



## HELCO repowers Puueo hydro

We have put new life into our oldest power generating facility, the Puueo Hydroelectric Plant, located on the north side of Hilo.

The plant's capacity is now 2.4 megawatts (MW), up from its previous capacity of 2.2 MW.



The Puueo Hydroelectric Plant was blessed on July 18, 2005, celebrating its return to service.

The Puueo Hydroelectric Plant has two run-of-the-river generating units that produce electricity by using the force of the water flowing from the Island of Hawaii's largest river, Wailuku. Unit 1, the oldest of the generators, is a 750-kilowatt (kW) generator that was installed in 1919. Unit 2, a 1,500-kW generator, was put into service in 1941.

In 2002, Unit 2 sustained irreparable damage and has just been replaced by a new, more efficient, turbine generator. The project reflects an investment of \$3.5 million in the use of renewable energy, reducing the consumption of fossil fuels on the island by an estimated 36,000 barrels per year.

The Puueo plant uses approximately 58 million gallons of water per day, funneled through a 7,231-foot steel penstock that carries water from an elevation of 446 feet to 43 feet. Water used is returned to the river without being heated or treated chemically.

We also operate the smaller Waiiau Hydroelectric Plant and purchase electricity from the independent producer Wailuku River Hydro.

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## Net metering encourages renewable energy

Net energy metering encourages the use of renewable energy by residential and commercial customers. Customers who operate photovoltaic, wind, biomass, or hydroelectric systems (or a combined system) producing up to 50 kilowatts of electricity can take advantage of net energy metering.

Customers can feed excess electricity produced by their renewable energy system into HELCO's electric grid. The kilowatt-hours (kWh) of electricity sent to the grid are subtracted from the kWh drawn from the grid throughout the month. Customers are only billed for the difference, the net kilowatt-hour use, plus the minimum monthly charge for electric service.

This is a good deal because these customers get credit at retail rates for renewable energy fed to the grid. And, customers will soon be able to carry forward credits that exceed the number of kWh drawn to subsequent bills within a 12-month period.

For detailed information about net energy metering, including forms for a net energy metering agreement, click on the "Renewable Energy" link on [www.heco.com](http://www.heco.com), or call HELCO at 969-0127.

## Come to our Energy Fair!

Join HELCO in Our Community as we celebrate Energy Awareness Month in October.

Come to the Prince Kuhio Plaza on Saturday, October 15, 2005, from 10:00 a.m. to 3:00 p.m. to enjoy the festivities at our Energy Fair.

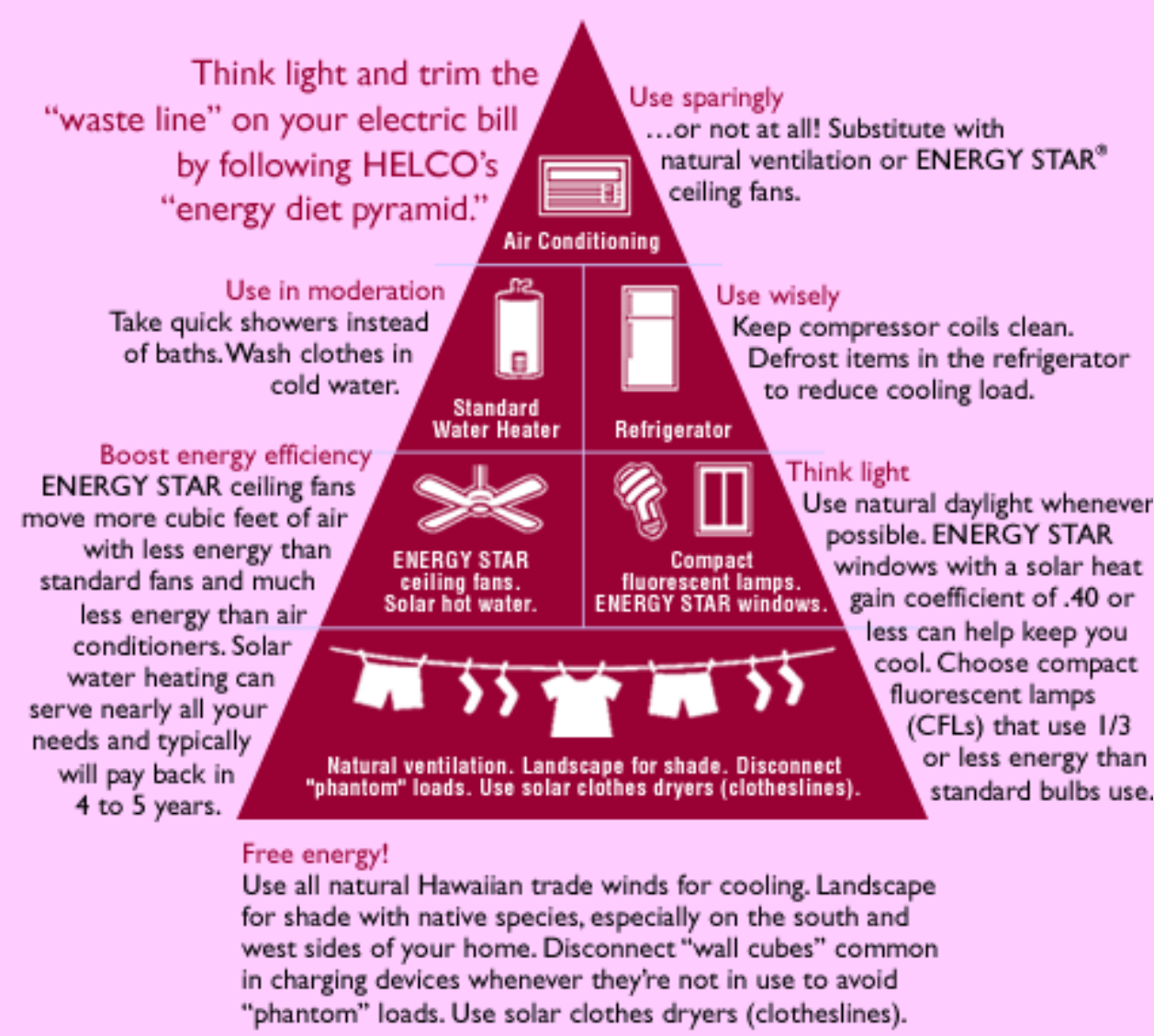
Check out the energy exhibits, fun hands-on activities, and entertainment. HELCO employees will be on hand to answer your questions about how to save energy and save money on your electric bill.

This is a perfect time to plan how you can cut back on your electricity use because we are heading into the two months, November and December, when we see the greatest electricity demand on the island.

The Hawaii County Community Policing Department will be at the Energy Fair from 10:00 a.m. to 1:00 p.m. to produce keiki identification cards.

And McGruff the Crime Dog® will be on hand celebrating his 25th Anniversary in Crime Prevention. So bring the whole family, and we'll see you at the Prince Kuhio Plaza!

## The energy diet pyramid



### RECIPE OF THE MONTH

## Portuguese Green Salad



- 1 head romaine lettuce
- 1 bunch watercress
- 1 red onion, thinly sliced
- 1 large tomato, diced
- 1/2 cup pitted black olives, sliced
- 1/2 cup garbanzo beans
- 1/4 cup salad oil
- 1/4 cup lemon juice
- Hawaiian rock salt
- Freshly ground black pepper

In a large salad bowl, break romaine and watercress into bite-size pieces. Add onion, tomato, olives, and beans. In a blender, whip salad oil with lemon juice. Pour over salad and toss gently. Serve with rock salt and freshly ground black pepper. Recipe makes 12 servings.