

Maryland Green Registry MEMBER The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

# **Pepco Holdings, Inc. (PHI)**

(Pepco, Delmarva Power, and Pepco Energy Services) 701 Ninth Street, NW, EP9208 Washington, DC 20068 202-872-4280 www.pepcoholdings.com, www.pepco.com www.delmarva.com, www.pepcoenergy.com Member since October 2009

## Management and Leadership

## **Environmental Team**

PHI Executive Management has appointed PHI's Vice President and General Auditor as the Environmental Compliance Officer for Pepco Holdings, Inc. Executive Management of the PHI lines of business is responsible for designating an Environmental Compliance Officer for their respective business and Site Environmental Compliance Officers for each facility within their business.

PHI's Environmental Executive Leadership Team provide effective top management oversight of PHI's environmental compliance activities in an effort to ensure that sound and consistent environmental practices are being adhered to across all PHI lines of business and to drive continuous improvement in the Company's overall environmental performance.

The PHI Corporate Environmental Services Group provides guidance and oversight to the organizations as well as embedded environmental support.

## **Environmental Policy Statement**

PHI is dedicated to conducting its business activities with respect and care for the environment. We focus on providing safe, reliable and affordable energy to our customers while we strive to minimize environmental impacts that result from our operations. The PHI Environmental Policy Statement was reissued in August 2009 by PHI Chairman & CEO. The new policy reflects our continued commitment to environmental protection and resource conservation. The policy continues to hold employees at every level responsible for carrying out their part of the company's environmental responsibilities, and for following the rules iterated in the EMS. The new redrafted Policy guides our activities in protecting and preserving the environment for future generations. The policy statement can be found within the Corporate Environmental Sustainability Report "Powering a Sustainable Future" at

<u>http://www.pepcoholdings.com/ res/documents/PHI Environmental Sustainabi</u> <u>lity Report.pdf</u>

## Annual Environmental Goals

PHI's business plan is founded on a commitment to producing energy and delivering electricity safely and reliably; helping our customers to conserve energy; and utilizing operational practices that achieve the smallest possible environmental footprint. As part of this commitment, the company has established annual goals and targets across its lines of business that are focused on reducing the company's environmental footprint and investing in infrastructure to improve reliability and bring customer benefits. The targets that are currently in place address the following initiatives that are relevant to greenhouse gas reduction and energy reduction:

- Deploying advanced metering infrastructure for the company's utility customers
- Implementing "Smart Communities" in the company's service territory
- Deploying demand response programs for the company's utility customers
- Implementing new energy efficiency and conservation programs for the company's utility customers
- Installing and maintaining new solar power systems
- Increasing green energy production from other alternate sources
- Evaluating and continuing to reduce the emission intensity profile of the company's vehicle fleet
- Maintaining EPA ENERGY STAR<sup>®</sup> status for PHI corporate offices
- Continuing the company's green purchasing program
- Sustaining the solid waste recycling program for paper, plastic, glass and aluminum at all facilities managed by the company's utilities

The company's progress toward these goals is tracked and reported to the company executives on a quarterly basis.

## **Environmentally Preferable Procurement**

PHI is committed to reducing its environmental footprint by fully considering, consistent with price, performance, availability, and safety

considerations, the purchase of products that have a lesser or reduced effect on human health and the environment when compared with conventional or competing products used for the same purpose. In evaluating the products we procure, PHI may consider the environmental aspects and impacts associated with all stages of the product's life, including raw materials used, manufacturing, packaging, maintenance requirements, reuses, recycle potential and disposal options. For example, PHI has reduced the purchase and use of aerosol products, is replacing hazardous solvents with nonhazardous alternatives, hires cleaning service companies that use Green Seal approved products and has undertaken a multi-year program to replace mercury vapor street lights with high-pressure sodium lights. We are also supporters of the U.S. Department of Commerce/U.S. Environmental Protection Agency's Green Supplier Network program, which works with suppliers to reduce both their environmental impacts and operating costs.

## **Environmentally Preferable Products and Services**

Pepco provides electricity service to 521,000 customers in Prince George's and Montgomery counties. To give our consumers more information about the energy they use – and empower them to make wise energy decisions, PHI has been field testing advanced meters and other components of advanced electric metering technology in preparation for deployment to customers' homes and businesses. This cutting-edge technology gives individuals, businesses and utilities a greater ability to monitor – and reduce – energy usage through realtime information about how much energy individual customers are using and when that usage occurs.

The company proposes to offer rebates, bill credits or other financial incentives to both residential and commercial customers who install energyefficient appliances, equipment or other measures and/or who participate in voluntary peak-demand reduction programs. Successful programs can reduce the need for new or additional power generation and the environmental impacts of that additional generation.

Pepco Energy Services, a wholly owned Subsidiary of PHI, helps industrial, commercial, educational, health care, and local, state and federal governments reduce their energy consumption and expenses. Over the last 14 years, the company has developed, implemented, and financed over \$600 million of energy savings performance contracts for more than 250 customers. Pepco Energy Services engineers develop recommendations for steps to reduce energy usage and identify optimum methods to monitor, measure, and verify energy use for peak performance and cost savings. The solutions the company designs, builds and maintains generate enough savings that the projects are self-funding, allowing customers to shift operational dollars to capital improvements.

#### **Environmental Restoration or Community Environmental Projects**

## *Pepco Implementation of Integrated Vegetation Management on Selected Rights-Of-Way*

To conserve natural resources and preserve environmental quality, PEPCO is managing certain Maryland Rights of Way (ROW) vegetation by employing Integrated Vegetation Management (IVM). Integrated Vegetation Management is a series of Best Management Practices that interprets tree care standards and provides guidelines to help Pepco Foresters manage our ROW's. Unmanaged vegetation growing near utility rights-of-way can damage utility facilities and cause problems with the safety and reliability of the circuits. Pepco currently complies with federal, state and local regulations that require vegetation control in proximity to the electric facilities. Using IVM allows Pepco to create wire zone areas along the ROW where the vegetation can be managed to promote lowgrowing plant communities dominated by grasses, herbs and small shrubs. The wire zone is the section of the ROW directly under the wires and extending outward roughly 10 feet on each side of the outermost conductor. Border zone areas can also be created along the edges of the ROW to establish small trees and tall shrubs and to the extent feasible, scattered, small native trees. The border zone on each side of the ROW begins at the outer edge of the ROW and ends roughly 10 feet from the outermost conductor(s). When properly managed, diverse, tree-resistant plant communities develop in the wire and border zones. These plant communities not only protect the electric facility and reduce long term maintenance, but also enhance wildlife habitat, forest ecology, and aesthetic values. Where topography allows additional vertical clearances under conductors that will provide connectivity of parcels of forest currently bisected by the ROW, the IVM protocols employed will maximize vegetation height and density. The resulting vegetation clearances will be compliant with applicable North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) rules, guidance, policies, procedures, and regulations.

After the establishment of the wire zone and border zone, PEPCO will maintain the areas as grasses and forbs during the breeding season for ground nesting birds from May through August of each year. If mowing is necessary outside of the May through August breeding season, mowing will be a height of no less than 10 inches in the border zone and no less than 6 inches in the wire zone, with the exception of areas under special management for invasive species control.

All wetlands and stream and wetland buffers (as defined by MDE) shall have IVM protocols employed that maintain a sustainable vegetation community of maximum height and density.

Where topography allows taller vegetation and trees under the conductors with a 25-foot safety distance may be cleared between the top of the

vegetation canopy and the conductors, unless the National Electrical Safety Code specifies a greater distance.

Pepco follows guidelines specified in "Best Management Practices: Integrated Vegetation Management (IVM) on Electric Utility Rights-of-Way (R. Miller, International Society of Arboriculture, 2007).

A detailed vegetation management plan will be created for each specific ROW and will include a map with pole positions, wetlands and streams and the buffers around them; areas of border zone and wire zone vegetation; and designated taller vegetation corridors across the ROW where topography allows additional vertical clearances under conductors, and the existent vegetation clearly indicated. The plan will describe the appearance/functionality of the vegetation in the ROW after construction, the proposed long-term appearance/functionality, and which prescribed vegetation management will be implemented.

#### Additional Restoration and Community Environmental Projects

As public concern about ecosystems changing habitats, pollution and land management continues to grow, PHI is committed to addressing all of these through the use of proactive and sustainable conservation and restoration initiatives in the context of its business initiatives. PHI uses an interdisciplinary, proactive approach to promote sound ecological practices and to restore, conserve and manage wetlands, protected public areas, forests and private property along its transmission and distribution line projects. PHI also partners with educational groups to help youth understand the importance of wildlife habitat conservation so that our natural resources are protected for future generations. PHI's natural resource conservation and habitat management goals are accomplished in part through pre-project planning studies used to identify sensitive locations and quide implementation of protective measures and best management practices that avoid impacts wherever possible, minimize unavoidable impacts, restore temporary impacts and mitigate for permanent impacts related to our business activities. Such measures include matting to cross wetlands, diverse methods of erosion and sediment control and hand clearing of vegetation in sensitive areas. This is essential for safe and reliable transmission of electricity as well as for protecting our natural resources. Silt fences are placed at the edges of wetland mats and around work areas to reduce siltation impacts. For projects where wetlands mitigation may be needed, PHI works closely with permitting agencies and other groups to create, enhance and/or preserve wetlands to increase the functional value of the area, particularly in regard to plant and wildlife habitat.

As part of its commitment to protecting the environment and being a good neighbor to the communities it serves, PHI works hard to turn potential environmental liabilities into clean and productive assets. PHI's recent, widely praised restoration of a "town gas" site on Maryland's Eastern Shore is an example of our success in this endeavor. As far back as the 1860s, a manufactured gas plant operated on a tract of land in Cambridge, Md. Delmarva Power now owns this land and began environmental remediation in the early 1990s, with the approval of the Maryland Department of the Environment. The work involved the removal of old gas plant structures and tanks and reinforcement of the bulkhead coal tar residue from reaching Cambridge Creek. The environmental cleanup of this site was completed in fall 2008 with the removal of 13,700 tons of material.

#### The Pepco WaterShed Sustainability Center

Pepco's new eco-friendly WaterShed Sustainability Center is located at its Rockville Service Center at 201 West Gude Drive and is open to the public for guided tours. The Center includes an energy-efficient house that was designed and built by students and faculty from the University of Maryland and won first place in the U.S. Department of Energy's 2011 solar decathlon on the National Mall.

WaterShed demonstrates a sustainable building design, renewable energy, a microgrid and how smart-grid technologies can be integrated into daily life. The house functions as a microscale ecosystem that captures and fully uses the energy of the sun and rain, while recycling domestic "wastes" that retain valuable energy and nutrients. It is designed as net-zero energy home that can also harvest, recycle and reuse water, including support to a local wetland and drought-tolerant plants native to the area that reduce runoff.

## ✓ Independently-Audited Environmental Management System

PHI's environmental management system (EMS) serves to ensure implementation of the policy and provides a benchmark for evaluating performance. Our EMS also reflects our corporate commitment to environmental and safety excellence across the board. PHI's forward-looking EMS is organized into five functional areas: Environmental Policy, Governance, Environmental Compliance Programs, Environmental Stewardship Programs and Risk Management. The EMS also includes a series of corporate procedures and standards that help implement and provide guidance on the company's policies and clarify employees' environmental roles and responsibilities in each line of business.

One of the many ways that PHI manages its environmental risks is through its Environmental Audit Program, as outlined in our EMS. The main objective of our Environmental Audit Program is to provide independent verification and assurance to management that the company's operations are being conducted in accordance with applicable laws, regulations and internal standards. It also oversees the identification and implementation of best management practices and sustainable solutions that not only support compliance, but also drive continuous improvement in PHI's environmental performance throughout all the company's businesses and facilities.

The PHI EMS audit program is directed by the Manager of Safety and Environmental Performance and conduct by trained audit team members -including independent contractors with specialized skills in environmental auditing and/or focused expertise on key compliance matters. The use of contractor auditors is designed to improve the efficiency and effectiveness and help maintain the appropriate level of independence of the overall audit process. When selecting an independent contractor the Manager of Safety and Environmental performance will require candidates that have demonstrated experience in EMS design and implementation, knowledge of applicable EPA rules and regulation, knowledge in the power delivery and power generation operation and familiarity with the audit methodology's utilized by PHI.

### <u>Waste</u>

## Solid Waste/Material Use Reduction and Reuse

PHI avoids the creation of pollution and waste in many ways. For example, Pepco has an extensive program to refurbish out-of-service transformers and restore them back to the system. The refurbishment process consists of sandblasting the rusted exterior to white metal, priming and repainting with special paints. Usable parts are removed from the equipment that are no longer serviceable and are cleaned, stored and used as spare parts.

PHI has also greatly reduced paper use by maintaining an extensive database of training and policy modules and making them available electronically to all employees. When printing and copying are necessary PHI provides duplex printers and copiers at nearly all of its facilities. In addition, we maintain and recharge batteries to extend their lives and reduce battery waste.

#### Recycling

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PHI supports recycling, reuse and recovery at all levels of our business. From recycling bins for paper, glass, cans and plastics in our office areas to refurbishing and reusing all types of equipment in the field, we are committed to making better use of our resources. PHI also recycles used lamps, batteries, electronic items, and its Vehicle Resource Management group recovers used oil using hydraulic oil recycling machines. In 2008, PHI facilities collectively recycled and reused 153,489 tons of industrial and office wastes with approximately 24,136 tons from its Maryland facilities.

#### Energy

## Energy Efficiency

*Our facilities – office buildings, power plants and energy transmission and* distribution centers – offer many opportunities for implementing energy-saving solutions and PHI has been taking advantage of these. Green design techniques are used when planning new construction; many of our existing facilities are being retrofitted. Edison Place, the state-of-the-art and energy-efficient headquarters of PHI, is the most prominent example of our facilities transformation. Built in 2000-2001, Edison Place earned accolades for its architecture and design, and has earned the U.S. Environmental Protection Agency's (EPA's) prestigious 2008 ENERGY STAR<sup>®</sup> Award, the national standard for superior energy efficiency and environmental protection. ENERGY STAR<sup>®</sup>, the joint program of the U.S. Department of Energy and the U.S. Environmental Protection Agency that helps individuals and companies save money and protect the environment through energy efficient products and practices, recently announced our achievement in demonstrating outstanding environmental leadership. Commercial buildings that earn the ENERGY STAR® label use an average of 40 percent less energy and release 35 percent less carbon dioxide into the atmosphere than typical buildings. Energy-efficient lighting has been installed throughout Edison Place and occupancy sensors in every office to ensure that lighting is not wasted on unoccupied spaces. All of the building's heating, ventilation and air conditioning system controls also have been adjusted for maximum energy efficiency.

At all of our facilities, we use workstation power management programs to minimize energy use of our computers and other electronic equipment

## Renewable Energy

Pepco Energy Services is one of the largest providers of renewable electricity in the United States, supplying a wide range of customers. In the mid-Atlantic region, the company supplies renewable energy to 6.5 percent of its New Jersey load, 4.5 percent of its Maryland and District of Columbia load and 4.2 percent of its Pennsylvania load, and these percentages will continue to increase. The company also helps a growing number of customers, including the U.S. Capitol, to purchase renewable energy credits (RECs) through which it provides cost-effective, environmentally sound green energy solutions individually tailored to meet each customer's goals within budget Conectiv Energy, a subsidiary of PHI, is contracting for a share of energy and RECs from a 198-megawatt (MW) wind farm operation in Illinois. Conectiv Energy will buy 50 percent of the wind farm's output (approximately 100 MW) effective Nov. 1, 2008 through July 1, 2017. Conectiv Energy's share of the wind farm output is expected to be approximately 300,000 megawatt-hours (MWh) per year (35 percent capacity factor). This contract expands Conectiv Energy's current activities in Illinois, which also include supplying load to the state's ComEd customers. Portions of Illinois are part of the PJM Interconnection, which operates the transmission system in the mid-Atlantic region. States within PJM accept RECs generated by facilities only if they are located in, or interconnected with, PJM's territory.

In December 2008, Pepco Energy Services completed the largest single roof-mounted installation of solar electricity panels in the United States. The project covers over 290,000 square feet on the roof of the Atlantic City Convention Center in New Jersey. The company will own, operate and maintain the solar array. Its 13,486 solar panels are capable of creating 2.36 megawatts of power and delivering nearly 3 million kilowatt-hours of electricity annually Both Conectiv Energy and Pepco Energy Services are active in generating power from reclaimed methane gas produced by landfills (which has been identified as a greenhouse gas suspected of contributing to global climate change).

#### **Transportation**

## **Employee Commute**

To promote the use of Mass Transit verses driving a vehicle, Pepco offers SmartBenefits which is an electronic way to receive Mass Transit benefits. The Mass Transit pre-tax transit benefits are electronically added each month to the employees Washington Metropolitan Area Transit Authority SmarTrip<sup>®</sup> card. This card simplifies transit travel and reduces employee's carbon footprint.

PHI also provides van pools for employee's commuting to and from New Jersey and Delaware worksites. A large majority of employees traveling long distance to the Corporate Headquarters in Washington DC, travel by Amtrak in place of driving.

#### Efficient Business Travel

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Across the four companies within PHI that are located in Delaware, New Jersey, Maryland, Virginia and Washington DC, the employees frequently utilize

conference call capabilities, webinars, "Sametime Online Meeting" program and video conferencing technologies to reduce travel to other business sites.

## Fleet Vehicles

PHI is moving ahead with the transformation of its vehicle fleet by adopting environmentally friendly technologies such as hybrids and alternativefuel vehicles to curb greenhouse emissions, and by the use of biodiesel fuel in those vehicles that have a diesel engine. The fleet will be transformed over the next five years as vehicles are due for replacement, initially with hybrid or alternative fuel vehicles and later with newer technologies as they become commercially available. In early 2007, PHI added a total of seven hybrid vehicles to its fleet, including one hybrid bucket truck. By the end of 2007, PHI had expanded that number to 40 hybrid passenger vehicles, including vehicles from Ford, Mercury, Toyota and Honda in addition to the hybrid bucket truck. An additional 98 hybrid vehicles, including eight new hybrid bucket trucks, were added to the fleet in 2008. The number of hybrids will continue to increase as combustion-only vehicles are scheduled for replacement.

Additionally the company Hybrid Pool Cars (both vehicles and vans) is made available for employees when traveling to meetings during business hours. PHI has 74 hybrid passenger cars that get 45 miles/gal compared to 28 miles/gal. The savings is 152 gal per year based on 12,000 miles/year. There are 55 hybrid SUVs that get 26 miles/gal compared to 18.9 mi/gal which equates to a saving of 182 gallons/year based on 12,000 miles/year.

There are 9 hybrid bucket trucks that get 6.7 miles/gallon verses 4 miles/gal based on 12,000 miles/year. Due to our 905 bio-diesel trucks, there was a reduction of CO-2 fleet emissions in 2008 by approximately 1,000 tons.

#### **Water**

## **Water Conservation**

Pepco is actively implementing water conservation measures at its facilities, including plumbing fixture retrofits, process water control upgrades and installation of native and adaptive landscaping. As part of this project, Pepco reduced its potable water consumption by over 1,200,000 gallons at its corporate headquarters building located in the District of Columbia.

10

#### Stormwater Management and Site Design

PHI has a Vegetation Management Program along its transmission rightsof-way which is essential for safe and reliable transmission of electricity as well as protecting our natural resources. The program reduces the need for the use of herbicides and provides many benefits. These benefits include: improving plant and wildlife habitat, enhanced employee training, providing public education, promoting landowner communications and cooperative efforts with cities, municipalities and other groups.

PHI developed a partnership with the city of Bowie and the U.S. Fish and Wildlife Services in developing a BayScapes and wildflower area along its 230 kV transmission rights-of-way. The wildlife meadow is visible from both residential and commercial areas and a major highway.

Storm water pollution prevention plans and associated training are prepared for several facilities. Employees that manage the facilities are trained to recognize and respond to situations that may compromise the integrity of the environment.

#### **Green Building**

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## LEED Gold - Existing Buildings Rating System

Edison Place, the corporate headquarters for Pepco Holdings, Inc. received the first U.S. Green Building Council's Leadership in Energy and Environmental Design for Existing Buildings: Operations & Maintenance (LEED EBOM) certification. The project achieved Gold certification. Edison Place is a 400,000 square foot Class A office building located at 701 Ninth St., NW. in Washington, D.C. Cassidy & Pinkard Colliers was a critical partner in the process that led to the building's certification; a process that began in 2007 as part of PHI's Blueprint for the Future plan to use technology and energy efficiency to meet the nation's energy challenges.

Pepco also promotes green building practices through the Pepco WaterShed Sustainability Center located at our Rockville Service Center. See "Environmental Restoration or Community Environmental Projects" section above for more information on the green building features demonstrated at this facility.

## Other

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Pepco Holdings, Inc. (NYSE: POM) is "among the U.S. corporations leading efforts to tackle climate change," according to this year's Carbon Disclosure Project (CDP) S&P 500 Report. PHI scored 87 of a possible 100 points on the Carbon Disclosure Leadership Index (CDLI), placing it in the top 10 percent of all S&P companies, and in the top tier of all utilities. The CDP summary report of all sectors highlights PHI's achievements in both the ranking presentation and the narrative of the report.

The Wildlife Habitat Council has given its 2008 International Habitat Conservation Award to Pepco Holdings, Inc.'s forestry program in recognition of the company's "commitment to environmental stewardship and promotion of biodiversity." PHI maintains approximately 1,200 miles of high-voltage transmission line rights-of-way, and fosters diversity of indigenous flora and fauna through meadow management; stream bank stabilization; natural bog preservation; wildflower maintenance and protection; and many other programs aimed at reversing or preventing the loss of species and their habitats from our region.

PHI was an Education/Outreach finalist in the Washington Business Journal and the Washington Board of Trade's "2008 Green Business Awards" program. In Maryland, PHI partnered with several retailers to provide customers with discounts for purchasing energy-efficient Compact Fluorescent Light bulbs (CFLs).

All three PHI utilities – Atlantic City Electric, Delmarva Power and Pepco – have been named Tree Line USA Utilities for 2008 by the National Arbor Day Foundation. The Tree Line program, sponsored by the Foundation with the National Association of State Foresters, recognizes utilities that demonstrate: a program of quality tree care; annual worker training in quality tree care; and a tree planting and public education program.

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practices that reduce environmental impacts and save money.