



2009 Corporate Sustainability Report



Hawaiian Electric Company

clean energy





energy

Aloha

Welcome to the third annual Hawaiian Electric Corporate Sustainability Report.

Our utilities, our islands and our country are in a time of transformation. As Hawaii reduces its dependence on imported oil, the emerging clean energy economy will provide our state with the long-term benefits of greater energy, economic and environmental security.

Like all such changes, the process is both exciting and challenging. Our 2009 Sustainability Report provides an update on what and how we are doing in our efforts to help meet our goals and reduce our islands' carbon footprint.

Most people would agree that the pace is picking up. Each year brings progress but, as noted, most of the course is still before us. It will take a united effort and cooperation among individuals, businesses, institutions and government to stay the course and reach our goal.

Sincerely,



Richard M. Rosenblum
President & Chief Executive Officer

Hawaii's Clean Energy Future

Moving Forward

The year 2009 marked the first full year since our companies signed a landmark Energy Agreement with the State of Hawaii. The Hawaiian Electric companies signed the agreement in October 2008 as part of the Hawaii Clean Energy Initiative to move Hawaii away from imported oil. Our goal is the most aggressive in the nation; to achieve a clean energy economy and lifestyle in which 70 percent of our energy for electricity, as well as ground transportation, comes from clean sources by 2030.

In the first year of the energy agreement, the Hawaiian Electric companies — in cooperation with many others — have moved forward in several areas.

Achieving Our Clean Energy Goals

Hawaiian Electric submitted the following proposals to the Hawaii Public Utilities Commission (PUC):

- **Feed-In Tariff (FIT):** Creates standard rates and standardized contracts to ease the process for private developers to add renewable energy to Hawaiian Electric company grids. Parties to the docket are working to have the FIT effective in 2010.

Hawaiian Electric is committed to adding as much cost-effective renewable energy as possible. Oahu's larger electric grid has the capacity to add considerably more renewables. However, Maui and Hawaii Islands' smaller electric grids have experienced under frequency, instability, and other system reliability issues due to high levels of variable renewable energy sources on their systems. Under the FIT docket, the PUC asked the utilities to develop reliability standards.

Hawaiian Electric has proposed a working group of renewable energy stakeholders to quickly identify ways to continue to add distributed customer-sited renewable projects onto the grid without compromising power quality and customer reliability. The goal is for the working group to offer proposals for PUC consideration that will ensure reliability for all customers while continuing to add more customer-sited intermittent renewable energy projects – like roof-top photovoltaic (PV) systems – without interruptions that could damage the PV industry in Hawaii.

- **Clean Energy Scenario Planning:** Replaces the previous Integrated Resource Planning process with a broader, more dynamic process to meet future energy needs. A broad group of stakeholders is developing a framework.
- **Decoupling:** Changes the financial model for utilities to one that better supports energy conservation and integration of more clean energy rather than one based on electricity sales. The PUC approved decoupling in principle in early 2010 and is developing the final implementation details.
- **Advanced Metering Infrastructure (AMI):** Proposes to install advanced meters for all customers and upgrade operations systems to allow more customer options, the ability to integrate more utility-scale and on-site renewable energy systems as well as future developments like electric vehicles, all with improved reliability.



- **Lifeline Rates:** Proposes electric bill credits for low and fixed income customers.
- **Clean Energy Infrastructure Surcharge:** Proposes a surcharge to help pay for projects that support renewable energy developers.
- **Pay As You Save (PAYS):** Proposed to expand, and make permanent, a pilot program to increase solar water heating by financing installations on rented homes. The PUC deferred consideration of the program for possible incorporation by the Public Benefits Fee administrator, rather than the utility.
- **PV Host program:** Proposes to increase commercially-owned, customer-sited photovoltaic arrays by allowing the utility to lease large roofs and other open spaces from customers, choose PV installers by competitive bidding and then buy all the electricity produced for distribution via the utility grid.

Interisland Wind and Undersea Cable

The Interisland Wind Project aims to transmit 400 megawatts of electricity from wind projects planned by First Wind and Castle and Cooke on Molokai and Lanai respectively to Oahu via an undersea cable. In 2009, Hawaiian Electric worked with the State on system integration studies, and coordinated environmental impact studies, community outreach, and public information projects. The website interislandwind.com was created to provide information and receive public input on all aspects of the project.

A technical review committee made up of national and international experts (including the National Renewable Energy Laboratory) was created to support the project. Studies to reliably integrate increasing amounts of energy from variable renewable sources into our existing system are being conducted along with other parallel integration studies to determine necessary technical upgrades for specific renewable projects proposed on Oahu, Maui and Hawaii Island.

Solar Energy

Hawaii is a national leader in solar energy. All three Hawaiian Electric companies — Hawaiian Electric, Maui Electric and Hawaii Electric Light Company — (as well as Kauai Island Utility Co-op) rank among the top ten utilities nationally for solar watts per customer. The Hawaii utilities are also acknowledged leaders in integrating intermittent solar power with other power sources on their grids, an increasing challenge as the number of customer-sited, distribution grid level photovoltaic systems increase on all islands.



In 2009, Sopogy, a Honolulu-based renewable solar energy company, opened a micro-concentrating solar energy facility at the Natural Energy Laboratory of Hawaii on Hawaii Island.



Biofuels

Biofuels are expected to play a substantial role in reducing the consumption of fossil fuels. By switching from “black” to “green” liquid fuels, Hawaiian Electric would have a firm renewable energy source that can readily be used in existing and planned electrical generating units and infrastructure. This will avoid billions of dollars of spending on major capital investments for new, replacement systems. Studies show that biodiesel, a type of biofuel that can be derived from vegetable seeds, nuts, or animal fats, can yield 220 percent more energy than is used in its production. Also, biofuels from local sources could decrease greenhouse gas emissions and help revive an agriculture industry in Hawaii. Developing a local agricultural energy and food industry would increase our economic security and keep more money now sent out of state here to create economic opportunities, jobs and state revenue.

In 2009, Hawaiian Electric completed its newest generating station at Campbell Industrial Park, designed to be fueled entirely by biofuels. Since then, the PUC approved a two-year contract for a subsidiary of Iowa-based Renewable Energy Group® to supply three to seven million gallons of renewable biodiesel annually to fuel the unit. The high quality biodiesel is processed from used cooking oil (known as yellow grease) and waste animal fat.

Sustainable Biofuels Policy

Hawaiian Electric Company collaborated with the Natural Resources Defense Council to create an environmental biofuel procurement policy for the transition to sustainable fuels that balance environmental, social, cultural and economic objectives. The policy focuses on eight components:



- 1) Preference for local biodiesel produced from feedstock grown in Hawaii
- 2) Compliance with principles and criteria set by the Roundtable on Sustainable Palm Oil, as determined by an independent auditor
- 3) No biodiesel or feedstock from recently deforested lands or from plantations that violate human or worker rights
- 4) Verifiable tracking of all feedstock from the fields to the utility facility
- 5) Participation in the development of greenhouse gas emissions accounting and reporting protocols
- 6) Establishment of a Biofuels Public Trust Fund to enhance the environmental, social, cultural, and economic viability of production and consumption of biofuels in Hawaii
- 7) Public review and input on the development of this biofuel policy and future revisions
- 8) Preparation of public progress reports to identify and address issues



Biofuels are also being tested in existing units at Maui Electric's Maalaea Power Plant and Hawaiian Electric's Kahe Power Plant to determine how much biofuel mixed with petroleum can be used to run the currently all-oil-fired units.

Hawaiian Electric has a commitment to support the long-term development of locally grown biofuel crops and cultivate potential local renewable fuel sources for the utility. The company provided a third year of seed funding for research by the Hawaii Agriculture Research Center (HARC) and the University of Hawaii agriculture colleges at Manoa and Hilo to identify potential biofuel feedstock crops for Hawaii. Research on locally grown biofuel feedstocks includes malanguy, palm oil, jatropha, and kukui.

In 2010, Hawaiian Electric also began a formal quest for a long-term supply of biofuels made from feedstocks produced and processed within the state of Hawaii. These local biofuel supplies may be proposed for use at generation sites on Oahu, Maui, Molokai, Lanai and Hawaii Island.

The proposals may use land or water-based crops, waste animal fat or yellow grease feedstocks originating in Hawaii that may be converted to liquid biofuel. Each growing, production and processing method for supplying



Dusk at the new generating station at Campbell Industrial Park which is designed to run entirely on biofuels.

Support for Homegrown Biofuels

Support and work on local biofuel production is steadily increasing. Several state laws now encourage the use of land to grow feedstock, and allow for more reasonable renewable energy prices.

- A 2007 law was enacted to permit biofuel processing facilities in designated agricultural districts and establish a program with the Hawaii Department of Agriculture to encourage production of energy feedstock.
- A 2008 law authorized the Hawaii Board of Land and Natural Resources to lease public lands to growers or producers of plant and animal material used in biofuels.
- A 2009 law authorizes preferential rates to agricultural energy producers selling electricity to utilities, and supports the long-term development of locally grown biofuel crops and fuel sources for the utilities.
- Another 2009 law helps utilities negotiate more stable and less costly prices for purchased renewable energy by no longer requiring consideration of avoided costs in determining rates.
- At the end of 2009, the State Department of Business, Economic Development & Tourism delivered a Biofuels Master Plan for Hawaii. The report was prepared under contract by the Hawaii Natural Energy Laboratory at the University of Hawaii and submitted to the 2010 Hawaii State Legislature.



biofuels to Hawaiian Electric companies must meet all environmental standards and other requirements under federal, state and county laws.

Construction is underway on four biodiesel-powered generators that are planned to provide eight megawatts of power to the grid at the Honolulu International Airport Emergency Facility, a partnership to serve the State of Hawaii Department of Transportation and Hawaiian Electric customers. The facility is expected to be in service by mid-2011.

Other Renewable Projects

Hawaiian Electric signed two new power purchase agreements to add renewable energy to the Oahu grid: 30 megawatts of wind power at Kahuku and a six-megawatt biomass project with Honua Power. Power purchase agreements are also being negotiated with the bidders selected through Hawaiian Electric’s request for proposals for 100 megawatts of renewable energy on Oahu.

Renewable Energy Projects in Progress

- 400 MW Lanai/Molokai wind farms
- 160 MW Other Oahu projects
- 30 MW Hawaii Island projects
- 40 MW Maui projects

630 MW Approximately, or more than 50% of the 1,100 MW goal for the state.

The Hawaiian Electric companies continue to support research for future renewable technologies including ocean thermal energy conversion and wave energy. Discussions to expand geothermal energy projects on Hawaii Island and Maui are also underway.

Renewable Portfolio Standards

In 2009, Hawaiian Electric and its subsidiaries Hawaii Electric Light Company and Maui Electric Company, achieved a consolidated Renewable Portfolio Standard of 19 percent, an increase by one percent from 2008. This is primarily the result of the additional

energy efficiency implemented in 2009 and increased installations of renewable technologies such as photovoltaic systems and replacement technologies such as solar water heating. However, a new renewable portfolio standard law which became effective on July 1, 2009 will count only renewable energy production while energy savings from energy efficiency programs will be counted in a separate energy efficiency portfolio standard. The new renewable targets are 25 percent of sales by 2020 and 40 percent by 2030.

Without the electrical energy savings from both the renewable energy displacement and energy efficiency included, the 2009 RPS for the Hawaiian Electric companies is 9.2 percent compared to the 19 percent stated above.



2009 Renewable Portfolio Standard Report (Net Megawatt Hours)

	HECO	HELCO	MECO	TOTAL
Electrical Energy Generated Using Renewable Energy Sources				
Biomass	360,323		38,432	398,755
Geothermal		167,591		167,591
Photovoltaic			1,390	1,390
Hydro		59,889	10,009	69,898
Wind		140,687	109,668	250,355
Biofuels	3,307		1,570	4,877
Subtotal	363,630	368,167	161,069	892,866
Electrical Energy Savings Using Renewable Displacement Technologies				
Photovoltaic Systems	15,668	9,563	4,766	29,997
Solar Water Heating	86,967	14,501	28,492	129,960
Subtotal	102,635	24,064	33,258	159,957
Electrical Energy Savings Using Energy Efficiency Technologies				
Pre-2009 Participants	604,348	46,479	81,375	732,202
2009 Participants	46,930	3,281	7,218	57,429
Subtotal	651,278	49,760	88,593	789,631
RENEWABLE TOTAL	1,117,543	441,991	282,920	1,842,454
TOTAL SALES	7,377,537	1,119,881	1,192,243	9,689,661
RPS PERCENTAGE	15.1%	39.5%	23.7%	19.0%
RPS not counting Energy Efficiency				10.9%
RPS not counting Energy Efficiency and Renewable Displacement				9.2%

% Energy from Renewable Sources as of 12/31/2009



15.1% HECO Renewable Energy



39.5% HELCO Renewable Energy



23.7% MECO Renewable Energy



19% TOTAL Renewable Energy

Renewable Goals

Year	Mandated % from renewable energy sources	Hawaiian Electric RPS	Exceeds Goals
2005	8%	11%	3%
2006	8%	13.8%	5.8%
2007	8%	16.1%	8.1%
2008	8%	18%	10%
2009	8%	19%	11%
2015	15%	Energy efficiency is no longer included in RPS	
2020	25%		
2030	40%		



Green Transportation

The Hawaiian Electric companies have actively participated in electric vehicle (EV) projects since 1995, gathering experience and insight into EV technologies and operations. In 2009, Hawaiian Electric Company joined with 20 other leading utilities across the nation in the Edison Electric Institute's nationwide campaign to support the adoption of electric vehicles.

HELCO employee, Woody Waltjen, stands beside the state's first hybrid electric bucket truck.



Electric vehicles are currently being tested in our company fleets, including converted Toyota Prius plug-ins on Oahu and Maui, a Phoenix Motorcars EV on Maui, and a hybrid bucket truck at Hawaii Electric Light Company on Hawaii Island. Hybrid light vehicles and trucks as well as plug-in hybrid sedans will also be added to our fleets, providing additional hands-on experience with charging, operations, and maintenance.

Hawaiian Electric is working in partnership with Better Place Hawaii, a company with plans to provide EV charging and battery swap stations. Maui Electric worked with a Maui architectural firm to install a wind turbine at its facility to charge EVs. Additional efforts include working with the Hawaii Automobile Dealers Association and the transportation working groups of the Hawaii Energy Policy Forum and the Hawaii Clean Energy Initiative.



Hawaiian Electric features its converted plug-in hybrid Prius at Hawaii Clean Energy Day.

of a power plant that does not need to be built because of these programs. Hawaiian Electric Company is currently working to obtain approval from the Public Utilities Commission to expand them.



Demand-Side Management

As Oahu's energy needs continue to grow, Hawaiian Electric has developed programs that reward customers for their assistance with managing the demand for electricity. Under the EnergyScout™ Program, participating customers allow Hawaiian Electric to remotely turn off certain types of customer equipment during system emergencies. Once the emergency passes, the equipment is restored to normal service.

By the end of 2009, the EnergyScout™ programs for both residential and commercial customers were fully subscribed. As a result, Hawaiian Electric is able to control nearly 57 megawatts of peak demand, equivalent to the output



Power to Save for Small Business

At the start of 2010, Hawaiian Electric introduced two new, free energy conservation guides tailored to small business offices and commercial kitchens. Power to Save for Small Business helps employers launch an energy conservation program in the workplace. Ways to Save at Work lists easy-to-follow workplace tips for employees. These guides may be downloaded at heco.com; or a hard copy may be requested by calling 808-543-7511.



Solar Milestone

In June 2009, the Hawaiian Electric companies celebrated the installation of 50,000 solar water heaters since its incentive program began on Oahu, Maui County and Hawaii Island in 1996. With previously installed solar systems, the 50,000 systems under the utilities' programs bring the total statewide to more than 80,000 solar roofs, maintaining Hawaii's place as a national leader. An estimated one out of three single-family homes is equipped with solar water heating in Hawaii and a new law which went into effect in January 2010 requires solar water heating to be installed on all newly built single-family homes.



Honolulu resident Jim Case, wife Suzanne, and daughter Suzanne, enjoy the benefits of solar water heating despite the overcast conditions of their Round Top Drive home.

Energy Efficiency Programs

On July 1, 2009, responsibility for most energy efficiency programs that had been run by Hawaiian Electric for over a dozen years was transferred to a new Public Benefits Fund administrator, known as the Hawaii Energy Efficiency Program, reporting directly to the Hawaii Public Utilities Commission. To learn more about rebates for solar water heaters and ENERGY STAR® appliances, visit HawaiiEnergy.com, or call 808-537-5577 on Oahu and 1-877-231-8222 toll-free from the Neighbor Islands.

Electricity in Hawaii

Electricity Production in Hawaii

The Hawaiian Electric companies produce roughly 60 percent of all the electricity they provide to customers. The other approximately 40 percent – including both conventional and renewable energy — is generated by companies known as independent power producers and sold to the Hawaiian Electric companies for distribution to customers.

Electricity by Fuel Source (Megawatt Hours) as of 12/31/09

Hawaiian Electric Companies			
	HECO	HELCO	MECO
Biofuel	3,306.88		1,570.19
Hydro		28,608.13	
Oil	4,491,606.83	512,718.73	1,079,655.87
Wind		82.75	
Total Internal	4,494,913.70	541,409.61	1,081,226.06

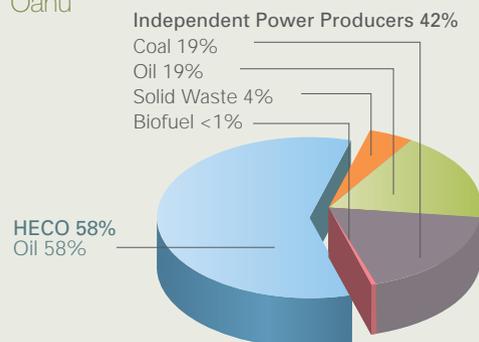
HECO/HELCO/MECO Consolidated Total 60%

Independent Power Producers			
	HECO	HELCO	MECO
Biomass			38,431.75
Coal	1,448,811.12		23,277.26
Geothermal		167,590.53	
Hydro		31,281.30	10,008.80
Oil	1,457,549.82	329,142.17	1,761.50
Solid Waste	360,322.57		1,390.22
Wind		140,603.91	109,667.52
Total IPP	3,266,683.52	668,617.91	184,537.05

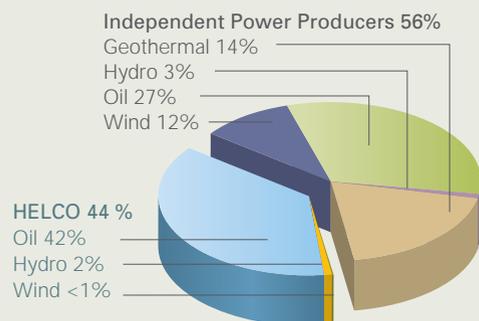
IPP Consolidated Total 40%

Electricity by Fuel Source

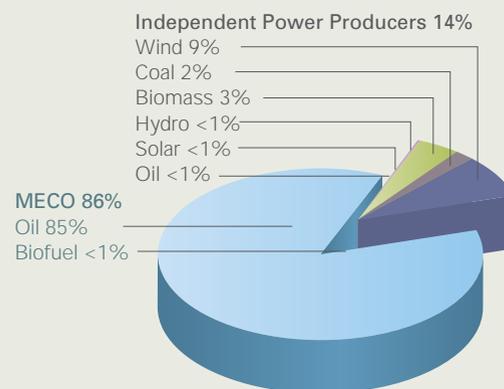
Oahu



Hawaii Island

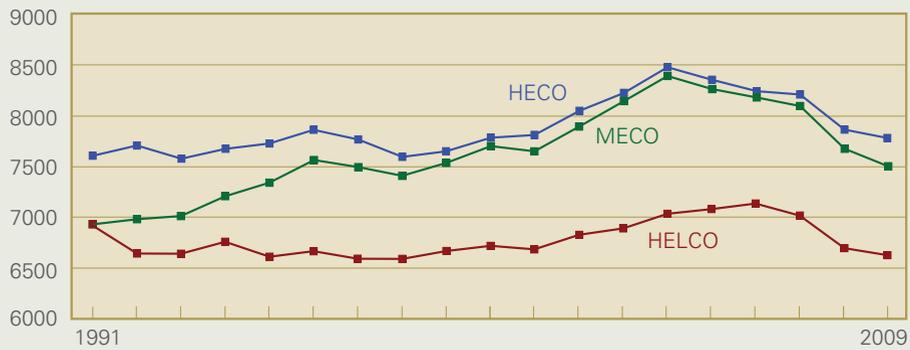


Maui County





Average Annual kWh Use Per Residential Customer



Out of 50 states, Hawaii ranks 48th in per capita electricity use and 41st for per capita total energy consumption.



Total Energy Consumption Per Capita

Rank	State	Million Btu
1	Alaska	1062.32
2	Wyoming	948.59
3	Louisiana	861.19
4	North Dakota	671.05
5	Texas	496.34
6	Montana	483.09
7	Kentucky	477.55
8	West Virginia	469.91
9	Alabama	460.82
10	Indiana	458.35
41	Hawaii	269.11

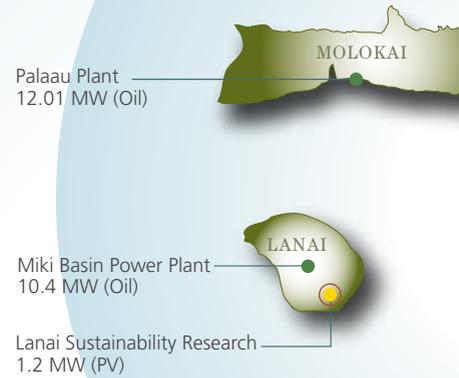
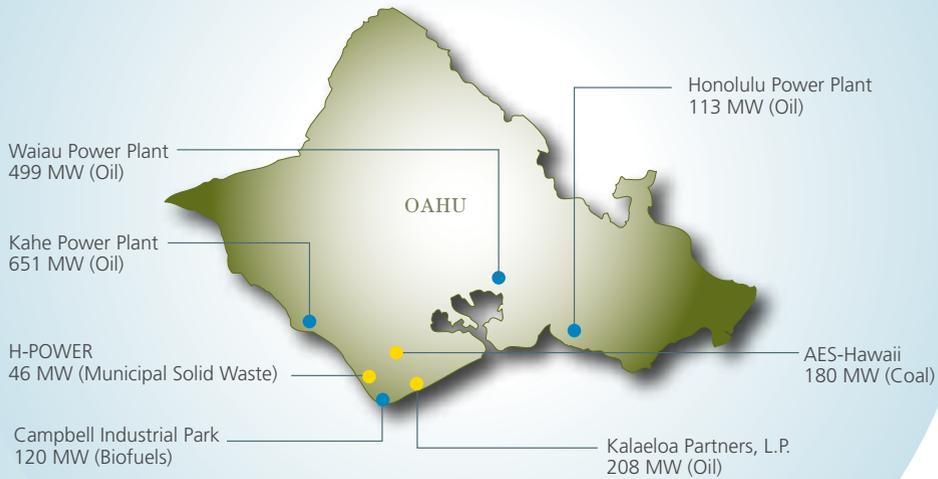
Source: U.S. EIA, Released August 28, 2009 (Complete 2007 Data)

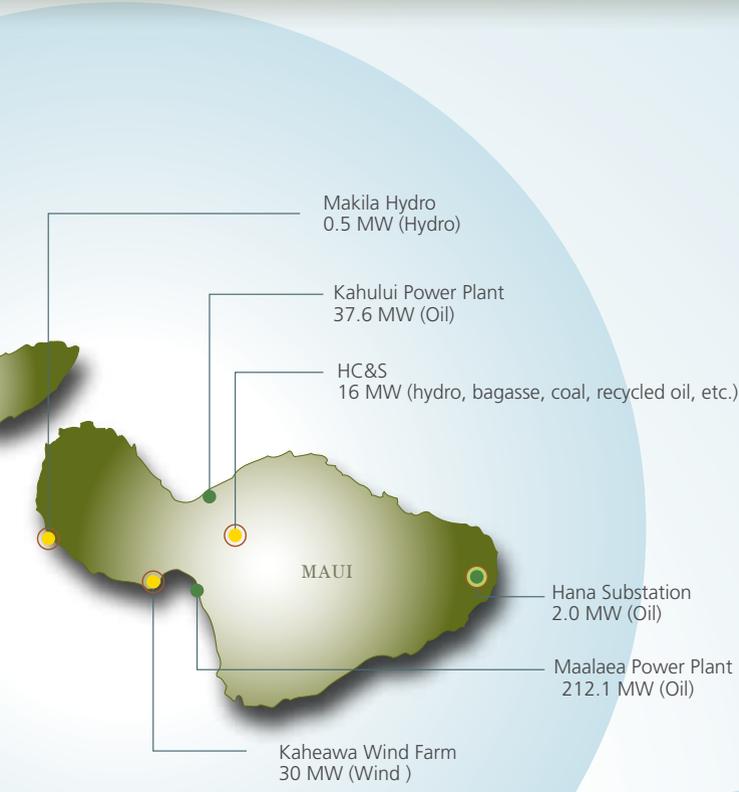
Reliable Service

Hawaiian Electric field crews work 24 hours a day, seven days a week to make sure that electrical service is restored rapidly and efficiently for customers in case of problems. If you experience an outage or want to report a downed power line or leaning utility pole, please call our trouble line at 808-548-7961.



Electricity Generation in Hawaii



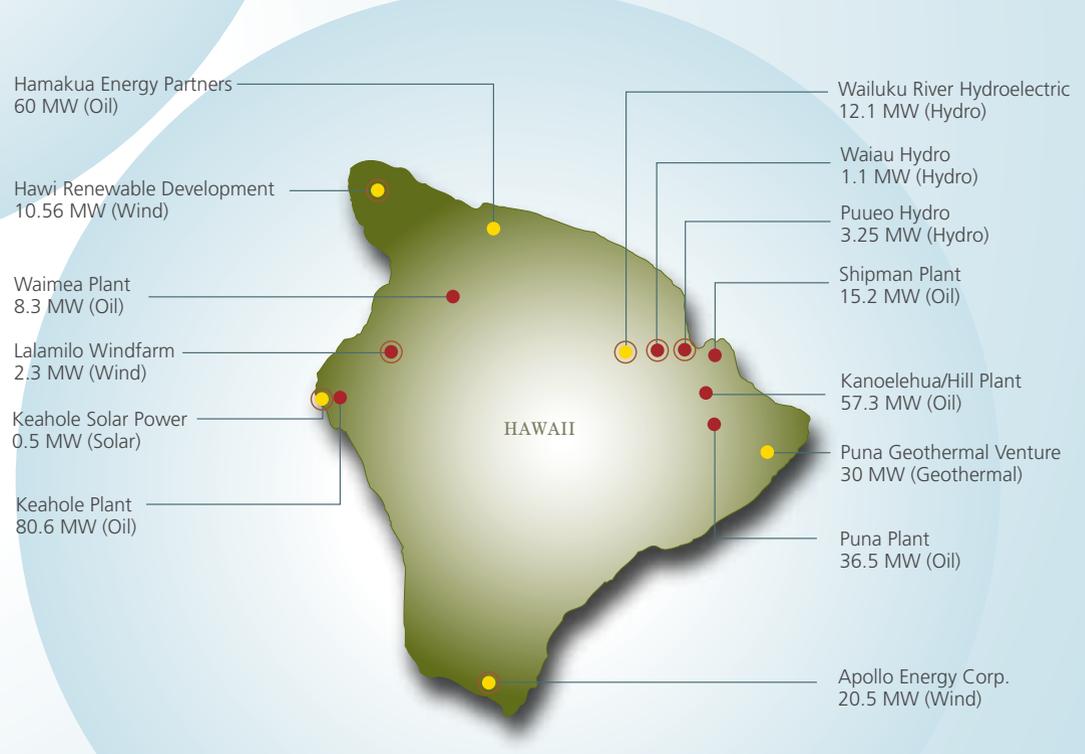


- Hawaiian Electric Company
 - Maui Electric Company
 - Hawaii Electric Light Company†
 - Independent Power Producers
-
- Firm Generation
 - As Available Generation
 - Standby Generation

Firm Generation – electricity from a source that is available and reliable on demand, whenever needed.

As Available Generation – electricity from a source that is not accessible all the time. Renewable energy sources such as solar and wind are good examples of “as available” power since they only provide electricity when the sun shines or the wind blows.

† HELCO also has 4 MW of available distributed generation.



Global Warming and Greenhouse Gas Regulation

Greenhouse Gas Regulation

National and international concern about the contribution of greenhouse gas (GHG) emissions to global climate change have led the state of Hawaii to action and stimulated federal legislative and regulatory proposals to reduce GHG emissions.



In 2007, Hawaii became the second state to adopt legislation that regulates GHG emissions when it passed Act 234, the Global Warming Solutions Act.¹ It requires a statewide reduction of GHG emissions by January 1, 2020 to levels at or below the 1990 levels. The Act also established a task force, comprised of representatives from state government, businesses (including Hawaiian Electric), the University of Hawaii, and environmental groups, to prepare a work plan and regulatory approach for “implementing maximum practically and technically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases.” The task force retained a consultant to prepare a work plan that was submitted to the Hawaii Legislature in December 2009.

The Task Force unanimously recommended that the Legislature strongly support the Hawaii Clean Energy Initiative as a means to meet Act 234 emission reduction goals though costs and funding mechanisms would need further exploration. The Task Force also requested the analysis of the Hawaii Clean Energy Initiative’s impact on different sectors of the economy be refined.

¹ For the 2008 updated inventory of Hawaii emissions, visit hawaii.gov/dbedt/info/energy/greenhouse/



Hawaii's Energy Profile

Hawaii's GHG reduction law coupled with its aggressive renewable portfolio standards mandate and unique energy profile should be taken into consideration as the federal government develops a nationwide GHG reduction policy.

Factors specific to Hawaii that differentiate our energy profile from the rest of the country include:

- Reliance on imported oil for energy and transportation needs
- Isolation from the continental U.S. and therefore an inability to utilize large-scale renewable developments outside of the state
- Economic dependence on tourism and the military which are energy-intensive industries
- Limited industrial base
- Greater need than most other states to address early adaptation measures for issues such as sea level rise
- Higher costs for carbon offset projects and the likelihood that most benefits would be experienced outside of the state
- Short commuting distances and mild weather
- Access to large marine (coastal and deep ocean) energy resources



Climate Change and Adaptation

Given the state's geographic location and isolated electric grids, Hawaii faces distinctive climate change impacts and costs. For example, while the timing, extent and ultimate effects of global warming cannot be determined with any certainty, global warming is predicted to result in sea level rise. This could impact coastal and other low-lying areas, and may cause erosion of beaches, saltwater intrusion into aquifers and surface ecosystems, higher water tables, and increased flooding and storm damage due to heavy rainfall.

The effects of climate change on the weather (for example, stronger hurricanes and resulting flooding), sea level, and the availability and quality of water can adversely affect operations at Hawaiian Electric since most of our facilities are sited along coastal, low-lying areas. As such, to ensure the reliability of each island's grid, Hawaiian Electric designs and constructs its electric generation systems with a greater level of redundancy than is typical for interconnected mainland systems. In addition, the company is exploring the best adaptations required to address potential impacts to its facilities.

Fostering Community Service and Environmental

Net-Zero Energy Living

The Hawaiian Electric companies are partnering with the Department of Hawaiian Home Lands (DHHL) to help develop affordable, energy self-sufficient and sustainable communities. Hawaiian Electric is providing technical assistance for construction of DHHL's Ke Kaiaulu Hoowaiwai - The Prospering Community - subdivision at Kaupuni in Waianae which will feature the state's first net-zero energy homes and serve as a model community for sustainable living.

This partnership was signed at the Council for Native Hawaiian Advancement's 8th Annual Native Hawaiian Convention where Hawaiian Electric was honored with the 2009 Native Hawaiian Economic Alliance Community Champion Award.

Kids navigate a web-based dashboard to measure the performance of the rooftop PV system in Nanakuli.



Solar Power in Nanakuli

The National Football League (NFL) Youth Education Town (YET) in Nanakuli receives over 25 percent of its lighting from eight photovoltaic panels installed through Hawaiian Electric Company's "Beyond Sun Power for Schools" project. Students can learn more about PV and the efficiency of the system through a web-based dashboard that displays data collected from the weather station on the roof.

The Nanakuli site, managed by the Boys and Girls Club of Hawaii, is the first NFL YET built outside of a Super Bowl host city, and the first Leadership in Energy and Environmental Design (LEED)-certified after-school facility in the country. The facility includes an outdoor amphitheater, native Hawaiian garden, large multi-purpose community room, library, arts-and-crafts room, learning center, computer and technology center, and multimedia studio.



Al Jerome Leano from Waipahu Elementary prepares his solar-powered model car for the Solar Sprint.

Solar Sprint

The annual Solar Sprint, organized by the Hawaii Department of Education and sponsored by Hawaiian Electric Company, helps children learn about renewable energy. Over 200 students demonstrated that sunlight hitting a PV panel can produce enough energy to power a small electric motor and propel a toy car fast enough to move down a 60-foot track within 20 seconds.

Participants included students from Kahuku Elementary, Kahuku High and Intermediate, Laie Elementary, Niu Valley Elementary, Noelani Elementary, Waialua High and Intermediate, Waipahu Intermediate, and Wheeler Middle schools.



Home Energy Challenge

The Hawaiian Electric Company Home Energy Challenge encouraged 1,386 participating families from 11 schools to save over 400,000 kWh and \$100,000 over a six-month period. For a second year, Mililani Mauka Elementary received the \$10,000 grand prize. Hahaione Elementary took second place, winning \$8,000, and Mililani Ike Elementary placed third, earning a cash prize of \$5,000.

Environmental Monitoring

The year 2009 marked a cycle of data collection at new air quality monitoring stations in West Oahu, where a majority of Hawaiian Electric's generating stations are located. Real-time data for these stations is available at westoahuair.com. Hawaiian Electric also continues to monitor fish populations off West Oahu shores and, since the 1970s, the utility has run what is believed to be the longest continuous study of coral reefs in the world.

Support for Seabirds

The Hawaiian Electric companies have been working with state and federal agencies and community organizations to increase public awareness of native seabirds — including shearwaters — for several years. Hawaiian Electric has supported research to protect and monitor seabirds on Oahu's offshore islands with annual seabird counts, habitat protection and predator control. Maui Electric Company, in cooperation with the Hawaii Department of Land and Natural Resources Division of Forestry and Wildlife and National Park Service continue to implement a program to reduce impacts on federal and state protected birds. Injured seabirds are recovered for rehabilitation through the Save Our Seabirds program. In partnership with Maui County, Maui Electric accelerated a project to shield streetlights and minimize distractions for fledgling seabirds during flight.



Earth Day Festival

In honor of Earth Day, Hawaiian Electric sponsors the annual Grow Hawaiian Festival to highlight the benefits of native plants to our unique island environment. Practitioners share traditional Hawaiian uses of medicinal native plants and demonstrate lau hala weaving, kapa making, implement making and lei making. With the help of

community organizations and conservation groups, individuals are encouraged to preserve natural resources and reduce contributions to climate change through energy conservation and the use of clean energy.



Arbor Day Tree Giveaway

After 16 years of sponsoring the annual Arbor Day tree giveaway, Hawaiian Electric and its community partners enjoyed a record-setting year in 2009, with 2,600 trees given away within an hour. The 2009 event focused on fruit trees to encourage home owners to grow plants that can sustain them in the future. Some of the most popular trees include calamondin, mountain apple, and Meyer's lemon.

Hawaiian Electric supports Arbor Day, native plants, and various landscaping projects because of the many benefits trees provide to the environment.



Tree shade cools areas naturally, reducing the need for air-conditioning; they also absorb carbon dioxide, a greenhouse gas that contributes to global climate change. For information on planting the right tree in the right place, visit arbordayhawaii.org.

Charitable Giving

Through the HEI Charitable Foundation and individual company contributions, the Hawaiian Electric companies provided donations to over 250 organizations. In addition, the Ka Papa O Kakuhihewa Fund, established in 2005 with funds provided by Hawaiian Electric Company, has granted more than \$240,000 to non-profit organizations promoting resource conservation.



Employee Volunteerism

Hawaiian Electric employees are enthusiastic about supporting their communities and regularly volunteer throughout the year. In 2009 approximately 1,100 employees provided over 4,600 hours of community service.

Sunset Elementary School Improvements

Hawaiian Electric employees and their families helped to beautify Sunset Elementary school grounds by donating and planting native trees, cleaning playground equipment, and painting furniture. The school also received help packing up classrooms for summer renovations.



Puu O Kapolei

Hawaiian Electric Company employees and members of the Kapolei Hawaiian Civic Club helped to clean the hula mound and native garden at Puu O Kapolei, restoring a precious cultural resource on Oahu's west side.



School Supply Drive

Kapolei and Makakilo elementary students received over \$1,500 and 55 boxes of school supplies including crayons, binders, notebooks, scissors, and backpacks donated by employees of Hawaiian Electric Company.

MAO GIVE Day

More than 50 Hawaiian Electric volunteers assisted with planting and weeding at a MAO Organic Farm GIVE (Get Involved Volunteer Environmentally) day. The Waianae-based farm supports its community by promoting care for natural resources and training youth through land-based educational programs.

2009 SERVICE BY THE NUMBERS

- 1,100 Employee Volunteers
- 4,600 Hours of Service
- 56 Community Projects





Environmental Benefits Statement

This report is printed on 100 percent postconsumer waste material. It is Forest Stewardship Council™ certified, processed chlorine free, alkaline pH, and meets the credibility of American National Standards Institute (ANSI) for longevity.

By using this paper, Hawaiian Electric Company saved the following resources:

Trees	23 fully grown*
Water	8,310 gallons
Energy	16 million BTU
Solid Waste	1,375 pounds
Greenhouse Gases	2,535 pounds

The savings are based on a quantity of 3000 reports. Environmental impact estimates were made using the Environmental Defense Paper calculator. For more information, visit <http://www.papercalculator.org>.

* Fully matured at 25 years.





Hawaiian Electric Company

www.heco.com