

Green Tips

GREENING OUR FAITH

*explores the wonder of our world,
addressing our roles as citizens and
people of faith as we wrestle with
potential global climate change*



ST. PHILIP'S
IN THE HILLS
EPISCOPAL CHURCH

...A STRONG
AND LOVING
COMMUNITY THAT
WELCOMES,
ENCOURAGES, AND
EMPOWERS ALL
TO GROW IN CHRIST
AND TO DO
GOD'S WORK
IN THE WORLD

Recycle old newspapers in several ways: use as packaging material instead of styrofoam peanuts or bubble wrap; use as wrapping paper for gifts; add shredded newspapers to your compost heap. Stuff in your shoes to keep their shape; create new soil by covering several layers of newspapers with mulch, watering and allowing time to break down into earth.

Cost: Free

Recycle your old computer. Old computers contain lead, gold, copper, mercury, and other hazardous chemicals. Drop off your old computer at Pima Computer Recycling. They will refurbish and resell it, or take it apart and use the components. Your donation may be eligible for a tax write-off.

Cost: Free

Where: Pima Computer Recycling, 1134 S. Park Avenue

Donate your old cell phone to the Red Cross and benefit both domestic violence victims and the Red Cross. They will send it to Phones 4 Charity. The refurbished phones will be given to domestic violence victims, and the local Red Cross will receive money back from the charity. No hazardous components of the phone wind up in our landfills. You can donate phones at Red Cross offices or several local places of business. For a list, contact the Red Cross at 520-318-6740 or www.redcrossarizona.org.

Cost: Free

Turn down your water heater thermostat (130 degrees if you use a dishwasher; otherwise, 120 degrees is hot enough). For every 10 degree decrease, you will reduce carbon dioxide by 500 pounds a year.

Cost: Free

Say "No" to paper receipts from ATMs and gas pumps. You will have permanent records on your monthly bank and credit card statements, and you will avoid all those small slips of paper to keep track of.

Cost: Free

Use the cold/cold cycle on your washing machine instead of the hot/hot cycle. There are several detergents on the market especially for cold water. You'll save up to 90% in energy used. If everyone in the US did this, it would save 100,000 barrels of oil a day.

Cost: Free

Reduce "phantom load" electricity by turning appliances all the way off. TVs and VCRs alone waste \$1 billion in lost electricity in the US. Each computer emits about 140 pounds of carbon dioxide a year; the screen saver uses as much energy as a spreadsheet program. Most of our electronic appliances with a clock, digital timer, remote control or standby mode rely on these phantom loads, with cell phone chargers, electric shavers and microwaves being prime examples. Plug as many of your electronics as possible into a power strip, then turn the strip off when they are not in use.

Cost: Free

Plant a tree. Cut heating and AC costs 10%–15%. Each tree can absorb one ton of carbon dioxide over its lifetime, as well as providing shade. Residents within the Tucson Electric Power Company district can get two trees delivered to their home. Varieties include mesquite, desert willow, willow acacia and blue palo verde.

Cost: \$8.00 each

How to order: download an application form at www.tucsonaz.gov/tcb/tft/ or call the Trees for Tucson office at 791-3109.

Pump up your tires every month to the amount recommended for your car. The average American who drives 12,000 miles a year could save about 16 gallons of gas annually and increase gas mileage by 3 percent.

Cost: Free

Adjust your flying habits: fly direct whenever possible (takeoff can consume 25% of the total fuel on short flights). The most fuel-efficient flight length is 2,700 miles, but even that produces one ton of carbon dioxide emission per passenger per flight. For flights less than 600 miles, consider taking a bus, train, or car.

Cost: Free

Buy locally produced food to reduce the amount of energy used for transportation. Most items in our supermarkets have traveled an average of 1,000 miles. Fresh local food can be found almost every day at any of Tucson's 12 local farmers' markets.

Where: St. Philip's Plaza farmers' market, 8 am to noon each Sunday; Plaza Palomino at Swan and Ft. Lowell on Saturday mornings. Locations and times of farmers markets are listed in Thursday's Star Caliente Section and the Tucson Weekly.

Do your banking and bill-paying online and save money on postage and gasoline. This will also reduce the amount of paper winding up in our landfills. If every US home received and paid its bills online, annual greenhouse gas emissions would drop by 2.1 tons. You can arrange individual bill payments at each company's website or centralize the process by setting up online bill payment at your bank.

Cost: Free

Use natural products from your kitchen instead of poisons to control pests. For example, spread coffee grounds around your foundation to repel ants. Soak cloth in cider vinegar and stuff down a nest hole to drive out pack rats.

Cost: Free

Don't pay for energy you're not using. When you are the last to leave a room in your house, turn off the lights and the phantom load appliances. If you don't use a room, block it off and stop heating or cooling it. If you will be out of the house for a few hours, turn down the heat or turn up the AC a couple of degrees.

Cost: Free

Bring your own reusable bag or tote to the supermarket. The average American family of four uses 1,500 plastic sacks in a year, and each sack can take up to 1,000 years to decompose. Your own bag made of canvas, cotton or nylon is sturdier than plastic, it holds more, and it's reusable.

Cost: Free or \$1.50 up

Where: home; Several local supermarkets sell cotton totes with their printed logos.

Increase the number of your houseplants and decrease the carbon dioxide in your home. Houseplants can also help remove toxins from the air. Spider plants and peace lilies are effective for removing carbon monoxide; ficus and aloe vera remove formaldehyde often found in adhesives and furnishings. Living greenery can boost your spirits and feelings of connection to the natural world. NOTE: If you have pets, make sure the plants you choose are non-toxic to them.

Cost: \$1.50 and up

Where: nurseries, supermarkets

Adopt Green Watts on your electric bill. This is a voluntary program — you agree to an extra charge on your monthly electric bill (\$2 to \$8) to purchase a specific number of Green Watts. Tucson Electric Power agrees to reduce fossil fuels by that amount, replacing fossil fuel energy with renewable energy from the sun, wind, and landfill gas sources.

Cost: \$2 for one Green Watt (20 kwh)

How to sign up: Call Tucson Electric Power at 520-623-7711 or go online:

www.greenwatts.com/pages/signup

Put your outdoor lights on a timer so they will automatically switch off at a pre-set time. Or invest in solar yard lights.

Cost: Free or \$13–25 (solar)

Where: at home supply stores for solar

Install a low-flow shower head with pause feature to use while scrubbing then reactivate for rinsing. A 6-minute shower uses 24 gallons for a regular shower. Cut shower time by one minute and you can save 500 gallons of water per year.

Cost: \$7 and up

Where: home improvement stores.

Buy compact fluorescent lightbulbs (CFLs). These are energy efficient and each bulb saves about 100 pounds of carbon dioxide emissions a year. They come in an array of sizes and shapes.

Cost: \$3.00 and up.

Where: home improvement stores.

Sun Lighting (4545 E. Broadway; Mon–Fri. see Richard) offers a lightbulb buyback and recycling program. Bring in your old bulbs — working or not, incandescent or fluorescent — and the store will give you full credit toward new fluorescent bulbs. The store will give you credit, old bulb for new bulb, for as many CFLs as you purchase. The old bulbs are sent to a recovery facility which recycles 100% of the lights. Bring in as many old bulbs as you like. The store will also recycle excess old bulbs free of charge.

NOTE: CFLs contain mercury and must be handled as hazardous waste; take them to the above store for your convenience and safety. They can also be taken to hazardous waste sites: On first Saturday of the month from 8 am to noon at 7575 E. Speedway, 1102 W. Irvington and SW corner of Ina and Oracle at the Park and Ride lot.

If a bulb breaks, leave the room for 15 minutes; double bag the white powder that is swept up; if a vacuum cleaner is used, remove the bag and double bag, then take bags to hazardous waste site.

Wrap your hot water heater in an insulated blanket. This will reduce your emissions by an additional 1,000 pounds a year and save on your utility bill. Blanket installations kits are available at home improvement stores and easy to use.

Cost: \$18 and up

Where: Home improvement stores

Use LED lights for your Christmas tree rather than incandescent bulbs. Carbon dioxide emissions will be reduced by 122 pounds a season. Replace outdoor lights with LED lights for even more savings. Using 10 strings of LED lights per season reduce carbon dioxide emissions by 2,300 pounds annually.

Bottled water, often municipal tap water, has become one of our largest landfill headaches. Worldwide, 41 billion gallons/year are consumed, wasting fuel for bottling, transport and producing carbon dioxide emissions.

Solution: fill reusable polycarbonate bottles with filtered tap water and refrigerate them yourself. These bottles are durable, portable, washable, reusable, and do not absorb odors or chemicals.

Cost: \$1.59 and up

Where: supermarkets and sports stores.

A programmable thermostat will keep your home at the correct temperature all year. Every 2 degrees Fahrenheit that you lower your thermostat in the winter (or raise it in the summer for air conditioning) can save 4% on energy bills. This will also save more than one-third of a ton of carbon dioxide emissions per year.

Cost: \$33 to \$80

Where: home improvement stores

Upgrading your TV? Be aware of the difference in energy consumption in the newer models. A 42” plasma screen consumes up to 400 watts of electricity. LCDs use about 200 watts. Your old TV, if it is a 27” cathode ray tube, uses only 100 watts.

Replace appliances/electronics with those labeled ENERGY *; any appliance over 10 years old should be replaced with Energy * equipment.

Pump gasoline in the early morning or after dark, when gasoline is densest and there is less evaporation. Fill up when your tank is half-empty; gasoline evaporates rapidly if there is more air in the tank. Finally, set the trigger at the pump nozzle to the low setting, minimizing vapors created while pumping.

Use your microwave to cook whenever possible. It's the most energy-efficient way to heat food. Each time you use your microwave instead of your conventional oven, you'll be using up to 80% less energy.

Participate online in Project Budburst. By noticing when plants bud, flower and leaf out, volunteers can track climate change as part of a nationwide initiative. Project BudBurst allows students, gardeners, and other citizen scientists across the United States to enter their observations into an online database that will give researchers a detailed picture of the warming climate. Join and start tracking spring in Tucson now at www.windows.ucar.edu/citizen_science/budburst

Reduce your car's gasoline costs and carbon dioxide emissions by 14 tons without the trouble of buying a new automobile by committing to one day a week without using your car. Use the bus, walk, carpool, or bike if you must go out; stay home if you can. This will require some initial planning, but may soon become a welcome habit.

Cost: Free

Install remote hot water system. The Metland™ D'Mand system is designed to move hot water to your most remote fixture on demand within seconds. Save gallons of water, otherwise wasted while you wait for the hot water to arrive at the faucet.

Cost: \$300 (if you install it yourself) –\$800

Where: Most solar companies install them.

Install tankless hot water heater. Electronic D'MAND™ pumping technology replaces the necessity of keeping 50 gallons of water hot all the time.

Cost: \$1300–\$1600 (–\$300 federal tax credit)

Where: Most solar companies install them.

Install Solar hot water system. Uses solar energy to heat hot water.

Cost: About \$5000 (less federal tax relieve \$1455 and state tax relief \$1000)

Where: Most solar coopanies install them

Install photovoltaic solar system. Tied to utility grid: get true net metering. When sun isn't shining the grid kicks in.

Cost: \$7–\$9/watt (less Tucson Electric Power rebate of \$3/watt; Federal and State Tax credits) — to get a list of solar vendors contact TEP to get SunShare information (phone: 745-3100 or tep.com) ot contact Green Team.

Contact the St. Philip's Green Team:

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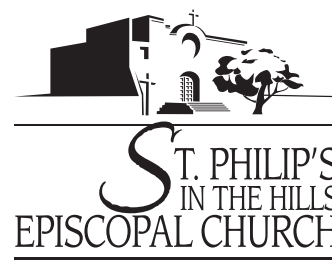
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