

Plastic Bags under Attack



Bans by Municipalities are Really Just a Big Eyewash

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The recent plastic bag legislation in San Francisco has spawned an intense discussion in cities across the United States. Issues addressing both the recyclability of plastic bags and their contribution to litter are being debated by local and state governments. How do we sort fact from fiction? What are the environmental and economic benefits of plastic shopping bags and why are they dispensed so widely at the retail level? Are plastic bags recyclable, and are they a significant portion of the municipal waste stream?

Today's polyethylene plastic shopping bag is a source-reduced modern marvel of engineering. A single bag weighs approximately 7-8 grams; however, it can hold up to 50 pounds of product – almost 3,000 times its own weight! Grocers and retailers provide plastic bags because they are strong, inexpensive, require less storage space, and are resource efficient. Like most polyethylene film, the plastic bag is a more energy efficient choice throughout its life cycle than alternative products, according to U.S. Environmental Protection Agency and European studies, producing between 60 and 79 percent less greenhouse gas emissions than uncomposted or composted paper bags, respectively. Because they are thin and lightweight, only one truck is

required to transport the same number of plastic bags as seven trucks of paper bags (even taking into account that plastic bags hold one-third less volume). Production of plastic bags uses less than four percent of the water required to produce paper bags.

In addition to these efficiencies, plastic bags are also highly recyclable. Currently, in the U.S., plastic bags are recycled predominantly through the nationwide grocery and retail system, where they are consolidated with stores' stretch film (pallet wrap) and recycled via a well-established recycling infrastructure. Manufacturers convert bags and film into various composite lumber products, pallets and in some cases – new bags. In 2005, over 700 million pounds of plastic bags and film were recycled and this growth is expected to continue in future years.

San Francisco's new Plastic Bag Reduction Ordinance requires certain grocers and retailers to use either paper bags or bio-based compostable plastic bags. As a result, the unintended consequences could be significant. Bio-based plastic bags are available in very short supply, meaning that for the most part grocers will be forced to provide consumers with paper bags. Where bio-based bags are used, if even a tiny percentage of the material is mixed in accidentally with polyethylene bags and film, the large domestic markets have indicated they will refuse shipments from those retailers due to contamination. It takes very little bio-based material to ruin an entire load of polyethylene, and the two materials are very similar in look and feel. In addition, an increase in

waste could occur, since retailers who are prohibited from dispensing recyclable plastic bags will have no reason to provide bins for consumers to recycle them. An important opportunity will be lost, therefore, to recycle a huge amount of plastic film materials not typically collected such as dry cleaning, newspaper and bread bags, and plastic film from small businesses – since most retail systems accept these bag and film materials as well.

Sensible and balanced solutions needed

Moreover, the litter issue will not necessarily improve and may, in fact, worsen if consumers believe bio-based compostable bags will degrade anywhere on the landscape. Currently, bio-based bags only degrade in specialized food waste composting facilities (approximately 100 facilities nationwide), and companies that produce bio-bags do not emphasize biodegradability specifics. Even with these few specialized facilities in place, collection systems are costly and do not develop overnight. Instead of banning a product that makes up, on average, less than 1 percent of the U.S. municipal solid waste stream, we need to make intelligent trade-offs and carefully evaluate our choices.

Over the past decade, plastic bag and film recycling has

been growing steadily, and this trend is expected to continue. As a commodity, clean polyethylene bags and film are highly valued materials, and an established infrastructure is in place to purchase and turn them into new products. Expanding opportunities for consumers and small businesses to recycle plastic bags and film at municipal drop-offs and at all large stores that dispense them is one solution. Reducing bag usage through more efficient bagging techniques at the grocery level, (e. g., elimination of double bagging or the one-item-in-a-bag practice) is yet another. More visually appealing signage in stores, better signage placement and ongoing consumer education by retailers, municipalities, and industry can also have a dramatic effect on the recovery and reduction rates of plastic bags. Plastic shopping bags are economically and environmentally efficient; they serve a useful purpose that would be difficult to replace. Over 90 percent of consumers have stated that they reuse their bags, and an increasing number recycle them. It's the responsibility of industry and government to provide the recycling opportunities and education, it's up to consumers to do their part and to recycle, and it's the responsibility of local and state governments to make judgments about products based on sound facts. ■