Washington Industrial Resource Fact Sheet

Energy Efficiency &

Renewable Energy

Introduction

U.S. DEPARTMENT OF

Washington's economy is ranked 14th in the nation in terms of 2008 gross domestic product (GDP), generating \$322.8 billion annually. Industrial manufacturing is a vital sector of Washington's economy, providing the state with 91,047 jobs and supplying \$59,033 million worth of goods. Based on total value of shipments, the largest manufacturing sectors in the state are transportation equipment manufacturing, petroleum manufacturing, food processing, computer and electronics manufacturing, and paper manufacturing. In 2007, Washington's industrial sector ranked 20th in the nation in terms of energy expended accounting for 521.0 trillion British thermal units (Btu), or 25.2 percent of all energy consumed in the state. The state's natural gas consumption tallied 75.5 trillion Btu, which was 28th in the nation for that year. Moreover, the industrial sector accounted for approximately 17.4 million metric tons of carbon dioxide emissions according to 2005 data.

Washington lawmakers have made strides to strengthen the state's economy through the promotion of energy efficiency. For example, the State of Washington Department of Ecology created a comprehensive energy plan, Growing Washington's Economy in a Carbon-Constrained World, to strategize about how to meet the state's 2020 greenhouse gas emission reduction goals. In this energy plan, energy efficiency is acknowledged as a useful tool for making businesses more competitive and profitable. Of note, this recommendation calls for legislation to create financial incentives for energy efficiency measures, such as Combined Heat and Power (CHP) and Distributed Energy Systems. In addition to its energy plan, the state government has worked to overcome energy-related issues affecting Washington residents and businesses by enacting legislation and creating energy efficiency resources. For



instance, Washington passed HB1007 in order to create a sustainable energy trust fund that would provide financing for energy efficiency measures. Additionally, the state government passed the *Energy Independence Act*, which requires electric companies to provide energy conservation programs to customers. Additional resources that are available throughout the state are listed below.

State Programs

State Government: The State of Washington, through the Washington State Department of Revenue, has made tax credits available for the implementation of renewable energy installations. Additionally, the Washington State Housing Finance Commission was charged with oversight of the *Sustainability Energy Trust Fund*, which finances energy efficiency and renewable energy projects in Washington State.

Utility Resources

Investor-Owned Utilities: Several investor-owned utilities (IOUs) in Washington provide industrial customers with incentives for engaging in energy saving activities. For example, Tacoma Power offers industrial customers cash incentives on the purchase of energy saving compressed air systems, lighting, refrigeration equipment, and new construction, as well as comprehensive no-cost energy audits. Puget Sound Energy (PSE) is another IOU that supplies industrial customers with a host of energy efficiency incentives, including cash rebates on energy-saving exit signs, HVAC systems, motors, lighting, natural-gas boilers, thermostats, and vending machines; PSE also offers an assortment of energy assessment and analysis tools, grants, and rebates for renewable energy projects.

Other IOUs that offer industrial customers energy-efficient incentive programs are Avista Public Utilities and Cascade Natural Gas. Incentives available from Avista Public Utilities include cash incentives on implementing renewable energy systems, lighting, motors, computers, HVAC systems, vending machines, refrigeration equipment, and steam-to-heat conversion units. Cascade Natural Gas provides incentives for implementing water heater, HVAC equipment, and ceiling/roof upgrades.

Public Power utilities: A plethora of Washington's public power utilities provide energy saving programs for their industrial customers. The following table is a detailed breakdown of incentive programs by program type.

INDUSTRIAL TECHNOLOGIES PROGRAM

NAME OF UTILITY	ANALYSIS TOOLS	CLEAN ENERGY INCENTIVE	ENERGY AUDITS	LOANS/ GRANTS	REBATES
Benton Public Utility District					Х
City of Ellensburg Electric Utility					Х
City of Port Angeles					Х
Chelan County Public Utility District		Х			
Clallam Public Utility District				Х	Х
Clark Public Utilities	х		х	Х	X
Cowlitz County Public Utility District					Х
Franklin Public Utility District					Х
Ferry County Public Utility District					Х
Grant County Public Utility District			х		
Grays Harbor Public Utility District		Х			X
Lakeview Light and Power					Х
Lewis County Public Utility District					X
Mason County Public Utility District			х		Х
Okanogan County Public Utility District		х	х	Х	X
Pacific County Public Utility District		х			Х
Pend Oreille Public Utility District			Х		Х
Richland Energy Services					Х
Seattle City Light	Х		Х		х
Snohomish County Public Utility District	Х				Х
Vera Water and Power					Х

Electric Cooperatives: Within the state of Washington, there are multiple electric cooperatives that offer industrial customers incentives aimed at increasing energy efficiency. The following table is a detailed breakdown of incentive programs by program type.

NAME OF UTILITY	ANALYSIS TOOLS	CLEAN ENERGY INCENTIVE	ENERGY AUDITS	REBATES
Big Bend Electric Cooperative				Х
Inland Power and Light		Х		Х
Northwest Public Power Association	х			
Orcas Power & Light Cooperative	Х	Х	Х	Х
Peninsula Light Company		Х		
Tanner Electric Cooperative		Х		Х
Oregon Trail Electric Cooperative			_	Х

Regional Resources

Nonprofit Organizations: The Northwest Energy Efficiency Alliance (NEEA) is a private nonprofit organization that promotes voluntary, market-based programs in the residential, commercial, and industrial sectors through its Northwest ENERGY STAR, BetterBricks, and Industrial market-facing brands. In addition, NEEA focuses on developing new energy-efficient technologies and provides marketing and training resources across the industry sectors. The Northwest Energy Education Institute also provides training tools to help improve energy-efficiency. Furthermore, the Bonneville Environmental Foundation and the Northwest Solar Cooperative provide incentives on renewable energy installations.

Clean Energy Application Center: The Northwest CHP Application Center provides assistance to organizations with CHP projects that are economically viable and make efficient use of energy. They offer software tools and information on CHP, such case studies, policies and initiatives, and CHP events.

Local Resources

Nonprofit Organizations: The Built Green Initiative provides grants of up to \$15,000 for energy-efficient/renewable energy projects in King County or the Seattle area. Additionally, the Washington State University Extension Energy Program offers financial incentives to help implement eligible energy efficiency projects at industrial manufacturing companies throughout Washington State.

Industrial Assessment Centers: The University of Washington, with sponsorship from the U.S. Department of Energy, hosts an Industrial Assessment Center (IAC) that provides no-cost energy assessment to manufacturers.

Manufacturing Extension Partnerships: Washington Manufacturing Services is a manufacturing extension partnership (MEP) that works to make Washington manufacturers more globally competitive by offering business and technical assistance. This MEP's services include lean enterprise, business development, and environmental health and safety.

For More Information

DOE Industrial Technologies Program (http://www1.eere.energy.gov/industry/index.html)

ITP Save Energy Now (http://www1.eere.energy.gov/industry/saveenergynow/)

ITP State Activities Web site - Washington (http://www1.eere.energy.gov/industry/states/state_activities/map_new.asp?stid=WA)

ITP State Incentives and Resources Database (http://www1.eere.energy.gov/industry/about/state_activities/incentive_search.asp)

Energy Efficient Upgrades (http://www.business.gov/expand/green-business/energy-efficiency/upgrades/office-equipment.html)

Washington Department of Revenue (<u>http://dor.wa.gov/Content/Home/Default.aspx</u>)

King County (http://your.kingcounty.gov/solidwaste/greenbuilding/incentives/commercial.asp)

Avista Public Utilities (http://www.avistautilities.com/services/renewable/incentives/washington/Pages/default.aspx)

Cascade Natural Gas (http://www.cngc.com/conservation/index.asp)

Puget Sound Energy (http://www.pse.com/solutions/forbusiness/pages/comRebates.aspx?tab=2&chapter=3)

Tacoma Power (http://www.mytpu.org/customer-service/your-business/rebates-promotions/compressed-air-program.htm)

Benton Public Utility District (http://www.bentonpud.org/conservation/comm_lighting.php)

City of Ellensburg Electric Utility (<u>http://www.ci.ellensburg.wa.us/utilities/services.cfm</u>)

City of Port Angeles (https://www.cityofpa.us/pwConserv.htm#CommInd)

Chelan County PUD (http://www.clallampud.net/conservation/com_RebatePrograms.asp)

Clallam Public Utility District (http://www.clallampud.net/conservation/commercialOverview.asp)

Clark Public Utilities (http://www.clarkpublicutilities.com/yourbusiness/programsForBusinesses)

INDUSTRIAL TECHNOLOGIES PROGRAM

Cowlitz County Public Utility District (http://www.cowlitzpud.org/comm_conservation.html) Franklin Public Utility District (http://www.franklinpud.com/conservation/rebate-programs.html) Ferry County Public Utility District (http://www.fcpud.com/conservation.htm) Grant County Public Utility District (http://www.gcpud.org/conservation/programs/industrial.htm) Grays Harbor Public Utility District (https://www.ghpud.org/index.php?option=com_content&task=vie w&id=90&Itemid=114) Lakeview Light and Power (http://demandsideengineering.com/lakeview/) Lewis County Public Utility District (http://www.lcpud.org/conservation.php) Mason County Public Utility District (http://www.masonpud3.org/powerSupply/ commercialConservation.aspx) Okanogan County PUD (http://www.okanoganpud.org/consrebates.htm) Pacific County PUD (http://www.pacificpud.org/es_comm.html) Pend Oreille Public Utility District (http://www.popud.com/energy.htm) Richland Energy Services (http://www.ci.richland.wa.us/RICHLAND/Electric/index.cfm?PageNum=86) Seattle City Light (http://www.ci.seattle.wa.us/light/conserve/business/cv5_ora.htm) Snohomish County PUD (http://www.snopud.com/energy/business.ashx?p=3780) Vera Water and Power (http://www.verawaterandpower.com/Energy_Rebates.htm) Big Bend Electric Cooperative (http://www.bbec.org/conservation.php#commercial) Inland Power and Light (http://www.inlandpower.com/customer_carec.php?id=196) Northwest Public Power Association (http://www.nwppa.org/web/education/educational.shtml) Orcas Power & Light Cooperative (http://www.opalco.com/wp-content/uploads/2009/03/ heatpumprebate-) Peninsula Light Company (http://www.penlight.org/netmetering.aspx) Tanner Electric Cooperative (http://www.tannerelectric.coop/conservation/net_metering.html) Oregon Trail Electric Cooperative (http://www.otec.coop/commercialprograms.aspx) Bonneville Environment Foundation (http://www.b-e-f.org/renewables/) Built Green (http://www.builtgreen.net/incentive.html) Industrial Efficiency Alliance (http://www.industrialefficiencyalliance.org/training.html) Northwest Energy Education Institute (http://www.nweei.org/) Northwest Energy Efficiency Alliance (http://www.nwalliance.org) Northwest Solar Cooperative (http://www.cascadesolar.com/greentagsfaq.htm) Washington State University Extension Energy Program (http://www.energy.wsu.edu/)

Contacts

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Manufacturing Extension Partnership in Washington

Washington Manufacturing Services Director: John Vicklund Phone: (425) 438-1146 Fax: (425) 438-2755 E-mail: jvicklund@wamfg.org Web site: http://www.wamfg.org Source: http://blue.nist.gov/centers/WA

Clean Energy Application Center for Region Northwest CHP Application Center Director: David Sjoding Phone: (360) 956-2004 E-mail: <u>sjodingd@energy.wsu.edu</u> Web site: <u>http://www.chpcenternw.org/</u> Source: <u>http://www.eere.energy.gov/de/chp/chp_application_centers.html</u>

DOE Regional Contact

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State Energy Office Contact

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EERE Information Center 1-877-EERE-INF (1-877-337-3463) www.eere.energy.gov/informationcenter



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