



PIERCE ENERGY PLANNING
HELPING SAVE ENERGY DOLLARS

ENERGY SAVING TIPS

1. A ¼ inch crack under your front door will waste as much energy as a 2" X 2" hole in your wall.
2. If all Americans installed "low-flow" showerheads, we could save billions of gallons of water every year (APS Energy Conservation, 2006).
3. A gallon of paint or a quart of motor oil can pollute 250,000 gallons of drinking water.
4. 2 gallons of tap water is needed to make 1 gallon of bottled water (APS Energy Conservation, 2006).
5. If we all recycled all our Sunday papers, 500,000 trees could be saved each week (APS Energy Conservation, 2006).
6. A 10-minute shower can use more than 50 gallons of water (APS Energy Conservation, 2006).
7. The junk mail Americans receive in one day could produce enough energy to heat 250,000 homes (APS Energy Conservation, 2006).
8. Every year Americans throw away enough office paper to build a wall 12 feet high stretching from LA to NY (APS Energy Conservation, 2006).
9. At the rate Americans are generating garbage, we need 500 new dumpsites every year.
10. Of all the fresh water on earth, 99.5% is in icecaps and glaciers (APS Energy Conservation, 2006).
11. Over a billion trees are used to make disposable diapers every year (APS Energy Conservation, 2006).
12. Compact florescent bulbs last 5 times longer than a conventional bulb and uses 70% less energy (APS Energy Conservation, 2006).
13. Each man, women and child in the United States uses the energy equivalence of 2,500 gallons of oil a year (APS Energy Conservation, 2006).
14. A family of 4 would use 10,000 gallons of oil a year, which is equal to filling the family car with 27 gallons of gas every day for a year (APS Energy Conservation, 2006).
15. The United States has about 5% of the world's population, yet we consume about 25% of the world's energy (Washington State University, 2008)!
16. An open fireplace damper can let 8% of your heat escape through the chimney (National Association of Home Builders, 2015).
17. Americans use twice as much energy as necessary to heat their homes (California Energy Commission, 2015).
18. A good old-fashioned clothesline is still the most energy efficient way to dry clothes (Albuquerque Public Schools, 2015).
19. The more insulation your home has the more energy and money you'll save (US Department of Energy, 2015).
20. Using a broom, instead of a hose to clean driveways and sidewalks saves hundreds of gallons of water each year (Be Water Wise, 2015).
21. The dishwasher uses 80% of its energy just to heat the water (Albuquerque Public Schools, 2015).



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22. Did you know your TV is using electricity even if it is turned off (US Department of Energy, 2012)!
23. The typical Americans throw away 60 pounds of plastic packing each year (University of Oregon, 2012).
24. About 75% of the water we use in our homes is used in the bathroom (Eartheasy, 2009).
25. Refrigerators in the U.S. consume equivalent of more than 50% of the power generated by all of our nuclear power plants (APS Energy Conservation, 2006).
26. A PC monitor switched off overnight saves enough energy to microwave six dinners (University of East London, 2015).
27. A photocopier left on overnight uses enough energy to produce over 1500 copies (Carbon Trust, 2004).

Energy Myths & Facts

1. **Switching lights on and off uses more energy than leaving them on if I'm only going to be out of the room for a short while.**

FALSE: This used to be true, but now the rule is that the longer the light is on, the more energy it uses. The energy used to switch a light on and off is less than that of leaving it on, so switching lights off when you leave the room saves energy, whatever type of bulb you have.

2. **Leaving the heating on overnight uses less energy than re-heating a cold building.**

FALSE: A boiler that spends an hour heating up a room in the morning is working no harder than a boiler that spends 14 hours switched on overnight. The only difference is that one is switched on for an hour, and the other for 14!

Source: University of East London, 2015

3. **Repeatedly turning computers and lights on and off reduces their lifespan.**

FALSE: Leaving computers on when not in use actually reduces their lifespan, because moving parts wear out faster. Lights are designed to be switched on and off many times a day without affecting their lifespan.

4. **Energy saving light bulbs can't be used with dimmer switches.**



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FALSE: There's now many energy saving light bulb options, including ones that can be dimmed, and ones with different hues of light.

5. Computer monitors use less energy when the screen saver is on.

FALSE: LCD screens use exactly the same amount of energy, whatever color they are displaying, so the screensaver uses just as much energy as when you are working. The best thing to do if you are leaving your desk - switch off your computer screen.

Don't dally in front of an open refrigerator!

Keeping the fridge door open while you decide what you want to eat may not seem like a big deal, but that open door accounts for 7% of the appliance's total energy use (Home Energy Magazine, 2014).

When you open your refrigerator, the cold air that keeps your food fresh escapes and is replaced by warm air from the room. Your refrigerator's compressor has to then drive the warm air out and bring the temperature back to normal, elevating not only your monthly energy bill, but also your environmental footprint.

Being careless with opening and closing your fridge door wastes 50 to 120kWh a year. Putting this into perspective, 50kWh of energy could run your dishwasher 20 times and 100kWh could run your washing machine 50 times (University of Florida, Institute of Food and Agricultural Sciences, 2014).

Un-Plug or Hit the Switch on Power Strips

- a. Anything plugged in is **using energy – copier, printer, coffee pot, microwave, water cooler, appliances, etc.**
- b. **Un-plug equipment** at the end of the day **OR**
- c. **Plug everything into a power strip** and **turn the power strip off.**
- d. Some schools have **electronic displays** that are left on even when the school is closed. At the end of the day, these displays can be **shut off manually or with simple timers.**

SPRING IS HERE!...the first thing you may want to do when the temperatures are warmer is open up the doors, but **DON'T**. What you may not realize is the air inside your buildings are still being conditioned (heated or cooled) even in these winter/spring months. What that means is **ENERGY** is still being used and **\$\$** are still being spent. Opening the door causes the heating/cooling unit to work



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harder to keep the temperature in the building to the set points on the thermostat...thus, wasting both **ENERGY** and **MONEY**.

Lighting – the right Light for the Right Task

Many offices, workrooms, or classrooms can easily reduce lighting without affecting productivity. Turn off as many unnecessary lights as possible. Light only those areas that are needed at the time. Providing the right lighting can save up to 15 percent on your lighting bill (California Energy Commission, 2015).

Replace your lamp's incandescent light bulbs with LEDs or compact fluorescent lights. A compact fluorescent light uses 75 percent less electricity to produce the same amount of light as an incandescent bulb (US Department of Energy, 2015). The compact fluorescent will last about 10,000 hours as opposed to the 600 to 1,000 hour average life of an incandescent (California Energy Commission, 2015). By replacing a 100-watt incandescent with an equivalent 25-watt compact fluorescent, you can save more than \$90 per bulb in electricity costs over the 10,000-hour lifetime of the compact fluorescent (California Energy Commission, 2015).

"Know Your Energy Use..."

- Minimize energy costs by reducing **USE** and managing **LOAD**
- **USE** (kWh) is the number of hours you have lights on, items plugged in (both on & off), and how hard and long the air conditioning units run.
- **LOAD** (KW) is how much energy your building uses in a given 15 minutes.

To Reduce **USE (kWh)**

- **Turn off** unnecessary lights; **Check** thermostat set points; **Keep** doors closed to reduce loss of conditioned air/air conditioning run times and **Unplug** items when not in use (or put on power strips for ease of shut-down)

To Reduce **LOAD (KW)**

- **Stagger** the time you power up all the equipment at the store (computers, lights, etc.) to spread out the 'load'.

Water

- **Stop leaky faucets** - A dripping faucet may seem harmless, but you'd be surprised at how much water is lost. According to the [U.S. Geological Survey's Water Science School](http://www.usgs.gov/water-science-school), one faucet that drips 4 drips per minute wastes 138 gallons of water a year.



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- **Replace old toilets** - Toilets manufactured before 1994 use up to five gallons per flush compared to 1.6 gallons for newer toilets. According to Savingwater.org, replacing an old toilet can save up to 10,500 gallons of water each year, depending on utility rates and usage habits.
- **Maintain appliances** - Appliances can sprout leaks because of aging materials, improper connections or ruptured hoses. Sometimes leaks can go unnoticed for weeks, wasting water and potentially causing damage to your home. Be sure to check your water heater, washing machine, refrigerator, and other appliances regularly.

Water conservation in the home and school...

1. Check faucets and pipes for leaks.

A small drip from a worn faucet washer can waste 20 gallons of water per day. Larger leaks can waste hundreds of gallons (Town of Bristol, 2015).

2. Don't use the toilet as an ashtray or wastebasket.

Every time you flush a cigarette butt, facial tissue, or other small bit of trash, five to seven gallons of water is wasted (Montclair Township Office of Environmental Affairs, 2015).

3. Check your toilets for leaks.

Put a little food coloring in your toilet tank. If, without flushing, the color begins to appear in the bowl within 30 minutes, you have a leak that should be repaired immediately (Eartheasy, 2015).

4. Install water-saving shower heads and low-flow faucet aerators.

Hot showers can use five to ten gallons every unneeded minute. "Low-flow" means it uses less than 2.5 gallons per minute (Natural Resource Defense Council, 2015).

5. All faucets should be fit with aerators. This single best home-water conservation method is also the cheapest!

6. Take shorter showers.

One way to cut down on water use is to turn off the shower after soaping up, then turn it back on to rinse. A four-minute shower uses approximately 20 to 40 gallons of water (Eartheasy, 2015).

7. Turn off the water after you wet your toothbrush.

Just wet your brush and fill a glass for mouth rinsing.

8. Use your dishwasher and clothes washer for only full loads.

Automatic dishwashers and clothes washers should be fully loaded for optimum water conservation.

8. Keep a bottle of drinking water in the fridge.

Running tap water to cool it off for drinking water is wasteful.