



Update

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November 2008

Historic energy conservation bill signed into law

On Wednesday, October 15, 2008 Pennsylvania Governor Edward Rendell signed historic energy savings legislation into law, giving Pennsylvania families and businesses important tools to save money on their electricity bills. Not only will the law reduce the demand for energy, it will also create thousands of green jobs, cut pollution, and reduce the need to build new power plants and transmission lines. The Senate approved the legislation, HB 2200, by a 47-3 vote; the House tally was 186-4.

Key Provisions:

1. Energy Conservation Targets

- Overall use of electricity must be reduced by 1 percent by 2011 and by 3 percent by 2013, and peak demand must be reduced by 4.5 percent by 2013;
- Utilities must submit plans to the Public Utility Commission (PUC) by July 1, 2009 detailing what energy conservation programs they will offer to customers in order to achieve these targets;
- Utilities will be fully accountable for reaching the targets. Failure to meet the 1 percent reduction by 2011 will expose the utilities to a penalty as high as \$20 million, and the bill requires the PUC to take the conservation program away from a utility failing to meet the goal;
- Utilities are required to contract with third party providers, via competitive bid, for all or part of the energy conservation programs;
- Utilities are permitted to recover the costs of energy conservation programs in rates.

2. Smart Meters

- Utilities must install smart meters on request from a customer who agrees to pay for the meter, and the utility must pay to install smart meters in all new construction and for all customers in 15 years or sooner;
- Utilities can recover the cost of meters in rates;

- By January 1, 2010 or when a utility's rate caps expire, each utility must submit a plan to the PUC to offer time-of-use rates and real-time pricing plans for all customers that have smart meter technology installed.

3. Next Steps

- On October 9, 2008 the PUC announce that it will begin the implementation of the legislation as soon as it is signed by the governor,
- The law requires the PUC to adopt an energy efficiency and conservation program by January 15, 2009. The PUC announced it will convene a working group and allow for stakeholder participation and input on the development of this program.

Passage of this landmark legislation was truly a group effort. Our thanks to all who helped push for the passage of this historic bill.

Update on Alternative Energy Investment Act funds

Since Governor Rendell signed the Alternative Energy Investment Act into law on July 9, creating a \$650 million energy fund, the Department of Environmental Protection (DEP) and the Commonwealth Financing Authority (CFA) have been hard at work examining how best to allocate the new funds.

The \$500 million allocated to the CFA will come from bonds that are expected to be issued in January 2009. Of this \$500 million, the first round of \$180 million in solar funding is expected to be available around March 2009. To ensure you will be notified when these funds become available, sign-up for notifications at the following website: <http://www.ahs2.dep.state.pa.us/aeifsignup/>

The remaining \$150 million will be allocated over eight years from the general fund. DEP is currently working on how best to distribute the \$92.5 million of grants, rebates and loans for homeowners and small businesses for consumer energy conservation projects. The first round of this funding could be available as early as November or December this year.

In the meantime, for more information on both state and federal incentives available for clean energy, take a look at PennFuture's new [energy funding webpage](#).

Federal bailout bill boosts clean energy

When President Bush signed the Emergency Economic Stabilization Act of 2008 (Public Law No: 110-343), several financial incentives to help the development of renewable energy and energy efficiency technologies that were included in the legislation also took effect.

Extension of the Production Tax Credit (PTC)

- The legislation includes a one-year extension of the PTC for wind and biomass plants and adds a new energy production category – marine renewable (energy derived from waves, tides, and currents).

Solar Investment tax Credit (ITC)

The new solar investment tax credit (ITC) provisions will:

- Extend for eight years the 30 percent tax credit for both residential and commercial solar installations;

- Eliminate the \$2,000 monetary cap for residential solar electric installations, creating a true 30 percent tax credit (effective for systems placed in service after December 31, 2008);
- Eliminate the prohibition on utilities from benefiting from the credit;
- Allow Alternative Minimum Tax (AMT) filers, both businesses and individuals, to take the credit;
- Authorize \$800 million for clean energy bonds for renewable energy generating facilities, including solar.

Energy Conservation Incentives

The new energy conservation incentives include:

- An extension of the commercial buildings tax deduction to the end of 2013;
- An extension of the tax credit for efficient furnaces, boilers, air conditioners, and water heaters; and insulation and window upgrades to existing homes (covering improvements installed in 2009, but not 2008);
- A one-year extension of the new energy-efficient home tax credit, to the end of 2009;
- Three years of manufacturer tax credits for sales of high-efficiency refrigerators, clothes washers, dishwashers, and dehumidifiers (2008-2010);
- A new tax credit for plug-in hybrid vehicles purchased starting in 2008 and extending until shortly after the number of qualifying vehicles reaches 250,000;
- A new 10 percent investment tax credit for combined heat and power systems (through 2016);
- An extension of fuel cell and microturbine credits to the end of 2016;
- Accelerated depreciation for smart meters and smart grid systems; and
- Extension of an existing bonding program for green buildings and sustainable design, and establishment of a new energy conservation bond program that would help local and state governments to fund energy conservation efforts.

For more information on the energy conservation provisions, visit the [Alliance to Save Energy website](#).

Policy News

PUC issues final AEPS rulemaking

On September 25, the PUC voted 5-0 to approve the final rules for implementing the Alternative Portfolio Standards Act (AEPS), setting the foundation for development of the alternative energy market over the next 15 years.

The AEPS originally passed in November of 2004, but the rulemaking process had been ongoing. The previous draft rulemaking was amended due to the passage of House Bill 1203 in July of 2007 that corrected open-ended language in the original legislation (more detail can be found in the [August 2007 issue of Green Power Update](#)).

Having the final rulemaking in place helps to provide greater certainty in the marketplace, especially for wind and solar companies, since the rules clearly define how utilities need to comply with the AEPS. Issues addressed in the rulemaking include the banking of alternative energy

credits, cost-recovery, modifications to AEPS requirements if goals cannot be met, and protection of the voluntary market.

The rulemaking now goes before the state's Independent Regulatory Review Commission, the Office of Attorney General, Governor's Budget Office and the standing committees in both houses of the General Assembly for review. Once that review is completed, the regulations would become final once published in the Pennsylvania Bulletin.

Pennsylvania adopts carbon registry

In October, as part of requirements of the Pennsylvania Climate Change Act, the Climate Change Advisory Committee recommended that DEP designate registries or systems that businesses can use to track both their greenhouse gas emissions and any reductions or offsets they achieve.

The DEP accepted the recommendation and adopted [The Climate Registry](#) as the emissions registry. The Climate Registry establishes consistent, transparent standards throughout North America for businesses and governments to calculate, verify, and publicly report their carbon footprints in a single, unified registry. Pennsylvania became a member of The Climate Registry last year, joining 37 other states and the District of Columbia.

The DEP also adopted three different organizations for offset registries: the [Climate Action Reserve](#), the [Voluntary Carbon Standard](#), and the [Gold Standard](#). Adopting a range of protocols will help to accommodate the wide variety of multinational businesses in Pennsylvania.

The committee and DEP must issue a report detailing potential climate change impacts and economic opportunities for Pennsylvania by April 9, 2009 and the development of a state plan to cut emissions by October 9, 2009.

Pittsburgh Climate Initiative

In July, Pittsburgh City Council unanimously passed a resolution establishing a goal of reducing greenhouse gas emissions by 20 percent by 2023. Now that the resolution has passed, the Pittsburgh Climate Initiative will be looking at implementing ordinances as necessary to achieve these goals.

PennFuture played a major part in the development of the Climate Action Plan as part of the Green Government Task Force, and will be spearheading community outreach to make sure the plan is implemented in every neighborhood. For more information and future updates on the initiative visit the official website: <http://www.pittsburghclimate.org/>.

New Jersey increases renewable and energy conservation goals

New Jersey Governor Jon Corzine recently released an ambitious plan to increase the amount of renewable energy required to meet the state's power needs to 30 percent by 2020, and to reduce energy consumption by 20 percent by 2020.

It is expected that offshore wind will play a large role in meeting this new renewable energy target. The Governor stated that he wants 1,000 megawatts of wind energy a year to be produced by 2012 and 3,000 megawatts by 2020.

New Jersey's strengthened initiative and Pennsylvania's recently passed energy conservation legislation show a growing commitment to the clean energy sector and green jobs in the region. We look forward to increasing development of renewable energy and energy conservation in Pennsylvania in the upcoming year.

Governor announces grant recipients

In October, Governor Rendell announced the recipients of the Pennsylvania Energy Development Authority (PEDA) grant solicitation. Under PEDA, applicants apply for grants to help pay for capital costs for advanced energy projects, such as solar energy, wind, low-impact hydropower, geothermal, biologically derived methane gas (including landfill gas), biomass, fuel cells, coal-mine methane, waste coal, integrated gasification combined cycle, demand management measures (including recycled energy and energy recovery, energy efficiency and load management), and clean, alternative fuels for transportation.

The winning projects are expected to invest nearly \$12 million in alternative clean energy projects that will create at least 1,200 full and part-time jobs and attract nearly \$118 million in private investment. In addition, the projects will produce 488,363 megawatt hours of electricity and conserve another 2,500 megawatt hours, which will help to avoid more than 310,000 tons of carbon dioxide, 2,000 tons of sulfur dioxide and 430 tons of nitrogen oxides -- equal to removing 55,000 cars from the road.

Since 2005, PEDA has approved 105 grants and loans totaling more than \$44 million for clean energy projects. For more information and to see a list of this year's grant recipients visit the [PEDA website](#).

Wind Energy Update

Casselman wind farm produces power and new bat research

On October 16, Governor Rendell dedicated Pennsylvania's newest wind farm, the Casselman Wind Power Project. Casselman, which is owned and operated by Iberdrola Renewables, consists of 23 wind turbines, enough to power more than 10,000 homes annually. Not only is the Casselman project producing clean energy, but one-third of the project sits above an old coal mine.

Iberdrola has taken additional steps to protect the environment, by partnering with Bat Conservation International (BCI) to conduct groundbreaking bat research project at the wind farm. From late July to early October 2008, Iberdrola Renewables, worked with BCI researchers to conduct a controlled experiment where wind turbines were shut down at the times when bats appear to be most vulnerable during their late-summer migration and when wind speeds are low.

While the wind industry and BCI have been examining ways to reduce bat mortality at wind farms for years, this is the first time in the U.S. a study was conducted to look at the effects of shutting down turbines to reduce impacts on bats.

The research is part of a larger effort to enhance the environmental safety of wind energy being undertaken by the [Pennsylvania Wind and Wildlife Collaborative](#), the [Bats and Wind Energy Collaborative](#) and others. The results of the study will be reviewed by the Bats and Wind Energy

Collaborative scientific advisory committee and then made public. The report is expected in April 2009.

This research is a critical step to developing a solution to protecting bats while producing wind energy. PennFuture commends Iberdrola Renewables and BCI for their historic research.

PECO purchases and banks alternative energy credits

PECO is the first utility in Pennsylvania to purchase and bank Alternative Energy Credits to comply with its Alternative Energy Portfolio Standard (AEPS) requirements ahead of schedule.

In December 2007, the PUC approved PECO's plan to enter into fixed-price, five-year agreements to purchase Alternative Energy Credits to meet its 2011 AEPS requirements, when 3.5 percent of the electricity it sells in the state must come from Tier I renewable resources like wind and biomass.

In accordance with this plan, PECO recently signed a five-year agreement with Iberdrola Renewables to purchase 240,000 megawatt-hours of wind energy credits. The wind energy associated with the renewable credits will be generated from Iberdrola Renewables' Providence Heights Wind Farm in Bureau County, Illinois and is enough to power about 25,000 homes annually. Additional information is available online at <http://www.peco.com/aepe>.

PennFuture applauds PECO's early action to comply with the AEPS and hopes other utilities will soon follow.

EverPower opens Pittsburgh office

Pennsylvania's wind energy potential has enticed another developer to locate offices in the state. EverPower Renewables has signed a lease for 6,600 square feet of office space on the second floor of the Chocolate Factory building in the Lawrenceville neighborhood of Pittsburgh.

EverPower is a New York based developer of utility scale wind projects and is currently developing the Highland Wind Project in Cambria County. When completed, the Highland Wind Project will be the first project to use the first project to utilize 2.5 megawatt Nordex turbines. The 25 Nordex turbines will generate 62.5 megawatts of electricity, enough to power approximately 18,000 homes annually.

Solar Energy Update

Update on Pennsylvania Solar Working Group

The solar requirements in the Alternative Energy Portfolio Standard (AEPS), along with the new solar funding in the Alternative Energy Investment Act, will stimulate an increase in the number of solar installations across the state.

To help prepare local governments for increased solar development, PennFuture, Governor Rendell's Office, DEP, the Department of Natural Resources and Conservation, State Association of Township Commissioners, School Boards Association, County Commissioners Association, State Association of Boroughs, State Association of Township Supervisors, Association of Township Supervisors, Workforce Investment Board and members of the solar industry have been working together as part of the Pennsylvania Solar Working Group.

The group has met monthly since April and is drafting sample solar ordinance language that can easily be incorporated into existing zoning regulations, including proper set-backs of solar systems and the ability for owners of solar systems to enter into solar easements with their neighbors. The group is also examining potential tax issues, training for building code inspectors and a model solar access ordinance to protect the solar rights of solar system owners.

Pennsylvania home to first U.S. solar mirror production facility

With the help of \$9 million in state investments, Germany-based Flabeg will open the first U.S. facility to manufacture parabolic solar mirrors that are used to help generate electricity at large-scale solar power plants.

Flabeg plans to lease a 20-acre site in Findlay Township, Allegheny County at the Clinton Commerce Park and build a 209,000-square-foot manufacturing facility. The first phase of construction is expected to begin this fall. The total investment from this project is expected to equal \$30 million and will create 300 manufacturing jobs in the state.

Pennsylvania continues to be a leader in recruiting clean energy businesses from across the globe (including Iberdrola, Gamesa and Conergy) because of the state's commitment to the renewable and alternative energy industry. These companies have helped generated more than \$1 billion in private sector investment in the economy and have created more than 3,000 family-sustaining jobs.

PennFuture News

Updates to energy website

PennFuture recently added informational pages highlighting clean energy funding, wind and solar energy to its energy webpage.

We hope the new web pages answer all your questions regarding the installation of small wind and solar systems at your home or business, where to find installers in your area, and what financing tools are available.

To view the new content [click here](#) and look for the new bars on the right side of the screen.

Awards luncheon honors clean energy purchasers and generators

On Tuesday, September 16, at the ninth annual Green Power Awards Luncheon, PennFuture honored 27 individuals representing educational institutions, religious organizations, small and large businesses, government, green power producers, green power leaders, public interest organizations, governmental entities, and faith-based groups for their leadership in purchasing green power, advancing policies that develop the renewable energy market, and taking the lead in creating new renewable supply.

Individuals and organizations receiving the awards included:

- Green Power Purchasers - Large Businesses
 - **Philadelphia Phillies**, for purchasing 20 million kilowatt-hours (kWh) of green energy to power 100 percent of the electricity needs of Citizens Bank Park, becoming the largest green power purchaser in major league baseball.

- **Dickinson College (Carlisle)**, for purchasing 50 percent of the electricity used on campus from wind power and for installing a 60 kilowatt solar array.
 - **University of Pennsylvania**, for purchasing 200,000 megawatt-hours per year of its electricity from wind energy.
 - **Children's Museum of Pittsburgh**, for purchasing 100 percent of its electricity from green energy sources, including wind and hydro power.
 - **University of Pittsburgh Medical Center (UPMC)**, for leadership in pursuing environmentally sustainable practices within the health care industry and for purchasing 10 percent of its electricity from green energy sources.
- Green Power Purchasers - Small Businesses
 - **Dansko (West Grove, Chester County)**, for purchasing 100 percent of its electricity from wind power and for its Leadership in Energy and Environmental Design (LEED®) New Construction Gold Certified office and retail complex in West Grove.
 - **Montgomery County**, for purchasing 100 percent of all county electrical accounts from wind energy, becoming the first 100 percent wind-powered county in the nation.
 - **The Philadelphia Print Shop, Ltd.**, for purchasing 100 percent of its electricity from wind power.
- Green Power Generators
 - **AE Polysilicon (Fairless Hills, Bucks County)**, for choosing Pennsylvania for the location of its new polysilicon manufacturing facility and for its commitment to creating Great Green Jobs in the state.
 - **Brubaker Farms (Mount Joy, Lancaster County)**, for its manure digester project that supplies clean energy back to the grid and helps to reduce carbon emissions by approximately 47,300 pounds per day.
 - **EverPower Renewables (Krayn, Cambria County)**, for its continued leadership in the development of wind energy in Pennsylvania, including the completion of the Highland Wind Project, the first project to use 2.5 megawatt Nordex turbines.
 - **Exelon Corporation and Epuron LLC**, for their continued leadership in the development of solar energy in Pennsylvania, including the construction of the Exelon-Epuron Solar Center at the Navy Yard in Philadelphia.
 - **Sisters of St. Francis of Philadelphia (Aston, Delaware County)**, for the installation of a 9.89-kilowatt solar photovoltaic system to help produce vegetables for 115 families.
- Leadership
 - **Sam Enfield (Arlington, Virginia)**, for his continued commitment to the sustainable development of wind in Pennsylvania, particularly his work on wind and bat interactions.
 - **Mike Freeman (Philadelphia)**, for his work in the development of the Exelon-Epuron Solar Center in Bucks County and the Navy Yard.
 - **Lance Simmens (Harrisburg)**, for his work to develop the wind energy model ordinance, solar working group, and for 67 presentations on Climate Change, as developed by Al Gore.
 - **Bill Cagney (Pittsburgh)**, of the International Union of Operating Engineers Local 95, for his enthusiasm and leadership in providing training to fill the great green jobs of the

future, and for sharing his expertise with other unions, government, the private sector and public interest organizations throughout the state.

- **Sister Janice McGrane (Flourtown, Montgomery County)**, for her continued efforts to promote green energy including her extensive volunteer work for the Great Green Jobs Campaign.
- **Mike Mckinley (Philadelphia)**, for his continued efforts to promote green energy through his support for the Great Green Jobs Campaign and the Energy Independence Strategy legislation.

- Pioneers
 - **Jon Costanza (Collegeville, Montgomery County)**, for his continued efforts to grow the solar energy industry in Pennsylvania and participation in the Great Green Jobs Campaign.
 - **Rushforth Solar (Bryn Mawr, Montgomery, County)**, for its continued commitment to the development of renewable energy in Pennsylvania, particularly solar thermal, and for participation in the Great Green Jobs Campaign.

- Green Jobs
 - **Sally Silver (Exton, Chester County)**, for her work in the development of the Smart Energy Initiative of Southeastern Pennsylvania, its training programs, and network of over 300 companies.

- Energy Efficiency and Demand Side Management
 - **PPL Electric Utilities (Allentown)**, for the development and expansion of the residential time-of-use rate pilot program, the Energy Analyzer website, and installation of advanced meters for all customers.
 - **Millcreek Township School District (Erie)**, for the installation of a green roof at the Asbury Woods Nature Center.

- The Citizens' Choice Green Power Hero Award (based on recommendations by PennFuture's members and supporters)
 - **Lewis Kindja and Aaron Steinly (Armagh, Indiana County)**, executive directors of principalsforchange.org; principal of United Junior/Senior High School, and assistant principal for United High School, respectively, for their leadership in Principals for Change and the 210 mile walking trip from Meyersdale, PA to Washington, D.C. to raise awareness about the need for alternative energy.

Congratulations to all of the award winners for showing leadership in their communities. If you have a nomination for next year's luncheon, please contact [Mary Kane](#).

Upcoming Events

Smart Energy Initiative releases fall schedule

The Smart Energy Initiative of Southeastern Pennsylvania (SEI), a regional, public-private energy industry partnership that provides economic development services to existing clean and renewable energy companies, has been diligently working to create new jobs; build an expert workforce;

address energy business needs and promote careers in energy across the five county Philadelphia region.

As part of this effort, SEI hosts seminars on hot topics in renewable energy and provides access to employee training. SEI released [its fall schedule](#) that includes:

Energy related seminars

November 20, 2008 - PA Energy Legislation: Opportunities for Local Business

December 2, 2008 - The World is Hot — Communications and the New Energy Economy

Upcoming Employee Trainings

November 3-7, 2008 - Advanced Solar PV Design and Installation

For further information please visit SEI's website: <http://www.smartenergypa.org>



Green Power: Turn It On! is sponsored by PennFuture, a statewide public interest membership organization working to protect and promote Pennsylvania's economy and environment. PennFuture encourages everyone to buy clean energy, but does not endorse any specific clean supplier.

About *Green Power Update*: Technology, policy and capital are all needed to create new sources of renewable energy. *Green Power Update* aims to keep you informed of new developments in these three areas and how they are helping to move Pennsylvania towards a clean energy economy.



PennFuture is carbon free and is powered by 100 percent clean electricity. To find out how your home or business can purchase clean, renewable energy, visit www.CleanYourAir.org today. It's Here. It's Working. Let's Make More.

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