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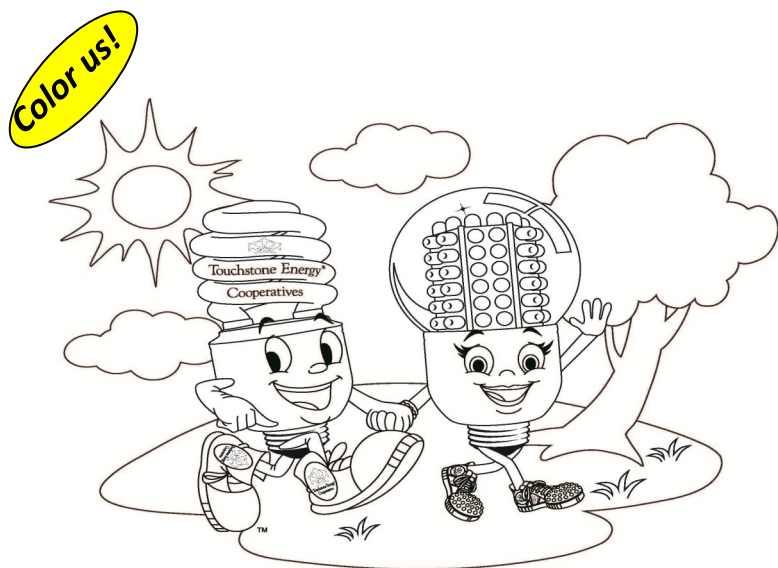
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Fun with Energy

Being energy efficient can be fun check out games,
puzzles and videos at:
www.kidsenergyzone.com/games
www.eia.gov/kids/energy



CFL Charlie and LED Lucy

Energy Efficiency (Continued)

their own set of challenges and opportunities when it comes to energy efficiency. This means there is no one set of solutions for everyone.

So what is your Tribal Government doing to conserve energy?

- The Health Clinic, the homes we built on the east side of Foxcroft Road, and our new apartment buildings were all designed with energy efficiency in mind.
- 28 homes on the west side of Foxcroft Road will soon be given energy efficiency facelifts.
- We've installed energy efficient lighting and replaced old, inefficient appliances in nine (9) government buildings.

What are you doing to conserve energy?

Share your thoughts, ideas, and tips for conserving energy *and* saving money with us via email at
ogs1@maliseets.com

or on our new Facebook page coming soon!

Sign - March 2014

Brenda Commander – Tribal Chief
Susan Young - Editor



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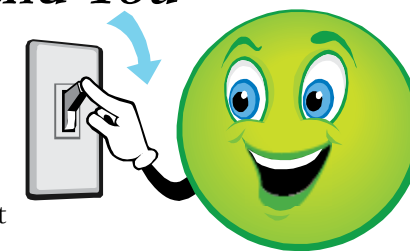
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Energy Conservation and You

Energy. We use *a lot* of it. Every day. In countless ways.

And it costs us. Both in the money we spend on buying fuel or electricity and the impact using energy has on our environment and our health.



- Fuel oil, gasoline, natural gas, kerosene - all those fuels that start out as the fossil fuel we pump out of the ground- cause all kinds of environmental problems:
- When spilled they pollute our wells and waterbodies and harm fish and wildlife;
- When burned in our furnaces and vehicles fossil fuel generates air pollution. Air pollution makes it harder for all of us to breathe and can worsen health problems like asthma, bronchitis, and heart disease;
- Nitrogen Oxide (NOx) and Sulfur Oxide (SOx) are air pollutants that cause acid rain, a particular problem for aquatic life in ponds and lakes in the Northeast;
- Carbon dioxide increases the acidity of our oceans (harming marine life) and contributes to Climate Change.

Even the wood we burn in our woodstoves pollutes the air we breathe.

A lot of the electricity we use in the State of Maine comes from hydropower. Dams prevent sea run fish like Atlantic salmon from migrating up-river to spawn. In the case of the Mactaquac, a dam on the Wolastoq/St John River in New Brunswick, Canada, it keeps salmon from spawning in our Meduxnekeag River.

These are *big* problems. The good news: these are problems we can *all* have a hand in solving.

We can't stop using energy. But we *can* use less of it. Working towards energy efficiency in our everyday lives - or another way to think of it, *energy conservation* – tastes good and is good for you ☺. It can save you money *and* help you live more lightly on the land.

So how do you go about conserving energy? We've gathered together a number of articles with tips, ideas, and resources for you. Everyone has

Continued page 12

35 Ways to Lower the Cost of Heating Your Home

produced by Maine Oil Dealer's Association*

Everyone's heard the news about rising crude oil prices and the price of heating oil is rising too.

While Maine's heating oil dealers have no control over prices (those

are set by buyers and sellers at the NYMEX commodities exchange), there's plenty The Maine Oil Dealer's Association can do to help you get the most warmth from every heating dollar from providing expert heating system maintenance to advice on how keeping your house weather tight and energy efficient.

Conservation is your most powerful tool in lowering energy costs. You can save hundreds of dollars on your home energy bill just by being smart about how you consume energy.

1. Heating system tune-up – To get the most value from the heating oil you buy and cut your fuel bill by as much as 5% – schedule a tune-up of your heating system once a year. Ask your heating oil dealer.

2. Keep the kitchen hot – Bake a lot of stuff. Breads, rolls, cakes, cookies, roasted chickens – all the things you avoid in the summer time because it makes the kitchen too hot.

3. Skirt the foundation – You can help insulate your house by sealing off the exposed portion of your basement or foundation with plastic, or leaves, or bales of hay – even snow.

4. Wear a sweater – Heck, wear a turtleneck and a sweater. Or a nice fleece pullover. It's cheaper for your body to do the heating than your furnace.



5. Coffee, tea, cocoa – Hot drinks will warm you up. The added hydration you get from drinks like tea or beef bullion also help your body "burn" calories more efficiently which helps keep you warm.

6. Snuggle – Make up some popcorn, get the whole

family on the couch cuddled up under a big blanket, and watch movies.

7. Upgrade an old heating system – Replacing an old system with a new one is an investment that will pay for itself by cutting your fuel costs by as much as 40%.

8. Seal your windows – Caulk around loose panes. Add weather stripping between sashes and sill. Drafty windows can be covered with a tight layer of polyurethane plastic sheeting.



9. Winter sports are for everyone

Hike, skate, cross country or down hill ski, snowshoe, sled, toboggan, make a snowman, go bird watching, have a snow ball fight – you'll warm up while you're saving by lowering your thermostat.

10. Clear the way – Make sure that armchairs, couches, drapes, bookshelves, etc. are not blocking your baseboards, making it harder for warmth to get to the rest of the room.

11. Play with your thermostat – Lower the setting when you go to bed, raise it when you wake up, lower it when you're not going to be home, raise when you return.

12. Weather-tight doors – All four sides of external doors need to be weather tight. Use rubberized weather stripping around the edges to keep out the cold winter wind.

13 Magic carpets – Carpeting and area rugs add a layer of insulation (about 1.3 R value) to floors and keeps your feet warm.

14. Let the sun shine in – "Southern exposure" gives you some very basic passive solar. Consider thinning evergreens if they block the sun on the south side of your house.

Continued page 11

35 Ways to Lower the Cost of Heating Your Home (cont'd)

15. Replace problem windows – Old windows with serious heat loss issues should be swapped for new ones. Ask your local lumberyard for information on replacement windows.

16. Insulate - Insulate - Insulate – Today's homes are much better insulated than homes built 30 or even 15 years ago. Still it's well worth taking an insulation inventory. You'll find lots of do-it-yourself books on insulation at your local hardware store, too.

17. Soup's On! – A nice hot soup or stew or chow-der for dinner, especially one that you simmer all day on the stove top adding warmth to your home.

18. Stormy weather? A weather tight storm door and a weatherized solid door make a great combination. The storm door stops wind, and the trapped air between the doors provides insulation.

19. Foam Tip No. 1 – Most hardware stores carry spray cans of foam insulation with easy instructions on how to seal off outlets, switches, and junction boxes on outside facing walls.

20. Window quilts – Consider thick thermal window quilts to help keep your home warmer by adding another layer of "dead air" insulation in your window casings.

21. Don't linger – The average open door makes a 21 square-foot hole in the wall. You save on fuel if you're quick about entering or exiting.

22. Foam Tip No. 2 – Use foam rubber pipe insulation to insulate any piping that is near the outside walls of the house.

23. Flue clue – Once your fireplace fire or wood-stove fire is totally out and is cool to the touch, close the damper to stop your home heating dollars from flying up the chimney.

24. Stay in good shape – Your body can create its own warmth more efficiently when you're in shape.



25. Clean those baseboards - Vacuum the heating pipes and their heat dispersing vanes inside your baseboard units to help them transfer heat to the room

air more efficiently.

26. Eat protein – Foods that are high in protein like fish, meat, cheese, and nuts actually boost your body's ability to produce its own heat.

27. Clear those baseboards -- Be sure to keep rugs slightly away from baseboards so that air can pass through the bottom of the baseboard in order to force warm air out of the top.

28. Cool clothes – Keep your closet doors closed. There's over 100 cubic feet in a closet you don't need to pay extra to keep warm.

29. Draw the shades, – Close all of your curtains and shades at night to trap heat inside; open them during the day to let heat from the sun in.

30. Have you got everything? Make sure you have your car keys and everything else you need when you step outside so you only have to open the door once.

31. Thermostat savvy – Adjust your temperature setting by moving it just 2 degrees at a time. Or if you're calling for heat, raise the setting slowly, and stop when you hear your furnace start.

32. Keep your windows clean – Be sure to keep windows on the south side of your house regularly clean to maximize solar gain.

33. Make your waterbed everyday. The sheets, blankets, and bed spread will help insulate the water so you won't have to pay quite so much to heat it.



34. Go for a walk – You can set your thermostat down five degrees, grab your hat and your mittens and go outside for a good invigorating walk around your block.

35. A friend is worth 500 Btu's per hour – Invite a bunch of friends over for a pot luck dinner. Humans give off approximately 500 Btu's every hour. Put enough people in the room, and you can heat it with human power. Not to mention the warmth of having your friends and family getting together.

Be smart, stay warm, save money - and we'll get through this winter together.

www.meoil.com/tips.asp

Join the “Change a Light Campaign”

The "Change a Light Campaign" is a nationwide effort sponsored by the United States Department of Energy to encourage Americans to upgrade conventional light bulbs to ENERGY STAR® compact fluorescent lights (CFLs).

Join us in changing the world, one light -- one step -- at a time.

Take the pledge at

<http://www.energystar.gov/index.cfm?fuseaction=cal.showPledge>

Join the “Change A Light Campaign”
Every light bulb or fixture you change to an

ENERGY STAR ® will:

- ◆ Use 1/3 of the energy of a standard incandescent light bulb
- ◆ Last up to 10 times longer
- ◆ Save an average of \$30 or more in energy costs over its lifetime
- ◆ Prevent 450 pounds of greenhouse gas emissions over its lifetime



Signs You’re an Energy Hogging Jerk (cont’d)

Indecision at the fridge

An indecisive friend at any mealtime can be painful, especially if you are starving and know exactly what you want to eat. Such indecision is costly in addition to annoying when it occurs as a friend gazes into an open refrigerator. If the habit proves too difficult to change, then at least consider using an energy-efficient refrigerator and keeping it full. “Keeping the fridge stocked will mean that less warm air will get in there and then have to be cooled,” Rogers explained. And if budgets are tight, jugs of tap water will work just as well as food.

Excessive and unnecessary lighting

Some people - perhaps your neighbors - seem to be allergic to the dark. Their cure is to light up the night everywhere they can - the porch, the backyard, the front yard, the driveway. And while they’re at it, they might as well light your yard too, right? Maybe even your bedroom window.

“If you are going to do that to a neighbor, make sure you are using compact fluorescent lights, which are four times more efficient than incandescent bulb,” Rogers said.

Better yet, enjoy the light of the stars. And in the middle of the day when sunlight is streaming through the window or when nobody is home, please turn off the lights.

Drinking bottled water.

A long, long time ago, like three or so years ago, drinking bottled water, especially from tropical island nations and the French Alps, was really, really cool.

But oh the times have changed. Now drinking bottled water is generally considered lame. “It take a lot of energy to move that water around,” Rogers said.

Most places in the U.S. have municipal systems that deliver water to our kitchens and bathrooms that is as safe, if not safer, than bottled water, he added.

According to a 2006 study by the Pacific Institute, the equivalent of 17 million barrels of oil is used to make plastic bottles every year. That’s enough fuel to run 1 million cars for a year.

What energy hogging habits would you add to the list?

Energy IQ (continued)

13. Electricity is the movement of:

- a. atoms
- b. molecules
- c. electrons
- d. neutrons

14. How much of the energy in burning coals reaches the consumer as electricity?

- a. 1/3
- b. 1/2
- c. 3/4
- d. 9/10

15. In a nuclear power plant, uranium atoms:

- a. combine and give off heat energy
- b. split and give off heat energy
- c. burn and give off heat energy
- d. split and give off electrons

Answers: 1. a, 2. d, 3. c, 4. a, 5. b, 6. c, 7. b, 8. d, 9. a, 10. c, 11. c, 12. d, 13. c, 14. a, 15. b

Saving Green

In these tough monetary times, everyone seems to be looking for ways to stretch their dollars. Here are some quick and easy ways to save money and at the same time, reduce your impact on the planet. You’ll be surprised at how much money you can save by making a few simple changes.



Pull the Plug

No, you don’t have to go without your TV, morning coffee, or a host of modern day conveniences. Did you know, all the digital displays on your DVD players, TVs, etc. draw power even when the unit is not turned on? By simply unplugging these items; or if the plugs are difficult to reach, plug them into a power strip and flip the switch when they are not in use, like when you go to bed or leave the house, will add up to some substantial savings on your electric bill.

Use your microwave or slow cooker

As strange as this may seem, using these appliances

can actually save you money. These appliances cook much more efficiently than standard electric stoves and ovens. In most homes, the kitchen is the most energy draining room in the house.

Make your own music

Instead of spending your money on CDs with all their packaging, consider downloading just the songs you want from the web onto your computer, iPod or MP3 player. Not only will you get just the music you want, you keep non-recyclable CD cases and assorted packaging out of the landfill.

Eat less beef, poultry and pork

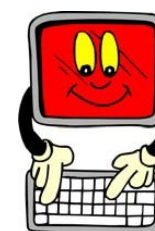
Each of these foods require a great deal of resources to raise and process. Commercial meat operations tend to be consumers of large amounts of fossil fuels and heavily contribute to pollution and the overall waste stream.

Drink from the tap

No, not the beer tap, we’re talking tap water. Drinking water from your tap not only saves you money, it helps keep millions of water bottles out of the landfill.

www.psychology.suite101.com/articles.cfm/green_money_savings_tips

Free On-Line Energy Audit



Ever wonder just how much your electric costs are really costing you? We are bombarded by information about how we can be more energy efficient, but just what does that mean? Finally, there is a way to figure this all out in the comfort of your home, without having to hire a pro.

All you need is a computer (or a friend with one or visit your local library) and some basic information about your house.

The Home Energy Saver is a free on-line energy audit website, that will allow you to figure out your current energy costs and how much you can save by making a few changes. You can customize your audit from the number and type of windows you have along with which direction they face to the number of slow-cookers you have on the kitchen counter and how often you use them.

Just enter your zip code on the first screen and you are on your way to savings!

The Home Energy Saver calculator can be found on-line at <http://hes.lbl.gov/>

Test Your Energy IQ

Test your energy knowledge with this quiz from the US Energy Information Administration

www.eia.gov/kids/energy.cfm?page=quiz



1. Most of the energy we use originally came from:

- a. the sun
- b. the air
- c. the soil
- d. the oceans

2. Electrical energy can be produced from:

- a. mechanical energy
- b. chemical energy
- c. radiant energy
- d. All of the above

3. Which use the most energy in American homes each year?

- a. lighting
- b. water heating
- c. heating/cooling rooms
- d. refrigeration

4. The U.S. consumes lots of energy. Which fuel provides the most energy?

- a. petroleum
- b. coal
- c. natural gas
- d. Solar



Increasing Your Vehicle's Fuel Economy

This year the cost of gasoline has been all over the place. No matter where you live, you are faced with the game of gasoline roulette.

Do I buy gas today, before the price goes up, or do I wait until tomorrow when the price might go down? While we don't have control over the fluctuating

gasoline prices, we can help our cars and trucks get more out of each gallon. By adopting a few of these tips, put forth by the U. S. Department of Energy, you can help increase your gas mileage, regardless of the type of vehicle you drive.

- **Drive Sensibly** - Aggressive driving (speeding, rapid acceleration and braking) wastes gas. It can lower your gas mileage by 33% at highway speeds and by 5% around town.

Sensible driving is also safer for you and others, so you may save more than gas money.

- **Observe the Speed Limit** - While each vehicle reaches its optimal fuel economy at a different speed (or range of speeds) gas mileage usually decreases rapidly at speeds above 60 mph. As a rule of thumb, you can assume that each 5mph you drive over 60 mph is like paying an additional \$0.21 per gallon of gas.

- **Remove Excess Weight** - Avoid keeping any unnecessary items in your vehicle, especially heavy ones. An extra 100 pounds of weight in your vehicle can reduce your miles per gallon by up to 2%.

- **Avoid Excess Idling** - Idling gets 0 miles per gallon. Cars with larger engines typically waste more gas at idle than do cars with smaller engines.

- **Use Cruise Control** - Using cruise control on the highway helps you maintain a constant speed and, in most cases, will save gas.

- **Use Overdrive Gears** - When you use overdrive gearing, your car's engine speed goes down. This saves gas and reduces engine wear.

- **Avoid Excess Idling** - Idling gets 0 miles per gallon. Cars with larger engines typically waste more gas at idle than do cars with smaller engines.
- **Use Cruise Control** - Using cruise control on the highway helps you maintain a constant speed and, in most cases, will save gas.
- **Use Overdrive Gears** - When you use overdrive gearing, your car's engine speed goes down. This saves gas and reduces engine wear.
- **Keep Your Engine Properly Tuned** - Fixing a car that is noticeably out of tune or has failed an emissions test can improve its gas mileage by an average of 4%, though results vary based on the kind of repair and how well it is done. Fixing a serious maintenance problem, such as a faulty oxygen sensor, can improve your mileage by as much as 40%.



Check & Replace Air Filters

Regularly - Replacing a clogged air filter can improve your car's gas mileage by as much as 10%. Your car's air filter keeps impurities from damaging the inside of your engine.

- **Keep Tires Properly Inflated** - You can improve your gas mileage by about 3.3% by keeping your tires inflated to the proper pressure. Under-inflated tires can lower gas mileage by 0.4% for every psi drop in pressure of all 4 tires. Properly inflated tires are safer and last longer.

- **Use the Recommended Grade of Motor Oil** - You can improve your gas mileage by 1-2% by using the manufacturer's recommended grade of motor oil.



www.fueleconomy.gov

Fuel Economy in Cold Weather



Cold weather and winter driving conditions can reduce your fuel economy significantly. Fuel economy tests show that, in short-trip city driving, a convention-

al gasoline car's gas mileage is about 12% lower at 20°F than it would be at 77°F. It can drop as much as 22% for very short trips (3 to 4 miles).

The effect on hybrids is worse. Their fuel economy can drop about 31% to 34% under these conditions.

Why is Winter Fuel Economy Lower? Cold weather affects your vehicle in more ways than you might expect:

- Engine and transmission friction increases in cold temperatures due to cold engine oil and other drive-line fluids.
- It takes longer for your engine to reach its most fuel-efficient temperature. This affects shorter trips more, since your car spends more of your trip at less-than-optimal temperatures.
- Heated seats, window defrosters, and heater fans use additional power.
- Warming up your vehicle before you start your trip lowers your fuel economy - idling gets 0 miles per gallon.
- Colder air is denser, increasing aerodynamic drag on your vehicle, especially at highway speeds.
- Tire pressure decreases in colder temperatures, increasing rolling resistance.
- Winter grades of gasoline can have slightly less energy per gallon than summer blends.

In severe winter weather, your mpg can drop even further.

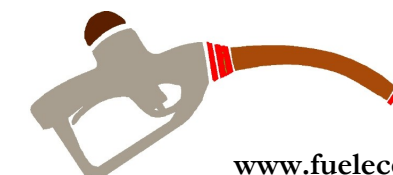
- Battery performance decreases in cold weather, making it harder for your alternator to keep your battery charged. This also affects the performance of the regenerative braking system on hybrids.

- Icy or snow-covered roads decrease your tires' grip on the road, wasting energy.
- Safe driving speeds on slick roads can be much lower than normal, further reducing fuel economy, especially at speeds below 30 to 40 mph.
- Using four-wheel drive uses more fuel.

Tips to improve winter fuel economy

You may not be able to completely mitigate cold weather's effect on your fuel economy, but you can do some simple things to improve gas mileage:

- Park your car in a warmer place, such as your garage, to increase the initial temperature of your engine and cabin.
- Combine trips when possible so that you drive less often with a cold engine.
- Don't idle your car to warm it up. Most car manufacturers recommend driving off gently after about 30 seconds. The engine will warm up faster being driven.
- Don't use seat warmers or defrosters more than necessary.
- Check your tire pressure regularly.
- Use the type of oil recommended by your car's manufacturer for cold weather driving.
- Remove accessories that increase wind resistance, like roof racks, when not in use.
- If you drive a plug-in hybrid or electric vehicle, preheating the cabin while plugged into the charger can extend your vehicle's range. If you drive a plug-in hybrid or electric vehicle, using the seat warmers instead of the cabin heater can save energy and extend range.



www.fueleconomy.gov

The Best and Worst Fuel Efficient Vehicles of 2014

The automotive world is rapidly changing to meet consumer demand and higher fuel economy standards. A growing number of vehicles entering the market are hybrid and/or electric vehicles. It is quite possible that in the not too distant future, standard gas burning vehicles will become a thing of the past. The website Fuel Economy.gov is the official US Government source for fuel economy information. They have put together their lists of 2014’s best and worst vehicles based on fuel economy. For more information check out www.fueleconomy.gov



EPA Class	Vehicle	Combined Mpg
2 Seaters	Smart fortwo electric drive convertible / coupe Honda CR-Z	107* 37
Minicompacts	Fiat 500e Scion IQ	116* 37
Subcompacts	Chevrolet Spark EV Ford Fiesta SFE FWD	119* 37
Compacts	Ford Focus Electric Toyota Prius c	105* 50
Midsize	Nissan Leaf Toyota Prius Hybrid	114* 50
Large	Tesla Model S Ford C-MAX Hybrid	95* 43
Small Station Wagons	Honda Fit EV BMW 328d x Drive	118* 35
Midsize Station Wagons	Toyota Prius v	42
* These are electric or hybrid vehicles. Since electricity is not measured in gallons, a conversion factor is used to translate the miles per gallon of gasoline equivalent.		
Small Pickup	Toyota Tacoma 2WD	23
Standard Pickup	Ram 1500 2WD	23
Small SUV	Toyota RAV4 EV	76*
Standard SUV	Toyota Hylander Hybrid	28
Minivans	Mazda 5	24
Cargo Vans	Chevrolet Express 1500 2WD GMC Savana	16 16
Passenger Vans	Chevrolet Express 1500 2WD Ford E150 Wagon GMC Savana 1500 2WD/FFV	14** 14** 14**



		Combined Mpg
2 Seaters	Bugatti Veyron	10
Minicompacts	Aston Martin D9 Aston Martin Vanquish Ferrari California	15 15 15
Subcompacts	Aston Martin Rapide S Bentley Continental GTC FFV Maserati Gran Turismo Mercedes Benz C63 AMG	15 15** 15 15
Compacts	Chevrolet Camaro Mercedes-Benz CL600 Mercedes-Benz CL65 AMG Rolls-Royce Phantom Coupe	14 14 14 14
Midsize	Bentley Mulsanne Ferrari FF	13 13
Large	Rolls-Royce Phantom EWB	14
Small Station Wagons	Cadillac CTS Wagon	14
Midsize Station Wagons	Mercedes-Benz E63 AMG	17



Beat the Heat Without Air Conditioning



Summer finally gets here and one of the first things we do is shut the doors and windows and crank up the AC.

By changing just a couple of habits you can keep your home and yourself cooler throughout the “dog days of summer”.

To reduce the heat entering your house:

- Keep shades and blinds closed during the heat of the day. This can keep the bright sunlight from heating up your house.
- Also keep sunny windows closed to keep the heat out.
- Be sure to keep lights and other nonessential electronics turned off.

To help cool your home:

- Use ceiling fans to circulate the air in the rooms you occupy most.
- If there is a breeze outside, even a minimum one, open the windows in your house to take advantage of it.
- If the breeze is not enough, try using table fans. Place one in a window facing out to draw hot air from inside your home. Place a second fan blowing in on the opposite side of the house. You’ll create a wind tunnel of sorts, cooling your home as you go
- Use a dehumidifier to reduce the humidity.

Be sure to exhaust fans to vent hot air outside.

To cool yourself:

- Wet your wrists and other pulse points with cool water.
- Apply ice wrapped cloths on your wrist, around your neck etc. These will help lower your temperature by up to 3 degrees and can last for up to an hour.
- Spend time in the shade.

If you must use an air conditioner for comfort or other health reasons, be sure to use one smartly:

- Install air conditioner on the shady side of your home.
- Check for gaps and leaks around the air conditioner. Seal all that you find.
- Keep the thermostat on your air conditioner set at 78°.
- Use fans to help move cooler air.
- Turn the AC down when you are asleep or no one is home.
- Chose a properly sized air conditioner for the space you are cooling.
- Keep all windows and doors closed while the air conditioner is on.
- Keep unit’s coils properly cleaned and refrigerant charged.

for more information:

www.ehow.com

Energy IQ (continued)

5. Coal, petroleum, natural gas and propane are fossil fuels. They are called fossil fuels because:

- a. They are burned to release energy and they cause pollution
- b. They were formed from the buried remains of plants and tiny animals that lived hundreds of millions of years ago.
- c. They are non-renewable and will run out
- d. They are mixed with fossils to provide energy

6. Gasoline is produced by refining which fossil fuel?

- a. natural gas
- b. coal
- c. petroleum
- d. propane

7. Propane is used instead of natural gas on many farms and in rural area. Why is propane often used instead of natural gas?

- a. it’s safer
- b. it’s portable
- c. it’s cleaner
- d. it’s cheaper

9. Natural gas is transported mainly by:

- a. pipelines
- b. trucks
- c. barges
- d. all three equally

10. Global warming focuses on an increase in the level of which gas in the atmosphere?

- a. ozone
- b. sulfur dioxide
- c. carbon dioxide
- d. nitrous oxide

11. Solar, biomass, geothermal, hydropower and wind energy are all renewable sources of energy. They are called renewable because they:

- a. are clean and free to use
- b. can be converted directly into heat & electricity
- c. can be replenished by nature in a short period of time
- d. do not produce air pollution

12. Today, which renewable energy source provides the U.S. with the most energy?

- a. wind
- b. geothermal
- c. solar
- d. hydropower

8 Signs You’re an Energy Hogging Jerk

by John Roach, www.msnbc.com

No matter whether you’re a tree-hugging environmentalist stressed out over global warming or a coal king lobbying against cap-and-trade schemes, wasting energy in these economically sensitive times makes you look like a jerk. Check out 8 energy hogging activities to avoid. Following the advice may not make you any less of a jerk, but at least it will make you a more energy-efficient jerk, noted John Rogers, a senior energy analyst with the Union of Concerned Scientists in Cambridge, Mass., who helped compile the list.

Refusing to power off our computer

Let’s face it: Booting up a computer eats time off the clock, an annoyance for everyone from deadline-pressed cubicle warriors to retirees eager to logon to the Eons social network. But that’s no excuse to leave your computer up and running 24 hours a day especially when power saving options are built into the machine.

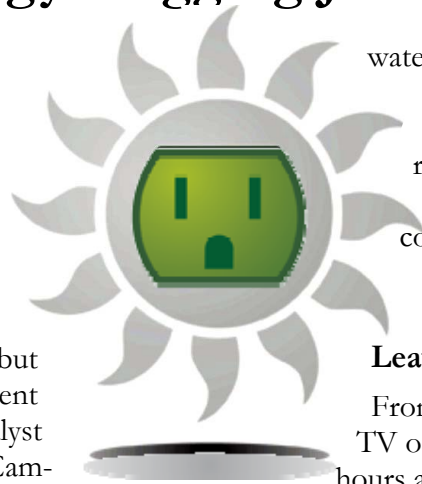
Almost all computers come equipped with energy-saving sleep or standby modes, which can be set to automatically kick in when the computer is idle for awhile - say 20 minutes. Usually, a toggle of the mouse or tap on the keyboard is sufficient to snap the computer awake.

After a long nap, some computers will delve into an even-deeper energy-saving hibernation mode. But even then, the computer is still sipping electricity. Energy experts recommend turning the computer off overnight and longish breaks in the day. Contrary to popular belief this will not harm the computer’s lifespan, noted Rogers.

Taking Really Hot Showers

A long hot shower may be a small luxury, but those extra minutes escaping with your thoughts under the body-warming water stream can quickly earn you some icy glares. For starters, hot-water tanks are finite and nobody enjoys a cold shower. What’s more, hot water heaters account for about 15 percent of an average home’s energy bills, according to the Alliance to Save Energy.

Try to limit yourself to five minute showers to make your housemates and bank accounts happy. If that doesn’t work, at least invest in a low-flow shower head, Rogers said. Another option is a so-called tank-less



water heater. These appliances generate a continuous stream of hot water when they are on - i.e. the hot water doesn’t run out - and when the hot water is turned off, it is off. The devices do cost more than a tank, but tend to last longer and consume less energy so they pay for themselves in a few years.

Leaving the TV on all the time

From morning gossip to late night comedy, TV offers something vacuous to watch 24 hours a day. But do you really have to keep it blaring all the time? You could read a book, play with your kids or take a walk. Heck, you could even stare out the window for a while. It’s probably more interesting. Nope? Then at least watch an energy-efficient TV such as one of the models recommended by the Environmental Protection Agency’s Energy Star Program, which are 30 percent more efficient than other models.

“And on rare occasions when you do turn it off, if you unplug it or turn it off at a power strip then it won’t be sucking juice the rest of the time,” Rogers said. Otherwise, the TV sits there in standby mode just waiting for you to press the power button on the remote control. “The new Energy Star ones have specification for both when it’s on and when it’s purportedly off, but you are still better off, really turning it off,” he added.

Leaving the car idling

If you’re lucky, your neighborhood is littered with friends that you pass on the street while out driving around. And since they’re friends, you stop, roll down the window and strike up a conversation. If you want to make even more friends, turn off the car while you sit there and talk. Energy experts recommend turning the car off, except when in traffic such as at a red light, anytime you’re idle for 30 seconds or longer. If you can’t bring yourself to turn it off, then at least drive an energy efficient car such as a hybrid, Rogers said.

Cranked up air conditioners

“I don’t know what to say to the person who cranks up the air conditioning and leaves the window open like the brother of a friend of mine does,” Rogers said. “But in general, if you insist on cranking up your AC so high that your roommate or spouse needs an electric blanket then at least buy the most efficient Energy Star rated air conditioner.”

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Fix a Leak and Save Some Green

At one time or another we’ve all been plagued by the drip at the kitchen sink, or the toilet that just keeps on running no matter how many times we jiggle the handle. Not only are these things incredibly annoying, it wastes trillions of gallons of water annually and it takes a chunk out of our wallets. Stop for a second and think about it, if you are on a town water supply, you pay for the water to come to your house, and you pay for the water to leave and yet you haven’t used any of it.

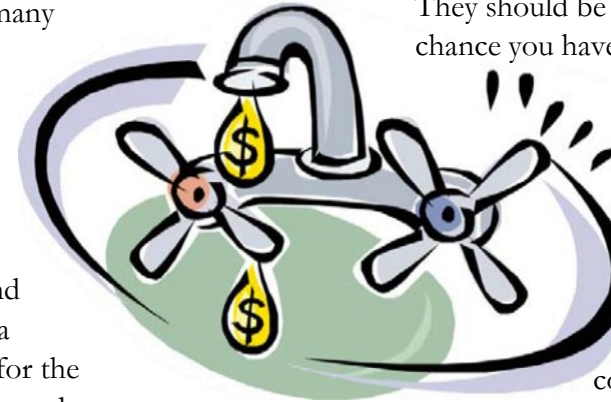
Did you know . . .

- ◆ 10% of all homes in the US have leaks that waste over 90 gallons of water per day?
- ◆ A leaky faucet can waste more than 3 of water per year?
- ◆ U.S. homes, on average, waste about 10,000 gallons per year due to leaky faucets, running toilets and other household leaks? That’s enough to fill a backyard swimming pool.
- ◆ Nationwide, more than one trillion, you read that right, trillion (1,000,000,000,000) gallons are wasted each year by water leaks in American homes. That’s the annual water usage of Los Angeles, Chicago and Miami combined.

Fortunately, many of these leaks are easy to fix, can be done by most do-it-yourselfers and pay for themselves almost immediately. We’ve listed some quick fixes, that will help you save water, save money and do your part to help the nation’s water supply.

A good way to check for leaks is to look at your water usage. This is most easily done in winter since we tend to use less in the winter, but it can be done any time of year.

Check your water meter and write down the number. Go to work, the store or just don’t use any water for two hours or more, that means, no flushing the



toilet, no showers, no filling the ice cube trays. Check your meter again after wards and compare the readings. They should be the same. If not, then there is a good chance you have a leak.

Another method is to simply look at your water bill. If your family of 4 uses over 12,000 gallons per month, there is a good chance you have a serious leak problem in your home.

To check for leaking toilets, place a couple of drops of food coloring in the toilet tank. Wait approximately 15 minutes, if the water in the bowl has turned the color of your food coloring, you have a leak. Be sure to flush the toilet immediately after the test so not to stain the porcelain. If you don’t have food coloring, you can use a dark colored juice like grape juice to do the test.

A faucet that drips once per second can waste about 3000 gallons of water per year. These drips are easily stopped by replacing worn washers and gaskets.

Showerheads that leak 10 drips per minute can waste over 500 gallons per year, enough to run 60 loads of dishes in your dishwasher. Most leaky showerheads can be fixed by tightening their connections with pipe tape and a wrench.

Outdoor water hoses are another culprit when it comes to wasting water. Most leaks come from hoses that were stored outside over the winter without having been drained first. Another prime source for leaks are worn or missing hose washers that allow water to leak out at the spigot. A new washer, a little pipe tape and wrench will give you a tight connection, stop the leak and save some cash.

There are also a number of new plumbing fixtures on the market that have been designed to reduce water usage and improve performance. These fixtures, marketed with the EPA WaterSense seal, will save water with each usage and will pay for themselves in no time.

For more information about the EPA WaterSense Seal, Fixing leaks, improving you water efficiency and games for the kids go to:

www.epa.gov/watersense