

Electronic Handbook of Industrial Resources

HAWAII



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Introduction

This resource provides a comprehensive listing of incentives, tools, and resources for industrial manufacturing energy efficiency in the state of Hawaii. 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



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State Industrial Overview

Hawaii is the newest of the U.S. states, achieving statehood in 1959. Hawaii is also the only state that is made up entirely of islands—there are several hundred islands that cover approximately 1,500 square miles and serve as home to a total of 1.3 million residents. Hawaii ranks 39th in the nation in terms of GDP at \$63.8 billion.¹

The geographic distance between Hawaii and the mainland gives it a unique energy profile. It has the lowest total energy consumption in the nation, and the majority of its energy sources come from petroleum. Hawaii uses very little coal and even less natural gas. In 2008, Hawaii ranked 47th in the nation for industrial energy consumption at 65.0 trillion Btu and 50th in the nation for industrial natural gas consumption at 0.4 trillion Btu.² Tourism provides the bulk of the income for the chain of islands, but its top industries include food manufacturing, nonmetallic mineral product manufacturing, and printing and related support activities.³

Exhibit 1 below compares the industrial energy consumption in Hawaii 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 Hawaii

Year	Hawaii Energy Consumption (Trillion Btu)	National Average (Trillion Btu)
2000	79.1	680.2
2001	70.3	642.8
2002	71.1	642.0
2003	66.8	639.6
2004	67.0	658.7
2005	71.1	696.7
2006	69.9	636.6
2007	67.8	637.0
2008	65.0	614.8

Source: http://www.eia.gov/emeu/states/hf.jsp?incfile=sep_use/ind/use_ind_hi.html&mstate=HAWAII

Hawaii at a Glance

State Information

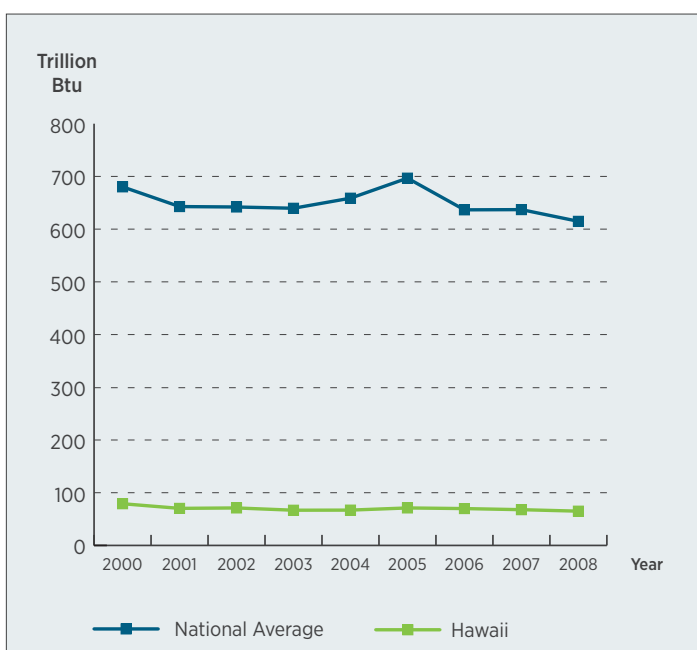
2009 Population (Million)	1.3
2008 GDP (Billion)	63.8
Rank by GDP	39

Energy Statistics

Total Energy Consumption 2008 (Trillion Btu)	283.8
Total Industrial Energy Consumption 2008 (Trillion Btu)	65.0
Total Industrial Energy Consumption Rank	47
Total Industrial Electricity Use 2008 (Trillion Btu)	13.0
Total Industrial Electricity Use Rank	42
Total Industrial Natural Gas Use 2008 (Trillion Btu)	0.4
Total Industrial Natural Gas Use Rank	50

Source: http://www.eia.gov/state/state_energy_profiles.cfm?sid=HI

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

Building Systems

Priority Permitting for Green Buildings

Companies embarking on new construction and building renovation projects can obtain free priority permitting if the projects are rated LEED silver or higher.

For More Information:

http://www.capitol.hawaii.gov/hrscurrent/Vol02_Ch0046-0115/HRS0046/HRS_0046-0019_0006.htm

Sponsor: Hawaii Department of Business, Economic Development and Tourism

Sponsor Type: State

Window Film

Window tinting saves energy in air-conditioned spaces, enhances privacy, and reduces carpet fading. Under the Hawaiian Electric Company (HECO) Energy\$olutions for Business Program, commercial or industrial businesses can receive a subsidy of 35 cents per square foot.

For More Information:

<http://www.heco.com/portal/site/heco/menuitem.508576f78baa14340b4c0610c510b1ca/?vgnextoid=52041f7ced52110VgnVCM1000005c011bacRCD&vgnnextchannel=84c9f2b154da9010VgnVCM10000053011bacRCRD&vgnextfmt=default&vgnnextrefresh=1&level=0&ct=article>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

Energy Sources

Customized Incentives

Projects that conserve electrical energy may be eligible to receive a cash payment under the Customized Incentives program. Projects are evaluated on a case-by-case basis. Examples include: VFDs for HVAC pumps, VFDs for HVAC fans, air conditioning improvements, process heat recovery systems, booster pumps, and heat pump water heaters.

For More Information:

<http://www.heco.com/vcmcontent/StaticFiles/pdf/CustomRebateFillable.pdf>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

Customized Incentives

Maui Electric Company (MECO) offers customized rebates for projects and equipment that improve energy efficiency and are not eligible for other incentives.

For More Information:

<http://www.heco.com/vcmcontent/StaticFiles/pdf/CustomRebateFillable.pdf>

Sponsor: Maui Electric Company
Sponsor Type: Utility

Green Business Program

This three-level program is designed to help businesses become more energy efficient and to recognize businesses that have greatly reduced energy intensity. The first component entails training, the second requires conducting an energy audit, and the third involves implementing energy efficiency measures.

For More Information:

<http://hawaii.gov/dbedt/info/energy/resource/greenbusiness>

Sponsor: Hawaii Department of Business, Economic Development and Tourism
Sponsor Type: State

Property Tax Exemption for Alternative Energy Improvements

In September 2009, the Honolulu City Council unanimously passed Bill 58 to create a real property tax exemption for alternative energy improvements. For the purposes of this property tax exemption, alternative energy sources include solar, wind, hydropower, tidal, wave, solid waste, and increased efficiency in fossil fuel burning facilities.

For More Information:

<http://www.dsireusa.org/incentives/incentive.cfm?IncentiveCode=HI28F&re=1&ee=1>

Sponsor: Honolulu City Council
Sponsor Type: Local

Renewable Energy Technologies Income Tax Credit

The State of Hawaii offers a tax credit for residential and commercial customers that have installed a renewable energy resource after June 30, 2003. For solar power systems, the tax credit will cover 35% of the costs up to \$250,000. For wind powered systems, the tax credit will cover 25% of the costs up to \$500,000.

For More Information:

http://www.capitol.hawaii.gov/hrscurrent/Vol04_Ch0201-0257/HRS0235/HRS_0235-0012_0005.HTM

Sponsor: Hawaii Department of Taxation
Sponsor Type: State

HVAC

A/C Systems - Chillers Rebates

Hawaiian Electric Company offers incentives to upgrade chilling systems. Rebates are specific to the product.

For More Information:

<http://www.heco.com/portal/site/heco/menuitem.508576f78baa14340b4c0610c510b1ca/?vgnextoid=b7595e658e0fc010VgnVCM1000008119fea9RCRD&vgnnextchannel=84c9f2b154da9010VgnVCM10000053011bacRCRD&vgnnextfmt=default&vgnnextrefresh=1&level=0&ct=article>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

A/C Systems - Packaged & Split Rebates

Businesses that operate an air conditioner more than eight hours daily are encouraged to purchase an energy efficient air conditioning system. Once purchased, the business is eligible for a rebate. Hawaiian Electric Company should be contacted directly for specific rebate amounts.

For More Information:

<http://www.heco.com/vcmcontent/pdf/InterimACrebate.pdf>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

A/C Systems - Packaged & Split Rebates

Businesses that operate an air conditioner more than eight hours daily are encouraged to purchase an energy efficient air conditioning system. Once the system is purchased, the business is eligible for a rebate. Maui Electric Company needs to be contacted directly for specific rebate amounts.

For More Information:

<http://www.heco.com/vcmcontent/pdf/InterimACrebate.pdf>

Sponsor: Maui Electric Company
Sponsor Type: Utility

A/C Systems - Window Unit Rebates

Rebates are now available for qualified room (window) air conditioning units installed at commercial and industrial facilities. All room (window) air conditioners must be ENERGY STAR rated.

For More Information:

<http://www.heco.com/portal/site/heco/menuitem.508576f78baa14340b4c0610c510b1ca/?vgnextoid=97521f7cced52110VgnVCM1000005c011bacRCRD&vgnnextchannel=84c9f2b154da9010VgnVCM10000053011bacRCRD&vgnnextfmt=default&vgnnextrefresh=1&level=0&ct=article>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

Customized Incentives

Projects that conserve electrical energy may be eligible to receive a cash payment under the Customized Incentives program. Projects are evaluated on a case-by-case basis. Examples include: VFDs for HVAC pumps, VFDs for HVAC fans, air conditioning improvements, process heat recovery systems, booster pumps, and heat pump water heaters.

For More Information:

<http://www.heco.com/vcmcontent/StaticFiles/pdf/CustomRebateFillable.pdf>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

Industrial Systems / Process Specific

Customized Incentives

Projects that conserve electrical energy may be eligible to receive a cash payment under the Customized Incentives program. Projects are evaluated on a case-by-case basis. Examples include: VFDs for HVAC pumps, VFDs for HVAC fans, air conditioning improvements, process heat recovery systems, booster pumps, and heat pump water heaters.

For More Information: <http://www.heco.com/vcmcontent/StaticFiles/pdf/CustomRebateFillable.pdf>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

High Technology Business Investment Tax Credit

The State of Hawaii offers a “high technology” business investment tax credit up to \$2 million for qualified high technology businesses (QHTB). The credit is administered over the course of five years. The tax credit will match the developer’s investment.

For More Information:
<http://www.state.hi.us/tax/announce/2003ann01.htm>

Sponsor: Hawaii Department of Taxation
Sponsor Type: State

Motor Rebate Program

Rebates are available for businesses that replace motors with premium efficiency motors. Rebate amounts depend on a number of factors, including horsepower (HP).

For More Information:
<http://www.heco.com/portal/site/heco/menuitem.508576f78baa14340b4c0610c510b1ca/?vgnextoid=37495e658e0fc010VgnVCM1000008119fea9RCRD&vgnextchannel=84c9f2b154da9010VgnVCM10000053011bacRCD&vgnextfmt=default&vgnextrefresh=1&level=0&ct=article>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

Lighting

Lighting Incentives

HECO offers lighting rebates for the installation of the following products: T8 fluorescent lamps, super T8 fluorescent lamps, high-performance electronic ballasts, specular reflectors with de-lamping, de-lamping without reflectors, occupancy sensors, metal halide lamps, pulse start-metal halide lamps, high pressure sodium lamps, T5 and T5HO fluorescent lamps, compact fluorescent lamps, induction lighting systems, and LED exit signs.

For More Information:
<http://www.heco.com/portal/site/heco/menuitem.508576f78baa14340b4c0610c510b1ca/?vgnextoid=5a295e658e0fc010VgnVCM1000008119fea9RCRD&vgnextchannel=84c9f2b154da9010VgnVCM10000053011bacRCD&vgnextfmt=default&vgnextrefresh=1&level=0&ct=article>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

Lighting Incentives

MECO offers lighting rebates for the installation of the following products: T8 fluorescent lamps, super T8 fluorescent lamps, high-performance electronic ballasts, specular reflectors with de-lamping, de-lamping without reflectors, occupancy sensors, metal halide lamps, pulse start-metal halide lamps, high pressure sodium lamps, T5 and T5HO fluorescent lamps, compact fluorescent lamps, induction lighting systems, and LED exit signs.

For More Information:
<http://www.heco.com/vcmcontent/StaticFiles/pdf/DSMLIGHTING-WORKIIO309.pdf>

Sponsor: Maui Electric Company
Sponsor Type: Utility

Load Management

Customized Incentives

Customized rebates are available for projects and equipment that improve energy efficiency and are not eligible for other incentives.

For More Information:
<http://www.heco.com/vcmcontent/StaticFiles/pdf/CustomRebateFillable.pdf>

Sponsor: Maui Electric Company
Sponsor Type: Utility

Energy Wise Commercial Energy Efficiency Program

Kauai Island Utility Cooperative (KIUC) offers rebates to commercial customers for installing energy efficient equipment. Once a KIUC representative has performed an energy audit of a business, energy saving measures will be detailed. If recommendations are accepted and implemented properly, the upgraded systems are then eligible for rebates.

For More Information:
<http://www.kiuc.coop/co-opportunities/index.htm>

Sponsor: Kauai Island Utility Cooperative
Sponsor Type: Utility

EnergyScout™

The EnergyScout™ for Business Program offers incentives for business owners that curtail a facility’s energy use during periods of power-generation emergencies.

For More Information:
<http://www.heco.com/portal/site/heco/menuitem.508576f78baa14340b4c0610c510b1ca/?vgnextoid=be631805f1f02210VgnVCM1000005c011bacRCD&vgnextfmt=default&cpsexcurrchannel=1>

Sponsor: Hawaiian Electric Company
Sponsor Type: Utility

Green Business Program

This three-level program is designed to help businesses become more energy efficient and to recognize businesses that have greatly reduced energy intensity. The first component entails training, the second requires conducting an energy audit, and the third involves implementing energy efficiency measures.

For More Information:

<http://hawaii.gov/dbedt/info/energy/resource/greenbusiness>

Sponsor: Hawaii Department of Business, Economic Development and Tourism

Sponsor Type: State

Industrial Systems General

Customized Incentives

Customized rebates are available for projects and equipment that improve energy efficiency and are not eligible for other incentives.

For More Information: <http://www.heco.com/vcmcontent/StaticFiles/pdf/CustomRebateFillable.pdf>

Sponsor: Maui Electric Company

Sponsor Type: Utility

Energy Wise Commercial Energy Efficiency Program

KIUC offers rebates to commercial customers for installing energy efficient equipment. Once a KIUC representative has performed an energy audit of a business, energy saving measures will be detailed. If recommendations are accepted and implemented properly, the upgraded systems are then eligible for rebates.

For More Information:

<http://www.kiuc.coop/co-opportunities/index.htm>

Sponsor: Kauai Island Utility Cooperative

Sponsor Type: Utility

Enhanced Services Program (ESP)

ESP provides businesses with technical services such as cost analysis and energy efficiency training.

For More Information:

<http://www.kiuc.coop/co-opportunities/index.htm>

Sponsor: Kauai Island Utility Cooperative

Sponsor Type: Utility

Green Business Program

This three-level program is designed to help businesses become more energy efficient and to recognize businesses that have greatly reduced energy intensity. The first component entails training, the second requires conducting an energy audit, and the third involves implementing energy efficiency measures.

For More Information:

<http://hawaii.gov/dbedt/info/energy/resource/greenbusiness>

Sponsor: Hawaii Department of Business, Economic Development and Tourism

Sponsor Type: State

Hawaii Energy Efficiency Business Incentives

This program provides nonresidential customers with a variety of energy saving rebates on equipment, such as lighting, motors, air-conditioners, chillers, window films, and other customized energy efficiency projects.

For More Information:

<http://hawaiienergyefficiency.com/59/for-your-business>

Sponsor: Hawaii Public Utilities Commission

Sponsor Type: State

Training Program - Hawaii Energy Alliance

HECO will provide training on energy conservation four times annually.

For More Information:

<http://www.heco.com/portal/site/heco/menuitem.8e4610c1e23714340b4c0610c510b1ca/?vgnextoid=c5a9bb0fe3a3e010VgnVCM1000005c011bacRCRD&vgnextfmt=default>

Sponsor: Hawaiian Electric Company

Sponsor Type: Utility

End Notes

- ¹ “Save Energy Now State Partnerships: ITP Activities in Hawaii.” The Office of Energy Efficiency and Renewable Energy (EERE). Accessed 13 Oct. 2010. http://www1.eere.energy.gov/industry/states/state_activities/map_new.asp?stid=HI
- ² “State/Territory Energy Profiles.” U.S. Energy Information Administration. Accessed 13 Oct. 2010. http://www.eia.gov/state/state_energy_profiles.cfm?sid=HI.
- ³ “Detailed Statistics - American FactFinder.” U.S. Census Bureau. Accessed 13 Oct. 2010. http://factfinder.census.gov/servlet/IBQTable?_bm=y&-ds_name=AM0831GS101.

EERE Information Center

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

www.eere.energy.gov/informationcenter

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