

Conservation Works! Grants Announced November 17, 2009

Following is a list, by county, of local municipal and non-profit organization projects receiving Conservation Works! grants.

Notes: An average home in Pennsylvania uses approximately 10,000 kilowatt hours of electricity annually. MCF is one thousand cubic feet of natural gas. An average home that uses natural gas for heating consumes approximately 85 MCF annually.

Adams County

Borough of Gettysburg - \$250,000 to upgrade the municipal building's heating system, the roofing system, the lighting system, and the windows and entry doors. In addition, installation of correct vapor barriers, waterproofing and drainage barriers will address existing moisture penetration issues. Energy consumption will be reduced by 38 percent.

Total kilowatt hours saved: 36,480

Total MCF saved: 81,360

Allegheny County

Turtle Creek Valley Council of Governments - \$483,800 to replace 434 traffic signal heads and 60 street light fixtures with LED technology. Energy savings will be 80 percent plus additional municipal savings in maintenance and replacement costs.

Total kilowatt hours saved: 14,724,120

Allegheny County Airport Authority - \$249,422 to replace existing High Intensity Discharge (HID) lighting fixtures in passenger pickup and passenger drop-off areas of Pittsburgh International Airport with high efficiency Light Emitting Diode (LED) lighting fixtures and related mountings from a Pennsylvania LED lighting company.

Total kilowatts saved: 4,448,910

Borough of Baldwin - \$250,000 to replace the existing HVAC system and replace single-pane aluminum frame windows and doors in the borough's 30,000 square foot municipal complex.

Total kilowatt hours saved: 1,569,000

Total MCF saved: 9,850

Carnegie Library of Pittsburgh - \$224,500 to upgrade the existing building envelope including the roof, walls and glass making them more energy efficient.

Total kilowatt hours saved: 346,950

Total MCF saved: 45,000

Allegheny General Hospital – \$250,000 to replace traditional sodium vapor lights in a parking garage with 421 new, state-of-the-art LED fixtures. The LED lights to be used are manufactured in Pennsylvania. The project is expected to create 631 hours of installation work.
Total kilowatt hours saved: 6,048,250

Chatham University – \$143,316 to upgrade lighting in the Eastside Building on campus. The reduced energy use and related emissions reduction will help the college to achieve its goal of a 20 percent carbon reduction by 2023.
Total kilowatt hours saved: 4,118,400

University of Pittsburgh - \$236,816 to upgrade portions of the lighting systems in two University of Pittsburgh buildings; The School of Library and Information Science and the Frick Fine Arts Building. The project will replace 2,097 fixtures with high efficiency fluorescent fixtures. The project is will produce an annual energy savings of more than 48 percent.
Total kilowatt hours saved: 5,870,000

Beaver County

Beaver County - \$250,000 to renovate the aging and inefficient boiler system at the county nursing home. Energy savings of 35 percent is anticipated.
Total MCF saved: 374,000

Bedford County

Broad Top Township - \$351,000 to install a clean 54.28 kilowatt photovoltaic solar power generation system to provide at least 50 percent of the electric energy consumed at the Riddlesburg wastewater treatment plant which serves more than 500 homes and businesses in Broad Top Township and Coaldale Borough.
Total kilowatt hours saved: 1,287,825
Total kilowatt hours generated: 1,287,825

Berks County

Borough of Wyomissing - \$56,700 to replace 162 sodium vapor streetlights with new induction style bulbs which will provide more direct white light, make the streets safer, and reduce maintenance costs.
Total kilowatt hours saved: 1,306,360

The Highlands at Wyomissing – \$129,778 to upgrade lighting, hot water and ventilation systems to increase energy efficiency.
Total kilowatt hours saved: 1,819,000
Total MCF saved: 119,119

Bradford County

Towanda Municipal Authority - \$413,760 to upgrade the Towanda and Wysox Municipal Authorities' waste water treatment plant aeration system, install a geothermal heat pump to the lab building and a 7 kW solar array to the Wysox 2 pump station. The project is projected to create four jobs.
Total kilowatt hours saved: 5,212,620

Bucks County

Richland Township - \$500,000 for a joint venture between Richland Township and the Richland Township Water Authority to install 1,350 photovoltaic solar panels at the authority's Walnut Bank Farm Water Treatment Building. This project would generate \$119,346 in renewable energy credits and create three jobs.
Total kilowatt hours generated: 10,656,875

Lower Makefield Township - \$250,000 to replace 23 incandescent traffic lights with LED models and replace all free-standing parking lot light poles with LED fixtures.
Total kilowatt hours saved: 6,114,010

Warwick Township - \$211,011 to replace 272 existing mercury vapor and high pressure Sodium streetlights with energy efficient LED lights.
Total kilowatt hours saved: 1,198,810

St. Mary Medical Center Foundation - \$250,000 to improve the hospital's chilled water plant which will enable optimum cooling of outpatient care areas. This project will reduce energy consumption by 25 percent and reduce air pollution by more than 1.1 million pounds of carbon dioxide per year. The project will create seven temporary positions.
Total kilowatt hours saved: 20,000,000

Cambria County

Bishop McCort High School - \$211,480 to replace 187 antiquated single-pane windows.
Total kilowatt hours saved: 4,777,830
Total MCF saved: 134,160

Cameron County

Cameron County Commissioners - \$83,516.96 for three energy savings improvements to the county courthouse, including installing attic insulation, replacing 55 single-pane windows, and adding computer control software to the HVAC system. The projects will generate a 37 percent energy savings and create 10 temporary, full-time jobs.
Total MCF saved: 12,480

Centre County

Millheim Borough - \$203,500 to replace the borough building's oil furnace and propane heaters with a geothermal heating system, and replace its old windows with energy efficient models. It will also replace constant speed starters at the Millheim Water Treatment Plant with variable speed versions. The project will create an estimated six temporary jobs.

Total kilowatt hours saved: 1,981,240

Total MCF saved: 7,760

Chester County

London Grove Township - \$237,761 to install a geothermal HVAC system in the township building. The project will reduce electric use and eliminate the use of natural gas. The project will create jobs.

Total kilowatt hours saved: 400,000

Total MCF saved: 7,000

East Goshen Township - \$87,177 to replace incandescent lamps with LED lamps in the traffic signals at 15 intersections.

Total kilowatt hours saved: 4,970,640

West Chester Borough - \$121,865 to upgrade the existing high pressure sodium lighting fixtures in the Bicentennial Parking Garage with energy efficient LED light fixtures. The upgrade will result in 27 percent total energy savings for the borough. The project will ensure the creation of at least one new job. The upgrade will serve as a pilot program for the borough and if successful, similar energy efficiency upgrades will be made at the other borough-owned parking garages.

Total kilowatt hours saved: 377,070

Chester County Historical Society - \$250,000 to complete the third phase of an HVAC system replacement in Horticultural Hall. The project is expected to create three full-time jobs.

Total kilowatt hours saved: 300,000

Total MCF saved: 52,940

Clearfield County

Decatur Township - \$390,202 for a multi-municipal project with Bradford and Woodward townships including upgrading insulation, windows, lighting and installing two geothermal heat pumps.

Total kilowatt hours saved: 7,291,920

Total kilowatt hours generated: 67,625

City of DuBois - \$180,000 to replace 119 existing light fixtures throughout the city with energy efficient LED versions.

Total kilowatt hours saved: 1,917,130

Clinton County

City of Lock Haven - \$206,689 for renovations to the Hope Hose Fire Company building which include adding exterior wall finish and insulation, replace the 39-year-old boiler and hot water heater with high efficiency gas models.

Total kilowatt hours saved: 1,318,960

Total MCF saved: 4,500

Columbia County

Town of Bloomsburg - \$14,918 to replace the recycling center's existing metal halide high bay lights with linear fluorescent high bay lights.

Total kilowatt hours saved: 597,090

Bloomsburg University of Pennsylvania - \$250,000 to improve HVAC controls with energy management functionality, lighting efficiency improvements, variable frequency drive on heating/cooling pump, improved chiller function, and a new high efficiency water chiller for air conditioning at seven facilities.

Total kilowatt hours saved: 9,951,860

Crawford County

City of Meadville - \$250,000 to replace the city building's original boiler and chiller systems with high efficiency equipment, and upgrade the existing lighting fixtures.

Total kilowatt hours saved: 2,160,000

Total MCF saved: 60,000

Saegertown Borough - \$37,000 to replace the borough's two oldest turbine pumps with submersible ones, to provide process and cooling water to local manufacturers. This will result in an energy savings of 28 percent.

Total kilowatt savings: 993,370

Cumberland County

Carlisle Borough - \$250,000 to upgrade HVAC and lighting in the borough's hall, community center and public works garage. The project will also install solar photovoltaic panels to generate renewable energy.

Total kilowatt hours saved: 1,076,220

Total MCF saved: 20,440

Total kilowatt hours generated: 166,000

Cleve J. Fredricksen Library Association - \$250,000 to replace an antiquated HVAC system on the Library's upper floor with a variable refrigerant flow heat pump system.

Total kilowatt hours saved: 1,184,000

Total MCF saved: 29,110

Dauphin County

Harrisburg Parking Authority - \$250,000 to replace existing high sodium light fixtures in parking garages with LED fixtures.

Total kilowatt hours saved: 7,065,380

Borough of Steelton - \$249,998 to replace existing lighting, valves and motors at the water treatment facility with more energy efficient versions.

Total kilowatt hours saved: 4,083,320

Delaware County

Springfield Township - \$28,420 to replace incandescent traffic signal bulbs at nine township intersections with 335 energy efficient LEDs and replace 45 old LEDs.

Total kilowatt hours saved: 3,787,770

Delaware County Regional Water Quality Control Authority - \$250,000 to upgrade lighting at the county's Western Regional Treatment Plant and four pump stations.

Total kilowatt hours saved: 4,947,610

Radnor Township - \$244,044 to retrofit an existing 100-year old township-owned building, the Willows Cottage, with geothermal heat pumps and energy efficient historically accurate replacement windows.

Total MCF saved: 13,124

Lansdowne Borough - \$450,647 to upgrade 610 incandescent traffic lights and 1,144 mercury street lights in five municipalities.

Total kilowatt hours saved: 8,305,190

Riddle Memorial Hospital - \$38,862 to install new lights in the hospital's parking garage.

Total kilowatt hours saved: 2,534,270

Elk County

Elk Regional Health Center - \$149,041 to upgrade lighting system by replacing the old existing fixtures with new, energy-efficient ones. Four temporary, full-time jobs will be created.

Total kilowatt hours saved: 5,094,780

Erie County

Shriners Hospitals for Children - \$250,000 for upgrades including the expansion of an existing central HVAC system, a lighting retrofit, installation of a new high efficiency boiler, and modifications to the domestic hot water system.

Total kilowatt hours saved: 4,204,000

Total MCF saved: 67,600

Hamot Medical Center – \$250,000 to replace a large central HVAC handling unit serving an operating suite in the hospital.
Total kilowatt hours saved: 3,082,380
Total MCF saved: 121,360

Millcreek Community Hospital – \$250,000 to upgrade and implement several energy conservation and control measures to the air conditioning system to increase energy efficiency.
Total kilowatt hours saved: 9,550,000
Total MCF saved: 42,320

Forest County

Forest County - \$250,000 to purchase and install energy efficient aluminum frame windows and new boilers in the Forest County Courthouse.
Total kilowatt hours saved: 221,080
Total MCF saved: 53,000

Huntingdon County

Huntingdon County - \$206,405 for multiple energy upgrades at the Shirley Home Energy Conservation Project including adding a dual-fuel burner on the steam boiler, replacing 16 window air conditioners with an air-to-air heat pump, installing 50 double-hung replacement windows, replacing nine exterior doors, replacing three inefficient residential refrigerators, and installing a propane hot water heater.
Total MCF saved: 19,082

Huntingdon Borough - \$210,000 to install a natural gas boiler and ceiling insulation at the borough's water treatment facility, and replace the municipal building's gas/electric HVAC system with geothermal heat pumps. The project will create two permanent, part-time jobs.
Total MCF saved: 24,724

Lackawanna County

Covington Township - \$108,225 to install energy conservation measures at Moffat Estate, the township municipal building. Steps to be taken include installation of a 10 kW wind turbine to generate electricity and various building improvements such as adding insulation, replacing windows and improving heating and ventilating systems.
Total kilowatt hours saved: 1,674,213
Total MCF saved: 7,848
Total kilowatt hours generated: 260,780

Keystone College – \$200,000 for a campus wide lighting upgrade that will result in a significant increase in energy efficiency.
Total kilowatt hours saved: 9,946,780

Moses Taylor Hospital – \$85,900 for lighting upgrades, vending machine misers and compressed air system improvements.
Total kilowatt hours saved: 5,738,720

Scranton Cultural Center at the Masonic Temple – \$250,000 to replace 94 incandescent stage lights with 35 energy efficient LED lights. The project is expected to create five full-time jobs for installation and maintenance.
Total kilowatt hours saved: 9,144,820

Lackawanna College – \$250,000 to install 126 full-size and 126 transom energy efficient windows in the college’s main campus building.
Total kilowatt hours saved: 25,334,670

University of Scranton – \$250,000 to replace or upgrade existing lighting fixtures on approximately 25 percent of the campus, including classrooms, offices, hallways and dormitories.
Total kilowatt hours saved: 10,159,610

Lancaster County

Penn Township - \$219,162 to install a 64 kW solar photovoltaic system on the existing township public works facility.
Total kilowatt hours generated: 2,092,500

Warwick Township - \$96,098 for a multi-part project to increase building envelope efficiency through insulation and window replacement, and replace external and internal lighting with occupancy sensors. This project will create the equivalent of one new, permanent job, 11 new full-time, temporary jobs and two new part-time jobs.
Total kilowatt hours saved: 5,077,210

ILC Corporation – \$100,000 to purchase and install 122 compressor control units and 200 LED streetlight retrofits.
Total kilowatt hours saved: 2,300,382
Total MCF saved: 12,663

Thaddeus Stevens College of Technology – \$250,000 to retrofit the lighting systems in 12 of the school’s older buildings.
Total kilowatt hours saved: 6,954,690

Lawrence County

City of New Castle - \$16,732 to retrofit indoor fluorescent lighting at several facilities.
Total kilowatt hours saved: 554,130

Ellwood City Borough – \$250,000 to install 250 LED street lights.
Total kilowatt hours saved: 1,815,000

Jameson Memorial Hospital – \$222,351 to upgrade the school’s cooling system, including a new cooling tower and building controls to maximize free cooling opportunities.

Total kilowatt hours saved: 12,451,540

Lebanon County

Lebanon County - \$292,000 to upgrade existing incandescent traffic signals to LED lighting across the county.

Total kilowatt hours saved: 23,605,650

Lehigh County

Upper Macungie Township - \$181,544 to upgrade existing incandescent traffic signals to LED signals at 18 intersections and upgrade inefficient HVAC systems at the Independent Park recreation site and the public works garage.

Total kilowatt hours saved: 4,735,830

Total MCF saved: 35,927

Allentown Parking Authority - \$250,000 to replace and upgrade existing lighting to lower wattage fixtures.

Total kilowatt hours saved: 5,094,240

Lower Macungie Township - \$183,670 to replace boilers and upgrade lighting fixtures in the township’s office building and annex.

Total kilowatt hours saved: 743,628

Total MCF saved: 2,737

Luzerne County

Wilkes-Barre/Scranton International Airport - \$46,144 to replace old, high wattage lighting fixtures in seven airport buildings.

Total kilowatt hours saved: 3,075,300

Huntingdon Township - \$32,003 to improve building insulation and reduce overall energy use in lighting, general heating and water heating. The savings will allow the township to temporarily employ 11 people during the renovation process.

Total kilowatt hours saved: 1,072,070

Luzerne County Conservation Center Authority - \$176,576 to retrofit outdoor arena marquee with an LED display.

Total kilowatt hours saved: 2,243,440

Economic Development Council of Northeastern Pennsylvania - \$239,000 for a multi-municipal effort to increase energy efficiency of government buildings, including replacing windows, doors, water heaters and lighting fixtures.

Total kilowatt hours saved: 1,001,764

Total MCF saved: 8,240

West Wyoming Borough - \$241,114 for an energy efficiency retrofit of the borough's town hall which includes a new high efficiency Energy Star furnace and air conditioning, energy efficient windows, insulation, brick repointing and energy efficient lighting. This project will reduce energy consumption by 27 percent.

Total kilowatt hours saved: 30,830

Total MCF saved: 15,000

City of Nanticoke - \$250,000 to replace the 25-year-old electric HVAC system in the borough's municipal building, and to replace bathroom fixtures and faucets to conserve water use. The project will result in employment of 10 contractors throughout the life of the project.

Total kilowatt hours saved: 2,446,790

Misericordia University - \$170,602 to replace 162 T12 light fixtures and 42 incandescent exit signs with equivalent LED fixtures.

Total kilowatt hours saved: 955,750

Total MCF saved: 9,785

Mercer County

George Junior Republic - \$250,000 to replace the school's original heating system and replace it with new EnergyStar-rated equipment.

Total MCF saved: 419,100

Montgomery County

Township of Upper Merion - \$102,795 to replace a gas-fired boiler, retrofit entry doors, and retrofit exterior parking area lights with LED lighting.

Total kilowatt hours saved: 796,650

Total MCF saved: 34,640

Pottstown Borough Authority - \$250,000 to install high-efficiency aeration blowers at the waste water treatment plant.

Total kilowatt hours saved: 5,227,970

The Devereax Foundation - \$250,000 to upgrade the HVAC/air handler system, insulation, windows and ductwork at the Devereax Kanner Center.

Total kilowatt hours saved: 1,492,180

Total MCF saved: 8,790

Lansdale Hospital Corporation - \$250,000 to improve lighting system controls, apply a computerized building control system for the HVAC systems, and the renewal of air handling systems with high-efficiency heat pumps and air handlers.

Total kilowatt hours saved: 39,569,020

Abington Memorial Hospital – \$250,000 to retrofit four parking garages with high-efficiency lighting fixtures and controls.
Total kilowatt hours saved: 12,253,590

Northumberland County

Milton Regional Sewer Authority - \$500,000 to install of an aerobic digester and purchase energy efficiency blowers, air delivery and diffuser equipment.
Total kilowatt hours saved: 10,472,000

Perry County

Perry County - \$250,000 to replace the current HVAC system at the county prison with an energy efficient geothermal system.
Total kilowatt hours saved: 22,743,560

Philadelphia County

Chestnut Hill College – \$250,000 to install an energy management system which will enable campus-wide energy and water savings via scheduling and monitoring of HVAC, lighting, and plumbing systems, reducing consumption and maintenance costs, and increasing system reliability.
Total kilowatt hours saved: 12,237,525
Total MCF saved: 52,695

Trustees of the University of Pennsylvania – \$181,650 to retrofit six exhaust fan motors at the Carolyn Lynch Laboratory with variable frequency drives, allowing the fans to run slower and save energy.
Total kilowatt hours saved: 11,791,580

Pike County

County of Pike - \$302,500 for energy efficiency improvements to municipal buildings in Lackawaxen and Shohola townships and Matamoras Borough. Improvements include new efficient lighting, additional insulation, select window and door replacement and upgrades to inefficient heating and cooling systems. A 25 kW solar panel array will be installed at the Matamoras Borough Fire Hall/Maintenance Building.
Total kilowatt hours saved: 3,746,164

Potter County

Harrison Township - \$44,000 to install a new door and energy efficient windows, weather-stripping and insulation.
Total kilowatt hours saved: 4,944,320
Total MCF saved: 16,880

Schuylkill County

Borough of Tamaqua - \$250,000 to install a new energy efficient geothermal HVAC system and insulation of the exterior walls and roof at the borough's waste water treatment facility.
Total kilowatt hours saved: 12,561,380

Borough of Orwigsburg - \$250,000 upgrades at the Community Memorial Hall, which include the installation of a ground source geothermal HVAC System, solar panels, storage tanks with a heat exchanger, new wall and roof insulation to current code requirements, and the removal of the current inefficient oil fired burner. Initial consultant estimates indicate an energy savings of more than 60 percent.
Total kilowatt hours saved: 4,639,800

Somerset County

Borough of Berlin - \$249,977 to install a new gas boiler in the Berlin Community Building and replace 105 outdated mercury vapor street lights.
Total kilowatt hours saved: 1,287,720
Total MCF saved: 8,120

Somerset County - \$249,784 to upgrade to a high efficiency HVAC system with a modern control system at the county jail, and lighting upgrades in the county library and parking garage.
Total kilowatt hours saved: 5,617,290

Susquehanna County

Susquehanna County - \$100,000 to install new equipment and piping, and install energy efficient windows at the county courthouse.
Total kilowatt hours saved: 6,325,589
Total MCF saved: 15,660

Union County

Municipal Authority of the Township of Gregg - \$250,000 to upgrade the existing treatment plant headworks, air diffusers, aeration blowers, and replace the utility water system.
Total kilowatt hours saved: 12,550,000

Bucknell University - \$250,000 to replace the two air handling units serving the two main dining facilities in the Elaine Langone Center, and upgrade those areas to a variable air volume system with occupancy monitoring to optimize energy use.
Total kilowatt hours saved: 7,654,300
Total MCF saved: 83,000

Venango County

City of Franklin - \$229,607 to retrofit four municipal buildings with energy efficient light fixtures, overhead doors and heating units. It is anticipated that this project will help create eight temporary, full-time and part-time positions.
Total kilowatt hours saved: 665,300
Total MCF saved: 35,927

Warren County

Brokenstraw Valley Authority - \$500,000 to optimize the timing of sewage treatment to improve performance, reduce equipment wear and tear and reduce energy use for disinfection and aeration. A variable speed control on the blowers at the wastewater treatment plant will improve the efficiency of the aeration process. The project will also include improvements at three sewage pump stations. These improvements will result in energy savings of more than 28 percent.

Total kilowatt hours saved: 1,325,040

Washington County

Peters Township Sanitary Authority - \$137,250 to make mechanical upgrades and operational changes that will reduce energy demands at the Bush Run and Donaldson's Crossroads Water Pollution Control plants.

Total kilowatt hours saved: 3,238,400

Total MCF saved: 3,040

Westmoreland County

City of Jeannette Municipal Authority - \$250,000 to replace the natural gas boiler/heat exchanger at the wastewater treatment plant with a methane gas combination boiler/heat exchanger.

Total MCF saved: 35,800

City of New Kensington - \$213,351 to replace 148 mercury vapor street lights within 16 city blocks resulting in 85 percent energy savings. The project will create 15 full-time jobs. There are an estimated 10 additional jobs that would be provided for assembling the LED lights and installation.

Total kilowatt hours saved: 3,812,120

York County

Carroll Township - \$138,000 to retrofit the municipal building with efficient heating and cooling system, which includes removing the rooftop units and replacing them with EnergyStar-rated equipment. The resulting savings will allow for the replacement of the old oil heating system in a separate part of the building. Annual energy savings is expected to be 56 percent.

Total kilowatt hours saved: 2,291,400

Multi-County Projects

Lyc-Clint Counties Commission Community Action (STEP), Inc.

(Lycoming and Clinton) - \$250,000 to transform a vacant retail building into a new community center. The new center will use EnergyStar-rated equipment and is expected to attain LEED Silver Level certification.

Total kilowatt hours saved: 7,227,420

Total MCF saved: 3,900

Economic Development Council of Northeastern Pennsylvania D.B.A. NEPA Alliance (Lackawanna, Luzerne, Pike, Wayne, Carbon, Monroe and Schuylkill) - \$491,400 to help municipalities realize energy and cost savings by converting or retrofitting existing traffic signal lights in 25 municipalities.
Total kilowatt hours saved: 34,749,000

Economic Development Council of Northeastern Pennsylvania D.B.A. NEPA Alliance (Lackawanna, Luzerne, Pike, Wayne, Carbon, Monroe and Schuylkill) - \$491,400 to help municipalities realize energy and cost savings by converting or retrofitting existing traffic signal lights in 18 additional municipalities.
Total kilowatt hours saved: 34,749,000