

Sustainability Tips...Did you Know?

Here is a list of facts to post in your weekly bulletin, your monthly newsletter, or facts to share with the congregation any way you see fit.

- Bicycles are the most efficient method of transporting a human, at about 35 calories of energy per passenger mile, while walking uses about 100 and cars use about 1,860 calories per mile.
- If your dishwasher has an air-dry setting, use it instead of the heat-dry setting. You will cut the dishwasher's energy use 15 to 50%. If there is no air-dry setting, turn the dishwasher off after its final rinse and open the door. The dishes will dry without using extra electricity. Also, scrape, don't rinse dishes before loading the dishwasher. Pre-rinsing can use up to 20 gallons of water.
- It's easy to judge your present showerhead's flow rate. Just hold a gallon container under the head and clock the time it takes to fill it. If it fills up in fifteen seconds, the flow rate is about 4 gallons per minute (gpm). If it's full in ten seconds, the flow rate is closer to 6 gpm. With a low-flow head, it should take 24 seconds or more.
 - ❖ Install low-flow showerheads. They can cut back the flow to 1 gpm, which, depending on your current shower, could save you two to four gallons each minute you're in the shower. Or, take shorter showers - you will save water and energy.
- Take advantage of our warm, arid climate and hang your clothes to dry. 60% of the energy associated with clothing purchases over the life of the garment is due to washing and drying.
- Recycling one aluminum can saves enough energy to run a TV for three hours -- or the equivalent of a half a gallon of gasoline.
- What's most important to buy organic? Many fruits and veggies have been shown to have high levels of chemicals. Apples, bell peppers, celery, cherries, grapes (imported), nectarines, peaches, pears, potatoes, spinach, and strawberries all can have high levels of pesticide residue under standard farming practices, so buying organic varieties has a greater effect. While it would be nice to support organic farming all the time, it is less necessary for asparagus, avocados, bananas, broccoli, cauliflower, corn, kiwi, mangos, onions, papaya, pineapples, and sweet peas since these foods typically have low levels of pesticide residue. Check out www.foodnews.org for more information.
- Washing plastic bags, especially ziplock bags, is fun and easy. Some people don't do it because they take so long to dry and take up space on the dish rack. However, if you hang them outside on a clothesline they dry really quickly and they are out of the way during the drying process.



- Replace standard incandescent light bulbs with compact fluorescent light bulbs (CFLs) and save 75% of lighting costs. Turn off unnecessary lighting and use task or desktop lamps with CFLs instead of overhead lights.
- Unplug electronics, battery chargers and other equipment when not in use. Taken together, these small items can use as much power as your refrigerator.
- Take steps to cut water use such as installing faucet aerators, low-flow showerheads, and low-flush toilets. As much as 19% of California electricity is used to pump, transport and treat water.
- A 5° higher setting on your air conditioning thermostat will save about 10% on cooling costs.
- Turn your water heater down to 120° or the "Normal" setting when home, and to the lowest setting when away. Water heating accounts for about 13% of home energy costs.
- Reduce air conditioning costs by using fans, keeping windows and doors shut and closing shades during the day.
- A few safe, simple ingredients like soap, water, baking soda, vinegar, lemon juice and borax, aided by a little elbow grease and a coarse sponge for scrubbing, can take care of most household cleaning needs. And they can save you lots of money wasted on unnecessary, specialized cleaners!
- Enable "power management" on all computers and make sure to turn them off at night. A laptop computer uses up to 90% less energy than bigger desktop models.
- Run your dishwasher and clothes washer only when fully loaded. Fewer loads reduce energy and water use.
- Make sure your dryer's outside vent is clear and clean the lint filter after every load. When shopping for a new dryer look for one with a moisture sensor that automatically shuts off when clothes are dry.
- Test for air leaks by holding a lit incense stick next to windows, doors, electrical boxes, plumbing fixtures, electrical outlets, ceiling fixtures, attic hatches and other locations where there is a possible air path to the outside. If the smoke stream travels horizontally, you have located an air leak that may need caulking, sealing or weather stripping.
- Instead of buying more and more clothes, swap or mix and match with friends!
- Don't accept "free" or promotional products. These are not "gifts" where the Earth is concerned.
- Around 100 million trees and 28 billion gallons of water are used to send junk mail to Americans every year. You can stop 75% of unsolicited mail by registering on the Mail

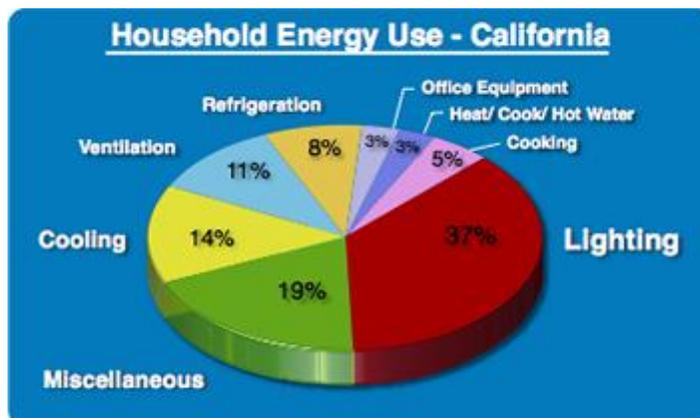


Preference Service on the Direct Marketing Association (www.dmchoice.org) for a fee of \$1. Within 90 days, most unsolicited mail will stop.

- Slow it down! Reducing highway speeds to 55-60 mph will decrease fuel consumption and only adds about 2 minutes to every 10 miles of driving.
- Reduce Purchases: In general, think before you buy any product - do you really need it? How did the production of this product impact the environment and what further impacts will there be with the disposal of the product (and associated packaging materials)? When you are thinking about buying something, try the 30-Day Rule -- wait 30 days after the first time you decide you want a product to really make your decision. This will eliminate impulse buying.
- Don't shop, recycle instead. Buy used clothes and goods from thrift stores, Ebay, garage sales, craigslist, etc. Check out The Freecycle Network (www.freecycle.org) - an online community tool for giving and receiving free stuff.
- Pack-it-Out: If you are traveling and no recycle bins are available, pack your recyclables home with you whenever possible.
- Make your own sandwich bags:
 - ❖ <http://www.re-nest.com/re-nest/cookware/etsy-find-lined-reusable-sandwich-bags-by-mamamade-082771>
 - ❖ Or, wash and recycle any plastic Ziploc bags you use...remember, every bag you throw away ends up in the landfill.
- A lot of recycling can take place in the bathroom-- put one garbage can and one recycling can. You will be surprised how quickly the recycling can fill up with items like empty shampoo bottles or cardboard soap/toothpaste boxes.
- Recycle glass jars – jam jars, peanut butter, or honey jars, and spaghetti sauce jars. Clean them out and they are great as to-go cups!
- Keep the refrigerator away from heating appliances like windows and heating ducts. Direct exposure to heat forces the unit to work harder and use more energy.
- You can save energy dollars by using hot water only for heavily soiled laundry. Select the "bright colors" mode for most of your laundry needs. Ninety percent of the energy your washer uses goes toward heating water.
- Get a tune up and you will see significant increases in miles per gallon in your car saving fuel and reducing emissions.
- Old toilet paper rolls can be used for storing cords, wires, and chargers that come with all of our electrical devices. You can even write on the outside of the tube so that you know which device the cord charges.

- Empty cereal boxes make great gift boxes for shirts and other clothes, plus they're already decorated so gift-wrapping is optional.
- Give up paper towels. Use rags made from old clothes or buy some reusable microfiber towels, which grip dirt and dust like a magnet, even when they get wet. Wash and reuse.
- Use cloth napkins instead of paper napkins—it will help save trees and waste in landfills.
- Turn off PCs, monitors, printers, copiers, and lights every night and every weekend. If you can't turn off the whole computer, turn off the monitor and the printer.
- Enable the energy savings options on existing office equipment—most equipment has settings that “power down” after a user-specified period of inactivity. This can be accessed via the Control Panel on Windows machines.
- Implement paper reducing strategies such as double sided printing as a default; use e-mail instead of sending memos and faxing documents
- It is now illegal to throw batteries in the trash in California, though few people probably know this!
- Many grocery stores have implemented bag-recycling programs, but transportation of these bags to and from stores requires valuable resources. *And 99% of the 100 billion plastic shopping bags used in the U.S. are never recycled, with a single bag taking up to 1,000 years to fully break down.* What can you do? **BRING YOUR OWN REUSABLE BAG.** If you grocery-shop once a week, in five years you'll have kept about 250 to 1,000 grocery bags out of our landfills. When one ton of plastic bags is reused or recycled, the energy equivalent of 11 barrels of oil is saved!

- **Annual Electricity Use Per California Household**



Source: California Energy Commission

This means that changing your lightbulbs to CFLs instead of incandescent can reduce the amount of lighting. Miscellaneous refers to many of the electronic equipment such as TVs that use phantom power even when they're not on—buy smart surge protectors



that turn off when the devices are not in use, or unplug your microwave and TV when you're not using them!

- What helps the environment AND the health of your family? There are many things that do both; here are some examples:
 - ❖ **Buy organic.** *Health*—eating organic will reduce your pesticide exposure. *Environment*—it also means fewer chemicals are used on the land.
 - ❖ **Eat less meat.** *Health*— eating less meat is better for your heart and overall health. *Environment*—it also saves energy, water, and land resources.
 - ❖ **Eat pasture fed.** *Health*—pasture fed beef, chicken, and dairy products are fed less antibiotics and contain healthier fats. *Environment*—it also saves energy and is better for the local waterways. Read more at http://www.ucsus.org/food_and_agriculture/solutions/smart_pasture_operations/greener-pastures.html
- Ways to Make Your Grass Greener
 - ❖ **Use natural fertilizers**, which release nutrients slowly throughout the year, won't leach away, and support the variety of soil organisms that improve fertility and combat diseases.
 - ❖ **Water deeply but infrequently.** Grasses do best when the whole root zone is wetted, and then dries out between waterings. Avoid frequent shallow watering that causes poor root development. Overwatering also promotes lawn disease.
- Recycling plastics uses only about 10 percent of the energy that it takes to make a pound of plastic from virgin materials (mostly oil). Educate yourself about what you can recycle, and make sure to use your recycling bins.
- If every household in the U.S. replaced one incandescent light bulb with a compact fluorescent, the pollution equivalent of one million cars would disappear. Wouldn't it be great to make a million cars disappear?!
- Most American homes use hot water tanks that keep 25 to 50 gallons of water hot 24 hours a day. It's a comforting thought while at work. Lower your water heater temperature to 120°
- The average American uses ¼ to 1/3 of a ton of paper each year. Only about half of that is recovered for recycling. Discard paper in the recycling bin, not the trashcan.
- One ton of recycled paper uses: 64% less energy, 50% less water, 74% less air pollution, saves 17 trees and creates 5 times more jobs than one ton of paper products from virgin wood pulp. When you buy paper, look to see whether it uses recycled content or not. Use scrap paper for shopping lists, notes, and printing.



- Every mile per hour that you drive faster than 55mph, your fuel economy goes down by 2%. So at 70, you get close to half the miles per gallon than you would at 50 mph! Every 5mph you drive over 60, you're paying about an additional 30 cents per gallon.
- Aggressive driving (speeding, rapid acceleration and braking) wastes gas. It can lower your gas mileage by 33 percent at highway speeds and by 5 percent around town.
- 1.5 billion barrels of oil are used each year to produce plastic water bottles. Buy a stainless steel water bottle and carry it around with you so that you can avoid using plastic water bottles wherever you go.
- 240 trees would be needed to absorb the average CO₂ emitted by a car in the U.S. each year, and there are 230 million vehicles registered. Walk, run, ride your bike, carpool, or use public transportation.

Tips from <http://www.epa.gov/climatechange/wycd/home.html>:

- Change a light, and you help change the world. Replace the conventional bulbs in your 5 most frequently used light fixtures with bulbs that are Energy Star-qualified (i.e., CFLs) and you will help the environment while saving money on energy bills. If every household in the U.S. took this one simple action we would prevent greenhouse gases equivalent to the emissions from nearly 10 million cars.
- Be smart when irrigating your lawn or landscape; only water when needed and do it during the coolest part of the day, early morning is best.
- Turn the water off while shaving or brushing your teeth.
- Do not use your toilet as a waste basket - water is wasted with each flush. And did you know a leaky toilet can waste 200 gallons of water per day? Repair all toilet and faucet leaks right away.

Tips from EPA Home <http://www.epa.gov/epahome/home.htm>:

- A family of four uses 400 gallons of water every day. How can you help?
 - ❖ Don't let the water run while shaving or brushing teeth.
 - ❖ Take short showers instead of tub baths.
 - ❖ Keep drinking water in the refrigerator instead of letting the faucet run until the water is cool.
 - ❖ Scrape, rather than rinse, dishes before loading into the dishwasher; wash only full loads.
 - ❖ Wash only full loads of laundry or use the appropriate water level or load size selection on the washing machine.
 - ❖ Buy high-efficient plumbing fixtures & appliances.



- ❖ Repair all leaks (a leaky toilet can waste 200 gallons a day).
 - ❖ Water the lawn or garden during the coolest part of the day (early morning is best).
 - ❖ Water plants differently according to what they need. Check with your local extension service or nurseries for advice.
 - ❖ Set sprinklers to water the lawn or garden only - not the street or sidewalk.
 - ❖ Use soaker hoses or trickle irrigation systems for trees and shrubs.
 - ❖ Keep your yard healthy - dethatch, use mulch, etc.
 - ❖ Sweep outside instead of using a hose.
 - ❖ Landscape using "rain garden" techniques to save water and reduce stormwater runoff.
- Reduce:
 - ❖ Buy permanent items instead of disposables.
 - ❖ Buy and use only what you need.
 - ❖ Buy products with less packaging.
 - ❖ Buy products that use less toxic chemicals.
 - Reuse:
 - ❖ Repair items as much as possible.
 - ❖ Use durable coffee mugs.
 - ❖ Use cloth napkins or towels.
 - ❖ Clean out juice bottles and use them for water.
 - ❖ Use empty jars to hold leftover food.
 - ❖ Reuse boxes.
 - ❖ Purchase refillable pens and pencils.
 - ❖ Participate in a paint collection and reuse program.
 - ❖ Donate extras to people you know or to charity instead of throwing them away.
 - Recycle:
 - ❖ Recycle paper (printer paper, newspapers, mail, etc.), plastic, glass bottles, cardboard, and aluminum cans. If your community doesn't collect at the curb, take them to a collection center.
 - ❖ Recycle electronics.
 - ❖ Recycle used motor oil.
 - ❖ Compost food scraps, grass and other yard clippings, and dead plants.



- ❖ Close the loop - buy recycled products and products that use recycled packaging. That's what makes recycling economically possible.

Tips from Energy Star http://www.energystar.gov/index.cfm?c=heat_cool.pr_hvac:

- Check your air filter every month, especially during heavy use months (winter and summer). If the filter looks dirty after a month, change it. At a minimum, change the filter every 3 months. A dirty filter will slow down air flow and make the system work harder to keep you warm or cool — wasting energy. A clean filter will also prevent dust and dirt from building up in the system — leading to expensive maintenance and/or early system failure.
- Install a programmable thermostat: A programmable thermostat is ideal for people who are away from home during set periods of time throughout the week. Through proper use of pre-programmed settings, a programmable thermostat can save you about \$180 every year in energy costs.

Tips from EPA Waste <http://www.epa.gov/epawaste/consERVE/rrr/composting/index.htm>:

- Yard trimmings and food residuals together constitute 26 percent of the U.S. municipal solid waste stream. That's a lot of waste to send to landfills when it could become useful and environmentally beneficial compost instead!