UTAH CLEAN ENERGY

HOME ENERGY CHECKLIST:

SIMPLE WAYS to SAVE ENERGY, SAVE MONEY, & REDUCE YOUR CARBON FOOTPRINT

√	ACTION	FAST FACTS	$
	LIGHTING		
	• Replace10 most frequently used incandescent light bulbs with Energy Star Compact Fluorescent Lights (CFLs) • CFLs are available in different sizes, shapes, and wattages, for indoors and outdoors. • CFLs are 2/3 more energy efficient and last 10 times as long.	• If every US household replaced 5 lights with ENERGY STAR bulbs, we could prevent the annual output of **more than 21 power plants**! • **Save about $30 or more** in electricity costs over each bulb's lifetime. • Recycle your CFLs and dispose of them properly: www.deq.utah.gov/Pollution_Prevention/CFLs.htm	
	• Turn the lights off when not in the room.	• Save nearly 10%of a home's electricity costs by flipping the switch off.	
	REFRIGERATOR & APPLIANCES		
	• My refrigerator and appliances are ENERGY STAR rated.	• Refrigerators account for 10% of your energy bill • Refrigerators built prior to 1990 can use two to three times more energy than new efficient models.	$
	• I have recycled my extra refrigerator(s).	• Prevent 4500 pounds of global warming pollution each year and save about $150 a year on your electricity bill by discontinuing the use of a 2nd refrigerator. • Rocky Mountain Power offers $$ to recycle old refrigerators, and they will pick it up from your home. Contact your local utility to see about similar programs.	$
	• My refrigerator door closes firmly against the gasket.	• Check the tightness of the door by placing a flashlight inside the refrigerator and closing the door. If you see any light, replace the gasket.	
	• My refrigerator temperature is set to 37° to 40°F for the fresh food compartment and 5°F for the freezer section. If I have a separate freezer for long-term storage, I keep it at 0°F. I regularly defrost my freezer.	• Place an inexpensive appliance thermometer in a glass of water in the center of the refrigerator and one between frozen packages in the freezer. Read them after 24 hours.	
	• My refrigerator coils (located beneath or behind) are cleaned at least once a year.	• Refrigerator coils are heat exchange surfaces. Keep them clean to operate at peak efficiency. • Unplug the refrigerator before cleaning the coils with a vacuum cleaner or soft brush.	

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	• Appliances with adaptors, lights, clocks are unplugged or plugged into a power strip, which I switch off when not in use.	• **In the average US home, 40% of all electricity used to power home electronics is consumed while the products are turned off. Across the US, this equals the annual output of 17 power plants.** • Many appliances use energy when they are plugged in but not on (called "phantom loads") • Use power strips to shut off any power to the electronics at night and during the day. • ENERGY STAR products save energy while in the 'off' mode.	
LAUNDRY & DISHES			
	• My dishwasher and/or clothes washer are ENERGY STAR rated.	• Compared to a model manufactured before 1994, an ENERGY STAR rated clothes washer can save up to $110 per year on your utility bills and save more than 20 gallons of water per load.	$
	• The dishwasher, washer and dryer are run only when they are fully loaded. • I don't use a dishwasher, I dry my dishes on a drying rack. • I use the energy-saving mode on the dishwasher, washer and dryer, if they have one.	• Run your dishwasher with a full load, since most of the energy used goes to heat water. • The "Energy-Saving" setting uses less water and less energy to wash and dry dishes and/or clothes.	
	• I wash my clothes in cold water.	• Using cold water for laundry saves up to $63 a year while saving energy. Look for cold water laundry detergent.	
	• I dry my clothes on a clothes line or drying rack	• Prevent 1000 pounds of carbon dioxide annually by drying your clothes outside 6 months per year.	
	• I use a front loading laundry machine.	• Get a rebate from your utility for highly efficient washers and dryers. You'll save water too!	$
COOKING			
	• I use an induction cooktop, a solar over, or a hybrid solar oven (see: www.solarcooking.org or google "solar ovens")	• Induction cooktops use 90% of the energy produced compared to only 55% for a gas burner and 65% for traditional electric ranges. • Solar ovens require no fuel of any kind to cook and reach temperatures of 360° - 400° F.	

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		• Hybrid solar ovens use electric backup for use when sun power is not available.	
	• I don't preheat longer than necessary, and I bake as many dishes in the oven as I can at one time to make the most of the heat. • I use pots and pans that fit the stovetop burners and use a lid to reduce cooking time and energy use. • I keep the oven door closed and look through the window to check on my food.	• Ten minutes for preheating is sufficient, and it's not necessary to preheat if you're roasting, broiling or preparing foods with a cooking time of over an hour. • Pans that fit a burner absorb more energy, reducing the amount of wasted heat. • Oven temperature is lowered by 25°F to 75°F every time you open the door.	
	WATER		
	• I have aerator faucets and low-flow showerheads.	• Inexpensive and simple to install, low-flow shower heads and faucet aerators can reduce your home water consumption as much as 50%, and reduce your energy cost of heating the water also by as much as 50%. • See Questar Gas' www.thermwise.com for more info	$
	• None of my faucets have leaks, especially my hot water faucets.	• Water leaks are just money, water, and energy down the drain. • Repair leaky faucets as quickly as possible; a slow drip could waste up to 48 gallons of water a week.	
	• My hot water heater thermostat is set to 120° F (be sure to check your dishwasher's manual for the appropriate water temperature)	• For each 10°F reduction in water temperature, you can save between 3%–5% in energy costs. • Reducing your water temperature to 120°F slows mineral buildup and corrosion in your water heater and pipes.	
	• My water heater is properly insulated with a water heater blanket, and my hot water pipes are covered with sleeve insulation.	• Hot water heater blankets cost only around $10 (Questar Gas provides them free with a self home energy audit). You can recoup the cost of the blanket in less than a year from energy savings.	$
	• I turn my water heater down, when I leave for a week or more.	• Remember to turn it back up when you return.	
	• My hot water heater is ENERGY STAR rated • I have a tankless ('on-demand') hot water heater *or* • I have a solar thermal system	• Water heating is 13% of your utility bill. • Consider upgrading if your water heater is more than 7 years old. • Questar Gas offers rebates for all of these options,	$

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		see www.thermwise.com for more info.	
HEATING & COOLING			
	• I have and **use** a programmable thermostat to automatically adjust the temperature throughout the week and when away.	• A **properly used** programmable thermostat can save as much as 10% a year on heating and cooling bills by automatically adjusting the thermostat while you are away or sleeping. They are easy to set according to your schedule.	
	• WINTER: I set the thermostat at **68° F or lower** when I am home during the winter. • When I am away for 4 or more hours, it is set at 55° F and I lower my thermostat at night while I am asleep. • SUMMER: I set the thermostat at 78° F or higher when I am home during the summer. • When I'm away for 4 hours or more it is set at 85° F.	• For every degree you lower your heat, you save up to 5% on heating costs. • Reduce global warming pollution by 20% - 50% through proper heating and cooling equipment maintenance, upgrades, appropriate insulation, air sealing, and thermostat settings.	
	• I use solar passive heating during the winter by opening the drapes/blinds on south-facing windows to let the sun shine in to heat my home. • At night, I close the drapes to retain indoor heat.	• In the summer, do the opposite by closing your drapes during the day to keep out the sun's warm rays.	
	• My furnace and A/C filters are clean; I replace filters monthly during the heating and cooling season.	• Clean furnaces run more efficiently saving energy and money.	
	• I close and seal the fireplace damper when I am not using it.	• Closing the damper prevents heat/cold air from escaping. • Special damper seals are available.	
	• I have an evaporative or "swamp" cooler.	• Cooling accounts for 30% of home energy use. • Evaporative coolers are the most efficient way to cool in the southwest's arid climate and they use 1/5 the energy of a central air conditioner. • If you have an air conditioner, make sure it has an ENERGY STAR label with a SEER rating of 13 or above.	$

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	• I have installed an ENERGY STAR ceiling fan.	• ENERGY STAR rated ceiling fans make a room feel 5°F cooler and are 50% more efficient than conventional fans. • In the winter, set your fan to turn in the clockwise direction to help efficiently distribute warm air.	$
	• I keep my windows and doors shut while heating or cooling (A/C only) • I shut the door to unused rooms and close off any vents, so as to not heat or cool the room.	• NOTE: A cracked window is necessary for air flow with an evaporative cooling system. • NOTE: Do not close the vents if you heat your house with a heat pump – closing the vents could harm the heat pump.	
	• My vents, radiators, heating and cooling equipment are not blocked by furniture, rugs, drapes, etc.	• Adequate space around heating and cooling equipment allows it to operate efficiently.	
	• My air ducts are properly sealed and insulated.	• Leaking ducts can reduce system efficiency up to 30 %. Seal leaks with mastic or non-cloth backed tape labeled UL181 B-FX.. • This is especially important for ducts located in unconditioned space, such as your attic.	$
HOME SEALING and INSULATION			
For more Home Sealing Information, download the free EPA ENERGY STAR "Do-It-Yourself Home Sealing Guide". See the "Additional Resources" section for a link.			
	• My walls, floors, basement and ceiling are properly insulated according to my climate zone.	• Increased insulation could cut heating and cooling costs 20% - 30% and make your home more comfortable. • Visit www.ornl.gov/~roofs/Zip/ZipHome.html to find out what is appropriate for your location.	$
	• I have checked my roof, walls, doors, ceilings and windows for leaks and sealed them appropriately.	• Hire a contractor or see the "Do-It-Yourself Home Sealing Guide" for proper sealing methods.	$
	• My doors and windows have weather-stripping between them and the frames.	• Weather stripping ensures a tight fit for doors and windows, avoiding drafts and air leaks.	$
	• I have high-efficiency ENERGY STAR rated double-paned windows or storm windows or I put up plastic sheeting around my windows during winter.	• Energy-efficient windows can save up to 30% on your heating and cooling costs.	$

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COMPUTERS and ELECTRONICS			
	• My home computer(s) is/are powered down when not in use.	• If you can't turn your computer off, be sure to use the "Energy-Saving" mode and turn off your monitor.	
	• My computers are automatically set to go into standby mode or "sleep" after 20 minutes of inactivity.	• When you know you will be gone for a few hours, put your computer in standby mode or turn it off to save energy.	
	• All other equipment (scanners, printers, copiers, etc.) are turned off **when not needed for more than 2 hours.**	• Buy ENERGY STAR qualified equipment to reduce energy use while in standby mode. • Computers and office equipment do not need to stay	
	• My equipment, electronics and computers are ENERGY STAR rated.	• Over its lifetime, ENERGY STAR qualified equipment in a single home office (e.g., computer, monitor, printer, and fax) can save enough electricity to light an entire home for more than 4 years.	
	• I turn off, computers, printers, TV's, DVD's, speakers, and other electronics when not in use. • I plug my electronics into a power strip and turn the power strip off when not in use.	•	
OUTDOORS			
	• My outdoor lights are on a programmable timer or motion sensor, and have been upgraded with energy efficient light fixtures.	• Better yet, upgrade to solar powered lights which charge their batteries during the day, come on at night, and don't require any electricity from the grid.	
	• Trees and shrubs are planted around my house in such a way as to provide shade in the summer and shelter from the wind.	• Deciduous (leaf-shedding) trees and shrubs on the south side, shade during the summer and allow sun through in the winter. • Trees and shrubs can provide shelter from cold winds when strategically planted.	

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	RENEWABLE ENERGY FOR YOUR HOME		
  	1) **Determine how much electricity and/or natural gas you use**, on average, over the course of a year. You can do this by looking at your power bills or by contacting the power companies and requesting a summary of your usage history. 2) **Use this checklist** to reduce your home energy consumption. 3) **Choose which renewable energy technology** and determine whether you are interested in technologies for electricity, water, and/or space heating. Solar thermal, geothermal, solar photovoltaic, wind, and microhydro have different costs, applications and technologies. For more information on the various technologies, visit: www.utahcleanenergy.org, geology.utah.gov/sep/renewable_energy/index.htm, or www.eere.energy.gov. 4) **Contact dealers and installers** in your area to start getting an idea of costs. A list of dealers and installers for each technology is available on line at www.geology.utah.gov/sep/renewable_energy/index.htm 5) **Net metering agreement.** If you will be connecting with the grid, you will want to let your utility know you are planning to install a system and will be net metering. 6) **Apply for Utility Rebates, State, and Federal Tax Credits.** Familiarize yourself with, and be sure your contractor understands the requirements for any incentives. For information on available incentives, visit: www.utahcleanenergy.org/eepolicy/REIncentives.htm		$
	ADDITIONAL RESOURCES		
	Utah Energy Conservation Coalition: www.utahenergy.org **US Environmental Protection Agency ENERGY STAR Program: www.energystar.gov** **A Do-It-Yourself Guide to ENERGY STAR Home Sealing: www.energystar.gov/ia/home_improvement/home_sealing/DIY_COLOR_100_dpi.pdf** **Department of Energy's Consumer's Guide to Energy Efficiency and Renewable Energy http://www.eere.energy.gov/consumer/** **Energy Efficiency and Renewable Energy Network (EREN): www.eren.doe.gov** **Alliance to Save Energy: www.ase.org** **American Council for an Energy-Efficient Economy: www.aceee.org** **Rocky Mountain Power: www.rockymountainpower.net** **Consumer Federation of America www.buyenergyefficient.org** **Consumer Reports www.greenerchoices.org** **Southwest Energy Efficiency Project http://www.swenergy.org/**		

This Energy Efficiency Audit was adapted by **Utah Clean Energy** from Alliance to Save Energy's Home Energy Audit and Power$mart Brochure, www.ase.org; American Council for an Energy –Efficient Economy's Home Energy Checklist for Action, www.aceee.org; and Energy Efficiency and Renewable Energy Network's Energy Savers Brochure, www.eren.doe.gov. **Utah Clean Energy thanks the Utah Geological Survey – State Energy Program and the George S. and Dolores Doré Eccles Foundation for their contributions to our Clean Energy Campaign.**