.

The Advisory Committee consists of:

- John Ubinger, Environmental Lawyer, Pennsylvania Environmental Council;
- Samuel E. Hepfer, Energy Conservation Professional, South Central Community Action Programs;
- Charles Mowbray, FirstEnergy (Vice Chairman);
- Edward Miller, Division VP Commercial Lending, Northwest Savings Bank;
- Peter J. Tarapchak, Staff Specialist Energy & Electrical Engineering Carpenter Technology Corporation, Reading;
- Derek James, University of Pennsylvania, Project Manager, Environmental Management Assistance Program (Pending approval of Commission); and
- Brian Vayda, Manager American PowerNet.

During 2008, board meetings were held on January 8, March 11, June 26, September 10 and December 5.

Met-Ed/Penelec staff and board members continued to play an active role in PASEB activities, including meetings and conference calls.

### **Conclusion**

The Year 2008 proved to be a very busy period for the Met-Ed/Penelec SEF. The SEF increased its visibility and made new investments that resulted in energy savings and new clean energy sources.

### **Sustainable Development Fund**

(PECO Service Territory)

http://www.trfund.com/sdf

# **Introduction and Highlights**

Sustainable Development fund (SDF) continued its eighth year of promoting renewable energy and advanced clean energy technology, energy efficiency and conservation, and sustainable energy businesses that benefit the residential, commercial, institutional and industrial customers in the PECO Energy service territory.

This 2008 Annual Report was prepared by the Sustainable Development Fund (SDF) and is submitted to the Pennsylvania Public Utility Commission and to the joint petitioners in the PECO Energy restructuring proceeding. Since its inception ten years ago, SDF has played a leading role in accelerating the region's investment in a clean energy economy. This report discusses the initiatives and accomplishments of SDF in 2008.

### **Financial Approvals**

### Loans and Investments

As of the writing of this report, SDF has committed nearly all of its remaining available capital. In these very difficult financial times, there is a critical need for predictable access to capital for clean energy and energy efficiency projects. Institutional lenders are no longer lending or when they do lend, it is on terms that incorporate very high risk premiums. Projects that were feasible and ready to go six months ago can no longer obtain financing on commercially reasonable terms, if at all. Many entities have no ability to take advantage of the grants, rebates or tax credits that may be available for clean energy projects since they are unable to finance the balance of the project costs. With this in mind, The Reinvestment Fund (TRF), which manages the SDF, is working diligently to raise additional capital for clean energy and energy efficiency financing.

Against this backdrop, SDF approved \$3,887,627 in ten new loans for new energy projects in 2008. The total project budgets of these ten financing transactions are \$43,200,335. These projects are shown on the table below:

Borrower	Purpose	Loan Amount	Total Project Budget
New Life Affordable Housing II, LP	Financing for high-performance energy measures (lighting, air conditioning, windows, etc.) for 39-unit affordable housing project	\$300,000	\$9,637,866
1260 HDC - Northeast I (Keystone)	Financing for high-performance energy measures for 23-unit affordable housing project	\$939,364	\$4,617,627
1260 HDC - Northeast II (Ditman)	Financing for high-performance energy measures for 34-unit affordable housing project	\$824,696	\$6,795,380
The Fresh Grocer - La Salle	Financing of high-efficiency micro- turbine generators and other energy efficiency measures for independently owned new supermarket	\$1,000,000	\$14,393,700
Philadelphia Folklore Project	Finance energy efficiency measures for neighborhood cultural arts organization	\$8,014	\$169,000
Reform Congregation of Keneseth Israel	Finance energy efficiency measures (lighting upgrades) for neighborhood congregation	\$40,484	\$94,117
Germantown Jewish Centre	Finance energy efficiency measures (HVAC system) for multi-use facility	\$316,701	\$734,000
Smart Energy Solutions, Inc.	Finance energy efficiency measures (Energy Star windows, insulation, white roof) for energy services company's warehouse	\$21,193	\$120,000
The Quaker School - Horsham	Finance energy efficiency measures (Energy Star windows/doors, lighting, insulation, white roof) for K-8 school for students with learning disabilities	\$237,175	\$3,785,775
Center for Student Learning at Pennsbury	Finance energy efficiency measures for a charter school serving at-risk students in lower Bucks County	\$200,000	\$2,852,870

### **Core Grants**

In 2008, the SDF Board approved four new core grants. The total of the grants approved was \$51,918 and the total value of the projects supported by these grants was approximately \$294,307. The core grants approved in 2008 are shown on the following table:

Grantee	Purpose	Grant Amount	Total Project Budget
Farm School at Snipes	Support for the installation of a 5.25 kW solar PV system at an environmental and agricultural education center	\$16,418	\$45,841
Pennsylvania Environmental Council	Support to prepare a professional video of the 2008 Philadelphia Sustainability Awards	\$3,000	\$12,466
Rushforth Solar	Support to write-down the installation costs of three or four large solar domestic hot water (DHW) systems in apartment buildings	\$25,000	\$136,000
Citizen's for Pennsylvania's Future	Support for the public conferences of PennFuture's Center for Energy, Enterprise and the Environment	\$7,500	\$100,000

At the SDF Board meeting on June 24, 2008, the SDF Board decided to suspend the core grant program until such time as the Board determines that SDF income from loans and investment justifies resumption of the core grants. This decision was reaffirmed at the SDF annual meeting on December 16, 2008 in the approval of the 2009 Annual Program Plan.

As of December 31, 2008, SDF had paid \$1,277,852 to its core grantees and had made a budget adjustment of (\$328,635) to the core grant program budget to reflect the four unexecuted agreements and the grants coming in under budget. At the close of 2008 there were seven open core grants with an unexpended balance of \$155,871.

### **The PECO-UNICOM Merger Programs**

### The Pennsylvania Wind Development Program

In the 2000 settlement of the PECO-Unicom merger proceeding, SDF received \$12 million for the purpose of developing new Pennsylvania wind projects. SDF has committed its wind funding in three categories of wind energy projects as shown in the table on the following page. Except for \$213,466 that SDF has available for a second community wind project (and the outside consultants to review the

proposals), all of the wind funding has been committed and all but \$406,907 (for two community wind projects) has been paid to operating wind projects.

	Total \$			
Туре	Committed	Total \$ Paid	Balance	Uncommitted
Utility-Scale Wind Farms	\$11,500,000	\$11,500,000	\$0	\$0
Community Wind	\$193,441	\$0	\$193,441	\$210,966
Small-Scale Wind	\$75,000	\$75,000	\$0	\$0
Project Review	\$18,093	\$18,093	\$0	\$2,500
TOTALS	\$11,786,534	\$11,593,093	\$193,441	\$213,466

In 2008 there were seven utility-scale wind farms operating in Pennsylvania that had received financial support from SDF.

	Size	Annual Output	SDF Grant
Project	(MW)	(MWh)	Amount
Mill Run	15	38,938	\$1,000,000
Somerset	9	20,404	\$1,000,000
Waymart	64.5	150,445	\$3,250,000
Meyersdale	30	81,243	\$2,500,000
Bear Creek	24	71,173	\$2,000,000
Casselman	34.5	93,819	\$1,000,000
Allegheny Ridge	80	217,248	\$750,000
TOTALS	257.0	673,270	\$11,500,000

As of December 31, 2008, all seven wind projects had fully earned their SDF wind energy production incentives.

### **Community Wind**

SDF defines community wind projects as locally-owned wind projects that use utility-scale wind turbines with a nameplate generating capacity between 500 kW and 10 MW. SDF sees an important market niche for these projects and is committed to help at least two community wind projects come on line in Pennsylvania.

In 2007, SDF executed a wind energy production incentive agreement with PennFuture Enterprises on behalf of the City of Hazleton in the amount of \$193,441 to support the construction of a 600 kW community wind project that will provide 75% of the electricity consumption of Hazleton's wastewater treatment facility. The project experienced problems in 2008 with the availability of a wind turbine and the increased costs of capital projects, but has resolved the turbine issue and received a grant from the Pennsylvania Energy Harvest program, so the turbine is scheduled to come on line in 2009.

SDF had planned to issue a second community wind solicitation in 2008 to identify a second community wind project, but held off because of the uncertainty in the wind market. SDF now plans to issue this RFP in 2009 and has reserved up to \$210,966 for this solicitation and \$2,500 for the technical consultants to assist with the application reviews.

### Small Wind

SDF's Small Wind program consisted of financial support in 2008 to the Pennsylvania Department of Conservation and Natural Resources (DCNR) for the installation of six 10 kW wind turbines at six state parks as part of DCNR's Sustainable Energy Demonstration and Exhibit at State Parks program. The six turbines are located at Presque Isle State Park, Prince Gallitzin State Park, Promised Land State Park, Pymatuning State Park, Tuscarora State Park and Yellow Creek State Park. The SDF grant for these installations was \$75,000.

### The Solar Photovoltaic Grant Program

### The Solar PV Grant Program

In the 2000 settlement of the PECO-Unicom merger proceeding, SDF received \$4 million for the purpose of supporting solar photovoltaic installations in Pennsylvania. A grant from the Pennsylvania Energy Development Authority to SDF in the amount of \$701,366 and proceeds from the Solar REC sales (see sub-section B(2) below) increased the PV program budget to \$4,772,370.

	Total \$ Committed	Total \$ Paid	Balance	Uncommitted
Solar PV Grants	\$3,918,212	\$3,252,153	\$666,060	\$220,821
Program Administration, Installer Training, Education and Coordination	\$603,337	\$586,670	\$16,667	\$30,000
TOTALS	\$4,521,549	\$3,838,823	\$682,727	\$250,821

	Approved Systems	Installed Systems
Number of Systems	229	208
Total Capacity	910 kW	846 kW
Estimated Annual Production	989 MWH	918 MWH

The total value of the approved solar PV systems supported by the SDF program is \$8,113,308. As of the end of 2008, SDF had approximately \$250,821 in uncommitted funding for the PV program. These funds will be committed in early 2009 between new PV funding and the necessary extension of the program administrator's contract.

### Registering and Selling Solar Renewable Energy Certificates

SDF has continued its work registering and trading Solar Renewable Energy Certificates (SRECs) on the PJM Generation Attributes Tracking System (GATS). As of December 31, 2008, SDF had registered a total of 1,045 SRECs on GATS, of which 446 were registered in 2008. SDF has also entered in eight sales agreements for a total of 472 SRECs, earning \$105,276 after commissions. The SREC proceeds are shared 50/50 with many of the system owners and SDF's shares are dedicated to the Solar PV Grant Program. As of December 31, 2008, SDF had distributed a total of \$34,272 to the system owners and \$71,004 to the SDF solar program. SDF currently has 573 SRECs in its GATS account available for sale and will be looking for buyers in 2009.

### The Renewable Energy Public Education Program

In the 2000 settlement of the PECO-Unicom merger proceeding, SDF received \$2.5 million for public education about renewable energy. Since 2001, SDF has operated a public education program that has involved 42 separate grant agreements for a wide variety of activities. As of December 31, 2008, there were only two grants with an open balance: the Energy Coordinating Agency of Philadelphia's energy education project and the solar display project.

	Total \$ Committed	Total \$ Paid	Balance	Uncommitted
Education Grants and Contracts	\$2,320,086	\$2,275,268	\$44,818	\$2,750
Coordination and Evaluation	\$177,164	\$171,064	\$6,100	\$0
TOTALS	\$2,497,250	\$2,446,332	\$50,918	\$2,750

The Pennsylvania Clean Energy Communities Campaign is continuing under the management and funding of SmartPower. The campaign's website is <a href="http://communities.trfund.com/">http://communities.trfund.com/</a>. As of December 31, 2008, twelve local communities have completed all of the requirements to become a Clean Energy Community and have earned a free 1.26 kW solar PV system. The twelve Pennsylvania Clean Energy Communities are Abington Township, Cheltenham Township, East Bradford Township, Jenkintown Borough, Lower Makefield Township, Middletown Township, Nether Providence Township, Swarthmore Borough, Tredyffrin Township, Upper Dublin Township, Upper Makefield Township and West Vincent Township. SDF is working with two solar installers to install 1.26 kW solar PV systems in these communities. SmartPower is working with the remaining communities to help them get the needed number of new customers so they qualify for the free 1.26 PV system. As of the end of 2008, SDF had \$2,750 in uncommitted funds in the public education program.

### **Organizational Issues**

### **Board Membership**

The SDF board is comprised of seven members, whose two-year terms are staggered so that the terms of approximately equal number of directors end each year. Current board members may serve two consecutive full terms. The four board members whose terms expired on December 21, 2008 were Charlotte Arnold, Baird Brown, Randolph Haines and Richard Webster. The Nominations Committee interviewed all of the nominees and made a report to the SDF Board at the Annual Meeting on December 16, 2008, at which time the Board unanimously elected the following four individuals to the Board:

- Tom Balderston
- Kurt Bresser
- Baird Brown
- Frank Jiruska

The SDF Board members for 2009 are as follows:

- Tom Balderston, Mid-Atlantic Capital Alliance
- Baird Brown, Attorney
- Kurt Bresser, Energy Manager, Temple University
- Mark Deitcher, Project Financing Specialist
- Frank Jiruska, PECO
- Alber Koening, Clean Energy Technology Consultant/Entrepreneur
- Muscoe Martin, Green Building Architect

The SDF Board met four times during this reporting period.

### **Financial Report**

As of December 21, 2006, SDF no longer receives funds from PECO ratepayers. SDF's unaudited financial statements for the twelve-month period ending December 31, 2008 show total income of \$473,219 for the period. Operating expenses for the 12-month period totaled \$473,525, resulting in a breakeven net income of -\$306 for the 12-month period. On December 31, 2008, SDF held funds in two accounts pending disbursement of its loans, investments, grants and operations: \$2,026,238 was held in SDF's Sweep/Liquidity investment account and \$3,878,480 was held in SDF's Limited Maturity investment account. Outstanding loans, energy performance contract leases receivable and outstanding investments in portfolio companies at December 31, 2008 totaled \$4,251,850; an additional \$1,595,000 in loans and investments were closed awaiting disbursement at the end of 2008. SDF's liabilities at December 31, 2008 totaled \$267,177 and were comprised of general accounts payable and accrued expenses of \$74,624, grants payable of \$191,553 and an escrow payable of \$1,000.

Audited financial statement for the year ending June 30, 2008, is available upon request by contacting Robert Sanders, Fund Manager, Sustainable Development Fund, The Reinvestment Fund, 718 Arch Street, Suite 300 North, Philadelphia, PA 19106-1591.

### **Sustainable Energy Fund**

(PPL Service Territory)

http://www.thesef.org

### **Introduction and Highlights**

SEF was formed pursuant to a joint settlement agreement arising from the Pennsylvania Public Utility Commission's electric utility deregulation proceedings in 1998. SEF operates in an entrepreneurial manner as a financially independent and self-sustaining private non-profit enterprise, fully incorporated as a 501(c)(3) organization for charitable, educational and scientific purposes. SEF is led by a President who reports to a seven member Board of Directors.

The organization seeks out, focuses on and invests in economically viable, energy related businesses, projects and education initiatives that create innovative, market-based technologies and solutions to enable environmentally sound sustainable energy use in the Commonwealth of Pennsylvania.

SEF assists all types of commercial entities including small businesses, municipalities, school districts, non-profits, farmers, manufacturing facilities, warehouses and transportation companies to reduce the consumption of energy from non-sustainable sources. These reductions are achieved by reducing or removing financial and/or educational barriers that prevent these organizations from generating energy from renewable resources and implementing improvements in efficiency of energy utilization as well as reducing energy consumption through behavioral change. Traditional financial barriers are overcome by SEF's innovative and flexible loan, leasing and equity programs as well as experienced and knowledgeable staff. SEF's education and outreach programs improve the knowledge of educators and students as well as business owners and residential energy users.

### Focus areas include:

- Renewable Energy-Energy generated from naturally-replenished resources such as sunlight, wind, hydro and geothermal as well as rapidly renewable biomass.
- Energy Efficiency Measures-Measures that provide the same benefit while consuming less energy such as envelope insulation, LED lighting and efficient motors.
- Energy Conservation-Activities that reduce energy usage by changing behavior.

### **Continuing Educational Initiatives**

SEF funds a variety of educational initiatives that raise public awareness of sustainable energy as well as provide intense topic specific training for energy users and educators. This year saw the continued expansion of SEF's award winning Solar Scholars ® Program, continuation of its CFL Education Program

and a plethora of activities designed to increase public awareness of energy related topics throughout Pennsylvania.

### Solar Scholars®

SEF's Solar Scholars® program is a first-in-the-nation solar education initiative that promotes the adoption and integration of renewable energy concepts and technologies into the curriculum of colleges and universities throughout Pennsylvania.

The goals of the Solar Scholars® Program are to seed the adoption and integration of renewable energy concepts and technologies into an on-going curriculum of schools that currently do not have renewable energy or sustainability programs and to expand and enrich existing renewable energy or sustainability college programs.

The Class of 2008 consisted of 83 professors and students representing 31 of Pennsylvania's institutions of higher learning. SEF provided each attendee with a scholarship that covered all costs except transportation to and from the conference in exchange for agreeing to integrate sustainable energy into their institution's curricula. This year's week-long intensive training conference was hosted at Dickinson College from July 27<sup>th</sup> to August 1<sup>st</sup>. The week's training included both theoretical and hands-on training which centered on solar photovoltaic technology and included sessions on photovoltaic (PV) science and manufacturing, system design and installation, marketing and financing of current technologies, other renewable energy technologies, electric industry power production utilities and the grid.

Following the conference, each college was eligible to compete for one of twelve \$15,000 grants toward the installation of an on-campus photovoltaic system that has a minimum capacity of 3 kilowatts. The grants were awarded to:

- Dickinson College
- Elizabethtown College
- Franklin & Marshall College
- HACC Harrisburg
- Lycoming College
- Muhlenberg College
- Northampton Community College
- Penn College of Technology
- Penn State Hazleton
- Penn State Schuylkill
- Thaddeus Stevens College
- University of Scranton

During the 2008/2009 year, grant recipients worked on the design, the location and the installation of the array. All schools are anticipated to have their solar systems commissioned by the end of 2009.

### CFL Program

SEF's CFL program utilized the differences between incandescent and compact fluorescent light bulbs to develop an understanding of electric generation and energy efficiency in middle and high school students. SEF provides teachers with the SEF developed "Investigation CFLs and Incandescent Bulbs" curriculum unit that includes lesson plans, hands-on activities and resource pages as well as training on how to implement the curriculum. The curriculum and training are provided free for teachers and the curriculum is available for free download on SEF's website at http://www.thesef.org.

SEF showcased the program and materials at the 2008 PA Science Teachers Annual convention. SEF presented the lesson plans and provided hands-on training demonstrating the difference in efficiency and amount of heat loss of the CFL bulb when compared to the incandescent bulb.

Regional school districts were notified of the CFL program via the science coordinators to promote the CFL lesson plans and SEF's CFL fundraising program.

### **Educational Outreach**

The purpose of SEF's education outreach is to equip Pennsylvania's energy users with the knowledge necessary to make fact-based energy decisions that include the long term environmental and resource impacts of various energy sources. The report titled "Energy Learning Curve" notes that more than 50% of Americans cannot name at least one renewable energy source, 39% cannot name at least one fossil fuel and 32% believe that electricity generated by solar PV contributes to global warming. Pennsylvanians were further challenged by a rapidly changing landscape brought about by significant legislative and regulatory changes.

To meet this increasing challenge, SEF created a series of new seminars on a variety of topics including but not limited to, the Alternative Energy Investment Act, How to Finance Energy Projects and Carbon Reduction Management, among others. These seminars are provided for free to a wide audience including students, residential and commercial energy users dispersed geographically throughout Eastern and Central Pennsylvania.

In addition, SEF created seminars to develop the skills of front-line employees, managers and owners of energy-related companies. In December 2008, SEF initiated its first Finance 101 Class which helps energy industry participants develop a basic knowledge of financial terms, financial instruments, financial concepts, credit and underwriting, as well as how to overcome barriers in the sale of energy efficiency and renewable energy projects. The first training was attended by thirteen entities, including economic developers, energy efficiency contractors and renewable energy contractors. The attendees left the seminar with insight into how they can help their customers reduce energy costs in this tough economic environment.

### **Program-Related Investments**

### Small Business Lighting Retrofit Rebate Program

SEF and PPL partnered together to design and implement a rebate program that gives small businesses up to \$2,000 to help replace old or inefficient lighting with new energy efficient technology. An increased number of companies are interested in saving energy, reducing their energy bills and protecting the environment. This program provided a rebate to financially subsidize the lighting improvements now while providing long-lasting energy savings.

The program is for small businesses with less than 100 employees and 25,000 square feet, that are in good standing with PPL and have a desire to replace all inefficient lighting with Energy Star Products.

The program launched in July 2008 and over the year 131 were received. The approved projects saved more than 790MWh of energy annually and reduced electric bills by almost \$80,000. As a result of the rebate program, small businesses implemented almost \$300,000 in lighting projects.

### Commercial Energy Efficient Financing Program (CEEF)

Given the present economic conditions, businesses have concern of increasing debt to pay for energy efficient projects. SEF developed a commercial energy efficient financing program where the costs of the energy efficient projects are paid back with the energy savings. With the CEEF loan there is no increase in the operating costs and no up-front out of pocket expenses.

### **Energy Efficient Projects**

- George F. Kempf Supply Company, Inc. is a family-owned and operated business which sells building materials and supplies to contractors and sub-contractors who are primarily located in Pennsylvania, New Jersey and Delaware. The company's projects include drywall, metal studs, ceiling tiles, sheetrock and grid insulation along with 10,000 building material projects. George F. Kempf Supply Company upgraded the lighting system at the company's Philadelphia headquarters and 206,000 sq. ft. warehouse operation in West Philadelphia. These upgrades, costing \$147,288, have a projected annual energy reduction of 549,378 kWh, translating to an annual savings of \$69,000.
- <u>Jewish Home of Greater Harrisburg</u> is a non-profit 501(c)(3) corporation organized in July of 1965 for the purpose of establishing and maintaining a home for the aged and infirmed and to provide shelter and healthcare services in Harrisburg, Pennsylvania. The home consists of a 138-bed skilled nursing facility and a 64-bed assisted living facility. Jewish Home used the \$224,000 loan proceeds to weather-strip doors, seal air leaks above the acoustical ceiling tiles and redo the domestic hot water systems in both the assisted living and skilled nursing facilities. Annual energy savings for the hot water and weatherization projects are estimated to be \$25,666.
- Mt. Joy Wire is a company that manufactures and sells a variety of low and high carbon steel wire products, stainless steel and plated wire products and specializes in applications such as plating, tempering and crimping of wire. After an in-depth energy audit on Mt. Joy's

headquarters building in Lancaster County, Mt. Joy Wire decided to upgrade their lighting at a cost of \$162,333 for projected annual savings of \$63,089 based on 2009 rates.

# Renewable Energy Financing Program (REF)

During the last half of 2008, significant legislative action was taken at both the State and Federal level which SEF believed would result in a surge of renewable energy installation in 2009. In anticipation of this surge, SEF developed the Renewable Energy Finance Program. Many of these projects required specialized short-term financing to cover rebates as well as project financing.

Leases, Loans, Investments, Grants and Rebates						
Entity	Amount of SEF Funding	Total Project Amount	Kilowatt- hours generated per year	Kilowatt- hours saved per year	Greenhouse Gases Saved (metric tons per year)	
George F. Kemp Supply	\$147,250	\$147,250		549,378	285.4	
Jewish Home of Greater Harrisburg	\$203,950	\$203,950		23,014	12.7	
Mt. Joy Wire	\$162,333	\$162,333		1,371,508	712.5	
Small Business Lighting Retrofit Rebates	\$18,366	\$288,234		794,106	412.7	
Dickinson College	\$15,000	\$30,030	3,819		2.0	
Elizabethtown College	\$15,000	\$24,500	3,646		1.9	
Franklin & Marshall College	\$15,000	\$28,500	3,553		1.8	
HACC Harrisburg	\$15,000	\$23,168	3,742		1.9	
Lycoming College	\$15,000	\$21,000	3,314		1.7	
Muhlenberg College	\$15,000	\$51,556	3,553		1.8	
Northampton Community College	\$15,000	\$29,080	3,553		1.8	
Penn College of Technology	\$15,000	\$26,800	3,314		1.7	
Penn State Hazleton	\$15,000	\$31,000	3,553		1.8	
Penn State Schuylkill	\$15,000	\$25,700	5,341		2.8	
Thaddeus Stevens College	\$15,000	\$29,129	3,580		1.9	
University of Scranton	\$15,000	\$38,980	3,314		1.7	
TOTALS	\$711,899	\$1,161,210	44,282	2,738,006	1,446.1	

### **Green Connexions**

Green Connexions, Inc. is a for-profit C corporation owned by SEF organization. The mission of Green Connexions is to provide products and services through renewable energy and energy efficiency business ventures. Profits from Green Connexions are used in support of SEF to help sustain its mission. Green Connexions continues to develop opportunities in the renewable energy and energy conservation business sectors.

### **Board Activities**

The SEF Board of Directors consists of seven members, whose three-year terms are staggered so the terms of approximately one-third of the members end each year. Current members can run for reelection. During the SEF Annual Meeting, Andrew Stein replaced Gary Lamont as Chairman of the SEF Board and Eric Epstein replaced Dennis Maloskey as Vice Chairman. The SEF Board of Directors consists of:

- Andrew Stein, Chairman
- Eric Epstein, Vice Chariman
- Alan A. Roman, Secretary & Treasurer
- Gary Lamont, Director
- G. Scott Paterno, Director
- Fr. John Ryan, Director
- Robert J. Davis, Director

### **Financial Report**

As of December 31, 2006, SEF no longer receives funding from the PPL ratepayers. SEF is funded via the program-related investments and the endowment fund.

For the year ending December 31, 2008, SEF's internal financial statements show total income of \$1,535,023 and total expenses of \$1,500,878. Unrealized Gains/Losses were \$5,537,127 for a consolidated net loss of \$5,393,206. The Balance Sheet reports assets at \$18,512,214 and liabilities at \$118,404. Included in assets are program related investments of \$4,857,583.

Audited financial statements for the year ending June 30, 2008 are available upon request by contacting Lynne Puzio, Accounting Associate, Sustainable Energy Fund, 968 Postal Road Suite 315, Allentown, PA, 18109.

### West Penn Power Sustainable Energy Fund, Inc.

(West Penn Power Service Territory)

http://www.wppsef.org/

### **Introduction and Highlights**

In 2008, the West Penn Power Sustainable Energy Fund (WPP SEF) entered its seventh 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 2008, the WPP SEF Board approved \$4,953,240 to co-fund 17 funding requests. Key accomplishments in 2008 include:

**Investing in clean energy**. The WPP SEF committed \$2,000,000 to support Solar Power Industries (SPI) plant expansion to manufacture solar PV modules and panels in Pennsylvania. This strategic investment in "made-in-PA" solar PV will assist the Commonwealth to significantly increase the amount of installed solar PV and for the expansion of SPI workforce and manufacturing in western Pennsylvania.

**Investing in energy efficiency**. The WPP SEF expanded its investment in the PA Home Energy program by allocating up to \$1,500,000 to the program in 2008. PA Home Energy is focused on establishing ENERGY STAR residential building programs in Pennsylvania. PA Home Energy uses ENERGY STAR Qualified Homes for new home construction and Home Performance with ENERGY STAR to service existing housing stock. This investment provides support for workforce development, contractor and homeowners incentives, public outreach and marketing, administrative infrastructure, and a robust, quality assurance program.

In addition to PA Home Energy, a single-family residential program, the WPP SEF is working with the PA Housing Finance Agency to conduct comprehensive energy audits and energy improvements in incomequalified, multi-family housing complexes. The WPP SEF has committed \$157,000 to assist with workforce development (trained to BPI Multi-Family standards) and to defray the cost of the energy audits.

**Investing in education and public outreach.** In 2008, the WPP SEF made a commitment to support the Pennsylvania entry (Penn State) in the 2009 DOE Solar Decathlon which will be held in the Fall 2009. Other key commitments included providing support to the 2011 PA Clean Energy Expo, the establishment of the community energy event request for proposals (RFP) to spur community-based clean energy events, and the continued duplication and dispersal of the residential ENERGY@Home DVD which now has been distributed to over 10,000 Pennsylvania residents.

The WPP SEF has strived to maintain a balance of funding to support clean energy generation, energy efficiency and conservation, and public education/outreach. In all three of these categories, the WPP SEF seeks to support job growth whenever possible.

# **Financial Approvals**

The WPP SEF financial approvals in 2008 can be broken down into the following categories: loans, strategic initiatives developed by the WPP SEF and grants (includes grants, sponsorships, memberships).

### Loans

Business	Amount	Comments
AFC First Financial	\$500,000	Provided funding to support PA-based residential energy
		efficiency improvements.
Elk Regional Health Center	\$69,000	Funding to expand biomass boiler system to provide heat/
		hot water to adjacent senior health care facility.
Solar Power Industries	\$2,000,000	Funding provided to expand Solar Power Industries solar
		PV manufacturing facility.
Frontier Energy Systems	\$200,000	Funding provided to expand Frontier Energy Systems
		industrial motor energy efficiency technology.
Investment Total	\$2,769,000	

# **Strategic Initiatives**

Business	Amount	Comments
PA Home Energy	\$1,500,000	WPPSEF is deploying ENERGY STAR construction programs that utilize a comprehensive whole house approach to improve residential energy efficiency (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 contractor & homeowner incentives for a limited time.
2011 PA Clean Energy Expo	\$325,000	The WPPSEF is anticipating hosting the 2011 PA Clean Energy Expo which will be held at Penn State's Bryce Jordan Center.
ENERGY@Home	\$8,340	The WPPSEF will duplicate and disperse 5,000 additional copies of the ENERGY@Home DVD.
Infrared Thermography	\$17,400	The WPPSEF purchased an infrared camera to demonstrate how they can be used to evaluate the thermal envelope of a home. The camera will be used in support of the PA Home Energy program.
Community Energy Events	\$37,500	The WPPSEF seeks to facilitate community-based energy efficiency events that promote the use of clean energy and energy conservation. This funding commitment is an open RFP.
Total Strategic Initiatives	\$1,888,240	

# **Grants/ Memberships/ Sponsorships**

Business	Amount	Comments
2009 Solar Decathlon	\$85,000	The WPP SEF committed to provide up to \$85,000 to support the Penn State solar home entry in the 2009 DOE Solar Decathlon.
Multi-Family Energy Audits- PA Housing Finance Agency	\$150,000	To support diagnostic energy audits in multifamily housing units within the WPP service region. The commitment will support up to 30 multi-family units.
Clarion University - Natural Gas Combined Heat & Power	\$21,000	To support a residential-scale natural gas combined heat & power demonstration.
Multi-Family Energy Audit Training- PA Housing Finance Agency	\$7,000	To support the multi-family energy audit training program so that PHFA could launch a statewide multi-family renovate & repair program.
Westmoreland Community Action	\$15,000	Installation of 2 solar hot water systems on ENERGY STAR Qualified Homes in the South Sixth Street Jeanette Project.
2008 Energy from Biomass & Waste Expo	\$6,000	Support for a biomass conference and expo.
Penn State Wind Conference	\$5,000	Statewide PA wind conference sponsorship.
PA Fuels for Schools- Endless Mountains	\$7,000	Meeting sponsorships for schools, institutions, commercial & industrial wishing to explore the use of biomass-fueled heating & power systems.
Grants/Memberships/ Sponsorship Total	\$296,000	

### **WPP SEF Administration**

The WPP SEF 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 and external nomination process. The WPP SEF Board reviews all applicants and then submits their recommendation to the Commission for final approval. All of the board members serve on a volunteer basis. The WPP SEF Board of Directors as of December 31, 2008 was:

- Michele Ponchione, President
  - o World Kitchen
- Cassandra Robinson, Vice President
  - o Allegheny Power
- Rob Hosken, Secretary
  - o Building Performance Architecture
- Pat O'Brien, Treasurer
  - First Federal Bank of Monessen
- John Walliser
  - o Pennsylvania Environmental Council
- Jim Stark
  - Fayette County Community Action Agency

In February 2008, the WPP SEF Board approved the nomination of Mr. John Walliser to serve on the WPP SEF Board. In June 2008, Mr. Ed Johnstonbaugh submitted a letter of resignation to the WPP SEF Board and it was accepted. As of December 31, 2008 the WPP SEF had 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 WPP SEF 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, 2008, was:

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

### **WPP SEF Board Meetings**

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

In 2008, the WPP SEF Board of Directors met on:

February 15 (Greensburg, PA)
April 3 (Greensburg,, PA)
June 19 (Greensburg, PA)
August 14 (Rector, PA)
October 9 (Greensburg, PA)
November 14 (Farmington, PA)
December 11 (Charleroi, PA)

### **WPP SEF Website**

The WPP SEF website is updated throughout the calendar year as new projects are funded and programs developed. The WPP SEF website is at <a href="http://www.wppsef.org">http://www.wppsef.org</a>.

### WPP SEF Logo Redesign

The WPP SEF logo was redesigned in the summer of 2008 and the new design was approved on November 14, 2008. The use of the new logo will go into effect in January 2009.

### **Planned 2009 Activities**

The WPP SEF will focus on two broad categories in the 2009 timeframe. They are:

**Bioenergy.** The WPP SEF will continue to seek out projects that use Pennsylvania indigenous biomass resources for the production of clean power/heat generation. The WPP SEF will expand its efforts to seek out investment opportunities in residential, commercial, and light industrial applications for bioenergy.

**Energy Efficiency.** The WPP SEF will continue to work on laying a solid foundation for the PA Home Energy program in 2009. The WPP SEF will work with AFC First Financial and the Pennsylvania Finance Housing Agency to develop and expand their residential energy efficiency programs. In addition, the WPPSEF will explore how its energy efficiency programs can be expanded to include the commercial and light industrial sectors.

During the Fall 2009, the WPP SEF will have its annual strategic planning meeting for the 2010-2011 timeframe.