What You Do Makes a Difference!

Nineteen Great Energy-Saving Ideas

1. Take advantage of a no-cost home energy assessment. Call **781-305-3319** to schedule your no-cost, detailed home energy assessment from Home Works Energy, a MassSave Participating Home Performance Contractor. You may also sign up online at greenneedham.org. The energy advisor will provide information on weatherization, equipment replacement, insulation, and tell you about generous rebates, plus zero and low-interest loans.
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2. Turn down the thermostat in winter and turn it up in summer.
NStar recommends a winter setting of no more than 68 degrees. Cut annual heating bills by as much as 10 percent a year by turning your thermostat back 10 to 15 percent for eight hours a day. For summer, NStar recommends 78 degrees for central air.
To make it easy, buy a **programmable thermostat** ($25 MassSave rebate or free as part of Home Energy Assessment.)

3. Drive smart
Drive the speed limit, avoid rapid acceleration and hard braking, and don't idle. According to the U.S. Dept. of Energy, aggressive driving can lower your gas mileage by 33 percent at highway speeds and 5 percent around town. While each vehicle reaches its optimal fuel economy at a different speed (or range of speeds), gas mileage usually decreases rapidly at speeds above 50 mph. They advise against idling a car to warm it up, pointing out "Most manufacturers recommend driving off gently after about 30 seconds. The engine will warm up faster being driven." See www.fueleconomy.gov

4. Walk and Bike More
Improve your health and carbon footprint by leaving your car at home. According to the 2001 National Household Transportation Survey, 28 percent of all trips are less than one mile, a reasonable distance for walking, and 41 percent of trips are less than two miles, a distance that is reasonable for biking. You can bring emissions down simply by choosing to walk or bike on short trips.

5. Drive less
Take public transportation to work or school, car pool, consolidate errands, take fewer car trips and vacation closer to home. How many miles do you typically drive each year? Try to set a weekly or monthly mileage reduction goal!

6. Reduce air travel and try to fly non-stop when you do fly.
Air travel is estimated to add about 1/2 to 1 pound of CO2 per mile flown. Reducing your flights can make huge cuts in your carbon footprint. Since most energy is used on take-off and landing, flying non-stop is more energy-wise.

7. Add at least one non-meat, non-dairy meal each week. The United Nations Food and Agriculture Organization estimates that raising livestock causes 14.5% of human-caused greenhouse gas emissions. This is due to the energy intense production of livestock feed and the methane (a powerful greenhouse gas) that is emitted from manure and animal digestion, especially cows and sheep. While use of best practices can reduce emissions, lower consumption in the developed world can help. Green America calls eating less beef "the single most powerful thing you can do" to combat climate change. http://www.fao.org/news/story/en/item/197608/icode/; *Green American*, Issue 99, Fall 2014.

8. Unplug or dispose of a little-used second refrigerator or freezer
According to Mass Save, "your old fridge or freezer could be costing you $150 a year in energy cost." Mass Save will pick up and recycle a working second refrigerator and pay you $50! Call (877) 545-4113 or visit Masssave.com -- "For the Home, Rebates and Incentives." (If a second fridge is a must, simply turn it off when it isn't needed or consider downsizing to a small Energy Star compact fridge.)

9. **Turn off lights and electronics** when no one is in the room, plug electronics into power strips with a switch that can be turned off when devices are not in use. Electronics such as TV's, stereos, computers, printers, and DVD players use power even when off. Turning off the power strip switch cuts off this wasted power. **Video game consoles** such as XBox and PlayStation use a lot of energy when in standby mode. "The best thing to do is simply turn off your video game console whenever possible **AT THE POWER STRIP**. Another good option is to use the power management features already built into your device. These features are often disabled initially, so you have to activate them yourself, but they can save tons of energy without negatively affecting your gaming experience. Video game consoles also use much more power when used for nongaming purposes—like watching movies—than a stand-alone device such as a DVD player. So if you're craving a movie, make sure to use a separate DVD player rather than your game console." City of Palo Alto Energy Tips October, 2013. http://www.cityofpaloalto.org/news/displaynews.asp?NewsID=1194&TargetID=235
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10. Don't leave computers on
The U.S. Dept. of Energy recommends using standby (sleep) mode on your computer if you won't use it for at least 20 minutes (or program the computer to do this automatically), and turning it off if you won't use it for at least 2 hours. The DOE points out that it is a myth that you shouldn't turn off computers. Also, screen savers are not energy savers, and the power-down feature may not work if you have a screen saver activated. Modern LCD color monitors do not need screen savers at all. Keep in mind that ENERGY STAR-labeled computers use 30%-65% less energy than computers without this designation, depending on usage. http://energy.gov/energysaver/articles/energy-efficient-computer-use

11. Reduce your hot water use. Heating water takes more energy than you might think!
Take showers of 5 minutes or less, don't leave water running when you do dishes, and when using the clothes washer, do some loads using cold water for wash and rinse cycles. NStar recommends turning the water heater down to 120 degrees for energy saving and safety.
http://www.nstar.com/residential/energy_efficiency/spring_summer.asp

12. Install a low flow shower head. This can reduce shower hot water use by 30%. Low flow shower heads are not costly, and are installed, if needed, during a Mass Save Home Energy Assessment.

13. Replace your most-used incandescent light bulbs with compact fluorescents or LED's, which use 75% less energy and last much longer. (When you do have to dispose of compact fluorescents, remember to take them to the Universal Waste Shed at the Needham Transfer Station since they contain a small amount of mercury.)

14. Wash full loads and use your dishwasher on the no-heat/air dry or energy saving setting. Much of the electricity used by the dishwasher is for heated drying.

15. Plug air leaks. Air infiltration substantially raises the cost of heating and cooling. Use caulking, door sweeps, outlet insulators, foam, and weather stripping to seal drafty windows and doors. (It may help to use an incense stick to find leaks.)

16. Replace an old refrigerator with an Energy Star appliance. EnergyStar refrigerators are twice as efficient as ones made before 1993. (And units with top freezers use less energy than a side-by-side.) Use the NStar "Home Calculator" to see how much you can save each year – it could be more than $150. www.nstar.com Check MassSave for rebates. www.masssave.com/residential/offers/rf-and-fr-ma

17. Replace an old furnace with a high efficiency unit. Replacing an old, inefficient furnace can reduce your heating bill by hundreds of dollars a year. Check the Mass Save website for rebates. www.masssave.com

18. Add insulation. A priority for reducing heating bills and not as expensive as other measures. Have a Mass Save no cost home energy assessment (See Action #1 above) and ask your home energy advisor what is needed and about rebates that pay 75% of the cost up to $2,000.

19. Buy a car with better gas mileage. Hybrids and electric cars are great, but any mile-per-gallon improvement is significant. Check on tax rebates for electric and plug-in hybrids.