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Let's Talk Trash

A cheaper, greener way to deal with garbage.

By [Daniel Gross](#) | Newsweek Web Exclusive
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If you had to devise a product designed to succeed in this unique climate, it might be one that makes an eco-friendly, alternative-energy-powered, carbon-reducing, American-made, public-space-beautifying commodity that saves municipalities money and that can be purchased with stimulus funds.

In other words, it might be the **BigBelly solar-powered trash compactor**. Capital investment and discretionary spending have fallen this year, but BigBelly's sales are up 80 percent.

Early this decade, company founder Jim Poss, who had worked in the solar and electric-vehicle fields, was struck by the number of overflowing garbage cans he saw and the huge inefficiencies he detected in the carting business. Garbage cans are filled mostly with air and the trucks are expensive to operate—about \$100 per hour, all costs considered. "I figured there's a lot of inefficiency there. If you compact trash on site, you can make trucks and the people running them more effective." Instead of spending money driving trucks around--burning gas and spewing carbon dioxide into the ozone—we'd all be better served spending the same money on efficiency-producing compactors. Especially if those compactors keep streets clean by trapping garbage inside them and can be powered by a free source of clean energy: the sun.



Poss started the company while getting his MBA at Babson College. A solar panel on the top of the container charges a battery, and when volume reaches a certain level, it starts compacting with 1,200 pounds of force, providing a 5-to-1 reduction in volume. "On a busy day, it'll run for 15 minutes," says Poss. Since the compactor fills up more slowly than a garbage can, it doesn't need to be emptied as often. Which makes it a potential money-saver when used in remote areas—like ski resorts and state parks—or in urban areas where volumes of trash require frequent pickups. Funded by angel investors at first, Poss has raised about \$10 million in capital. He contracted with a firm in Vermont to manufacture the BigBelly and sold his first machine to Vail Resorts in early 2004.

Although it is made in America, BigBelly is reminiscent of a futuristic Japanese robot. Flashing lights indicate when it is full and needs to be emptied. Many are wireless-enabled, which effectively turns them into Twitterers—they transmit brief text messages to a centralized Web site to let owners know when

compactors are full. Like many smart green products, they're not cheap--and they're much more expensive than the dumb product they're hoping to dislodge. It costs about \$80 a month to lease a BigBelly, or from \$3,000 to \$3,900 to purchase one, though those buying in bulk get a discount.

As a rule of thumb, Poss says, if the installation of a BigBelly can save an hour of collection time per month on a garbage can, it pays off relatively quickly. "In a city that collects once per day, or in a park system where there's travel time of 10 to 20 minutes to reach a garbage can and they collect three times per week," it pays for itself in about three to four years. For a large-scale user who deploys them in a concentrated area, the savings can be greater. Earlier this year, **Philadelphia leased 500 BigBellys and placed them downtown**. In areas where the BigBelly operates, the city picks up the trash five times per week instead of 17. Poss says the city is saving \$800,000 a year in labor and fuel costs and will save \$12 million over the products' 10-year lifespan—without any reduction in service. Philadelphia has redeployed workers from collecting trash to recycling initiatives. "It's not a solution for every trash can in the world, but it is one for millions of trash cans in the U.S.," says Poss.

BigBelly is still more like a startup than an industrial giant. So far, the company has sold more than 3,000 units, with sales of 2,000 expected this year alone. Other areas of BigBelly concentration include Boston (more than 200) and Massachusetts state parks (about 100). BigBelly employs 24 people, and Poss says the company has "recently had a couple of profitable months." In June, BigBelly partnered with trash-removal giant Waste Management to sell compactors.

Like the compact fluorescent light bulb, BigBelly compactors are expensive replacements that can justify their high costs through savings generated over time, even in the absence of government incentives. But Poss anticipates that the stimulus bill may help. One challenge to adoption is that already pinched municipal budgets generally maintain separate line items for trucks, for collection, and for trash cans. But the BigBelly doesn't fit neatly into any of those. The flow of funds to states and municipalities, Poss notes, has given potential purchasers more flexibility to make investments that yield savings.

BigBelly is still a very small company, and the solar-powered compactors it has placed into service amount to a few biodegradable packages placed on top of a landfill. But its progress signifies a truism about this post-bubble economy: Efficiency is the new growth. In this period of universally tight budgets, products and services—even expensive ones—that demonstrate an ability to save resources and money are gaining traction. Said Poss: "People who were receptive to us because we're green are now really receptive to us because we save money, and, by the way, we're also green."

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