

360: Recycling Plastic Bags

by [Amanda Wills](#)

Earth911's [360 series](#) breaks down the ins and outs of your everyday items.

Many of us have plastic bags stuffed into the doors of our cars, under the kitchen sink or in various nooks in the garage. With about 89 billion plastic bags, sacks and wraps used each year, recycling is paramount.

In 2007, more than 830 million pounds of plastic bags and film were recycled nationwide, up 27 percent from 2005. Plastic bags can be made into dozens of new and useful products as well. So, let's get down the basics about plastics bags and figure out how to save this material from the landfill.



According to the EPA, in 2007, the U.S. generated almost 14 million tons of plastics in the municipal solid waste stream as containers and packaging, almost 7 million tons as non-durable goods, and about 10 million tons as durable goods. Photo: [Howstuffworks.com](#)

Top 10 Reasons to Recycle Plastic Bags

1. It's Right Around the Corner

According to the Plastics Division of the American Chemistry Council, more than 1,800 U.S. businesses handle or reclaim post-consumer plastics.

2. It's Worth a Thousand Words

Plastic bags *photodegrade*, meaning they slowly break down into smaller and smaller bits that can contaminate soils and waterways.

3. We Need a Boost

According to the EPA, only about 12 percent of bags and film were recycled in 2007.

4. Everyone Wants It

There is a high demand for this material, and in most areas, demand exceeds the available supply because many consumers are not aware that collection programs are available at stores.

5. It's Easier Than You Think

It takes 91 percent less energy to recycle a pound of plastic than it takes to recycle a pound of paper.

6. You Can Save a Trip

For every seven trucks needed to deliver paper bags, only one truck is needed for the same number of plastic bags.

7. Just Let It Burn

Plastics can help trash burn more efficiently in energy-recovery facilities, creating energy that can be used to make electricity in some communities.

8. It's Going Coast to Coast

Small plastic bags made up about 9 percent of the debris found along various U.S. coasts in a five-year study.

9. Save Some Gas

When one ton of plastic bags is reused or recycled, the energy equivalent of 11 barrels of oil is saved.

10. It's So Trashy

According to the EPA, the amount of plastics generation in municipal waste stream has increased from less than 1 percent in 1960 to 12.1 percent in 2007.

Tips on Recycling

Due to their light weight, most curbside programs do not accept plastic bags. They can easily get stuck inside machinery when recycled as well. However, most grocery stores throughout the U.S. now offer plastic bag recycling. However, the trick is actually remembering to take those excess bags with you next time you go to the store. Here are a couple of reminding tips:

- Hang a cloth bag in your kitchen or garage where you put excess plastic bags. It will be easy to notice once you leave the house.
- When filling out your grocery list, make sure to add "recycle plastic bags."
- Don't forget about the other light weight plastics! Plastic film, dry cleaning bags, newspaper bags and plastic wrap from products can be recycled at your grocery store as well.
- Toss your leftover plastic bags in your reusable shopping bags. You'll remember both on your next trip to the store.



Many grocers and retailers now offer drop-off programs that allow shoppers to return their used bags to be recycled. In most stores, bag collection areas are located at the front entrance or near checkout areas.
Photo: Independent.co.uk

The Recycling Process

A plastic bag is a thermoplastic, meaning it is capable of being repeatedly softened by heat and hardened by cooling.

1. First, the plastic is melted down.
2. The softened plastic is then pushed through an extruder. To visualize this, reflect back on the days when you owned a Play-Doh kitchen set and you made delicious plates of bright green spaghetti. Squeezing Play-Doh through the little machine to make it into noodles is similar to extruding.
3. An extruder die appropriately shapes the plastic before it is cut with a knife.
4. The end result could be a large piece of composite lumber or thousands of little pellets, which can be used to make other plastic products.

What's Next?

Although many consumers reuse plastic bags in their homes for daily tasks such as doggy duty or taking out the trash in the bathroom, there are still other products that plastic bags can actually become once recycled.

Plastic bags can be made into second generation products including durable building and construction products, door and window frames, exterior moldings, low-maintenance fencing and decks. Plastic bags can also be reprocessed into post-consumer resin used in the production of new bags, pallets, containers, crates and pipes.

Though the discussion of plastic bag bans has increased (the U.N. has even suggested a [global ban](#)), San Francisco is currently the only U.S. city to outlaw them.



Amanda Wills

Amanda Wills is the Assistant Editor of Earth911.com