

**THE PENNSYLVANIA ENERGY DEVELOPMENT  
AUTHORITY**

**ANNUAL REPORT**

**JULY 1, 2010 – JUNE 30, 2011**



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL PROTECTION

**Pennsylvania Energy Development Authority  
Board as of July 1, 2011**

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**Hon. Edwin B. Erickson**  
Pennsylvania Senate

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North Branch Energy, Inc.

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**Laureen M. Boles**  
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**Romulo L. Diaz, Jr.**  
VP, Govt. & External Affairs  
PECO Energy Company

**Hon. George Greig**  
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**Sarah Hetznecker**  
Conergy Projects

**Bernie Lynch**  
Strategic Development Solutions LLC

**Consumer Advocate's Designee:**  
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Office of Consumer Advocate

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Secretary of Banking

**Hon. C. Allan Walker**  
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IBEW Third District

**Staff**

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Executive Director

**Anthony Adusei**  
Energy Program Specialist

**Angela Rothrock**  
Administrative Assistant

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Board as of July 1, 2010**

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**Bernie Lynch**

Strategic Development Solutions

LLC

**Staff**

**Thomas Bell**  
Executive Director

**Becky Campbell**  
Energy Program Specialist

**Angela Rothrock**  
Administrative Assistant

## **Introduction**

This annual report covers the operations of the Pennsylvania Energy Development Authority (PEDA) for the period July 1, 2010, to June 30, 2011. This year saw the awarding of more than \$17.6 million in competitive grants to 37 clean energy projects, as well as the opening of its eighth competitive financing round. PEDA also entered into grant agreements with successful project applicants, continued to oversee the implementation of existing PEDA projects and received new ARRA funding in 2010.

## **Background**

PEDA was created by the Energy Development Authority and Emergency Powers Act of 1982. It is a public corporation governed by a 19-member Board of Directors and managed by an executive director and staff. PEDA became active when its first Board of Directors was confirmed on June 26, 1984, and it remained active until 1995. After a period of dormancy, on April 8, 2004, Executive Order 2004-5 was issued revitalizing PEDA and transferring it to the Department of Environmental Protection, which now provides staffing for the authority.

PEDA's mission is to promote the development and use of Pennsylvania's clean, indigenous energy resources and to stimulate economic development and job creation in Pennsylvania's growing energy sector in an environmentally beneficial manner.

## **Accomplishments in the 2010-11 Fiscal Year**

During the past fiscal year, PEDA funded innovative clean energy projects, helped recruit new clean energy companies to Pennsylvania, awarded some of Pennsylvania's first American Recovery and Reinvestment Act (ARRA) of 2009 energy funding, and worked on energy policy issues for the Commonwealth.

At its August 27, 2010, meeting, the PEDA board approved one fiscal year 2010 PEDA solicitation. PEDA accepted applications for the solicitation from April 30 to June 15, 2010. The solicitation consisted of \$20.5 million of funding for clean, alternative energy projects of all kinds. There were three funding sources for this solicitation including: \$5 million in ARRA funding, \$13 million in Growing Greener II (GGII) funding and \$2.5 million from the Duquesne Light settlement. The board awarded funding on August 27, 2010 in the amount of \$16.4 million to 35 projects.

The grants awarded included \$3.5 million to 6 projects from the federal American Recovery and Reinvestment Act, \$10.8 million to 21 projects for Growing Greener II and \$2 million to 8 projects from the Duquesne Light settlement. The public funding leveraged over \$200 million in private matching funds.

At its September 22, 2010, meeting, the PEDA board approved and awarded a second solicitation of \$1.2 million from ARRA and GGII funds left over from the August 27, 2010, round. Two projects were selected.

The projects will produce or save 10 billion kilowatt hours of electricity over their lifetimes, or 833 million kilowatt hours per year. These projects will create 1,400 permanent green jobs. The total lifetime CO<sub>2</sub> reduction is 8.9 million tons. These 37 projects will produce annually enough kWh to provide the entire annual power consumption of approximately 83,300 PA homes.

During the 2010-11 fiscal year, PEDAs continued to work with the state Department of Community and Economic Development (DCED) to administer the two outstanding PEDAs loans. Principal and income repayments of approximately \$217,317.10 attributable to the loans are detailed in the financial information in Appendix B.

Additional activities undertaken by PEDAs's board and staff during the 2010-11 fiscal year included continuing to administer projects PEDAs has funded through both Growing Greener II and the American Recovery and Reinvestment Act of 2009 (ARRA). PEDAs also prepared new guidelines for the eighth round of financing, reviewed and evaluated the new projects that have been presented and worked with the Office of Energy and Technology Deployment and the Office of Community Revitalization and Local Government Support to recruit clean, advanced energy companies to locate in Pennsylvania.

## **Financial Report**

As of June 30, 2011, the Energy Development Fund contained a total of \$9,099,632.50 in funds. The funds include designated administrative funds, revenue from interest on securities, repayments of loan principal and interest and application fees. Financial information for the Energy Development Fund is described in Unreserved Fund Balance, attached as Appendix B, and a Balance Sheet, attached as Appendix C.

As noted above, Growing Greener II provides PEDAs with up to \$10 million annually. Those funds are a part of the Commonwealth's general obligation bond issuances. As such, the funds are not deposited directly into the Energy Development Fund, but are maintained by the Governor's Office of Budget as a part of the larger fund containing other general obligation bond proceeds. PEDAs grantees are paid from this larger fund. A statement of commitments and expenditures for PEDAs's allocation of Growing Greener II funding is attached as Appendix D.

Financial information for the Duquesne Light Settlement Fund is described in Appendix E.

## **Activities Going Forward**

PEDAs announced a new financing solicitation of \$5.3 million that opened April 30, 2011, and closed June 15, 2011. This funding consists of \$3.9 million GGII, \$577,000 ARRA and \$741,000 Duquesne Light Settlement funds. PEDAs will review proposed clean energy projects from the 2010 solicitation. PEDAs will also investigate possible additional

sources of funding for the Authority and continue to work with the DEP (Office of Energy and Technology Deployment) on energy policy development.

## **Conclusion**

PEDA continues to work with Governor Tom Corbett, the legislature and the private sector to help finance innovative clean energy projects and companies and to promote clean energy in Pennsylvania. In the coming year, PEDA's board and staff look forward to continuing to foster growth in this exciting area of the economy.



**Appendix A**  
**2010 PEDA August Project List ARRA**

<u>Grantee/Project</u>	<u>Project Type</u>	<u>County</u>	<u>Amount</u>
<p><b>Quanta Technologies Inc.</b>            Development of next generation Insulating Glass System (IGS) product targeted to the Mass Market Consumer and Historic Homes and Buildings Segments. The company currently markets an IGS to the Low Income Weatherization Segment. This development will broaden the product line, allowing greater penetration of this energy savings technology in the region. A 16.5% market penetration in the Mid-Atlantic Region (over a 10 year period) would result in consumer energy savings of \$660 million per year.</p>	Energy Efficiency and Distributed Generation	Lancaster	\$500,000
<p><b>Albright College</b>            The project will consist of installation of a 1 MW combustion turbine which will include a waste heat recovery boiler. The system will allow for the on-site production of power combined with the recovery of waste heat for use on site, as well. This will effectively utilize 80% of the energy in the fuel (in contrast to utility generation which only can utilize 35% of the fuels energy). As such, this will reduce the carbon footprint of the facility by approximately 43%.</p>	Energy Efficiency and Distributed Generation	Berks	\$846,000
<p><b>Piney Creek Limited Partnership</b>            The Piney Creek Limited Partnership Power Plant plans to co-fire (supplement) a portion of their waste coal fuel with biomass fuel. Potential benefits of co-firing include air quality improvements, reduced greenhouse gas emissions, market and employment development opportunities, and reduction of municipal wood residues at area landfills. Sources of biomass could potentially include a range of materials including forest harvesting residues, sawmill residues and municipal biomass wastes.</p>	Biomass	Clarion	\$429,599
<p><b>Pittsburgh Allegheny County Thermal</b>            The project will save substantial energy on an existing steam generation and distribution system located in downtown Pittsburgh. The project will upgrade existing infrastructures currently in place that are critical to public and private businesses that are connected, position PACT for future growth and maintain this sustainable business as a real asset to downtown Pittsburgh.</p>	Energy Efficiency and Distributed Generation	Allegheny	\$881,487

<u>Grantee/Project</u>	<u>Project Type</u>	<u>County</u>	<u>Amount</u>
<p><b>Sullivan County School District</b>  Sullivan County School District will install a biomass district energy system to reduce energy costs at the high school and elementary school by replacing 85% (46,500 gallons) of their heating oil usage with 775 tons of sustainably harvested local biomass. The first year energy savings from the project will be \$101,000. The biomass system will include an external hot water thermal storage tank and will tie into the existing, central hydronic heating system at the schools.</p>	Biomass	Sullivan	\$630,000
<p><b>The Fox Chase Cancer Center</b>  The existing windows are energy depleting steel frame sections with single pane glass glazing. This project will replace all existing windows with new thermally improved aluminum frames with low E; high shading coefficient insulated glazing assembly. An operating energy cost savings of at least 40% can be achieved based on energy model analysis.</p>	Green Building	Philadelphia	\$250,000

### 2010 PEDA September Project List ARRA

<u>Grantee/Project</u>	<u>Project Type</u>	<u>County</u>	<u>Amount</u>
<p><b>International Battery Inc.</b>  Energy Storage is a crucial element in meeting electricity energy needs by enabling renewable generation (wind power and solar) to be fully integrated as resources and by optimizing the capacity of Utility transmission and distribution infrastructure as consumer demand grows. International Battery produces large format Lithium-Ion batteries that offer key advantages to these applications. The project will demonstrate this capability, accelerating commercialization and generating Green Tech jobs.</p>	Energy Efficiency and Distributed Generation	Lehigh	\$800,000

## 2010 August Duquesne Light Settlement Project List

<u>Grantee/Project</u>	<u>Project Type</u>	<u>County</u>	<u>Amount</u>
<p><b>Burns And Scalo Roofing Company Inc.</b>                      The Sunscape Energy Demonstration Project will re-develop the flat roof of an existing office/warehouse building, utilizing three different solar energy technologies totaling 105 kW to generate energy and a green roof under and around a section of the solar installation to study increased solar efficiency from ambient air temperature reduction around solar arrays.</p>	Solar	Allegheny	\$498,357
<p><b>City Of Pittsburgh</b>                      This project involves the first phase of an energy efficient streetlight conversion that will replace 40,000 high pressure sodium lights with more efficient LED. Phase I will replace the lights in 30 business districts throughout the city. The goals of this project are to save energy, reduce greenhouse gas emissions, reduce operating costs, improve public safety and aesthetics and ensure equity of light across diverse neighborhoods.</p>	Energy Efficiency and Distributed Generation	Allegheny	\$816,105
<p><b>Converteam Inc.</b>                      Converteam will transfer the company's existing state-of-the-art Pro-Solar inverter technology developed by its German affiliate to its manufacturing facility in Pittsburgh, PA. The goal of this project is to develop and manufacture the next generation of higher power and higher efficiency solar inverter systems for utility-scale photovoltaic (PV) installations in the United States. The project will immediately create 30 new jobs and retrain 150 incumbent workers.</p>	Solar	Allegheny	\$250,000
<p><b>Pittsburgh Allegheny County Thermal</b>                      The Project will save substantial energy on an existing steam generation and distribution system located in downtown Pittsburgh. The project will upgrade existing infrastructures that are critical to public and private businesses that are connected, position PACT for future growth and maintain this sustainable business as a real asset to downtown Pittsburgh.</p>	Energy Efficiency and Distributed Generation	Allegheny	\$118,513
<p><b>Converse PPG Industries Inc. PPG Glass Business and Discovery Center</b>                      This project will complete an Energy Efficient Lighting Upgrade at PPG Industries Inc.'s Glass Business and Discovery Center site in Harmar Township, PA. The work will include installation of nearly 3,500 energy efficient lighting products including high bay T 5 fluorescents, T 8 fluorescents, energy efficient electronic ballasts and LEDs.</p>	Energy Efficiency and Distributed Generation	Allegheny	\$35,784

<p><b>School District of Pittsburgh</b>  The School District of Pittsburgh will kick off a Solar Thermal Initiative to follow a successful LED Lighting Initiative started in 2009. Variations of solar thermal systems, each including roof mounted solar collection systems, installed at three properties are expected to offset energy costs associated with heating domestic hot water and provide a practical and accessible green technology teaching tool for the Pittsburgh Public School system.</p>	Solar	Allegheny	\$71,000
<p><b>Soldiers and Sailors Memorial Hall and Museum Trust Inc.</b>  The Soldiers &amp; Sailors project will update and enhance electrical operations in order to reduce annual costs of utilities by \$36,000 and annual electrical consumption would be reduced by 306,000 kWh. CO<sub>2</sub> reduction in lbs would be 24%. The project would involve new lighting systems, HVAC upgrades and variable speed drives. It would not only benefit Soldiers &amp; Sailors but the Pittsburgh and Pennsylvania community as a whole.</p>	Green Building	Allegheny	\$84,000
<p><b>Wilkinsburg Borough</b>  The Borough of Wilkinsburg is experiencing a time of revitalization and actively marketing itself as a community committed to sustainability. The Borough has invested in energy efficiency improvements to the Municipal Building. The roof has been replaced, boiler system replaced and 66 new energy efficient windows will be replacing the original windows.</p>	Energy Efficiency and Distributed Generation	Allegheny	\$141,750

### 2010 PEDA August Project List Growing Greener II

<u>Grantee/Project</u>	<u>Project Type</u>	<u>County</u>	<u>Amount</u>
<p><b>UGI Performance Solutions</b>  This project involves the installation of a 330KW solar energy generator on the South facing roofs of the Arthur Ashe Youth Tennis and Education Center and an energy-efficient lighting system for the tennis building.</p>	Solar	Philadelphia	\$393,400

**2010 PEDA August Project List Growing Greener II**

<u>Grantee/Project</u>	<u>Project Type</u>	<u>County</u>	<u>Amount</u>
<p><b>American Refining &amp; Biochemical Inc.</b>                      American Refining &amp; Biochemical Inc. (ARB) will equip and expand its existing thick film manufacturing facility and dedicate it to the production of improved metallization pastes that are used in the manufacture of high efficiency silicon solar cells. Additionally, they will develop new proprietary front side silver paste formulations that will increase solar cell efficiency and reduce the cost per KW of electricity.</p>	Solar	Montgomery	\$315,000
<p><b>Community Energy Inc.</b>                      Community Energy Inc. (CEI) commenced construction before the end of 2010 on a pioneering 15 MW, \$65 million solar photovoltaic (PV) project in PA, which will be the largest solar electric generating facility in the eastern United States. CEI seeks to use the construction of this project to help commercialize solar technologies, to encourage new solar development and manufacturing in PA and to demonstrate innovative agricultural preservation practices.</p>	Solar	Lancaster	\$1,000,000
<p><b>Consol Energy Inc.</b>                      CONSOL Energy Inc. will demonstrate and deploy a micro-turbine generator to capture and use a waste stream from a coal bed methane processing plant to produce electricity. The site selected for this demonstration is a CNX Gas processing plant in Fallowfield Township, Washington County, PA. During each 12 months of operation, 1664 MWh of electricity will be generated while consuming 18,520 thousand cubic feet of methane and reducing an equivalent of 6,486 metric tons of carbon dioxide.</p>	Recycled Energy	Washington	\$529,156.50
<p><b>Curwensville Area School District</b>                      The Curwensville Area School District will employ a closed-loop geothermal heat pump system that will be able to reduce energy costs and substantially reduce the amount of air quality emissions which is currently produced from burning coal. This new system will make use of a renewable energy source by using the ground as a heat exchanger. The grant portion for this project will cover the physical equipment of the high school portion.</p>	Geothermal	Clearfield	\$574,771.50

## 2010 PEDA August Project List Growing Greener II

<u>Grantee/Project</u>	<u>Project Type</u>	<u>County</u>	<u>Amount</u>
<p><b>Hamilton Health Center Inc.</b>  This project includes the construction of a geothermal well field required for installation of a closed-loop geothermal system at Hamilton Health Center, Inc.'s new facility. Located in an adaptively reused 68,000 square foot warehouse building in the South Allison Hill neighborhood of the City of Harrisburg, Dauphin County, the new facility provides health care for the underserved and underinsured in South Central Pennsylvania. It is located on a Brownfield Action Team site as designated by PA DEP.</p>	Geothermal	Dauphin	\$242,672
<p><b>Haverford Township</b>  Haverford Township will install a \$1.2 million geothermal system in its new 35,000 square foot Community Recreation Environmental Center located at the former Haverford State Hospital site. The building will serve as an educational hub for outdoor learning of the 124 acres of preserved open space and transform the site into a valuable economic, environmental and recreational resource for the region.</p>	Geothermal	Delaware	\$300,000
<p><b>KGRA Energy LP dba Liberty I, LLC</b>  KGRA Energy Corporation, through its relationship with Chesapeake Energy Corporation will construct a heat-recovery-to-power project at a gas gathering station in Bradford County, PA. The project will recover exhaust &amp; waste heat from eight Caterpillar reciprocating engines and will convert the heat to clean, renewable electricity using a modular organic Rankine cycle power production system. KGRA will build, own and operate the facility to produce 10.2 million kwh/yr.</p>	Recycled Energy	Bradford	\$750,000
<p><b>Kline's Services Inc.</b>  Phase II of Kline's Services Renewable Energy System Project is the installation of a methane digester and a generator to produce electricity. The methane digester will take waste from Kline's operation and turn it into a methane-rich biogas. This biogas will then be used to fuel engine generator sets to produce 600kW year round. The generated power will provide four times more power than currently consumed by Kline's Services. The excess generated electricity will be net metered.</p>	Energy Efficiency and Distributed Generation	Lancaster	\$250,000

<p><b>MainLine Solar LLC</b>  This flat roof-mounted 900kW solar electric farm will be located on the A. Duie Pyle Parkesburg facility. The energy produced will supply 100% of the electricity needs for this distribution center. This project will be used as a springboard for similar solar farms to supply high-energy-demand companies with electricity in the surrounding area. Proceeds from this project will fund full-time research and development jobs to create new renewable energy sources and products to meet diverse needs.</p>	Solar	Chester	\$450,000
<p><b>Metro-Tek Electrical Services</b>  Metro-Tek Electrical Services Co. in cooperation with Energy Alliance Group LLC has planned a 2.2 MW ground mounted solar system for Moore Township Elementary and Lehigh Township Elementary. This grant will help offset the costs associated with this groundbreaking project and secure the future energy prices of these district schools.</p>	Solar	Northampton	\$831,250
<p><b>Pennsylvania American Water Co.</b>  This project includes the installation of a 30 kW micro-hydro turbine to recover energy from the raw water pipeline of the Oneida Valley Water Treatment Plant in (Butler County) Pennsylvania. Work includes construction of a new vault with micro turbine; interface with existing electrical switchgear and related piping, valves and conduit.</p>	Low-Impact Hydropower	Butler	\$180,000
<p><b>Pennsbury School District</b>  The Pennsbury School District in Southeastern PA is engaging in a progressive renovation and expansion project, Holistic Green Building at Makefield Elementary to dramatically improve energy efficiency, implementing renewable energy resources (solar roof) and enhancing indoor environmental quality of a 60,600sf historical elementary school building. This green school building will achieve LEED-Silver certification from the U.S. Green Building Council upon completion of the project.</p>	Green Building	Bucks	\$188,000

<p><b>Philadelphia City Treasurer – Dept. Of Recreation</b>  The Department of Recreation in Philadelphia is undertaking a pilot energy reduction strategy at Awbury, Olney, MLK, Lee, Picariello, and Simons Recreation sites, which will provide a model for other recreation sites in the city. The project entails lighting replacements and control upgrades at all six sites, real time energy monitoring with displays at three sites, and a 14.5 kW solar photovoltaic system at one site. The project anticipates a 30-40% electrical load reduction.</p>	Energy Efficiency and Distributed Generation	Philadelphia	\$412,482
<p><b>Phoenixville Area School District</b>  This project includes the implementation of a comprehensive energy program at Phoenixville Area High School, Schuylkill Elementary School and Barkley Elementary School. Work includes installation of 400 kW of solar photovoltaic electric generation; energy efficient retrofits of lighting, heating, cooling, pumping and ventilation systems; demand limiting and demand response planning; and implementation of a behavior modification educational program to improve energy use awareness.</p>	Solar	Chester	\$554,500
<p><b>Roaring Spring Blank Book Co.</b>  The Roaring Spring Bio-Fuel project takes wood/paper based waste and will turn that waste into usable fuel cubes that can be used in place of coal for customers. The fuel cubes will range between 7,000 and 8,000 BTU, depending on the mixture of products used. The cubes have a much lower emission level than coal. The project is the first of its kind in Central PA with hopes of expanding throughout the state.</p>	Biomass	Blair	\$450,000
<p><b>Solar Development Group LLC</b>  Warnaco, a textile company will install a 1.5 MW photovoltaic system. Installation will allow Warnaco to go into a 15-year Power Purchase Agreement.</p>	Solar	Blair	\$737,139
<p><b>UGI Development Co.</b>  The Dow Solar Project will consist of the installation of a 2.0 MW solar facility located behind the meter at an existing manufacturing plant. The project will be used to offset a portion of the plant's power requirements. Additional benefits will include environmental benefits created by offsetting the need for electricity produced by conventional means.</p>	Solar	Bucks	\$900,000



<p><b>Ultra Poly Corp.</b>  This project will consist of the conversion, via pyrolysis gasification, of 20 tons/day of non-source separated waste plastics having a fuel value of 18,000 BTU/pound that is currently going to landfill, to alternative energy. The BTU content will be converted to 3,000 gallons per day of liquid fuel meeting ASTM standard for low sulfur diesel fuel. In addition to eliminating solid waste now going to landfill and generating alternative energy, this project will create 28 new high-paying jobs and preserve 48 existing jobs.</p>	<p>Recycled Energy</p>	<p>Northampton</p>	<p>\$750,000</p>
<p><b>UPMC Health System</b>  UPMC's project is a unique application of a closed-loop geothermal system. The uniqueness comes from a newly developed highly efficient electric groundwater based industrial sized chiller capable of managing the significant cooling and infectious control air replacement requirements of a modern hospital. The system will also eliminate chemical cooling tower treatments and reduce demands placed upon the municipal's domestic water and sewage infrastructure.</p>	<p>Geothermal</p>	<p>Venango</p>	<p>\$124,170</p>
<p><b>Viridity Energy Inc.</b>  This project consists of the installation and optimization of an innovative energy storage system to maximize the recapture of existing regenerative braking capacity from trains along a portion of the Market Frankford Line, the highest ridership line in SEPTA's system. Upon implementation, the storage system will enable SEPTA to generate measurable gains in both energy efficiency and voltage stability in this critical corridor, providing a replicable and scalable model for broader system-wide implementation.</p>	<p>Recycled Energy</p>	<p>Philadelphia</p>	<p>\$900,000</p>

## 2010 PEDA September Project List Growing Greener II

<p><b>Zoological Society of Pittsburgh</b>          The Pittsburgh Zoo &amp; PPG Aquarium International Conservation Center will breed threatened and endangered species, beginning with African elephants. This grant will be used to install a biomass burner for elephant manure and switch grass to heat the elephant barn and perhaps other buildings. It will also buy a baler and a stacker for use in growing switch grass, which will be used to supplement the elephant manure until the herd grows big enough to produce enough manure to heat the barn.</p>	Biomass	Somerset	\$450,000
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## 2010 August DECLINED Project List ARRA

<u>Grantee/Project</u>	<u>Project Type</u>	<u>County</u>	<u>Amount</u>
<p><b>Arcelor Mittal USA Inc.</b>          Arcelor Mittal proposed to purchase and install a modern energy-efficient, low-emission, walking-beam reheat furnace at its Steelton facility. Installation of this equipment would make its Steelton, PA, rail mill facility more energy efficient. The proposed project implemented would have the most advanced technology to recycle and recover energy increasing energy efficiency and reducing CO<sub>2</sub> emissions.</p>	Energy Efficiency and Distributed Generation	Dauphin	\$800,000 DECLINED
<p><b>General Electric Company DBA GE Transportation</b>          This project would have upgraded GE wind drive train development facility to allow test and development of wind turbine drive trains from 2.0 to 3.6 MW, in order to meet the market need for larger drive trains. The requested grant funding of \$500,000 would have provided a portion of the costs for a higher capacity crane at the Erie area facility. The GE cost share of \$637,359 would provide remaining crane costs as well as tooling and fixtures required to complete the project by fully incorporating energy efficiency and renewable energy into a sustainable community.</p>	Wind	Erie	\$500,000 DECLINED

### 2010 August TERMINATED Project List ARRA

<p><b>Kraft Foods</b>          This project would have created an industry-municipality partnership between the local wastewater plant and Kraft Foods. The primary objective was to use 105 MMcf/yr of bio-methane that is currently flared off. The project entailed the purchase and installation of a filtration system, compressor and pipeline to deliver this bio-methane to fuel a boiler at Kraft.</p>	<p>Biologically Derived Methane Gas</p>	<p>Lehigh</p>	<p>\$577,500          TERMINATED</p>
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### 2010 August TERMINATED Project List GGII

<p><b>Renewable Energy Partners LLC</b>          This project involved a minimum of 1.8 MW of net-metered photovoltaic solar modules to be installed on 12.5 acres of land. This land is adjacent to, and part of, a 34-acre, 330,000 square foot industrial facility at the Greater Lewistown Corporate Center (GLCC), located in Granville Township, Mifflin County. The orientation of the GLCC property provides for an optimal system orientation and makes solar PV an ideal, cost-effective, alternative energy choice.</p>	<p>Solar</p>	<p>Mifflin</p>	<p>\$850,000          TERMINATED</p>
<p><b>United States Green Energy</b>          This project involved the development and procurement of an automated continuous flow high speed solar siding/shingle lamination machine. The machine will be incorporated into the planned production facility in a restored roundhouse located on a former steel mill site in McKeesport, Allegheny County. 100% of the proposed grant will be spent within Pennsylvania.</p>	<p>Solar</p>	<p>Allegheny</p>	<p>\$750,000          TERMINATED</p>

## 2010 August WITHDRAWN Project List GGII

<p><b>Solar Strategies Development Corp.</b> Pennsylvania based Solar Strategies has developed unique, scalable and proven techniques to produce NetZero Energy Modular Homes in a re-equipped modular manufacturing facility. Solar Strategies has developed patented and patent-pending production line innovations that lowers the installation costs of Solar PV, Solar Hot Water and Energy Efficiency features. Combining state-of-the-art advanced battery technology and smart meter demand response controls are part of this strategy.</p>	<p>Energy Efficiency and Distributed Generation</p>	<p>Clarion</p>	<p>\$730,000 WITHDRAWN</p>
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## Appendix B

### ENERGY DEVELOPMENT FUND UNRESERVED FUND BALANCE STATEMENT June 30, 2011

Unreserved Fund Balance, July 1, 2010	\$1,784,031.49
Reserved for Encumbrances - Restricted Revenue, July 1, 2010	2,626,385.84
Reserved for Restricted Revenue, July 1, 2010	1,144,448.00
Reserve for Transfer to General Fund, July 1, 2010	1,016,698.82
Revenue:	
PEDA Application Fees	31,650.00
Loan Repayment	180,633.43
Interest Payments	36,683.67
Late Fees	0.00
Interest on Securities	684,315.52
Duquesne Light Settlement	1,500,000.00
<b>Total Revenue</b>	<b><u>2,433,282.62</u></b>
Pending Prior Year Lapses	320,605.35
<b>Total Funds Available</b>	<b><u>\$9,325,452.12</u></b>
Deductions:	
Expenditures - Current	33,573.44
Reserved for Non-Lapsable Balance	416,426.56
Expenditures - Restricted Revenue	1,101,352.84
Commitments - Current	0.00
Commitments - Restricted Revenue	3,427,442.94
Reserved for Restricted Revenue	742,038.06
Reserved for General Fund Lapse	(1) 1,016,698.82
<b>Total Deductions</b>	<b><u>6,737,532.66</u></b>
<b>Unreserved Fund Balance, June 30, 2011</b>	<b><u><u>\$2,587,919.46</u></u></b>

(1) - Amount to be lapsed to General Fund per Act 178 of 2003

## Appendix C

### ENERGY DEVELOPMENT FUND BALANCE SHEET June 30, 2011

#### ASSETS

Temporary Investments	\$8,190,525.84
Loans Receivable	<u>909,106.66</u>
<b>Total Assets</b>	<b><u><u>\$9,099,632.50</u></u></b>

#### LIABILITIES AND FUND BALANCE

#### LIABILITIES

<b>Total Liabilities</b>	<b><u>\$ -</u></b>
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#### FUND BALANCE

Reserved for Loans Receivable	\$ 909,106.66
Reserved for Encumbrances - Restricted Revenue	3,427,442.94
Reserved Non-Lapsable Balance	416,426.56
Reserved for General Fund Lapse (1)	1,016,698.82
Reserved - Restricted Revenue	742,038.06
Unreserved/Undesignated	<u>2,587,919.46</u>
<b>Total Fund Balance</b>	<b><u>9,099,632.50</u></b>
<b>Total Liabilities and Fund Balance</b>	<b><u><u>\$9,099,632.50</u></u></b>

(1) - Amount to be lapsed to General Fund per Act 178 of 2003

## Appendix D

### GROWING GREENER II BOND FUND EXECUTIVE AUTHORIZATION STATEMENT June 30, 2011

BALANCE JULY 1, 2005	\$ -
FY 2005-06 EXECUTIVE AUTHORIZATION	\$ 10,000,000.00
FY 2006-07 EXECUTIVE AUTHORIZATION	\$ 10,000,000.00
FY 2007-08 EXECUTIVE AUTHORIZATION	\$ 10,000,000.00
FY 2008-09 EXECUTIVE AUTHORIZATION	\$ 10,000,000.00
FY 2009-10 EXECUTIVE AUTHORIZATION	\$ 10,000,000.00
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TOTAL EXECUTIVE AUTHORIZATIONS	\$ 50,000,000.00
COMMITMENTS	\$ 15,984,283.71
EXPENDITURES	
FY 2005-06	\$ 323,562.07
FY 2006-07	\$ 2,925,987.35
FY 2007-08	\$ 3,596,835.59
FY 2008-09	\$ 4,967,237.88
FY 2009-10	\$ 7,389,308.92
FY 2010-11	\$ 10,734,584.94
	<hr/>
TOTAL EXPENDITURES	\$ 29,937,516.75
TOTAL COMMITMENTS AND EXPENDITURES	\$ 45,921,800.46
BALANCE JUNE 30, 2011	\$ 4,078,199.54

## Appendix E

### ENERGY DEVELOPMENT FUND DUQUESNE LIGHT SETTLEMENT June 30, 2011

BALANCE JULY 1, 2007	\$ -
FY 2007-08 REVENUE	\$ 3,000,000.00
FY 2008-09 REVENUE	\$ -
FY 2009-10 REVENUE	\$ 1,500,000.00
FY 2010-11 REVENUE	\$ 1,500,000.00
	<hr/>
TOTAL REVENUE	\$ 6,000,000.00
COMMITMENTS	\$ 3,427,442.94
EXPENDITURES	
FY 2009-10	\$ 729,166.16
FY 2010-11	\$ 1,101,352.84
	<hr/>
TOTAL EXPENDITURES	\$ 1,830,519.00
TOTAL COMMITMENTS AND EXPENDITURES	\$ 5,257,961.94
BALANCE JUNE 30, 2010	\$ 742,038.06