



2015
**YOUR PUBLICLY OWNED
 ELECTRIC UTILITY**
 City of Healdsburg





ANNUAL ELECTRIC SYSTEM REPORT

CONTENTS

- 2 – How Does It All Work?
- 3 – Where Does Our Electricity Come From?
- 5 – What Can We Do For You?
- 6 – 2014 Power Content Label

Este folleto contiene información acerca de su proveedor de electricidad. Si usted tiene preguntas, favor de llamar 707.431.3346



MESSAGE FROM THE MAYOR

Since 1899 the City of Healdsburg has owned and operated its own Electric Utility. Over the last 100 plus years, the City has moved from a small hydro generation plant in the Black Mountains to owning generation plants throughout northern California, maintaining over 60 miles of high voltage distribution lines with safety and reliability ratings well exceeding statewide averages. Remarkably the City is able to provide this high level of service at rates 30% lower than PG&E's. These lower rates result in over 3 million dollars savings for the community each year.

Through the City's ownership of the power plants at the Geysers and hydro plants in Calaveras County, the City provides a high level of renewable and carbon free energy to all of the City's customers. In most years, the City's electric energy ranges between 50 to 60% carbon free with over 43% of that energy coming from renewable energy provided by the Geysers. As described within, the City's Power Content allows all of Healdsburg's customers to show environmental stewardship while also saving money.

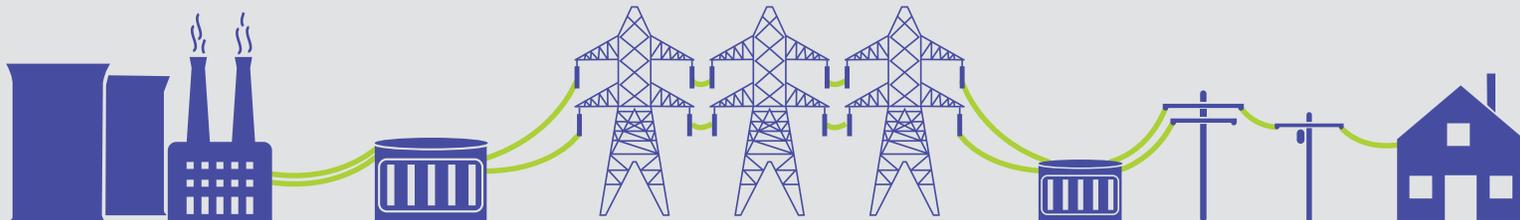
This brochure is intended to provide information about the operation and services of the City's Electric Utility. I hope that you find it useful and a good reference of the City's conservation programs, power content, and utility operation that all result in a tremendous service to our community.

Sincerely,

Shaun McCaffery

HOW DOES IT ALL WORK?

Delivering electricity is a complex process. In order to power your lights, electricity must be created at a generation site and travel through a complex web of transmission and distribution lines to reach your home. Every dollar you pay for your electricity is allocated to the following four categories: Generation, Transmission, Distribution, and Public Benefit Funds. The graphic below shows how electricity reaches you and the average cost for each portion.



GENERATION

Electricity is generated at plants or sites for our use. Plants and sites include facilities that use natural gas, geothermal, and hydroelectric sources to generate electricity.

Average Cost = \$0.48 per dollar

TRANSMISSION

Power lines, typically supported by large towers, transmit electricity between remote generation plants and the communities that consume the electricity.

Average Cost = \$0.12 per dollar

DISTRIBUTION

Localized high voltage power lines distribute electricity to our community and neighborhoods.

Average Cost = \$0.37 per dollar

PUBLIC BENEFITS FUND

In 1996 the State of California established the Public Benefits Fund to support energy efficiency programs, incentives for the installation of solar systems, and low income discounts. Funds collected through the Public Benefits Fund may be used to pay for efficiency upgrades on existing equipment or electric load (load = everything plugged in).

Cost to support conservation programs = \$0.03 per dollar



OUR MOST COMMON RESIDENTIAL REBATES

- **FREE HOME ENERGY AUDITS**
- **ENERGY STAR® APPLIANCE REBATES:**
 - Refrigerator - \$75
 - Freezer - \$50
 - *Dishwasher - \$60
 - *Clothes Washer - \$75
 - Room Air Conditioner - \$75
- **ENERGY STAR® LIGHTING:**
 - LED Bulbs - \$2.50/bulb
 - LED Light String - \$0.10/light on string
- **ELECTRIC HOT WATER HEATER - \$100**

- ****POOL PUMP - \$125**
- **WEATHERIZATION:**
 - Ceiling/Attic Insulation - \$0.35-\$0.65/sq. ft.
 - Wall Insulation - \$0.75/sq. ft.
 - Replacement Windows - \$1.50/sq. ft.
 - Duct Insulation and Sealing - \$250
 - Roof Radiant Barrier - \$0.35/sq. ft.
- **HEAT PUMP/AIR CONDITIONER/ EVAPORATIVE COOLER**
Rebate based on size & efficiency
- **HEAT PUMP OR AC TUNE-UP - \$150**

*Rebates available only for homes with electric hot water heaters. Homes with natural gas hot water heaters should visit www.pge.com/rebates for more info.

**Pool Pump must be a high efficiency variable speed pump with a motor that is rated 3 horsepower or less.

Commercial Rebates are also available. For more info and to download rebate forms:

www.CityofHealdsburg.org/234/Rebates-Energy-Efficiency



WHERE DOES OUR ELECTRICITY COME FROM?

THE GEYSERS GEOTHERMAL PLANTS

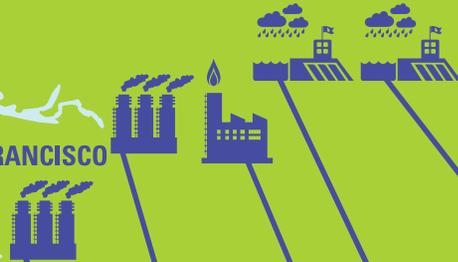
Middletown, CA

Providing over 32 million kilowatt-hours, or roughly 43% of Healdsburg's energy needs, the Geysers Geothermal Project represents the majority of the City's source of renewable energy.



● SACRAMENTO

● SAN FRANCISCO



HEALDSBURG'S ELECTRIC DISTRIBUTION SYSTEM

- Circuits
- Central Circuit
 - Fitch Circuit
 - North Circuit
 - South Circuit
- City Limits
- Badger Substation
- Plaza

PLAZA

BADGER
SUBSTATION



2,000
Feet



DISTRIBUTION

COMBUSTION TURBINE PROJECT #1

Alameda, CA and Lodi, CA

The Combustion Turbine Project #1 (CT-1) is a grouping of natural gas fired generation plants typically used only during periods of abnormally high system loading or during shut-downs of other large generation resources. The units, located in the Cities of Alameda and Lodi, are sources of reserve capacity, peaking energy, and black start capability for the City of Healdsburg and the California Independent System Operator (CAISO).

NEW SPICER MEADOW RESERVOIR

Tuolumne County, CA

Melting snow and runoff fill the New Spicer Meadow Reservoir providing water storage for irrigation, domestic use, recreation, and energy production. The water released from New Spicer Meadow does not create a large amount of energy and is considered as a renewable generation source by the State of California.

LOS ANGELES

LODI ENERGY CENTER

Lodi, CA

The City of Healdsburg's newest generation plant is the Lodi Energy Center (LEC). Located along Interstate 5 just south of the City of Lodi, the designers of the Lodi Energy Center were able to incorporate the latest efficiency technologies to produce a plant that is one of the most efficient natural gas burning plants in California.

COLLIERVILLE POWER HOUSE

Calaveras County, CA

Fed by the McKay's Point Reservoir, the Collierville Power House consists of two generators, each with a rated capacity of 127 megawatts. As an owner of the Calaveras Hydro project the City of Healdsburg is able to provide roughly 8% of the City's energy needs from this large hydro project. Large hydro-generation plants are a great source of carbon free energy and long term rate stability.



HYDROELECTRIC



NATURAL GAS



GEOTHERMAL



COMBUSTION

WHAT CAN WE DO FOR YOU?

SOLAR

The Electric Department connected its first photovoltaic system in 2002 and today has over 840 kW of solar panels interconnected in city limits. The Electric Department has facilitated this with its distribution of over \$770,000 in solar incentives to our customers.

Per CA SB-1, Healdsburg residents may be eligible to offset part or all of their electric usage with a PV system. Rebates are still available for residential and commercial solar systems. In addition, tax credits may also be available to help with the installation of a PV system.



ELECTRIC VEHICLE RATE

While many cities do not offer a discount program to their residential utility customers who own plug-in electric vehicles, the City of Healdsburg Council adopted Resolution #55-2013 which provides for a 15% discount on electric rates for qualifying customers.

CARE PROGRAM

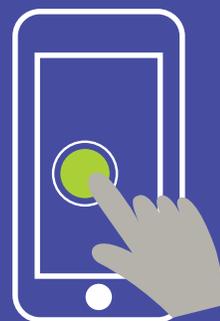
PROVIDING QUALIFYING RESIDENTIAL UTILITY CUSTOMERS WITH DISCOUNTED UTILITY RATES

The City of Healdsburg CARE program was adopted by the City Council on June 1, 2009. This program offers a discount on the monthly electric bill for eligible households. In addition to a 20% discount on electric bills, Healdsburg offers discounts of 15% on water and 20% on sewer bills.

LEARN MORE AT www.cityofhealdsburg.org/173/Utility-Programs

VIEW AND PAY YOUR UTILITY BILL FROM HOME OR WHEREVER IS CONVENIENT.

- Receive email notifications of new bills.
- Make one-time payments or setup automatic payments with a credit/debit card or a bank account.
- Save paper and the environment by going paperless with your utility bill.



SIGN UP for online bill pay: www.onlinebiller.com/healdsburg



2014 POWER CONTENT LABEL

This Power Content Label illustrates the type and percentage of electric generation purchased by the City of Healdsburg and supplied to our electric customers during the 2014 calendar year.

Healdsburg’s Electric Department owns generation plants throughout Northern California and, through that ownership, almost 51% of the energy Healdsburg supplied in 2014 was carbon free. These carbon free generation plants include the geothermal plants at the Geysers, the Calaveras Hydro Project, and hydroelectric power contracts with the Western Area Power Administration (refer to the map on page 3 & 4 for information on generation sites owned by the City of Healdsburg).

Carbon Free electricity is generated from sources that do not add new carbon to the natural carbon cycle. This means that the electricity is generated using sources that do not produce carbon emissions because they are not combusted (like solar, wind, geothermal, and hydroelectric) to generate electricity, or the materials burned to produce electricity are part of the natural carbon cycle (biomass and biowaste).

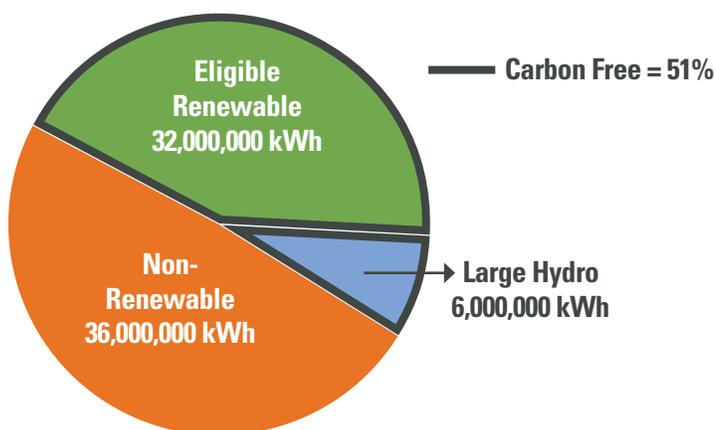
Many of the carbon free sources of generation are also considered renewable sources. A renewable resource is one that is naturally replenished on a timescale that allows the resource to be used without depletion or harm to the environment. Large hydroelectric generation facilities are not considered renewable sources by the State of California.

The City of Healdsburg has a deep desire to provide the best renewable and carbon free sources of energy to its customers. Because of this, we continue to focus on procuring renewable generation sources and increasing our Renewable Portfolio Standard.

ENERGY RESOURCES	2014 POWER MIX	2014 CA POWER MIX
Eligible Renewable	43%	20%
Biomass & Biowaste	0%	3%
Geothermal	43%	4%
Eligible Hydroelectric	0%	1%
Solar	0%	4%
Wind	0%	8%
Coal	0%	6%
Large Hydroelectric	8%	6%
Natural Gas	27%	45%
Nuclear	0%	9%
Other	0%	0%
Unspecified Sources of Power	22%	14%
TOTAL	100%	100%

“Unspecified Sources of Power” means electricity from transactions that are not traceable to specific generation sources. State numbers are percentages estimated annually by the California Energy Commission based on the electricity sold to California consumers during the previous year. For specific information about this electricity product: City of Healdsburg 707-431-3346 or www.cityofhealdsburg.org. For general information about the Power Content Label: California Energy Commission at 1-800-555-7794 or www.energy.ca.gov.

HEALDSBURG GENERATION SOURCES



GREEN ELECTRIC RATE

For customers wishing to promote the development and use of renewable energy, the City of Healdsburg offers a Green Rate. Under the Green Rate, the City will procure, on the customer’s behalf, Renewable Energy Credits (RECs) to match the customer’s monthly energy consumption. Customers choosing the Green Rate will incur an additional 1.8 cents per kWh for every kWh consumed during the billing period.





ANNUAL ELECTRIC REPORT

Electric, Water & Wastewater Department
401 Grove Street, Healdsburg, CA 95448
707.431.3346
www.cityofhealdsburg.org

EASY WAYS TO MAKE YOUR HOME ENERGY EFFICIENT

- Inform Yourself
- Install Insulation
- Check Your Windows
- Install Motion Sensor Switches & Timers
- Caulk & Weather-Strip Doors
- Replace Old Electric Appliances
- Look for the Energy Star Name & Label
- Wash your Laundry in Cold Water
- Install a Programmable Thermostat
- Use Led Light Bulbs
- Use Led Seasonal Lighting

Rebates available for many of these improvements. Visit: www.cityofhealdsburg.org/234/Rebates-Energy-Efficiency



24-HOUR UTILITY RESPONSE HOTLINE
707-431-7000 or Toll-Free 855-755-6586