STOUT GREEN GUIDE



Sustainable Practices

Revised July 2009

INTRODUCTION

Welcome to the UW-Stout Green Guide to Sustainable Practices. We hope that you keep this guide as a reference and share it with friends and colleagues. A PDF version of the Guide is available of the Environmental Sustainability Office website, http://www.uwstout.edu/sustainability/

Sustainability at UW-Stout Video - Check out all the GREEN projects at UW-Stout!

Calculate your carbon footprint on the earth by visiting: http://www.epa.gov/climatechange/emissions/ind_calculator.html

Ecological Footprint: Take this quiz to see how Green you really are: http://www.footprintnetwork.org/en/index.php/GFN/page/calculators/

TRANSPORTATION

Transportation is responsible for approximately a third of the average American's global warming impact. Americans use about 385 million gallons of gasoline every day, which means more than a gallon of gasoline every day for every man, woman and child.

- Ride a bike or walk
- Drive the speed limit. Most vehicles get the best gas mileage around 55mph.
 Every mile per hour above 55 requires increasingly more fuel since wind resistance becomes the limiting factor.
- Keep the tires on your car adequately inflated since tire pressure is important to fuel economy.
- Maintain your vehicle. Changing your oil, replacing the air filter, and doing all the other recommended maintenance will keep your car running efficiently and help it last longer.
- Carpool when you can. Carpooling with friends and coworkers saves fuel.
- Don't idle in your car. Idling wastes money and gas, and generates pollution and global warming causing emissions. Also, you only need about 30 seconds to warm your car before driving. So, you can save money, emissions, and time if you just get in and go.
- Combine trips to reduce total mileage.
- Remove excess weight from your car. For every 100 lbs. in your vehicle, your mpg is reduced by 2%.
- Consider gradually taking off when you get the green light for improved overall mileage. You consume gas much more quickly when you accelerate quickly.
- When driving around town and at lower speeds, roll down your windows to save gas. But it may surprise you to learn that when highway driving, it's more energy efficient to use your air conditioning. The drag caused by open windows while driving at higher speeds counteracts the energy saved by keeping the AC off.
- Pick a lane. Studies have shown that switching lanes frequently does not significantly save trip time. Instead, stop the constant surging to get into the empty lane and relax in cruise control.

WATER

A good mantra to keep in mind when thinking about water quality is "all the water I use today will be reused tomorrow." This simple saying allows us to think more carefully about where our water comes from, where it is going, and what is in it.

- Get leaky faucets and toilets fixed. A dripping faucet can waste about 20 gallons of water per day, toilets up to 200 gallons per day.
- Turn off the water when brushing teeth and save a gallon of water each time you brush.
- Keep showers short. A two-minute reduction in your daily shower time can save more than ten gallons of water. If every American used a gallon of water less every day, we would conserve the amount of water taken every two days from the Great Lakes. Showers account for 2/3 of all water heating costs.
- Wash clothes in cold water, and save 90% over the energy used when machines are set for hot cycles. If all American households switched to cold cycles, we could save the energy equivalent to 100,000 barrels of oil a day. The Menomonie Market Food Coop sells "green" laundry detergent for cold water washes.
- The University Housing laundry contract requires all front-loading washers, which use much less water than top-loading machines.
- Wear your clothes multiple times before washing, unless they're truly dirty. There
 is no need to wash clothes after only one wear. This saves water, energy and
 prolongs the life of your clothes.
- Hand wash dishes or only run your dishwasher with a full load, and use low power and low water modes.
- Install a low-flow shower head. Using less water in the shower means using less energy to heat the water.
- Avoid bottled water. On average it takes 3 liters of water to create a one-liter bottle of water. Water coolers are 75% less expensive than individual water bottles; plus, all tap water must pass rigorous quality tests in the United States. Use individually owned mugs/containers instead of disposable plastic water bottles.
- Say no to antibacterial soaps. Antibacterial soaps use chemical compounds to kill
 microorganisms and are persistent pollutants that have been detected in water
 resources, aquatic organisms and human milk. According to an FDA expert
 panel, antibacterial soaps offer no proven benefits over the use of regular soap
 and water.
- Use non-toxic cleaning supplies. Many cleaning supplies contain chemicals
 detrimental to aquatic ecosystems. There are several companies that make biodegradable, non-toxic cleaning supplies, which are carried at most stores. There
 are many excellent and cheaper cleaners that you can prepare quickly on your
 own. Try using borax, baking soda, washing soda, club soda, salt, distilled white
 vinegar, cooking oil or lemons.

- Anything going down storm drains goes directly to our waterways, NOT to the
 City's sewage treatment facility. During storms and spring snowmelt, litter in
 streets and parking lots (e.g. cigarette butts, plastic) will flow into these drains
 and get into our lakes, streams, rivers, and eventually the ocean. Properly
 maintain your vehicle- automobiles can leak many types of fluids that can get
 washed directly into storm drains. Don't wash your car on driveways or streets
 and avoid using salt.
- Natural landscaping with native plants will often eliminate any need for watering.
 In our region, grassy lawns generally don't need watering. The lawn may undergo a brief dormant period during late July and August, turning a dry brown, but it will recover with the cool moisture of September.

ENERGY

40% of U.S. energy use is in our homes, offices, and other buildings. Every kilowatt hour of energy saved corresponds to 1.5 pounds of CO2 emissions.

Lights

- Contrary to popular belief, if you will be gone for more than two minutes, it is more energy efficient to turn the lights off. The one exception is large areas, such as gymnasiums, that require time to warm up.
- Keep the lights in conference rooms and bathrooms off as a policy.
- If you're using incandescent bulbs for your desk lamps, replace them with compact fluorescent bulbs (CFLs). Replacing one regular light bulb with a compact fluorescent light bulb will save 150 pounds of carbon dioxide a year. CFLs save approximately 75% in electricity costs and last much longer.

Heating/Cooling

- During the summer, close blinds and drapes to block out the sun and keep the area cool.
- During the winter, leave blinds open to allow the sun to heat the room. If there is no sun, close the blinds to keep the heat in.
- In temperature controlled areas, keep windows closed. If you are uncomfortable with the current settings, contact facilities management for assistance 232-1104.
- If you have an adjustable thermostat, turn the temperature down by two degrees in the winter and up by two degrees in the summer. By simply doing this, you can save over 1 ton of greenhouse gases from being released into the atmosphere.
- Don't use space heaters- they use more energy than all your lights, computer, printer, and other office appliances combined.

Appliances

The term "phantom load" is used to describe energy drawn from appliances that are not actually in use but still draw electricity. In the average home, 75% of electricity used to power home electronics is consumed while the products are turned off. Any device that requires resetting after a blackout or power surge is a cause of phantom load (cell phone chargers, computers, stereos, VCRs, toasters, coffee makers, blenders and other kitchen appliances and home electronics).

- If you have electronic appliances that are rarely used, leave them unplugged.
- Turn off your computer, monitor, printers, copiers, and laptop when not using them. Turning them off and on doesn't shorten their lifetime.

- Set your computer, monitor and laptop to go to "sleep" when they're idle. Takes only a few seconds to set but reduces energy usage 90%. Don't use screensavers! They don't save energy, they use it.
- Plug all appliances into one power strip. When you are not using those appliances, turn off the entire power strip. Even though a device is off, it is still using energy if it is plugged in.
- Make sure your refrigerator is set between 38-43°F and that your freezer is set between 0-5°. Also, make sure your refrigerator doors seal properly. To check, make sure that a dollar bill closed in the door is difficult to pull out. If it slides easily, you should get your fridge checked out.
- Use your microwave, which is more energy efficient than electric ovens. If every person in North America used microwaves only, we would save in a year the amount of energy that all of Africa uses in the same time span. And keep your microwave clean – a cleaner microwave works better and cuts down on energy use.
- Air dry clothes- it saves energy and reduces greenhouse gas emissions.

WASTE REDUCTION

For every garbage can placed at the curb, there are 17 cans of waste created in the extractive and industrial processes used to convert raw materials into finished products and packaging. The average office employee generates a ton of garbage each year nearly half of it paper. This corresponds to nearly 19 trees.

General Guidelines

- Buy products with as little packaging as possible. If every American bought just one minimally packaged item out of every ten purchases, the waste eliminated from landfills each year would be enough to cover all of New York City's Central Park with a 27ft high layer of garbage.
- Start using a reusable water bottle. Disposable plastic water bottles are made from petroleum and natural gas which must be mined, refined, and transported to a manufacturing facility. About 75% of water bottles that could be recycled end up in landfills.
- Use reusable bags or a backpack at the grocery store to avoid using plastic bags. The U.S. uses 100 billion plastic shopping bags per year. That's about 333 bags per year per person -- nearly a bag per day.
- Pack lunches and snacks in reusable containers.
- Set copiers and printers for double-sided printing.
- Reduce junk mail. The average American home receives a tree and a half's
 worth of junk mail each year. To eliminate junk mail, register (for \$1) with the Mail
 Preference Service at https://www.dmachoice.org/MPS/. Recycle any junk mail
 you continue to receive.

Electronic Communication and Forms

 Communication studies show that people are more likely to read email than postcards and other printed mass mailings.

- UW-Stout Today is a daily email sent to all staff members to keep the campus informed of news and events. For questions, contact <u>today@uwstout.edu</u>, or ext. 2381
- Campus Life Today is the all student daily e-mail. To put an announcement in the student daily e-mail, send submissions to <u>campuslifetoday@uwstout.edu</u> by 10 a.m. For questions or concerns, contact the Student Organization Center at soc@uwstout.edu or ext. 1772
- If you have a multi-page or graphical document that you want to communicate, you can post a PDF on your website and share the web address via email.
- Most types of documents can be easily converted to PDFs using the options under the Print menu or the Acrobat menu. If you have trouble finding or using these options, call ASK 5000 for assistance.
- To create PDFs from multiple files, you need Adobe Acrobat. Contact ASK 5000 for more information.
- Use electronic forms when available. They have many benefits over paper forms: saves time -- you don't have to enter in the information by hand; saves money -- no printing costs; saves trees and energy; and saves filing space.
- In 2005, Stout instituted the Imaging Program to reduce the use of paper for record keeping. As a result of the project, the Financial Aid office eliminated 36,000 paper printouts and 7,500 file folders a year.

Recycling

Recycling is one of the most important and easiest parts of environmental stewardship. By recycling just half of a typical household's waste, you can save 1.4 tons of greenhouse gases from entering the atmosphere. At UW-Stout, we recycle mixed paper, shredded paper, corrugated, glass, plastic, aluminum, tin, scrap metal, shrink wrap, scrap wood, sawdust, tires, lead acid batteries, dry cell batteries, light bulbs, ballasts, ink jet cartridges, laser jet cartridges, used cooking oil, used motor oil, used oil filters, concrete, power plant ash and all appliances.

- In the academic buildings use the co-mingling recycling containers to recycle all aluminum cans, steel containers, glass bottles/jars, and #1 and #2 plastic bottles.
 In many of the residence halls, recyclables need to be sorted into the appropriate recycling bin.
- Paper (office paper, newspaper, magazines, packaging without wax coating such as 12 pack container boxes) should be placed in the separate paper recycling bins.
- Cardboard should be placed next to the paper recycling bins, or contact the custodian in your building for pick up.
- Compact fluorescent light bulbs: give to custodians for pick up
- Electronics: call Surplus for pick-up.
- In 2008, the procurement office switched to 5R Processors, Ltd., an electronic recycling company with a zero landfill policy and no pick up or recycling fees.
 Now, all parts of the university's unwanted computers equipment is recycled or

- sold back to the electronics market, with a percent of the proceeds returning to the university.
- To request recycling bins or special receptacles for rechargeable batteries, printer cartridges and toner cartridges, contact Bob Dodge at dodger@uwstout.edu
- The <u>Dunn County Solid Waste Division</u> website is a great resource for recycling and hazardous waste disposal information.

SUSTAINABLE PURCHASING STRATEGIES

Buy Recycled Products

In order to make recycling work, collected recyclables need to be made into new useful products which are purchased and used. Buying recycled products is called "closing the loop". Millions of trees, as well as other valuable environmental resources, can be saved if more recycled material was used for new products.

Equipment Sharing

The most sustainable and cost-effective equipment is the equipment you don't have to buy at all. Find ways to strategically share equipment, particularly items that are infrequently used.

Paper

The most sustainable and cost-effective paper choice is not to use paper at all. Disseminate announcements and documents electronically whenever possible.

- When you do have to purchase paper, keep the following in mind: Office Depot's 30%, 50% and 100% post consumer recycled paper is excellent quality and brightness and will not cause printer jams. Extra Bright paper is more expensive and produces more water and air pollution due to additional bleaching.
- All white copier and printer paper on campus contains 30% post consumer recycled content and is Green Seal Certified- Sustainable Forestry Initiative.
- Buy 100% recycled toilet paper. If every American home replaced a single 12roll pack of regular toilet paper with recycled each year, it would save five million trees.

Appliances

- Purchase Energy Star when replacing these appliances: refrigerators, microwaves, toasters, coffee makers, computers, printers, scanners, copiers.
- Energy Star appliances use 25-50% less energy. The Procurement and Materials Management department at UW-Stout currently requires the purchase of energy star certified products whenever the option is available.

Remanufactured cartridges

- Remanufactured cartridges cost up to 30% less than original equipment cartridges
- Each original equipment cartridge replaced with a remanufactured cartridge saves half a gallon of oil worth of plastic.
- Many laser jet cartridges have a return package in the container with them so you can send the empty cartridge back to the company for recycling at no charge

Batteries

- Rechargeable batteries cost much less than disposables in the long run. The
 cost of a set of rechargeable batteries and a recharger is recouped after
 recharging the batteries 7 or 8 times, while the batteries can be recharged
 hundreds of times.
- One recharger is usually sufficient to maintain a supply of charged batteries even for a large office.
- Rechargeable batteries are recyclable. To request a container, contact Bob Dodge at <u>dodger@uwstout.ed</u>
- Disposable batteries are <u>not</u> recyclable -- they are disposed of in the garbage and may present a potential pollution problem.

Other Green Purchasing Practices

- Look for labels that let you know the product is certified as environmentally friendly. But don't blindly accept a product that calls itself "green" and doesn't offer any substantiation. A few tips on labels: Look for the Green Seal or Scientific Certification Systems labels, or other labels offered by respected environmental organizations. For wood products, look for Forest Stewardship Council (FSC) certified labels. For seafood, look for Marine Stewardship Council (MSC) certified products. For coffee, look for fair trade, organic and shade grown.
- Support local independent businesses. Local merchants preserve community character, ensure product choice and diversity, and stimulate the local economy by relying upon local goods and services.
- Buy higher quality durable goods and avoid poor quality disposable items.

EATING GREEN

On average, American food travels about 1200 miles from the farm to the consumer. Forty-three thousand tons of food is thrown out in the United States each day.

- Eat lower on the food chain. Meat production can be energy, resource and pollution intensive. Eating a diet rich in fruits, vegetables, grains and legumes is healthier and easier on the planet. Consider exploring vegetarian options.
- Eat locally -- it saves transportation costs and helps the local economy.
- Take only as much as you can eat.
- Avoid throwaway plates, cups, flatware and trays. Carry and use your reusable mug. Eat at food service areas where you can use ceramic plates and cups, metal silverware and reusable trays.
- Avoid take-out food which is over-packaged.
- Recycle pizza box tops (if not contaminated by grease).
- Order Fair Trade, Shade Grown coffee for daily office use and special events.
 Fair Trade coffee ensures farmers receive a fair price for the coffee and ensures fair labor conditions. Shade grown coffee helps protect rainforests and bird habitat and requires fewer chemicals.
- Kick the bottled water habit. It takes more than 17 million barrels of oil annually to produce bottled water and 86% of the plastic bottles used the U.S. are not recycled. Buy a reusable bottle and choose tap water over bottled water whenever possible.

WEB RESOURCES FOR INFORMATION AND TO GET INVOLVED

- Big Green Purse http://www.biggreenpurse.com/
- Brighter Planet http://brighterplanet.com/
- Center for a New American Dream http://www.newdream.org/
- Green For All http://www.greenforall.org/
- Green Student U http://www.greenstudentu.com/
- GreenSense- UW-Stout's Student Environmental Organization http://greensense.uwstout.edu/
- Science, Society and the Environment (BIO 111) Web Resources- great list of GREEN resources http://www.uwstout.edu/faculty/jamesk/bio_111/resources.htm
- Sustainable Dunn- nonprofit local organization for educating and promoting environmental stewardship http://sustainabledunn.org/5.html