Fact Sheet HE 3167

UNIVERSITY OF FLORIDA
Cooperative Extension Service
Institute of Food and Agricultural Sciences

# Enviroshopping[1]

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You have tremendous influence in the board rooms of American companies. They listen each time you open your wallet. They will listen when you say "Reduce, Reuse, Recycle." They will listen when you "Reject and Respond." As an enviroshopper, consider the environment when you compare the convenience, the cost and the quality of your purchases. You will feel proud that you did "the right thing" for yourself and future generations.

Grains of sand make mighty sand dunes, and bits of trash make mountains of garbage. In Florida we throw away about eight pounds of garbage per person each day. The national average is about 3.5 pounds per day. The Florida rate is increased somewhat by the trash from our visitors (about 35 million each year).

What is the significance of this garbage? When we throw it away, it gets buried at the landfill or burned for electricity, and we never have to think about it again, right? Wrong! Excess trash affects us in many ways, even long before it becomes trash. There is potential damage to the environment when the raw materials are mined or drilled or extracted, and then transported to the factory. Air and water pollution occurs during manufacturing, storage and transportation of the finished products to the retail store.

Since energy is used in each of these steps, there are environmental consequences. From coal, oil or gas-fired electrical energy, there are large amounts of harmful atmospheric pollutants. The transport of fossil-based fuels can also degrade the environment, such as oil spills occurring in the ocean. And the production of fossil-based fuels affects the environment, as when coal is strip-mined.

Hydro-electric power is not without its environmental effects. To create the power source, thousands of acres of land are dammed up and flooded. As a result, the river ecology and wildlife habitat are destroyed. Nuclear power, too, produces radio-active waste for which we have not yet found a solution.

Most people are aware of the environmental damage possible when disposing of waste by landfill or burning. Few people realize that creating a product such as packaging from raw materials causes more environmental damage than disposing of it. The damage is a direct result of the large amounts of energy consumption associated with each product.

When the solid waste is placed in a landfill, it continues to affect the environment. Landfills that were built before today's strict standards went into effect have the potential to contaminate water supplies. Litter continues to blight our roads and highways. Some discarded products harm wildlife, both on land and in water.

Excess trash also wastes resources. The raw materials we use to make our paper, plastic and other materials, all need to be conserved for future generations.

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Thirty percent of our household waste is packaging. But we can't just do without it. It is a necessary part of our marketing and distribution systems. It performs several functions as it:

- protects food from light, heat, oxygen, natural contamination, tampering. It preserves food and prevents food waste.
- protects consumer goods from crushing, spoiling, and shoplifting.
- protects children from ingesting drugs, and hazardous chemicals.
- informs consumers of proper use, storage, features, and warranty.
- provides for easier warehousing, transportation, and distribution. Can be handled with large mechanical equipment.
- provides convenience to the consumer in ready-to-eat, single-serving, disposable and microwavable foods.
- encourages quantity purchases such as multi-packs.
- appeals to the eye of the shopper and draws it away from competition.
- attracts shopper with larger size packages and use of more shelf space.

Packaging varies widely in its efficient use of materials. Much packaging is designed for the utmost efficiency. Some packaging however, is excessive. Excessive packaging wastes energy and valuable materials and contributes to the waste disposal problem. Some of the improvements made for convenience sake or to increase shelf life, may produce packages that use more materials, or are more difficult or impossible to reuse or recycle.

The amount of packaging going into the waste stream CAN be reduced significantly. It's up to you. Do your part. **Be an Enviroshopper!** Follow the five "R's" of enviroshopping:

- **REDUCE** the amount of packaging you buy and throw away.
- **REUSE** and
- **RECYCLE** whenever possible.
- **REJECT** packaging that is unsatisfactory and
- **RESPOND** to producers and retailers to let them know how you feel.

## REDUCE

We consumers have become hooked on convenience and pay millions of dollars for it. We prefer to buy sixteen one-use spray bottles full of ready-to-use spray cleaner rather than a single bottle of concentrate to mix on our own. Why? Because we like no muss, no fuss, "convenience!"

Enviroshoppers are willing to give up some of that convenience to reduce their garbage production by **PRECYCLING**. When you precycle, either you choose products and packaging with less environmental impact, or you decide to do without it and just don't buy it at all. If you never buy it and bring it into your home in the first place, then you don't have to "manage" it. You don't have to figure out if it can be reused or recycled, and you don't have to dispose of it.

In the table section, *Table 1*, Summary of National Energy Savings from Packaging Reduction, shows the impact in energy savings of various packaging reduction actions by consumers and industry. Reducing all packaging in general could save the equivalent of **seven million** barrels of oil each year. Imagine seven million barrels of oil going up in smoke, creating massive amounts of air pollution, all to produce packaging that we throw away. Your precycling actions **will** make a difference.

Enviroshoppers compare the convenience of a product to its environmental impact. In some cases you will need the added convenience that only a certain type of packaging can provide. But where convenience is marginal, or is not that important to you, choosing less is better, from an energy, conservation and environmental point of view.

## REUSE

Present day packaging is a wonder of modern technology. It is often durable, versatile and attractive. Whenever you can, think of ways to reuse packages. Reuse will save you the money of buying a replacement item, it will save the energy, materials and landfill space for Florida, and reduce pollution.

Here are some "reuse" examples:

- Cover an old wooden box with fabric, add a cushion to the top, and you have a new stool to sit on.

- Drawstring mesh citrus bags make good laundry bags. Hang one on door knob in each child's room. They might use them! Use only for children old enough to handle the string safely.

- Frozen and convenience microwave foods often come with their own dish. Reuse these dishes for making your own convenience meals. When you cook, cook extra or use leftovers to refill the dishes, wrap in freezer wrap or place in a freezer container, and you have your own "instant" meals.

- Plastic bags and wraps can be reused for storing items.

- Packing materials such as polystyrene, plastic quilting and similar packing materials can be saved and reused for the same purpose.

- Plastic containers can be reused for food storage, also for scoops and watering devices. Glass jars can help organize nails and tacks and other household and shop items.

- Call your local social service agencies, such as schools, child care centers and senior centers, to see if they need empty containers for projects for their clients.

Packaging provides an excellent resource for your creativity. You have paid for it — you might as well make use (and reuse!) of it.

## RECYCLE

Recycling is an important part of our waste management strategy. In Florida especially we are required by state law to reduce our solid waste through recycling.

Recycling also saves energy. Producing packaging material from recycled stock takes less energy than making it from new raw materials. In the table section, *Table 2*, Energy-Saving Potential by Recycling, shows how much energy is saved.

Aluminum yields the greatest energy savings. In fact, if a family of four saves for cans a day for a year, they would save the equivalent energy in gasoline to drive a 30-mile per gallon car about 2,000 miles. We cannot afford to waste either aluminum or the energy. It's important for each of us to recycle as much as possible.

What kinds of packages can you recycle? Aluminum and glass are recyclable. Some paper and some plastic containers can be recycled. Steel of "tin" cans are recyclable. They all are easier to recycle when they are single material packages, rather than a mixture of two or more in one package. Many food packages are made from recycled glass, aluminum and paper products. Recycled plastic, however, cannot be used for food. All plastic food containers are made from new plastic. The Food and Drug Administration has not yet approved recycled plastics for use in food containers.

Closing the loop — For recycling to succeed, it depends on you. You have to provide used materials to be collected and reprocessed. But that is only the beginning of your role in recycling. **No material is really recycled until you buy it again after it is made into something new.** It is up to you, as an enviroshopper, to buy recycled materials whenever you can. Look for the recycled symbol on packages you buy.

## REJECT

Enviroshoppers reduce, reuse and recycle. In doing so, they also reject materials and products that cannot be reduced, reused or recycled.

For example, you can reject packaging that uses more material than necessary. One way to do that is to buy the largest quantity possible in one package. Two quart containers contain more packaging material than one half-gallon container. So much more that if 70 million American households bought a half-gallon container of milk a week instead of two quarts, they would reduce paper discards by 41.6 million pounds and plastic discards by 5.7 million pounds a year. This would save $145.6 million in packaging and more than 1 trillion Btu (British thermal unit) of energy, enough to heat and cool 7,500 households for an entire year.

You have the most powerful tool in our economy — your wallet. When shoppers stop buying a product, the producers find out why and make

changes to comply with their customers' needs. If you buy products and materials that are wasteful, harmful to the environment, or poor quality, you are sending a clear message that you want these to be produced. On the other hand, if you do NOT buy them, you are also sending a message. The producers will listen, either way.

## RESPOND

There will be times when you will not have a choice: a product you want to buy may not be available in a package that is recyclable or reusable. Perhaps the package of your favorite brand has been redesigned to incorporate several types of materials instead of one. Perhaps your grocer doesn't stock concentrated refillable cleaners.

In each of these cases, it is time for the fifth "R" of enviroshopping: **RESPOND**. Start with your local store manager. Let him know you are concerned about the solid waste problem. Ask him to stock refills. Ask him to offer loose produce. Encourage him to consider source reduction and recyclability in the products he offers for sale.

Contact the manufacturer of products in which the packages are not recyclable or are excessive. You can request that manufacturers reduce the toxicity of their packaging through changes in design and use of non-toxic inks, for example. You will find the name and address of the company on the package of all consumer goods. Many companies offer a toll-free telephone number. Look for one on the package, or contact your local consumer affairs office or local library to get telephone numbers for major companies. It takes only a small number of letters or phone calls from consumers for manufacturers to consider changes in their products.

You can encourage simpler, less complex packaging. Can label information be printed on a hanging label or peel-off tag, rather than needing a whole package? Perhaps a small tag or booklet could be tied to the product to give instruction for use, and eliminate the box. Less packaging can save money for the manufacturer, the consumer and the waste manager, and help to protect our environment and save our resources.

Encourage local government officials to initiate or expand a recycling program in your community. Suggest that government regulations be revised to allow for purchase of recycled materials for municipal supplies.

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Roy Johannesen, Mechanical Engineering Specialist, Energy Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Personal computations, 4/90.

Energy Table 1.

| Packaging Reduction Option | Potential Energy Savings/Year (in barrels of oil) |
|---|---|
| GENERAL | |
| General Packaging Reduction | 7 million |
| RETURNABLE CONTAINERS | |
| Increase in refillable soft drink containers | 1 million |
| Increase in reusable soft drink carriers | 265 thousand |
| Increase in 3-quart plastic milk jugs | 40 thousand |
| 10 percent increase in corrugated containers | 490 thousand |
| PACKAGE REDESIGN | |
| Replacement of 1/2 pt. milk pack with Ecopack | 2 thousand |
| Lightweight, new processes in soft drink containers | 490 thousand |
| LARGER PACKAGE SIZE | |
| Increasing sales of larger size soft drink containers | 75 thousand |

Energy Table 2.

| Material Recycled | Energy Saved by Recycling Per Ton | Energy Equivalent (gallons of gas) |
|---|---|---|
| Aluminum | 95 % | 1,915 |
| Plastics | 88 % | 695 |
| Newsprint | 34 % | 82 |
| Corrugated | 24 % | 51 |
| Glass | 25 % | 31 |