



## Frequently Asked Questions

### *Municipal and Private Water and Wastewater Program*

For general questions about Hawaii Energy and our other incentive offers, please visit the Hawaii Energy [website](#).

#### Water and Wastewater Program

**Q: What is the Hawaii Energy (HE) Water and Wastewater Program?**

A: The Hawaii Energy Water and Wastewater Program provides financial incentives for energy efficiency projects in water distribution and treatment systems and wastewater collection, conveyance and treatment facilities. The program was developed to increase awareness of the benefits of energy efficiency in these sectors and the availability of Hawaii Energy funding and technical assistance.

**Q: What types of assistance are provided?**

A: HE offers funding and technical assistance to help water and wastewater facilities to assess, identify and implement energy efficiency improvement projects, which may include cost-sharing assistance to help cover the costs associated with an energy assessment or cash incentives for purchasing and installing energy efficient equipment and processes. In addition to financial assistance, HE also provides the following:

- Operator training
- Development of various tools and materials
- Pump efficiency metering kits
- On-site energy assessments for selected facilities

**Q: How do I know if my facility is eligible for assistance?**

A: To be eligible for HE programs, your facility must be located in Hawaii, Honolulu, or Maui counties and pay into the Public Benefits Fund (PBF). PBF charges apply to Hawaiian Electric Company customers. To verify if you are eligible, contact HE.

**Q: How do I apply for assistance?**

A: Applying for assistance is easy. Visit the Water and Wastewater Solutions page on our website: [www.hawaiienergy.com/water-and-wastewater](http://www.hawaiienergy.com/water-and-wastewater) and begin by completing and returning the Wastewater Facility or Drinking Water checklist. Once you have completed a checklist, HE will contact you. For help with this process, contact Joe Simpkins at [simpkinswj@leidos.com](mailto:simpkinswj@leidos.com).

**Q: How can I receive more information about HE programs?**

A: For commercial inquiries, email [hawaiienergybusiness@leidos.com](mailto:hawaiienergybusiness@leidos.com) or call (808) 839-8880. You may also check out our website, [www.HawaiiEnergy.com](http://www.HawaiiEnergy.com) for more information.



# Hawaii Energy

YOUR CONSERVATION & EFFICIENCY PROGRAM

## Energy Use and the Municipal and Private Water and Wastewater Sector

### **Q: How much energy is consumed yearly by drinking water and wastewater utilities?**

A: The US Environmental Protection Agency estimates that 3% of national energy consumption, equivalent to approximately 56 billion kilowatt hours (kWh), is used for drinking water and wastewater services. In Hawaii, this sector consumes approximately 290 million kWh per year. This is equivalent to the energy consumed by roughly 43,939 Hawaii households (based on 2013 average kWh per residential customer in Hawaii).

### **Q: What is the difference between energy efficiency and energy conservation?**

A: Simply put, energy conservation involves modifying behavior in order to save energy. Typically, energy conservation employs a no-cost strategy. An example of this is turning off unnecessary lighting during working hours. Energy efficiency means installing equipment or processes that use less energy or modifying processes to reduce electrical consumption and demand. Examples include replacing a standard-efficiency motor with a premium-efficiency motor or shifting run-times to off-peak hours. Efficiency measures can be no to low-cost or can require a capital investment. However, both energy conservation and efficiency measures help reduce energy use and energy costs.

## Energy Efficient Equipment and Technologies

### **Q: What is a variable speed drive (VSD)?**

A: A variable speed drive (VSD) or variable-frequency drive (VFD) is a system for controlling the rotational speed of an electric motor by controlling the frequency of the electrical power supplied to the motor (VFDs) or by varying the voltage to the motor (VSDs).

### **Q: What is the difference between a standard efficiency motor and a premium efficiency motor?**

A: The amount of input power needed to produce rated horsepower varies from motor to motor, with more-efficient motors requiring less input wattage than less-efficient models to produce the same output. A premium efficiency motor is typically 2% to 5% more efficient than a standard one.

### **Q: What is load shifting?**

A: Load shifting is the practice of altering the pattern of energy use so that on-peak energy use is shifted to off-peak periods.

### **Q: How can load shifting lower my electric costs?**

A: Some energy providers offer a dual on-peak, off-peak basis rate structure. Shifting more demand to off-peak times would result in cost savings.

### **Q: What is cogeneration?**

A: Cogeneration (also combined heat and power, CHP) is the use of an engine generator, microturbine, or fuel cell to simultaneously generate electricity and capture the heat produced for beneficial utilization.

This document was adapted from the "Frequently Asked Questions" portion of the New York State Energy Research & Development Authority (NYSERDA) website (<http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/Sectors/Municipal-Water-and-Wastewater/FAQs-Ask-the-Expert.aspx>) and used with permission from NYSERDA officials.