



What It Means to Go Green: Reduce, Reuse, Repurpose, and Recycle

Rebecca Mills, M. Ag.

Extension Assistant Professor

Family & Consumer Sciences/4-H Youth Development

People and businesses around the world are concerned about the environment and the availability of natural resources for future generations. This concern is evident in the development and marketing of products like energy efficient appliances, vehicles powered by alternative fuel sources, and even biodegradable potato chip bags. What does it all mean and why is it something to learn about or do? This fact sheet defines some basic terms related to resource use and shares ideas of how simple choices can have a positive impact on the well-being of citizens, businesses, and the environment.

Reduce

Simply put, reduce means “less” as in “use less” or “make less of.” In environmental or “natural” terms it could mean something as simple as turning off the faucet while brushing teeth, thus REDUCING water use. Other ways to REDUCE could be:

- Carpool/walk/bike (reduce fossil fuel use, emissions).
- Turn off/unplug electrical appliances when not in use (reduce electricity use = \$\$ savings).
- Compost green waste like kitchen scraps or lawn trimmings (reduce garbage in landfill, create a usable product for later).
- Switch to energy efficient light bulbs and appliances (save on energy costs).

- Make double-sided copies (reduce paper use).
- Go electronic—emails, document sharing, online bills/bill pay (reduce paper use).
- Catch and store rainwater for outdoor watering (check first with local ordinances).
- Buy in bulk or purchase products with minimal packaging (reduce waste).
- Have household names/addresses removed from junk mail lists and credit card offers (reduce paper use; for more information visit www.dmachoice.org or www.optoutprescreen.com).

The Environmental Protection Agency (EPA) reports that paper products amount to 28.2% of all municipal solid waste generated in the United States which is the second largest category of all solid waste types reported. The largest category at 29.4%, titled “Other Wastes,” includes food scraps, yard trimmings and miscellaneous inorganic wastes. Small efforts like composting or making double-sided copies could make noticeable differences in the reduction of these two categories.

Efforts to reduce waste are possible in the home, at school, and in the workplace. Even if organized recycling efforts are not available, people everywhere can reduce waste by making simple changes every day.

Reuse

Reuse means using a product again for the originally intended purpose. Reusing items also contributes to the “reduce” principle. Reusing reduces the need to purchase a newer version of an item or product. A simple understanding of supply and demand shows that less demand equals less supply/production. By reducing the need for new products there is less impact on the environment from manufacturing processes as well as less garbage in the land fill. It is a win-win!

Here are some creative ways to reuse items:

- Using a refillable beverage container. (Note: be sure to purchase a “BPA free” product.)
- Store emergency water in green two-liter soda bottles. (Note: Not all types of plastic are recommended for long-term storage or reuse because of deterioration. Be sure your bottles have a number 1 or 2 on them, certifying approval by the Federal Drug Administration (FDA) for use with food/beverage products. Rotate home water storage every 12-18 months.)
- Switch out plastic baggies for plastic containers that can be washed and reused.
- Buy an artificial Christmas tree.
- Use plastic grocery bags as trash bags for small trash cans.
- Purchase/make reusable grocery bags.
- Donate clothing, furniture, and other household goods to charity or others in need.

Repurpose

The word “repurpose” takes on a combination of the terms reuse and recycle and brings a creative flare to the mix. Another term referring to this type of use is “upcycle.” Repurpose literally means give an item a new purpose whereas reusing something utilizes the product in its original intended form (container = container, etc.). When repurposing, a container could become a decorative wall hanging or a wall hanging could become a container—the possibilities are endless! Repurposing is a popular way for youth and adults to engage creativity in environmental awareness. A simple internet search will result in hundreds, if not thousands, of ideas to

repurpose items and give them a fresh, new, creative use.

Here are a few repurposing ideas:

- Faux metal art from toilet paper tubes (search <http://suzyssitcom.com> for a free tutorial).
- Pen holder from phone book (search “phone book pen organizer” at <http://www.chicaandjo.com>).
- Grocery bags from t-shirts, pet food bags, crocheted/knitted “plarn”: “yarn” made from plastic bags (search <http://tipnut.com> for “reusable grocery bags”).

Recycle

The Environmental Protection Agency (EPA) defines recycling as follows: “Residential and commercial recycling turns materials and products that would otherwise become waste into valuable resources. Materials like glass, metal, plastics, paper, and yard trimmings are collected, separated, and sent to facilities that can process them into new materials or products.”

The processing of recyclable materials happens in a variety of ways depending on what is being recycled and what the recycled material becomes. For example, plastic bottles are cleaned, sorted according to type (numbers 1-7), and shredded. The shredded plastic is heated to a specific temperature hot enough that the plastic can be formed into small pellets. Manufacturing companies purchase the pellets from plastic recyclers to make a myriad of “new” products from carpet and backpacks to decking and playground equipment.

Another unique recycling process happens with paper. At a recycling mill, paper goes into a large container similar to a household blender. The addition of water in the mixing process turns the paper into a pulp. Depending on the “new” end product, non-recycled paper may be added before manufacturing is complete. Products containing recycled paper range from paper backing on roofing shingles to toilet paper and kitty litter.

Here are other examples of products made using recycled materials:

- Glass: new glass bottles/jars, fiberglass, sand for road work/winter traction.
- Plastic bottles: sleeping bags/ski jackets insulation, polar fleece fabric, Frisbees, new plastic bottles and containers.
- Paper/cardboard: new cardboard, sheetrock, new paper, paper towels, egg cartons, phone books, building insulation, paper plates.
- Metal/aluminum cans: new aluminum cans, bike/car parts, appliances.

Conclusion

Understanding words related to “going GREEN” can be helpful when making consumer decisions. Individuals, families, businesses, and organizations can make important impacts by taking simple steps to reduce, reuse, repurpose, and recycle.”

Sources

- American Chemistry Council. (2012) FAQ: The safety of plastic beverage bottles. Retrieved from:
http://www.plasticsinfo.org/beveragebottles/apc_faqs.html
- Maine State Planning Office. (2006). What do your recyclables become? Retrieved from:
<http://www.maine.gov/spo/recycle/residents/whatrecyclablesbecome.htm#newspaper>
- Squidoo.com. (2012). 50 things you can reuse. Retrieved from:
<http://www.squidoo.com/reuse-everything>
- United States Environmental Protection Agency Office of Solid Waste. (2010). Municipal solid waste in the United States 2009 facts and figures. Retrieved from:
<http://www.epa.gov/wastes/nonhaz/municipal/pubs/msw2009rpt.pdf>

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran’s status. USU’s policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decision.

Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran’s status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.

This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University.