



Sun Power shines on more schools

The *Sun Power for Schools* program keeps growing! Since 1996, HELCO and its customers who signed up to be *Sun Power* partners have contributed money to pay for demonstration photovoltaic (solar electric) systems at four Big Island public middle and high schools.



Kalaniana'ole Elementary and Intermediate School is the first Big Island middle school to receive a *Sun Power* solar electric system.

Kalaniana'ole Elementary and Intermediate School is the latest and first middle school to receive a photovoltaic system. *Sun Power* systems are already up and running at [Kealakehe](#) and [Hilo High](#) and [Laupahoehoe High & Elementary School](#).

Through the *Sun Power for Schools* program, students study and explore how renewable energy sources like the sun produce electricity safely and efficiently. Also, the solar-generated electricity produced by these systems helps the schools' meet a small portion of their electricity needs. In addition, a Million Solar Roofs grant secured by Hawaiian Electric Company for the Department of Education (DOE) has made **PowerQuest** renewable energy coursework available to all schools. Check out the **PowerQuest** workbook at any middle or high school library or look for it online at <http://powerquest.heco.com>.

HELCO, the DOE and the U.S. Department of Energy recently co-sponsored a second **PowerQuest** workshop for teachers. Kevin Waltjen, workshop leader and HELCO employee, provided basic electricity information and procedures for downloading and utilizing the *Sun Power for Schools* data.

What can you do to help this program continue to grow so more students can be better prepared for our energy future? Become a *Sun Power* partner by contributing just \$1 or more with your electric bill. Just fill out the postage-paid sign up card included with this month's electric bill. For more information, call **969-0137** or visit our website at www.heco.com.

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Save this holiday season

The holidays are fast approaching. For most of us, it's a time for savoring old traditions – lots of festive cooking, beautiful bright lights to reflect the joy of the season and busy households with family members returning home to enjoy the ohana spirit. In order to help us keep the holidays bright, please encourage your family members to practice some very simple energy saving tips:

In the kitchen:

- Use the oven to capacity whenever possible, selecting dishes that bake at approximately the same temperature.
- Cook meals using the same source of heat (oven, broiler, surface units).
- Prepare several batches of food at a time either early in the morning or in the late evening hours when the use of electricity is lowest; freeze the extra food for future use.
- Use a microwave oven for small cooking jobs using the dishes you will serve the food in.
- Remove heavy wrapping paper that may act as an insulator before storing food in the refrigerator.
- Run the dishwasher only with a full load using the short cycle and air dry selectors.

In the laundry room:

- Use cold water in the clothes washer whenever possible and set the water level to the size of the load.
- Always use cold water to rinse.
- Dry full loads but do not overload the clothes dryer; dry loads in succession to use the retained heat.

In the bathroom:

- Take short five minute showers instead of tub baths.

In living areas:

- Turn lights off when you leave the room and turn TV sets and other electronic equipment off when they are not being used.
- For safety and to save energy, put your holiday lights on a timer or be sure to turn them off before you go to bed or leave the house.



POWER TIPS

Save on holiday lighting



Ho, ho, ho! It will soon be time to pull those boxes of lights and decorations out of storage to get ready for upcoming holiday festivities. Should you discover that your current collection of indoor and outdoor light strings won't stand up to another holiday season, here's a great tip.

Consider purchasing LED – Light Emitting Diode – holiday lights. These revolutionary new lights look similar to conventional miniature light strings but are more resilient, require a fraction of the energy conventional string lights use and are much safer.

LED lights are constructed from tiny solid-state chips similar to those used in computers. The chips convert electricity to light without the use of a filament or glass bulb. Instead, the chips are enclosed in solid plastic that can be made into a variety of shapes and sizes. Since LEDs have no filament, there is nothing to burn out and very little heat is produced. LED lights are shatterproof, constructed of flameproof epoxy plastic, and operate much cooler than regular lights, making them safer to use indoors and out.

Best of all, LED lights use very little electricity. Instead of consuming about 50 watts per string of 100 (for conventional mini lights), LEDs use only a few watts of power and are rated for up to 100,000 hours of use, or almost 11 years. LED lights may cost slightly more than conventional lights initially, but they will more than pay for themselves within a single holiday season. Look for them at local retail and hardware stores.



Look for Big Ben in your community

Join us at one of the 2003 Christmas Parades and see HELCO's Toys for Tots train, Big Ben, on the following dates:

Hilo - November 29 • Waimea - December 6 • Kona - December 13

Check your local newspaper for times and the exact location of the community events. We'd also like to say 'mahalo' to all who have contributed to this year's Toys for Tots program.



RECIPE OF THE MONTH

Salmon with Chinese Pesto



- 2 lbs salmon fillet
- 1 teaspoon minced garlic
- 3 tablespoons minced ginger root
- 1/4 cup minced green onions
- 1/4 cup minced Chinese parsley (cilantro), optional
- 1/4 cup canola oil
- 1/4 teaspoon pepper
- 1 teaspoon low sodium soy sauce
- 1 teaspoon sesame seed oil

Rinse salmon and pat dry; remove any small bones. Place salmon on a sheet of heavy foil large enough to wrap the salmon in envelope-style. In a small bowl, combine remaining ingredients; rub mixture into salmon. Wrap salmon fillet in the foil and seal. Bake in electric oven at 350°F for 20 to 25 minutes or until salmon is just opaque in center. Carefully open foil envelope to allow the steam to escape. Makes 6 servings.

