

Electronic Handbook of Industrial Resources

MARYLAND



Electronic Handbook of Industrial Resources

MARYLAND

November 2010

Introduction

This resource provides a comprehensive listing of incentives, tools, and resources for industrial manufacturing energy efficiency in the state of Maryland. It is organized according to industrial system and features information on rebates, waived fees, tax credits, loans and other resources such as analysis tools, education and training programs, and energy assessments. It is based on data available in the *States Incentives and Resources Database*, maintained by the U.S. Department of Energy's (DOE) Industrial Technologies Program (ITP).

The *States Incentives and Resources Database* is a comprehensive searchable online database of approximately 3,100 energy efficiency incentives organized by state. The database is updated regularly and is accessible via the *Save Energy Now* State and Regional Partnerships' Web site:

http://www1.eere.energy.gov/industry/states/state_activities/incentive_search.aspx



Contents

- Introduction 2
- State Industrial Overview 4
- Federal and National Industrial Energy Efficiency Programs 5
- State Incentives by Industrial System 5
 - Industrial Systems General 5
 - Lighting 7
 - HVAC 8
 - Building Systems 8
 - Industrial Systems / Process Specific 10
 - Energy Sources 11
 - Load Management 13
- End Notes 16

State Industrial Overview

Maryland has a total of 5.7 million residents and ranks 15th in the nation in terms of GDP, which is \$273.3 billion. The state is home to six Fortune 500 companies. In 2008, Maryland ranked 42nd in the nation's industrial energy consumption at 174.9 trillion Btu and 42nd in the nation's industrial natural gas consumption at 21.9 trillion Btu.¹

Maryland has only one nuclear power plant, which supplies more than one-fourth of the electricity generated by the state. A small amount of coal is produced by Maryland in the Appalachian Mountains. Cove Point, a liquefied natural gas (LNG) import facility is also located in Maryland, where LNG is then distributed throughout the Mid-Atlantic and Northeast regions of the United States.²

Exhibit 1 below compares the industrial energy consumption in Maryland in relation to the national average. The chart in Exhibit 2 is a visual representation of the same data.

Exhibit 1: Total Industrial Energy Consumption Statistics in Maryland

Year	Maryland Energy Consumption (Trillion Btu)	National Average (Trillion Btu)
2000	263.8	680.2
2001	259.4	642.8
2002	375.0	642.0
2003	435.1	639.6
2004	380.8	658.7
2005	378.3	696.7
2006	184.5	636.6
2007	183.6	637.0
2008	174.9	614.8

Source: http://www.eia.doe.gov/emeu/states/sep_use/ind/use_ind_md.html

Maryland at a Glance

State Information

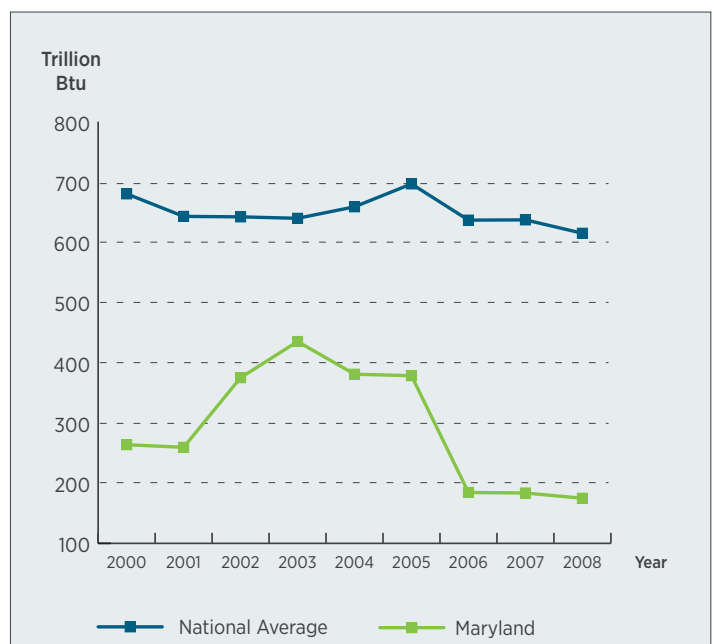
2009 Population (Million)	5.7
2008 GDP (Billion)	\$273.3
Rank by GDP	15

Energy Statistics

Total Energy Consumption 2008 (Trillion Btu)	1,446.9
Total Industrial Energy Consumption 2008 (Trillion Btu)	174.9
Total Industrial Energy Consumption Rank	42
Total Industrial Electricity Use 2008 (Trillion Btu)	19.3
Total Industrial Electricity Use Rank	40
Total Industrial Natural Gas Use 2008 (Trillion Btu)	21.9
Total Industrial Natural Gas Use Rank	42

Source: http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=MD

Exhibit 2: Total Industrial Energy Use



Federal and National Industrial Energy Efficiency Programs

In addition to the state level programs outlined in more detail in section III there are many government and non-government organizations that have resources to assist industry in the western region to utilize energy more effectively. Financial and technical resources are available from federal agencies, national laboratories, utilities, utility associations, industrial organizations, energy efficiency organizations, state energy offices, energy services companies, non-profits or non-governmental organizations, foundations, and private companies.

ITP is one such program that provides industrial manufacturers across the country with a variety of energy efficiency tools, resources, and incentives. ITP is a prime example of DOE's commitment to improving the energy efficiency of industrial operations in the United States. ITP is a multi-faceted outreach and deployment initiative designed specifically for industrial manufacturers. ITP supports research and development of energy efficient technologies, provides industry with energy management and assessment tools, resources, and information. It also provides no-cost energy assessments to industrial plants of all size.

Several other federal agencies offer energy efficiency incentives in addition to the multitude of DOE resources. Internal Revenue Service, for instance, provides tax incentives to industrial manufacturers that implement energy efficiency projects. In addition, the U.S. Environmental Protection Agency provides loans on new energy efficient construction and incentives on the implementation of combined heat and power systems. Finally, the U.S. Department of Agriculture is another federal agency that provides incentives to rural and small industrial operations seeking to become more energy efficient.

State Incentives by Industrial System

Industrial Systems General

Commercial and Industrial Energy Assessment Program

MEA cost-shared energy assessments to identify energy usage and provide recommendations for energy efficiency improvements.

For More Information:

<http://energy.maryland.gov/incentives/business/>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Conservation Loan Program

Low-interest loans available to non-profits and local governments for energy efficiency retrofit projects.

For More Information:

<http://energy.maryland.gov/incentives/state-local/janeelawton.asp>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Custom Incentive Program

This utility offers industrial and commercial customers an opportunity to apply for energy efficiency improvements that are not included in the utility's other incentive programs.

For More Information:

<https://cienergyefficiency.pepco.com/Custom.aspx>

Sponsor: PEPCO
Sponsor Type: Utility

Custom Technology Applications Program

The Custom Technology Applications Program is focused on reducing energy and demand in the small and large, commercial and industrial and governmental/non-profit customers with usage of 1 million to 2.5 million

kWh / year. Allegheny Power will provide incentives to the customer up to 25% of the capital investment, and up to \$100,000 of the project, to obtain the energy and demand savings.

For More Information:

<http://www.alleghenypower.com/Eng-Conserv/PABus/CustTechApps.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Energy Data Services (EDS)

EDS is a powerful data collection tool that turns a customer's energy usage data into the critical information needed to make money-saving energy decisions.

For More Information:

<http://www.alleghenypower.com/Bus-2Bus/EnergyDataServices/EnergyDataServices.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Jane E. Lawton Conservation Loan Program

Low-interest loans available to commercial and industrial businesses for energy efficiency retrofit projects.

For More Information:

<http://energy.maryland.gov/incentives/state-local/janeelawton.asp>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Motors

This program provides customers with cash rebates for the purchase of energy efficient motors. Rebates depend on the size and efficiency of the motors, but range from \$45 per hp to \$700 per 200 hp. The utility also provides custom incentives.

For More Information:

<https://cienergyefficiency.pepco.com/Motors.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Variable Frequency Drives

This program provides customers with cash rebates for the purchase of energy efficient variable frequency drives. Rebates depend on the size and efficiency of the equipment but range from \$1700 per 5 hp to \$7000 per 100 hp. The utility also provides custom incentives.

For More Information:

<https://cienergyefficiency.pepco.com/Variable.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Vending Equipment and Cooler Controls

This program provides customers with cash rebates of \$75 for the purchase of controls for refrigerated machines and \$30 for controls for non-refrigerated machines. There are also customized incentives as well.

For More Information:

<https://cienergyefficiency.pepco.com/Refri.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Constellation NewEnergy Online

This is an energy-management tool that is available to all electricity customers free of charge. The tool allows customers to find opportunities to improve their company's energy efficiencies, track changes in their company's usage, and compare usage across multiple facilities.

For More Information:

<http://www.newenergy.com/portal/site/menuitem.987b194dd5e782ce18a805e4da6176a0>

Sponsor: Constellation NewEnergy

Sponsor Type: Utility

Energy Efficiency Projects

Constellation Energy Projects Services provides solutions designed to achieve energy goals and promote a sustainable future by offering an extensive array of products and services.

For More Information:

<http://www.newenergy.com/portal/site/cne/menuitem.1b1af2559c566632782c82c7883da6176a0>

Sponsor: Constellation NewEnergy

Sponsor Type: Utility

Energy Efficiency Projects

The utility's sister company, Constellation Energy Projects & Services Group, helps commercial customers develop solutions to achieve energy goals.

For More Information:

<http://www.newenergy.com/portal/site/menuitem.1b1af2559c566632782c7883da6176a0>

Sponsor: Constellation NewEnergy

Sponsor Type: Utility

Energy Solutions

A program that forms a partnership with the Columbia Gas team to discover customized energy solutions for ventures.

For More Information:

<http://www.columbiagasmd.com/en/your-business/economic-development.aspx>

Sponsor: Columbia Gas of Maryland

Sponsor Type: Utility

Commercial Energy Calculator

The Commercial Calculator provides estimates of energy usage and costs based on inputs. It also presents a comparison of three efficiency levels for each calculation.

For More Information:

<http://bge.apogee.net/comsuite/biz-frame.aspx?url=/comcalc>

Sponsor: Baltimore Gas & Electric

Sponsor Type: Utility

Commercial Energy Systems Library

This extensive library provides in-depth information on various commercial energy systems, building design, and energy technologies.

For More Information:

<http://bge.apogee.net/comsuite/bizframe.aspx?url=/ces>

Sponsor: Baltimore Gas & Electric

Sponsor Type: Utility

Energy Efficiency Business Programs

The Baltimore Gas & Electric (BGE) Industrial/Commercial General Business Conservation Education Program is designed to pick up where the rebate programs leave off and promote the move to cost-effective, energy efficient products and services.

For More Information:

<http://www.bge.com/portal/site/bge/menuitem.ba8d83d81d610cb-259c031e0da6176a0/>

Sponsor: Baltimore Gas & Electric

Sponsor Type: Utility

Energy Solutions for Your Business

BGE offers financial incentives on equipment, such as lighting, motors, unitary HVAC systems, chillers, variable frequency drives, commercial refrigeration equipment, and commercial kitchen equipment. Incentives are pre-determined and typically cover up to 50% of the total cost for retrofit projects, and up to 75% of the incremental cost for new construction projects.

For More Information:

<http://conservation.bgesmartenergy.com/business/energy-solutions-business>

Sponsor: Baltimore Gas & Electric

Sponsor Type: Utility

Energy Audits

This service investigates total building electric use and then breaks it down into basic components like heating, cooling, lighting, and water heating. The audit will help customers prioritize energy-saving measures.

For More Information:

<http://www.smeco.coop/business/energyservices.html>

Sponsor: Southern Maryland Electric Cooperative

Sponsor Type: Utility

Energy Conservation Services

Southern Maryland Electric Cooperative (SMECO), in partnership with Chevron Energy, offers a full range of services, from facility electric-use audits to complete turn-key retrofits of equipment.

For More Information:

<http://www.smeco.coop/business/energyservices.html>

Sponsor: Southern Maryland Electric Cooperative

Sponsor Type: Utility

Commercial & Industrial Energy Efficiency Incentive Program

The PEPCO Commercial and Industrial Energy Efficiency Incentive Program is designed to promote and encourage energy efficiency projects both large and small. From changing out light fixtures to replacing major mechanical equipment, the program provides cash incentives to reduce qualified project costs. Each of the incentive plans that compose this incentive program is designed to support the purchase and installation of specific energy efficiency upgrades that play a vital role in making a building more efficient and reducing electric bills.

For More Information:

<https://cienergyefficiency.pepco.com/Overview.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Trade Ally Network

The PEPCO Commercial and Industrial Energy Efficiency Incentive Program Trade Ally Network provides a listing of experienced energy efficiency contractors, distributors, and other professionals.

For More Information:

<https://cienergyefficiency.pepco.com/Findally.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Lighting

Lighting and Lighting Controls

This program provides customers with rebates from \$15 to \$60 per fixture for the purchase of energy efficient lighting equipment on both new and existing construction.

For More Information:

<https://cienergyefficiency.pepco.com/Lighting.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Watt Watchers Commercial Lighting Efficiency Program

The Watt Watchers Commercial Lighting Efficiency Program will provide rebates to commercial customers for certain lighting modifications that improve efficiency.

For More Information:

<http://www.allegHENYpower.com/Eng-Conserv/PABus/Lighting.asp>

Sponsor: Allegheny Power

Sponsor Type: Utility

Mercury Vapor Lighting Replacement Program

The Energy Policy Act of 2005 mandates that mercury vapor lamp ballasts shall not be manufactured or imported after January 1, 2008, and additional regulations regarding the manufacturing of mercury vapor lamps will completely eliminate availability by 2011. These regulations are designed to promote energy efficiency and conservation with lighting installations. Allegheny Power offers several alternate lighting types to replace mercury vapor lighting when the fixtures fail.

For More Information:

http://www.allegHENYpower.com/CSC/Services/Mercury_Vapor_Replacement.asp

Sponsor: Allegheny Power

Sponsor Type: Utility

HVAC

Bioheat Tax Credit Program

In 2007, Maryland passed a Bio-Heating Oil Tax Credit. The statute provides for a \$0.03 per gallon tax credit up to \$500 for individuals and corporations that purchase bio-heating oil for the purpose of space and water heating. The statute defines bio-heating oil as being at least 5% biodiesel. The statute also limits tax credits to the 2008, 2009, 2010, 2011, and 2012 tax years.

For More Information:

<http://www.energy.maryland.gov/facts/renewable/bioheattaxcredit.asp>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Geothermal Heat Pump Grant Program

MEA offers grants to residential, business, and other entities to offset a portion of the cost of ground loop geothermal heat pump systems.

For More Information:

<http://energy.maryland.gov/incentives/business/geothermalgrant/index.asp>

Sponsor: Maryland Energy Administration

Sponsor Type: State

High-Efficiency HVAC and Retrofits

Allegheny provides rebates to commercial and industrial customers who install a high-efficiency air conditioner or a high-efficiency heat pump.

For More Information:

<http://www.alleghenypower.com/Eng-Conserv/PABus/HVAC.asp>

Sponsor: Allegheny Power

Sponsor Type: Utility

HVAC Systems

This program provides customers with cash rebates from \$35/ton to \$70/ton depending on the energy efficient rating of new HVAC equipment purchased.

For More Information:

<https://cienergyefficiency.pepco.com/HVAC.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Local Option - Corporate Property Tax Credit

Title 9 of Maryland's property tax code creates an optional property tax credit for corporations. This statute allows counties to provide a credit against the corporate property tax for buildings equipped with a solar, geothermal, or qualifying energy conservation device used to heat or cool the structure, to generate electricity to be used in the structure, or to provide hot water for use in the structure.

For More Information:

<http://mlis.state.md.us/asp/statutes/Respond.asp?article=gtp§ion=9-203&Extension=HTML>

Sponsor: Maryland Energy Administration

Sponsor Type: State

PeakRewards

BGE is offering customers a choice of a Honeywell programmable thermostat or an outside switch installed on a heat pump or air conditioner. When energy demand reaches a peak, BGE may send a signal to the thermostat or switch to briefly turn it off. Incentives and a one-time bonus are available upon enrollment.

For More Information:

<http://peakrewards.bgesmartenergy.com/what-is-peakrewards>

Sponsor: Baltimore Gas & Electric

Sponsor Type: Utility

Property Tax Credit for Solar and Geothermal Devices

Harford County offers a tax credit for real property taxes imposed on residential or nonresidential buildings or other structures that use solar or geothermal devices for heating, cooling, or generating electricity for on-site consumption.

For More Information:

<http://www.harfordcountymd.gov/Downloads.cfm?FormID=969>

Sponsor: Hartford County

Sponsor Type: Local

Building Systems

Bioheat Tax Credit Program

In 2007, Maryland passed a Bio-Heating Oil Tax Credit. The statute provides for a \$0.03 per gallon tax credit up to \$500 for individuals and corporations that purchase bio-heating oil for the purpose of space and water heating. The statute defines bio-heating oil as being at least 5% biodiesel. The statute also limits tax credits to the 2008, 2009, 2010, 2011, and 2012 tax years.

For More Information:

<http://www.energy.maryland.gov/facts/renewable/bioheattaxcredit.asp>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Corporate Income Tax Credit for Green Buildings

Enacted in 2001, this income tax credit applies to nonresidential and residential multifamily buildings of at least 20,000 square feet that are constructed or rehabilitated to meet criteria set forth by the U.S. Green Building Council or other similar criteria. Newly constructed buildings must be located on a qualified brownfields site, or in a priority funding area, and not in a wetlands area.

For More Information:

<http://www.energy.state.md.us/incen-tives/business/greenbuilding/index.asp>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Energy Management with Energy Profiler Online

Delmarva Power has a Web-based tool that can help industrial and commercial customers make energy-management decisions. Energy Profiler Online enables users to analyze usage for multiple sites or facilities, review usage data for energy-choice decisions, measure the effectiveness of energy efficiency efforts, and generate management reports.

For More Information:

<http://www.delmarva.com/business/services/commercial/energy/>

Sponsor: Delmarva Power

Sponsor Type: Utility

Energy Savings for Existing Construction

This utility offers Retro-Commissioning (RCx) services for achieving energy efficiency in existing buildings. A maximum of \$30,000 or 50% of the cost is available as a cash incentive for RCx.

For More Information:

<https://cienergyefficiency.pepco.com/EnergySaveEB.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Energy Savings for New Construction

This utility offers enhanced commissioning (ECx) services for achieving energy efficiency in new construction projects. A maximum of \$20,000 or 50% of the cost is available as a cash incentive for ECx.

For More Information:

<https://cienergyefficiency.pepco.com/EnergySavingNC.aspx>

Sponsor: PEPCO

Sponsor Type: Utility

Local Option - Corporate Property Tax Credit

Title 9 of Maryland's property tax code creates an optional property tax credit for corporations. This statute allows counties to provide a credit against the corporate property tax for buildings equipped with a solar, geothermal, or qualifying energy conservation device used to heat or cool the structure, to generate electricity to be used in the structure, or to provide hot water for use in the structure.

For More Information:

<http://mlis.state.md.us/asp/statutes/Respond.asp?article=gtp§ion=9-203&Extension=HTML>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Local Option - Property Tax Exemption for High Performance Buildings

Similar to Maryland's Property Tax Credit for Renewable Energy, Title 9 of Maryland's tax code creates an optional property tax credit for high performance buildings. This statute allows counties and municipalities to provide a credit against the property tax for buildings that achieve at least a silver rating according to the U.S. Green Building Council's LEED standards, or that meet other comparable green building guidelines or standards approved by the state.

For More Information:

http://mlis.state.md.us/asp/web_statutes.asp?gtp&9-242

Sponsor: Maryland Energy Administration

Sponsor Type: State

Property Tax Exemption for High Performance Buildings

Maryland provides an optional property tax credit for high-performance buildings.

For More Information:

http://mlis.state.md.us/asp/web_statutes.asp?gtp&9-242

Sponsor: Maryland Department of Assessments and Taxation

Sponsor Type: State

Solar Energy Grant Program

Maryland's Solar Energy Grant Program, administered by the MEA provides financial incentives to homeowners, businesses, local governments, and non-profit organizations that install solar water-heating systems or solar-electric/photovoltaic systems.

For More Information:

<http://www.energy.state.md.us/incen-tives/business/solargrants/index.asp>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Special Property Assessment for Solar Heating & Cooling

Title 8 of Maryland's property tax code allows for a statewide special assessment provision for solar heating and cooling systems. Under this provision, such systems are to be assessed at not more than the value of a conventional system for property tax purposes if no conventional system exists in the building. If a solar energy heating and cooling system is installed in addition to a conventional system in a building, the combined system may be assessed at not more than the value of the conventional system, essentially a full exemption for the solar energy equipment.

For More Information:

<http://mlis.state.md.us/asp/statutes/Respond.asp?article=gtp§ion=8-240&Extension=HTML>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Baltimore County Green Building Tax Credit

Baltimore County enacted Maryland's first property tax credit to encourage development of high performance buildings. The tax credit is available to the owner of a Baltimore County commercial building with completed LEED platinum, gold, or silver certification.

For More Information:

<http://resources.baltimorecountymd.gov/Documents/Economic%20Development/Forms/grnbltdgtaxcrdtform.pdf>

Sponsor: Baltimore County
Sponsor Type: Local

Energy Management with Energy Profiler Online

Delmarva Power has a Web-based tool that can help customers make energy management decisions. Energy Profiler Online enables users to analyze usage for multiple sites or facilities, review usage data for energy choice decisions, measure the effectiveness of energy efficiency efforts, and generate management reports.

For More Information:

<http://www.delmarva.com/business/services/commercial/energy/>

Sponsor: Delmarva Power
Sponsor Type: Utility

Howard County Green Building Tax Credits

The county offers tax credits for the construction of new buildings that are at least LEED silver certified.

For More Information:

http://www.howardcountymd.gov/DPZ/Environment/green_building.htm

Sponsor: Howard County
Sponsor Type: Local

Industrial Systems / Process Specific

Custom Incentive Program

This utility offers industrial and commercial customers an opportunity to apply for energy efficiency improvements that are not included in the utility's other incentive programs.

For More Information:

<https://cienergyefficiency.pepco.com/Custom.aspx>

Sponsor: PEPCO
Sponsor Type: Utility

Data Pulses

Data Pulses provides unedited, near real-time energy data respective to a facility—including demand pulse signals and/or synchronizing time signals—to customers, or upon customer consent, to the appropriate authorized competitive service provider.

For More Information:

<http://www.allegheypower.com/Bus2Bus/Bus2BusEngEfficiency.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Industrial Energy Efficiency Clearinghouse - Cutting Edge Technologies

The clearinghouse provides information on OIT combustion research and development projects that have begun yielding near-term benefits in commercial applications, as well as links to information on a broad array of potentially significant emerging energy efficient industrial technologies.

For More Information:

<http://energy.maryland.gov/incentives/business/industrial/clearinghouse/cuttingedge.asp>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Industrial Energy Efficiency Clearinghouse - Improving Current Technologies

The clearinghouse offers steam, motors, compressed air, and pumps sourcebooks, which provide a comprehensive overview of the technology, including explanations of use, maintenance, and opportunities for optimization.

For More Information:

<http://energy.maryland.gov/incentives/business/industrial/clearinghouse/improving.asp>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Industrial Energy Efficiency Clearinghouse - Training

The clearinghouse provides links and information on government and non-profit sponsored commercial training courses.

For More Information:

<http://energy.maryland.gov/incentives/business/industrial/clearinghouse/training.asp>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Ten Tips for Saving Natural Gas

MEA provides 10 tips for reducing industrial natural gas bills through equipment maintenance and resolution of facility and operational inefficiencies.

For More Information:

http://energy.maryland.gov/incentives/business/industrial/clearinghouse/natural_gas.pdf

Sponsor: Maryland Energy Administration
Sponsor Type: State

Variable Frequency Drives

Customers can improve the efficiency of their motor applications, particularly variable loads such as fans and pumps through the installation of variable frequency drives to receive a rebate of 50% of the variable frequency drive's cost before taxes, for each eligible drive rebate.

For More Information:

<http://www.alleghenypower.com/Eng-Conserv/PABus/Drives.asp>

Sponsor: Allegheny Power

Sponsor Type: Utility

Energy Efficiency Projects

The utility's sister company, Constellation Energy Projects & Services Group, helps commercial customers develop solutions to achieve energy goals.

For More Information:

<http://www.newenergy.com/portal/site/menuitem.1b1af2559c566632782c7883da6176a0>

Sponsor: Constellation NewEnergy

Sponsor Type: Utility

Equipment Analysis

SMECO's energy analysts can install temporary monitoring equipment at a facility. The monitoring service can help identify poorly operating equipment and verify proper airflow or proper thermostat operation.

For More Information:

<http://www.smeco.coop/business/energyservices.html>

Sponsor: Southern Maryland Electric Cooperative

Sponsor Type: Utility

Energy Sources

Bioheat Tax Credit Program

In 2007, Maryland passed a Bio-Heating Oil Tax Credit. The statute provides for a \$0.03 per gallon tax credit up to \$500 for individuals and corporations that purchase bio-heating oil for the purpose of space and water heating. The statute defines bio-heating oil as being at least 5% biodiesel. The statute also limits tax credits to the 2008, 2009, 2010, 2011, and 2012 tax years.

For More Information:

<http://www.energy.maryland.gov/facts/renewable/bioheattaxcredit.asp>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Clean Energy Production Tax Credit

Maryland offers a production tax credit for electricity generated by wind, geothermal energy, solar energy, hydropower, small irrigation power, municipal solid waste, and biomass resources. Eligible biomass resources include anaerobic digestion; landfill gas; wastewater-treatment gas; and cellulosic material derived from forest-related resources (excluding old-growth timber), from waste pallets and crates, or from agricultural sources.

For More Information:

http://www.energy.state.md.us/incen-tives/allprograms/cep_taxcredit.asp

Sponsor: Maryland Energy Administration

Sponsor Type: State

Geothermal Heat Pump Grant Program

The MEA offers grants to residential, business, and other entities to offset a portion of the cost of ground loop geothermal heat pump systems.

For More Information:

<http://energy.maryland.gov/incentives/business/geothermalgrant/index.asp>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Green Power Connection™

This program enables customers to install renewable-powered generators and then sell unused power back to the power grid.

For More Information:

<http://www.pepco.com/home/choice/dc/greenpower/>

Sponsor: PEPCO

Sponsor Type: Utility

Hess C-Neutral

This program helps businesses become leaders in environmental stewardship and consumer advocates. Businesses have the option to bundle natural gas, electricity, and/or fuel oil with carbon offset credits, making their total energy purchase 100% carbon neutral.

For More Information:

<http://www.hessenergy.com/green/carbon.htm>

Sponsor: Hess Energy

Sponsor Type: Other

Local Option - Corporate Property Tax Credit

Title 9 of Maryland's property tax code creates an optional property tax credit for corporations. This statute allows counties to provide a credit against the corporate property tax for buildings equipped with a solar, geothermal, or qualifying energy conservation device used to heat or cool the structure, to generate electricity to be used in the structure, or to provide hot water for use in the structure.

For More Information:

<http://mlis.state.md.us/asp/statutes/Respond.asp?article=gtp§ion=9-203&Extension=HTML>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Personal Income Tax Credit for Green Buildings

Enacted in 2001, this income tax credit applies to nonresidential and residential multifamily buildings of at least 20,000 square feet that are constructed or rehabilitated to meet criteria set forth by the U.S. Green Building Council or other similar criteria. Newly constructed buildings must be located on a qualified brownfields site, or in a priority funding area, and not in a wetlands area. Building rehabilitation projects are eligible if they do not increase the size of the building by 25%, or if they are located in a priority funding area. Credits apply to three types of alternative energy sources: photovoltaics, wind turbines, and fuel cells. Tax credits for alternate energy sources can only be claimed if they serve a green whole building, a green base building, or a green tenant space.

For More Information:

<http://business.marylandtaxes.com/taxinfo/taxcredit/greenbldg/default.asp>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Property Tax Exemption for High Performance Buildings

Maryland provides an optional property tax credit for high-performance buildings.

For More Information:

http://mlis.state.md.us/asp/web_statutes.asp?gtp&9-242

Sponsor: Maryland Department of Assessments and Taxation
Sponsor Type: State

Renewable Energy Certificates

An organization can play an important role in supporting renewable energy by purchasing Renewable Energy Certificates from Hess. An organization's green power purchase can range from 1% to 100% of its electricity usage.

For More Information:

<http://www.hessenergy.com/products/green/Renewable.aspx>

Sponsor: Hess Energy
Sponsor Type: Other

Solar Energy Grant Program

Maryland's Solar Energy Grant Program, administered by the MEA provides financial incentives to homeowners, businesses, local governments, and non-profit organizations that install solar water-heating systems or solar-electric/photovoltaic systems.

For More Information:

<http://www.energy.state.md.us/incentives/business/solargrants/index.asp>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Special Property Assessment for Solar Heating & Cooling

Title 8 of Maryland's property tax code allows for a statewide special assessment provision for solar heating and cooling systems. Under this provision, such systems are to be assessed at not more than the value of a conventional system for property tax purposes if no conventional system exists in the building. If a solar energy heating and cooling system is installed in addition to a conventional system in a building, the combined system may be assessed at not more than the value of the conventional system, essentially a full exemption for the solar energy equipment.

For More Information:

<http://mlis.state.md.us/asp/statutes/Respond.asp?article=gtp§ion=8-240&Extension=HTML>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Windswept Grant Program

The Windswept Grant Program will help offset a portion of the cost of small-scale wind energy projects. A limited number of grants are available to Marylanders for the installation of eligible wind energy systems of at least 1 kW for residential properties and 1.5 kW for non-residential properties.

For More Information:

<http://energy.maryland.gov/incentives/business/windswept/index.asp>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Energy Efficiency Projects

The utility's sister company, Constellation Energy Projects & Services Group, helps commercial customers develop solutions to achieve energy goals.

For More Information:

<http://www.newenergy.com/portal/site/menuitem.1b1af2559c566632782c7883da6176a0>

Sponsor: Constellation NewEnergy
Sponsor Type: Utility

Commercial Energy Systems Library

This extensive library provides in-depth information on various commercial energy systems, building design, and energy technologies.

For More Information:

<http://bge.apogee.net/comsuite/biz-frame.aspx?url=/ces>

Sponsor: Baltimore Gas & Electric
Sponsor Type: Utility

Property Tax Credit for Solar and Geothermal Devices

Harford County offers a tax credit for real property taxes imposed on residential or nonresidential buildings or other structures that use solar or geothermal devices for heating, cooling, or generating electricity for on-site consumption.

For More Information:

<http://www.harfordcountymd.gov/Downloads.cfm?FormID=969>

Sponsor: Hartford County

Sponsor Type: Local

Howard County Green Building Tax Credits

The county offers tax credits for the construction of new buildings that are at least LEED silver certified.

For More Information:

http://www.howardcountymd.gov/DPZ/Environment/green_building.htm

Sponsor: Howard County

Sponsor Type: Local

Montgomery County Clean Energy Rewards program

The Montgomery County Clean Energy Rewards Program provides incentives to Montgomery County residents, businesses, nonprofits, and congregations for purchasing clean energy through certified suppliers. Nonresidential customers, such as businesses and congregations, will receive \$0.015 cents per kWh. The incentives are distributed by suppliers and will appear as a credit on consumers' monthly bills.

For More Information:

<http://www.montgomerycountymd.gov/dectmpl.asp?url=/Content/dep/energy/CleanEnergyRewards.asp>

Sponsor: Montgomery County's Department of Environmental Protection

Sponsor Type: Local

Load Management

Advanced Metering and Energy Data Services

Allegheny offers its commercial customers the ability to access historical electric load data in 15, 30, or 60 minute increments for an individual facility or for multiple facilities. In today's changing energy industry, this data could be the critical information needed to make money saving energy decisions.

For More Information:

<http://www.alleghenypower.com/Eng-Conserv/PA/Bus2BusEECPa.asp>

Sponsor: Allegheny Power

Sponsor Type: Utility

Chief Energy Officer (CEO) Online

PEPCO's CEO Online is the online energy management tool for your business. CEO Online gives you the ability to electronically access your electric load data, for an individual facility or for all of your buildings. This unique management tool allows you to monitor and analyze a variety of electric consumption statistics.

For More Information:

<http://www.pepco.com/business/services/commercial/energy/>

Sponsor: PEPCO

Sponsor Type: Utility

Commercial and Industrial Energy Assessment Program

MEA cost-shared energy assessments to identify energy usage and provide recommendations for energy efficiency improvements.

For More Information:

<http://energy.maryland.gov/incentives/business/>

Sponsor: Maryland Energy Administration

Sponsor Type: State

Data Pulses

This program provides unedited near real-time energy data respective to a facility. Data Pulses provides demand pulse signals and/or synchronizing time signals to the customer - upon customer consent - to the customer's authorized Competitive Service Provider. This service enables customers to take advantage of load management systems and tools.

For More Information:

<http://www.alleghenypower.com/Bus-2Bus/Bus2BusEngEffeciency.asp>

Sponsor: Allegheny Power

Sponsor Type: Utility

Demand Response

Hess Demand Response offers customers an opportunity to generate recurring revenue. Customers earn money by committing to reduce electricity usage the few times a year when their local power grid is at its peak, or when there is a significant spike in energy prices. For this commitment to reduce usage, Hess will pay customers every month. When they fulfill their commitment during a demand response event, Hess will pay them even more.

For More Information:

<http://www.hessenergy.com/products/electricity/DR.aspx>

Sponsor: Hess Energy

Sponsor Type: Other

Demand Response Programs

Allegheny Power offers two demand response programs: Economic Load Response and Interruptible Load Resource. The Economic Load Response Program offers financial incentives to customers who reduce their power consumption during periods of high electrical demand or prices. To qualify, customers must have the ability to reduce their electric demand by a minimum of 100 kW per hour. The Interruptible Load Resource Program pays customers if they are called to reduce electrical usage during system emergencies. To participate, customers

must agree to be available for up to 10 reductions per year and have the ability to reduce demand by a minimum of 100 kW per hour.

For More Information:

<http://www.alleghenypower.com/Bus-2Bus/Bus2BusEngEfficiency.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Energy Data Services

Energy data services give Allegheny Energy customers the ability to access historical electric load data in 15-, 30-, or 60-minute increments for an individual facility or for multiple facilities. This data could be used to make money saving energy decisions.

For More Information:

<http://www.alleghenypower.com/Bus-2Bus/EnergyDataServices/EnergyDataServices.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Energy Data Services (EDS)

EDS is a powerful data collection tool that turns a customer's energy usage data into the critical information needed to make money-saving energy decisions.

For More Information:

<http://www.alleghenypower.com/Bus-2Bus/EnergyDataServices/EnergyDataServices.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Energy Management Resources

Resources are available on energy accounting, corporate energy management, and restructured markets, as well as information about how to hire a construction manager, ESCO, or an energy auditor.

For More Information:

<http://energy.maryland.gov/incentives/business/industrial/clearinghouse/energymanagement.asp>

Sponsor: Maryland Energy Administration
Sponsor Type: State

Generation Buy-Back Program

The utility will offer incentives to commercial and industrial customers that voluntarily reduce energy usage during peak energy times. Participating business customers are then paid a portion of the wholesale cost.

For More Information:

<http://www.alleghenypower.com/Bus-2Bus/Bus2BusEngEfficiency.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Constellation NewEnergy Online

This is an energy-management tool that is available to all electricity customers free of charge. The tool allows customers to find opportunities to improve their company's energy efficiencies, track changes in their company's usage, and compare usage across multiple facilities.

For More Information:

<http://www.newenergy.com/portal/site/menuitem.987b194dd5e782ce18a805e4da6176a0>

Sponsor: Constellation NewEnergy
Sponsor Type: Utility

Energy Efficiency Projects

The utility's sister company, Constellation Energy Projects & Services Group, helps commercial customers develop solutions to achieve energy goals.

For More Information:

<http://www.newenergy.com/portal/site/menuitem.1b1af2559c566632782c7883da6176a0>

Sponsor: Constellation NewEnergy
Sponsor Type: Utility

Load Response for your Business

Commercial customers can receive financial rewards, either in the form of dollars or energy bill credits, for using less energy on days when regional power grids are under stress.

For More Information:

<http://www.newenergy.com/portal/site/menuitem.c2d5c4a31e3b3661571c5010747176a0?title=lr>

Sponsor: Constellation NewEnergy
Sponsor Type: Utility

Commercial Energy Calculator

The Commercial Calculator provides estimates of energy usage and costs based on inputs. It also presents a comparison of three efficiency levels for each calculation.

For More Information:

<http://bge.apogee.net/comsuite/biz-frame.aspx?url=/comcal>

Sponsor: Baltimore Gas & Electric
Sponsor Type: Utility

Energy Efficiency Business Programs

The BGE Industrial/Commercial General Business Conservation Education Program is designed to pick up where the rebate programs leave off and promote the move to cost-effective, energy efficient products and services.

For More Information:

<http://www.bge.com/portal/site/bge/menuitem.ba8d83d81d610cb-259c031e0da6176a0/>

Sponsor: Baltimore Gas & Electric
Sponsor Type: Utility

PeakRewards

BGE is offering customers a choice of a Honeywell programmable thermostat or an outside switch installed on a heat pump or air conditioner. When energy demand reaches a peak, BGE may send a signal to the thermostat or switch to briefly turn it off. Incentives and a one-time bonus are available upon enrollment.

For More Information:

<http://peakrewards.bgesmartenergy.com/what-is-peakrewards>

Sponsor: Baltimore Gas & Electric

Sponsor Type: Utility

Understanding Demand

This program allows customers to learn how demand for electricity impacts electricity cost. This set of animations, text, and graphics explains the concept of demand and how it affects monthly bills.

For More Information:

http://bge.apogee.net/comsuite/biz-frame.aspx?url=/ces/default_ed.asp

Sponsor: Baltimore Gas & Electric

Sponsor Type: Utility

Energy Audits

This service investigates total building electric use and then breaks it down into basic components like heating, cooling, lighting, and water heating. The audit will help customers prioritize energy-saving measures.

For More Information:

<http://www.smeco.coop/business/energyservices.html>

Sponsor: Southern Maryland Electric Cooperative

Sponsor Type: Utility

Energy Conservation Services

SMECO, in partnership with Chevron Energy, offers a full range of services, from facility electric-use audits to complete turn-key retrofits of equipment.

For More Information:

<http://www.smeco.coop/business/energyservices.html>

Sponsor: Southern Maryland Electric Cooperative

Sponsor Type: Utility

Equipment Analysis

SMECO's energy analysts can install temporary monitoring equipment at a facility. The monitoring service can help identify poorly operating equipment and verify proper airflow or proper thermostat operation.

For More Information:

<http://www.smeco.coop/business/energyservices.html>

Sponsor: Southern Maryland Electric Cooperative

Sponsor Type: Utility

Load Inventory

Southern Maryland Electric Cooperative can assist in compiling an inventory of all major equipment loads in a facility. The cooperative's energy analyst can help evaluate the operational performance of the major equipment.

For More Information:

<http://www.smeco.coop/business/energyservices.html>

Sponsor: Southern Maryland Electric Cooperative

Sponsor Type: Utility

Beat the Peak!

Beat the Peak! is a voluntary program where members are encouraged to conserve or limit energy usage during peak times. When customers volunteer to participate in the program, they will be notified when it is urgent for them to turn back their thermostat setting during the heating season and raise the thermostat in the cooling season, curtail the use of major appliances, and turn off all unnecessary lights in an effort to reduce the peak demand on the cooperatives system.

For More Information:

http://www.choptankelectric.com/misc/beat_the_peak.html

Sponsor: Choptank Electric Cooperative

Sponsor Type: Utility

Energy Management with Energy Profiler Online

Delmarva Power has a Web-based tool that can help customers make energy management decisions. Energy Profiler Online enables users to analyze usage for multiple sites or facilities, review usage data for energy choice decisions, measure the effectiveness of energy efficiency efforts, and generate management reports.

For More Information:

<http://www.delmarva.com/business/services/commercial/energy/>

Sponsor: Delmarva Power

Sponsor Type: Utility

End Notes

- ¹ U.S. Department of Energy, Industrial Technologies Program, State and Regional Partnerships, “Industrial Technologies Program Activities in Maryland.” http://www1.eere.energy.gov/industry/states/state_activities/map_new.asp?stid=MD.
- ² Energy Information Administration, “State/Territory Energy Profiles,” Accessed October 4, 2010. http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=MD.

EERE Information Center

1-877-EERE-INFO (1-877-337-3463)

www.eere.energy.gov/informationcenter

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy