

# Three Myths about Trash

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There are three things everybody knows when we talk trash:

1. We know we're running out of landfill space;
2. we know we're saving resources and protecting the environment by recycling;
- and
3. we know no one would recycle if they weren't forced to.

Let's look at these three things we think we know. Are they real or are they rubbish?

## 1. Are We Running Out of Landfill Space?

Two events created the perfect garbage storm in the late 1980s. One barge and one bureaucrat created this overhyped myth. The garbage barge was the *Mobro 4000*. The bureaucrat was J. Winston Porter.

The *Mobro 4000* gained celebrity status by spending two months and 6,000 miles seeming to scour the Atlantic coastline and the Gulf of Mexico looking for a home for its load, as if no landfills existed. The physical availability of landfill space was not the issue, but you would not have guessed that from the hysteria the media whipped up.

J. Winston Porter became a star that season at the Environmental Protection Agency (EPA) by writing a report entitled *The Solid Waste Dilemma: Agenda for Action*, in which Porter proclaimed that recycling is absolutely vital because America is running out of landfill space.

What Porter thought he knew was simply not so. The EPA had noticed that the *number* of landfills was dropping. They failed to notice that the *size* of landfills was getting much bigger much faster. Total landfill capacity was actually rising. The EPA also underestimated the prospects for creating additional capacity.

Obviously, and as usual, the real landfill problem is not a landfill problem at all but a political problem. "Fears about the effects of landfills on the local environment have led to the rise of the not-in-my-back-yard (NIMBY) syndrome, which has made permitting facilities difficult. Actual landfill capacity is not running out."

Today, 1,654 landfills in 48 states take care of 54 percent of all the solid waste in the country. One-third of them are privately owned. The largest landfill, in Las Vegas, received 3.8 million tons during 2007 at fees within the national range of \$24 to \$70 per ton. Landfills are no longer a threat to the environment or public health. State-of-the-art landfills, with redundant clay, plastic liners, and leachate collection systems, have now replaced all of our previously unsafe dumps.

"We are not running out of landfill space."

More and more landfills are producing pipeline-quality natural gas. Waste Management plans to turn 60 of their waste sites into energy facilities by 2012. The new plants will capture methane gas from decomposing landfill waste, generating more than 700 megawatts of electricity, enough to power 700,000 homes.

Holding all of America's garbage for the next one hundred years would require a space only 255 feet high or deep and 10 miles on a side. Landfills welcome the business. Forty percent of what we *recycle* ends up there anyway. We are not running out of landfill space.

## **2. Are We Saving Resources and Protecting the Environment by Recycling?**

What are the costs in energy and material resources to recycling as opposed to landfill disposal, which we've just looked at? Which method of handling solid waste uses the least amount of resources as valued by the market?

As government budgets tighten and the cost of being "green" rubs against the reality of rising taxes, recycling coordinators like Auburn University's Leigh Jacobson will increasingly be under pressure to justify their programs as cost-effective alternatives to waste-disposal methods like landfills.

I don't think she will be able to do it. But it should be easier for Leigh at the university than it will be for her counterpart in the City of Auburn, or in any city that funds curbside recycling. Curbside recycling is substantially more costly — that is, it uses far more resources — than a program in which disposal is combined with a voluntary drop-off/buy-back option.

Overall, curbside recycling's costs run between 35 percent and 55 percent more than other *recycling* methods, because it uses huge amounts of capital and labor per pound of material recycled. Recycling itself uses three times more resources than does depositing waste in landfills.

The largest US organization dedicated to recycling just found out how difficult this chosen path can be. The final death knell for the National Recycling Coalition (NRC)

appeared to ring earlier this year when the organization announced it would be filing for Chapter 7 bankruptcy. The NRC ceased operations and terminated all staff members at the close of business on September 4, shortly after an attempt to merge with Keep America Beautiful failed. NRC is now trying to avoid bankruptcy by reorganization.

Even though they are a half-million dollars in debt, NRC may legally continue to exist if they can raise funds, negotiate with their creditors and develop a business plan. What seems to be their business plan? They are counting on the Kerry-Boxer Bill on clean energy to include recycling language. In other words, they are counting on being bailed out and subsidized. The market knows this is a losing proposition, so these players are trying to get taxpayers to fund their enterprises.

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The Solid Waste Association of North America found that, of the six communities involved in a particular study, *all but one* of the curbside recycling programs, and *all* the composting operations and waste-to-energy incinerators, increased the cost of waste disposal. Indeed, the price for recycling tends to soar far higher than the combined costs of manufacturing raw materials from virgin sources and dumping rubbish into landfills.

Recycled newspapers must be deinked, often with chemicals, creating sludge. Even if the sludge is harmless, it too must be disposed of. Second, recycling more newspapers will not necessarily preserve trees, because many trees are grown specifically to be made into paper. The amount of new growth that occurs each year in forests exceeds by a factor of 20 the amount of wood and paper that is consumed by the world each year. Wherever private-property rights to forests are well-defined and enforced, forests are either stable or growing.

Glass is made from silica dioxide — that's common beach sand — the most abundant mineral in the crust of the earth. Plastic is derived from petroleum byproducts after fuel is harvested from the raw material. Recycling paper, glass, or plastic is usually not justified compared to the virgin prices of these materials.

The best way to measure the scarcity of natural resources, such as trees, sand, or oil, is to use the market prices of those resources. If the price of a resource is going up over time (and it's not just inflation pushing those prices higher) the resource is getting scarcer. If the price is going down, it is becoming more plentiful. Indeed, since 1845, the average price of raw materials has fallen roughly 80 percent after adjusting for inflation.

This paradox of our having more by using more is explained by the use of the most important resource — man's mind. Human ingenuity makes natural resources increasingly available through prices, innovation, and substitution.

Bureaucrats, however, appear to occupy a place at the opposite end from human ingenuity. Their interferences in markets do damage. Just two examples will illustrate what I mean by that. One is about a light that has a dark side. The other example requires that you either clean your plate or become a composter.

In 2007, Congress *banned* incandescent bulbs — not exactly a market action. The phasing out of incandescent light is to begin with the 100-watt bulb in 2012 and end with the 40-watt bulb in 2014. By 2020, bulbs *must* be 70 percent more efficient than they are today. While a standard, 100-watt bulb costs \$1.24, the spiral compact fluorescent light (CFL) 100-watt sells for \$4.97. Advocates argue, however, that the CFL lasts longer and uses less energy. The packaging claims that after six years I will have saved \$74 in energy.

Thereby, in the year 2007 alone, under this edict, some 397 million compact fluorescent light bulbs were placed on the market. Their debut is counted as a success.

"Recycling would seem to be the philosophy that everything is worth saving except your own time and money."

However, the recycling of spent household CFLs has been an abject failure. Despite CFL-disposal bans in states like Maine, despite continuing statewide education efforts, and despite a free CFL-recycling program there, households throw the used bulbs into the trash that ends up in the landfills.

What's the problem with that? Landfills, as we've learned, have the space and the appetite for our waste. Well, the problem is the potential public and environmental health effects of the collective release of the small amount of mercury in each discarded CFL. For example, using the mean amount of 5 milligrams per CFL, the total amount of mercury contained in the 2007 shipments of CFLs alone is a large amount.

There is no mention on GE's packaging of the bulb's mercury component or any special precautions you must take when this bulb breaks.

Notice that "mercury free" is already a selling point for the producers of new LED technology Accent bulbs. "Accent" means you can't actually get enough light from them to read by. But, you can tell the packager has obviously experienced how ugly the CFL-produced light is, because the buyer is assured a *warm, white light*, which is something you do not get with a CFL.

In June of this year, Maine adopted the nation's first law that requires CFL bulb manufacturers to share the costs and responsibility for recycling mercury-containing CFLs through a producer-financed collection and recycling program, which must include an education component. This mandate will drive the CFLs' cost even higher. Additional specialized equipment will have to be created for handling light bulbs that will be seen to be hazardous waste. How can any savings ever result from such a boondoggle?

Then, bringing new depth and meaning to the word "boondoggle," San Francisco's newest mandatory-recycling ordinance took effect last month. All residences, all restaurants and all commercial buildings *must* participate in the city's recycling and composting programs. A recent study had unearthed the fact that 36 percent of the city's landfilled waste is compostable. That happens to be the ingredient that makes the landfill valuable as an energy source.

Collecting your food scraps, plant trimmings, soiled paper, and other compostables is considered necessary by San Franciscans to fight global warming. Residents get both a green cart and a green report titled "Stop Trashing the Planet." Residents face \$100 fines if they fail to separate their food scraps from their papers or cans. Businesses face fines of \$500. Really bad actors could be fined \$1,000. The stated goal is to get to *zero* waste, meaning no garbage at all going into landfills, by the year 2020.

Obviously, San Francisco believes we have run out of landfill space. Obviously, they do not have the vision to see the energy plants that landfills can become when waste is actually put in them.

In light of these facts, how can San Franciscans and others think recycling conserves resources? First, many states and local communities subsidize recycling programs, either out of tax receipts or out of fees collected for trash disposal. That's the case with Auburn University's recycling grant. Thus the bookkeeping costs reported for such programs are far less than their true resource costs to society. Also, observers sometimes erroneously compare relatively high-cost, twice a *week* garbage pickup with relatively low-cost, once or twice a *month* recycling pickups, which makes recycling appear more attractive.

"Mandated recycling exists mainly because there is plenty of money to be made by labeling products as "green" or "recycled" to get municipal and federal grants."

Why do these same people think that recycling is protecting the environment by not polluting? Recycling *is* a manufacturing process, and therefore it too has environmental impact. The US Office of Technology Assessment says that it is "usually *not clear* whether secondary manufacturing such as recycling produces *less pollution* per ton of material processed than primary manufacturing processes."

*Increased* pollution by recycling is particularly apparent in the case of curbside recycling. Los Angeles has estimated that its fleet of trucks is twice as large as it otherwise would be — 800 versus 400 trucks. This means more iron ore and coal mining, more steel and rubber manufacturing, more petroleum extracted and refined for fuel — and of course all that extra air pollution in the Los Angeles basin as the 400 added trucks cruise the curbs.

Manufacturing paper, glass, and plastic from recycled materials uses appreciably more energy and water, and produces as much or more air pollution, as manufacturing from raw materials does. Resources are not saved and the environment is not protected.

### **3. Do People Recycle Only When They Are Forced To?**

If all we knew about recycling was what we heard from environmentalist groups, recycling would seem to be the philosophy that everything is worth saving except your own time and money. Costs of recycling are mostly hidden. If we add in the weekly costs of sorting out items, it makes more sense to place everything in landfills.

But *private* recycling is the world's second oldest, if not the oldest, profession. Recyclers were just called *scavengers*. Everything of value has always been recycled.

You will automatically know that something is of value when someone offers to buy it from you, or you see people picking through your waste or diving into dumpsters.

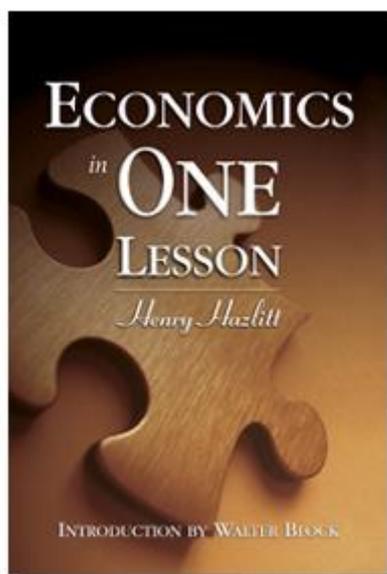
Aluminum packaging has never been more than a small fraction of solid waste, because metals have value. Ragpickers separating out cloth from waste may not be in season now, but cardboard, wood, and metals have always been in some demand.

Scrapyards recycle iron and steel because making steel from virgin iron and coal is more expensive. Members of the Institute of Scrap Recycling Industries recycle 60 million tons of ferrous metals, 7 million tons of nonferrous metals, and 30 million tons of waste paper, glass, and plastic each year — an amount that dwarfs that of *all* government (city, county, and state) recycling programs.

Recycling is a long-practiced, productive, indeed essential, element of the market system. Informed, *voluntary* recycling conserves resources and raises our wealth, enabling us to achieve valued ends that would otherwise be impossible. So yes, people do recycle even when they are not forced to do so.

However, *forcing* people to recycle makes society worse off. Mandated recycling exists mainly because there is plenty of money to be made by labeling products as "green" or "recycled" to get municipal and federal grants.

Henry Hazlitt and Ludwig von Mises speak to our recycling topic.



In [\*Economics in One Lesson\*](#), Hazlitt teaches us that mandatory recycling considers only short-term benefits to a few groups — politicians, public-relations consultants, environmental organizations, and waste-handling corporations — instead of looking at the longer-term effects of the policy for all groups. The negative consequence will be the squandering of human resources.

In conclusion, Mises also teaches us what to expect. Mises, in his great work [\*Human Action\*](#), does not say that recycling is a bad belief. He shows by example that mandatory recycling is an inappropriate *means* of caring about the environment. Waste is

inescapable. Austrian economics leaves it to every person to decide whether his or her belief in recycling is *more important* than the avoidance of the inevitable consequences of forced recycling policies: wasted natural resources and wasted human resources.

Floy Lilley is an adjunct scholar at the Mises Institute. She was formerly with the University of Texas at Austin's Chair of Free Enterprise, and an attorney-at-law in Texas and Florida. Send her [mail](#). See Floy Lilley's [article archives](#).