

Electronic Handbook of Industrial Resources
WEST VIRGINIA



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November 2010

Introduction

This handbook provides a comprehensive listing of incentives, tools, and resources for industrial manufacturing energy efficiency in the state of West Virginia. The document 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. The handbook is based on data available in the States Incentives and Resources Database, which is maintained by the U.S. Department of Energy (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
Building Systems.....	5
Energy Sources.....	5
HVAC	5
Industrial Systems / Process Specific	6
Lighting.....	6
Industrial Systems General.....	6
End Notes.....	8

State Industrial Overview

West Virginia has a total of 1.8 million residents and ranks 41st in the nation in terms of GDP, which is \$61.7 billion. In 2008, West Virginia ranked 29th in the nation's industrial energy consumption at 391.2 trillion Btu and 36th in the nation's industrial natural gas consumption at 41.4 trillion Btu.¹

West Virginia's coal production accounts for more than 10% of the U.S. total, making West Virginia the largest coal producing state east of the Mississippi River. West Virginia is also the second largest state in terms of interstate sales of electricity.²

Exhibit 1 below compares the industrial energy consumption in West Virginia 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 West Virginia

Year	Wisconsin Energy Consumption (Trillion Btu)	National Average (Trillion Btu)
2000	321.7	680.2
2001	354.3	642.8
2002	380.0	642.0
2003	347.0	639.6
2004	364.9	658.7
2005	347.2	696.7
2006	381.5	636.6
2007	398.8	637.0
2008	391.2	614.8

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

West Virginia at a Glance

State Information

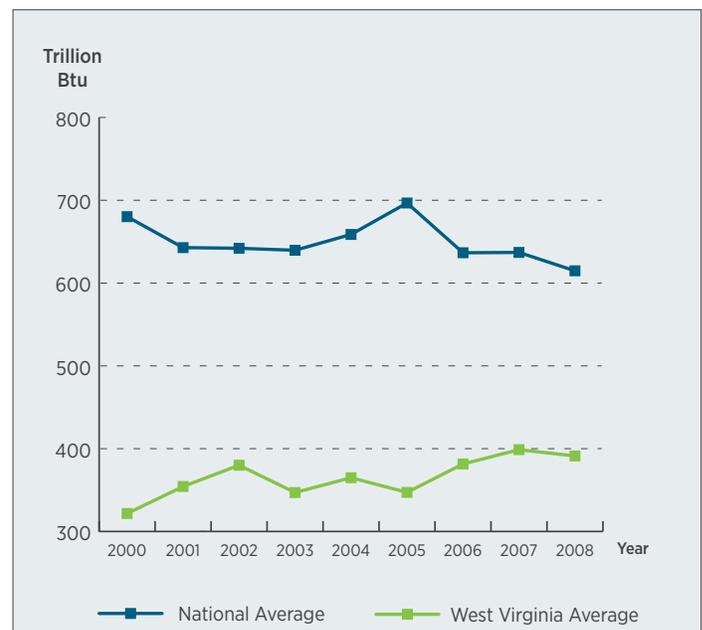
2009 Population (Million)	1.8
2008 GDP (Billion)	61.7
Rank by GDP	41

Energy Statistics

Total Energy Consumption 2008 (Trillion Btu)	830.8
Total Industrial Energy Consumption 2008 (Trillion Btu)	391.2
Total Industrial Energy Consumption Rank	29
Total Industrial Electricity Use 2008 (Trillion Btu)	50.3
Total Industrial Electricity Use Rank	25
Total Industrial Natural Gas Use 2008 (Trillion Btu)	41.4
Total Industrial Natural Gas Use Rank	36

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

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, nonprofits or nongovernmental 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.

Several other federal agencies offer energy efficiency incentives in addition to the multitude of DOE resources. The 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

Building Systems

None Available

Energy Sources

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

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

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

HVAC

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/EngConserv/PABus/HVAC.asp>

Sponsor: Allegheny Power

Sponsor Type: Utility

Industrial Systems / Process Specific

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.allegHENYpower.com/Bus2Bus/Bus2BusEngEfficiency.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Manufacturing Sales Tax Exemption

Purchases of materials and equipment purchased for direct use in manufacturing are exempt from the 6% state sales and use tax, including building materials and process equipment purchased for construction of a manufacturing facility.

For More Information:

<http://www.wvcommerce.org/business/businessassistance/expandingorrelocating/businessassistance/default.aspx>

Sponsor: West Virginia Development Office
Sponsor Type: State

Variable Frequency Drives (VFD)

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

For More Information:

<http://www.allegHENYpower.com/EngConserv/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

Lighting

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

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/EngConserv/PABus/Lighting.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Industrial Systems General

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/EngConserv/PABus/CustTechApps.asp>

Sponsor: Allegheny Power
Sponsor Type: Utility

Direct Loan Programs

The West Virginia Economic Development Authority can provide a financing level of up to 45% of fixed assets by providing low-interest, direct loans to expanding state businesses and firms located in West Virginia. The loan term is generally 15 years for real estate intensive projects and 5-10 years for equipment projects. Loan proceeds may be used for the acquisition of land, buildings, and equipment. Working capital loans and the refinancing of existing debt are not eligible.

For More Information:

<http://www.wveda.org/program-directloan.html>

Sponsor: West Virginia Development Office
Sponsor Type: State

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:

www.alleghenypower.com/Bus2Bus/EnergyDataServices/EnergyDataServices.asp

Sponsor: Allegheny Power

Sponsor Type: Utility

Industrial Assessment

West Virginia University provides no-cost energy assessments to small- and mid-sized manufacturers.

For More Information:

<http://www2.cemr.wvu.edu/~wwwiac/>

Sponsor: West Virginia University

Sponsor Type: Other

Industrial Revenue Bonds

This program provides customized financing through federal tax-exempt industrial revenue bonds. Of the state's bond allocation, \$47.25 million is reserved for small manufacturing projects, \$13.5 million is earmarked for qualifying projects in Enterprise Communities, and \$74.25 million is dedicated for exempt facility projects.

For More Information:

http://www.redp.org/incentives_and_financing.php?id=133&PHPSESSID=912591f9c95cc35916b4052c755d3ea6

Sponsor: West Virginia Development Office

Sponsor Type: State

Manufacturing Investment Credit

This financial assistance credit is for manufacturers that make qualified capital investments in an industrial facility.

For More Information:

<http://www.state.wv.us/taxrev/forms/all-years/mitca.pdf>

Sponsor: West Virginia Development Office

Sponsor Type: State

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

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Sponsor: Constellation NewEnergy

Sponsor Type: Utility

End Notes

¹U.S. Department of Energy, Industrial Technologies Program, State and Regional Partnerships, “Industrial Technologies Program Activities in West Virginia.” http://www1.eere.energy.gov/industry/states/state_activities/map_new.asp?stid=WV.

² Energy Information Administration, “State/Territory Energy Profiles,” Accessed October 4, 2010.
http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=WV.

EERE Information Center

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

www.eere.energy.gov/informationcenter

U.S. DEPARTMENT OF
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Energy Efficiency &
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