



Utah Energy Update

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Utah Energy Conservation Coalition/Energy Rated Homes of Utah

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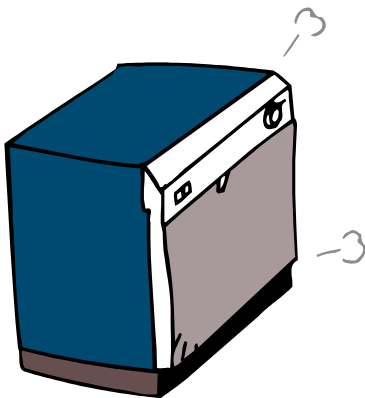
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How Much Was *Your* Last Utility Bill?

Imagine opening your electricity bill with a smile on your face! Seem impossible? You could make it a reality when you invest in energy-efficient products and practices. By understanding how we use energy and where it is used the most, we can cut down our individual electric bills.

The first thing you need to do is create a whole-house energy plan. Prioritize your whole-house plan by viewing your home as an energy system with interdependent parts. There are a number of factors that affect your energy bill, such as the size of your home, the efficiency of major appliances (e.g. refrigerator, water heater, air conditioner), and whether your home is sealed and insulated properly. Other factors include weather, energy rates, the number and kinds of lights, thermostat settings for heating and cooling, the number of loads of laundry, and if you have a pool or hot tub. Here is a list for estimated energy use of common used appliances:

Appliance	Monthly Use (Hours)	Yearly Average (Hours)	Monthly Cost (.09/kWh)	Yearly Cost (.09/kWh)
Water Heater	460	5,520	\$41.40	\$496.80
Refrigerator 21cu ft	220	2,640	\$19.80	\$237.60
Household Lighting	120	1,440	\$10.80	\$129.60
Clothes Dryer	108	1,290	\$9.68	\$116.10
Dishwasher	32	380	\$2.85	\$34.20



Appliance Facts:

- Resource-efficient dishwashers save energy, water, and detergent, AND they are the quietest dishwashers on the market.
- Many older refrigerators cost over \$100 per year to operate. A new energy-efficient model will cost less than half that much.
- The refrigerant used in most older refrigerators contributes to ozone depletion when released into the atmosphere. When you get rid of your old fridge, make sure the refrigerant is handled properly.
- Energy Star appliances are designed to be 30% more efficient than standard units.

Breathe Better Air

Duct Leaks Affect Your Family's Health, Comfort and Budget!

Leaky ductwork is one of the most important and common problems found in houses. Leaks in your duct system will not only increase your utility bills, they can prevent your cooling and heating system from delivering the comfort you need. Worse yet, duct leaks could be creating air quality problems that affect the health of your family. Because we spend up to 90% of our time indoors, the quality of the air in your house is critical. Asthma, allergies and odors have all been linked to indoor air pollution. A recent scientific study found that 40% of children's illnesses are caused by home environmental factors. In fact, the Environmental Protection Agency calls "indoor air pollution" the country's leading environmental health concern. In many houses, duct leakage is the main cause of indoor air quality problems.

Be More Comfortable!

Duct leakage prevents your heating or cooling system from doing its job properly. Leaky ductwork steals away system performance, taking with it your investment in high efficiency equipment. If your house doesn't feel cool on hot days, or parts of your house are cold in the winter, you may be experiencing problems caused by duct leakage. Heated or cooled air leaks out of holes and gaps in supply ductwork before it ever reaches the uncomfortable parts of your house. Leaks in return ducts can overwhelm the dehumidification capacity of your cooling system, making your house feel clammy. Sealing duct leaks will noticeably improve your family's comfort by helping you maintain a more even temperature throughout your home.

Save Money All Year Long!

Duct leaks force your system to run longer and work harder to keep you comfortable. In many houses, heating and cooling costs are increased by 20% to 30% because of duct leakage. Sealing duct leaks will lower your utility bills so you'll have more money to spend on other things. And lower utility bills also mean higher home value.

Common Energy Myth: *Duct tape* is good for sealing ducts.

Fact: Unfortunately, laboratory research has concluded that duct tape has very low durability when used to seal ducts. On new installations, tape often falls off as it ages and the adhesive dries out and wrinkles. Instead of duct tape, seal ducts with mastic or material using the ASTM standard. Save your duct tape for emergency repairs on car parts, shoes, backpacks, packages, removing warts, Halloween costumes or other useful repairs.

UPCOMING EVENTS

HOME ENERGY RATER TRAINING

Announced on our website www.utahenergy.org and held at 590 North State Street, Orem, Utah
Phone or email if you have questions at 801-765-0034 or cris@utahenergy.org

- Early Summer June 9-13, 2003
- Late Summer August 18-22, 2003
- Early Fall September 22-26, 2003
- Mid Fall October 20-24, 2003

Repairing Leaky Ducts

Step 1: Have a Duct Leakage Test performed to determine if leaky ductwork is contributing to comfort problems. Specially trained technicians evaluate the duct system and perform a duct blaster test which tells the technician the amount of leakage. Or, locate leaky ducts yourself by inspecting all joints.

Step 2: Seal the Leaks

All joints in ductwork need to be sealed with a product called mastic. It comes in a tube or can. It can be easily applied with a caulk gun or paint brush.

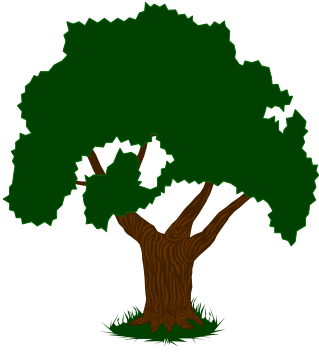
Step 3: Review Your Utility Bill

Compare your energy use with pre sealing bills. See the savings! If not, you should consider sealing those other household leaks.

Energy Saving Fact:

The U.S. Department of Energy estimates that homeowners lose between \$10-\$15 billion per year from problems with ductwork. In fact, repairing leaky ducts is often the most cost effective energy saving improvement a homeowner can make.

Landscape For Energy Efficiency



Landscaping is a natural and beautiful way to keep your home more comfortable and reduce your energy bills. In addition to adding aesthetic value and environmental quality to your home, a well-placed tree, shrub, or vine can deliver effective shade, act as a windbreak, and reduce overall energy bills.

Carefully positioned trees can save up to 25% of a typical household's energy for heating and cooling. During the summer months, the most effective way to keep your home cool is to prevent the heat from building up in the first place. A primary source of heat of heat buildup is sunlight absorbed by your home's roof, walls, and windows. Landscaping can help block and absorb the sun's energy to help block and absorb the sun's energy to help decrease heat buildup in your home by providing shade and evaporative cooling.

Deciduous trees planted on the south and on the west will help keep your house cool in the summer and allow sun to shine in the windows in the winter. A well-planned landscape can reduce an unshaded home's summer air-conditioning costs by 15% to 50%. You may be familiar with wind chill. If the outside temperature is 10 degrees F and the wind speed is 20 miles per hour, the wind chill is -24 degrees F. Trees, fences or geographical features can be used as windbreaks to shield your house from the wind.

When planting this spring, keep in mind that energy efficiency is also found in the yard.

Did you know?

- **On average, a well-designed landscape provides enough energy savings to return your initial investment in less than 8 years.**

Remodeling or Spring Cleaning?

Remodeling is a good time to seal areas not normally visible. For instance, when replacing carpet seal around the base plate area under the molding. This will stop air movement from trickling under the molding from other areas of the home. (Air movement from the garage allows carbon monoxide from starting up your vehicles to come in to your house). When remodeling the kitchen, replace those out of date appliances with Energy Star® labeled ones. Since refrigerators use 14% of the homes energy, this would be a great place to start!

If you plan to replace cabinets, caulk and seal holes in the walls before installing new ones. There are a lot of hidden areas under the cabinetry. If you need draperies, consider installing insulated window shades. Typically, these are made of fabric with special insulating and reflective qualities. Another desirable feature is an edge seal to keep any drafts from coming through your windows. Are you on a budget? It is a practical decorator's touch to hang old patchwork quilts as window draperies. When you have a choice between incandescent light bulbs and fluorescent lights, choose the fluorescent. They use much less electricity for the same amount of light. Are you repainting? Dark walls and ceilings may be dramatic, but they absorb light. Pastels or white on walls and ceilings will give maximum illumination with fewer light fixtures, and will make a room with drapes open pleasantly light without electricity during daylight hours.

When Spring cleaning with the windows open, remember to turn down the thermostats. Those cool breezes that feel so good will send your furnace on a fuel-burning rampage unless the thermostats are reset. It is also a good time to search out and seal up air leaks. Before spring cleaning make a trip to the hardware store and purchase caulk and application materials so they are readily available to you when you find those leaks. Change your furnace filter, the battery in your set-back thermostat, and replace the batteries in the smoke detector.



New Products in Energy

EnergyWise Technologies announced that it has launched the EnergyWise-1000, a revolutionary energy solution for residential electricity consumers. With its unique technology, the EnergyWise-1000 allows residential consumers to use the same power efficiency methods used by commercial enterprises to lower their electric bills. The EnergyWise-1000 is very compact and attaches to the main power panel in the home.

“The EnergyWise-1000 reconditions electrical energy in the homes of consumers, leading to lower electric bills, increased life for household appliances, and built in power surge protection for the entire home,” said Earl Bushman, Vice-President of Technology of EnergyWise. “This technology application in the residence, is the same method that has saved millions of dollars for commercial users.”

The technology in the EnergyWise-1000 increases the power factor, by reducing the amount of reactive power (kVAr) the load draws from the utility company. Capacitors within the EnergyWise-1000 supplies the reactive power (kVAr) needed for the creation of the EMF within the inductive load. Due to the parallel relationship between kVAr and kW, the amount of power supplied by and purchased from the utility company is reduced by power factor optimization.

“Our technology leads to improved efficiency and lower bills, and our test customers are realizing significant savings,” said Glen Jensen, President of EnergyWise. “We expect consumer savings to increase even more as energy prices spike.”

As a result of supplying reactive power (kVAr) locally, motors run cooler and more efficiently. In addition to improvements in efficiency, appliance life cycles, and surge protection, the EnergyWise-1000 also reduces electrical line-noise and the harmful effects caused by noise.

Electrical power suppliers also benefit from the EnergyWise-1000 by being able to supply more power to customers without generating or acquiring additional power. It reduces capital expenditures by leveraging existing infrastructure.

“We believe that the EnergyWise-1000 is a solution not only for consumers, but also for electricity suppliers, as we deal with increasing energy demands and limited existing supplies,” said Dave Warner Vice-President of Operations for EnergyWise. “The EnergyWise-1000 helps us to maximize the resources we already have, making us better stewards of those resources.”

The EnergyWise-1000 is priced so many consumers can see the product pay for itself with their energy savings over 24 to 36 months. The unit is very compact and can be installed in less than an hour by a licensed electrician.

About EnergyWise Technologies:

EnergyWise Technologies provides energy solutions that lower energy costs for consumers, acquisition and infrastructure costs for suppliers, and environmental costs for the world. EnergyWise Technologies does this by improving residential power factor with the EnergyWise-1000. The EnergyWise-1000 decreases energy consumption from residential customers, thereby helping the consumer and keeping the environment cleaner. For more information on the EnergyWise-1000, visit www.energywise1000.com

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Education is information, information is knowledge and with knowledge you can make the right decisions!

Have a nice day and remember to be energy efficient in your home and at work.

T H A N K S F O R T H E S U P P O R T !