

## Reduce packaging waste

Smart choices to use less and recycle more

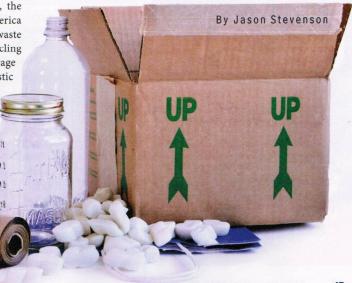
he simple click of your mouse can make a toaster oven, DVD, or even a garden gnome appear on your doorstep a few days later. But that new gnome will be encased in an oversized box stuffed with foam peanuts, twist ties, and shrink-wrap—all eventually destined for the local dump. Of the 254 million metric tons of waste generated in the United States in 2007, containers and packaging accounted for 31 percent. We landfill more corrugated cardboard boxes—8.2 million metric tons—than newspapers, office paper, and junk mail combined. And we still discard twice as many plastic soda bottles than we recycle.

"If you want to have the most beneficial impact on waste, you need to focus on the first R: reduce," says Phil Simmons, an engineer at Hydroqual, a New Jersey-based environmental consulting firm. For any packaging you can't avoid, turn to the other R's: reuse and recycle. To reuse, save sturdy boxes to ship gifts or store books, or flatten to make art projects, says Michelle Bexelius, founder of ecokido.org; use glass and metal containers to organize household items like art supplies.

Recycling, however, takes some specific know-how. "When it comes to recycling, metals are almost always in demand, but plastics are trickier," says Simmons, the primary author of the 2006 State of Garbage in America Report, a state-by-state quantitative overview of waste generation and recovery. Most curbside recycling programs accept #1 and #2 plastics, such as beverage and detergent containers, but fewer also collect plastic film, such as grocery bags, dry-cleaner bags, and plastic wrap. As a result, less than 12 percent of all plastic packaging is recovered; the rest ends

up in a landfill, discarded by a recycling center, or thrown out by a frustrated consumer.

Cut back on packaging consumption by buying in bulk, finding gently used goods, and shipping online orders together (for more, see "Seven Instant Packaging Savers," page 49). Next, recycle religiously, and visit your city or county's website to learn which numbered plastics and other materials they accept. And finally, recognize that not all packaging materials are created equal. Plastics, metals, glass, and paper all carry different environmental costs-and the good-versus-bad breakdown may surprise you. "It's not just the materials we put in recycling bins, but also all the energy and resources to make the item," Simmons explains. For instance, producing brand-new glass bottles requires twothirds more energy than producing new plastic bottles. Consult the chart on page 48 for information about which packaging materials cause the most damage and which offer the most hope.



## family

## Which is better:

## Glass, plastic, or paper?

Compare the eco-impact of different packaging materials using this chart. For perspective: The average U.S. home burns 11,000 kilowatt hours of energy and produces 16,000 pounds of carbon dioxide through electricity use per year.

Material	Energy cost to produce \$1,000 worth	Green- house gases produced	Amount recovered in 2007	Landfill lifespan	Alternatives
Glass containers	6,944 kilowatt hours	3,527 lbs.	28%	1 million years	Always recycle glass— otherwise your great- great-great grandkids might find a bottle you threw away
Plastic containers (#1, #2, #5)	3,889 kilowatt hours	2,425 lbs.	14%	450 years	Reduce use of throwaways, and try to buy easily recyclable #1 and #2 plastics.
Plastic bags and film	3,611 kilowatt hours	2,270 lbs.	10%	500-1,000 years	Use canvas grocery bags; wrap sandwiches in napkins.
Polystyrene foam peanuts	3,333 kilowatt hours	2,078 lbs.	7%	500 years	Cushion fragile shipments with crumpled newspapers or magazines. Drop off excess foam packaging peanuts at your local FedEx or UPS store.
Coated and uncoated paper bags	3,889 kilowatt hours	2,381 lbs.	37%	1 month	Switch to reusable canvas bags, and always recycle paper bags.
Coated and laminated paper, including gift wrap, tissue, and butcher paper	3,611 kilowatt hours	2,151 lbs.	Negligible	2–5 months	Wrap gifts in newspaper comics pages or reusable fabric wraps.
Corrugated cardboard	4,444 kilowatt hours	2,645 lbs.	74%	1-2 months	Buy packaging-free products. Reuse cardboard boxes and compost shredded cardboard.
Steel and aluminum cans, boxes, and other containers	4,722 kilowatt hours	3,262 lbs.	54%	200-400 years	Fill reusable containers at the bulk bins, and always recycle steel or aluminum containers.

 $Source: Economic\ Input-Output\ Life\ Cycle\ Assessment\ (EIO-LCA),\ eiolca.net/copyright/index.html.$