



AGENDA

Plastic Bag Community Plan Task Force Meeting

The City of Newport's Plastic Bag Community Plan Task Force will hold a meeting beginning at 5:30 P.M. on Thursday, May 3, 2012. The meeting will be held in the Conference Room A of the Newport City Hall, 169 S.W. Coast Highway, Newport, Oregon 97365. A copy of the meeting agenda follows.

The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired, or for other accommodations for persons with disabilities, should be made at least 48 hours in advance of the meeting to Peggy Hawker, City Recorder 541.574.0613.

The Plastic Bag Community Plan Task Force reserves the right to add or delete items as needed, change the order of the agenda, and discuss any other business deemed necessary.

- I. Call to Order and Roll Call
 - II. Recycling - Presentation by Lincoln County Waste Haulers
 - III. Task Force Comments
 - A. Information Submitted by LeOra Johnson
 - B. Information Submitted by Herb Goblirsch
 - IV. Public Comment
 - V. Develop Next Agenda and Set Meeting Date
 - VI. Adjournment
-

INFORMATION FROM LEORA JOHNSON

PLASTIC BAG COMMUNITY PLAN TASK FORCE

TASK

- * To identify different approaches to reduce or eliminate the use of single-use plastic checkout bags;
- * Ways in which to measure their effectiveness;
- * May include....
 - + Community outreach and education
 - + Local recycling efforts
 - + A local ban...

With or without a charge/deposit on paper checkout bags

PLASTIC BAG COMMUNITY PLAN TASK FORCE

PROBLEM

The PROBLEM with the use of single-use plastic checkout bags....

PLASTIC BAG COMMUNITY PLAN TASK FORCE

PERSPECTIVES

RETAILERS

Advantages

Disadvantages

HAULERS

Advantages

Disadvantages

PUBLIC

Advantages

Disadvantages

ENVIRONMENT

Advantages

Disadvantages

PLASTIC BAG COMMUNITY PLAN TASK FORCE

OTHER EFFORTS / EXPERIENCES

*** Legislation:**

ID:

Enforcement:

Effectiveness:

***Other bans:**

PLASTIC BAG COMMUNITY PLAN TASK FORCE

POSSIBLE SOLUTIONS

ENFORCEMENT

PLASTIC BAG COMMUNITY PLAN TASK FORCE

RECYCLING

INFORMATION FROM HERB GOBLIRSCH

Oceanic 'Garbage Patch' Not Nearly as Big as Portrayed in Media

ScienceDaily (Jan. 4, 2011) — There is a lot of plastic trash floating in the Pacific Ocean, but claims that the "Great Garbage Patch" between California and Japan is twice the size of Texas are grossly exaggerated, according to an analysis by an Oregon State University scientist.

Further claims that the oceans are filled with more plastic than plankton, and that the patch has been growing tenfold each decade since the 1950s are equally misleading, pointed out Angelique "Angel" White, an assistant professor of oceanography at Oregon State.

"There is no doubt that the amount of plastic in the world's oceans is troubling, but this kind of exaggeration undermines the credibility of scientists,"

White said. "We have data that allow us to make reasonable estimates; we don't need the hyperbole. Given the observed concentration of plastic in the North Pacific, it is simply inaccurate to state that plastic outweighs plankton, or that we have observed an exponential increase in plastic."

White has pored over published literature and participated in one of the few expeditions solely aimed at understanding the abundance of plastic debris and the associated impact of plastic on microbial communities. That expedition was part of research funded by the National Science Foundation through C-MORE, the Center for Microbial Oceanography: Research and Education (<http://cmore.soest.hawaii.edu/>).

The studies have shown is that if you look at the actual area of the plastic itself, rather than the entire North Pacific subtropical gyre, the hypothetically "cohesive" plastic patch is actually less than 1 percent of the geographic size of Texas.

"The amount of plastic out there isn't trivial," White said. "But using the highest concentrations ever reported by scientists produces a patch that is a small fraction of the state of Texas, not twice the size."

Another way to look at it, White said, is to compare the amount of plastic found to the amount of water in



Larger plastic pieces can harbor microbes, both beneficial and harmful, scientists have discovered. (Credit: Photo courtesy of C-MORE project)

which it was found. "If we were to filter the surface area of the ocean equivalent to a football field in waters having the highest concentration (of plastic) ever recorded," she said, "the amount of plastic recovered would not even extend to the 1-inch line."

Recent research by scientists at the Woods Hole Oceanographic Institution found that the amount of plastic, at least in the Atlantic Ocean, hasn't increased since the mid-1980s -- despite greater production and consumption of materials made from plastic, she pointed out.

"Are we doing a better job of preventing plastics from getting into the ocean?" White said. "Is more plastic sinking out of the surface waters? Or is it being more efficiently broken down? We just don't know. But the data on hand simply do not suggest that 'plastic patches' have increased in size. This is certainly an unexpected conclusion, but it may in part reflect the high spatial and temporal variability of plastic concentrations in the ocean and the limited number of samples that have been collected."

The hyperbole about plastic patches saturating the media rankles White, who says such exaggeration can drive a wedge between the public and the scientific community. One recent claim that the garbage patch is as deep as the Golden Gate Bridge is tall is completely unfounded, she said.

"Most plastics either sink or float," White pointed out. "Plastic isn't likely to be evenly distributed through the top 100 feet of the water column."

White says there is growing interest in removing plastic from the ocean, but such efforts will be costly, inefficient, and may have unforeseen consequences. It would be difficult, for example, to "corral" and remove plastic particles from ocean waters without inadvertently removing phytoplankton, zooplankton, and small surface-dwelling aquatic creatures.

"These small organisms are the heartbeat of the ocean," she said. "They are the foundation of healthy ocean food chains and immensely more abundant than plastic debris."

The relationship between microbes and plastic is what drew White and her C-MORE colleagues to their analysis in the first place. During a recent expedition, they discovered that photosynthetic microbes were thriving on many plastic particles, in essence confirming that plastic is prime real estate for certain microbes.

White also noted that while plastic may be beneficial to some organisms, it can also be toxic. Specifically, it is well-known that plastic debris can adsorb toxins such as PCB.

"On one hand, these plastics may help remove toxins from the water," she said. "On the other hand, these same toxin-laden particles may be ingested by fish and seabirds. Plastic clearly does not belong in the ocean."

Among other findings, which White believes should be part of the public dialogue on ocean trash:

- Calculations show that the amount of energy it would take to remove plastics from the ocean is roughly 250 times the mass of the plastic itself;
- Plastic also covers the ocean floor, particularly offshore of large population centers. A recent

survey from the state of California found that 3 percent of the southern California Bight's ocean floor was covered with plastic -- roughly half the amount of ocean floor covered by lost fishing gear in the same location. But little, overall, is known about how much plastic has accumulated at the bottom of the ocean, and how far offshore this debris field extends;

- It is a common misperception that you can see or quantify plastic from space. There are no tropical plastic islands out there and, in fact, most of the plastic isn't even visible from the deck of a boat;
- There are areas of the ocean largely unpolluted by plastic. A recent trawl White conducted in a remote section of water between Easter Island and Chile pulled in no plastic at all.

There are other issues with plastic, White said, including the possibility that floating debris may act as a vector for introducing invasive species into sensitive habitats.

"If there is a takeaway message, it's that we should consider it good news that the 'garbage patch' doesn't seem to be as bad as advertised," White said, "but since it would be prohibitively costly to remove the plastic, we need to focus our efforts on preventing more trash from fouling our oceans in the first place."

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Paper, plastic or a dirty bag?

JUNE 3, 2010

Hollywood starlets, politicians, business representatives, labor and environmentalists had a meeting of the minds this week at a press conference held by Assemblywoman Julia Brownley, D-Santa Monica, in support of AB1998, to ban the use of plastic and paper grocery bags.

Well, maybe agreement was reached between the above named parties, but not everyone agrees. "This is not the time to be putting a financial burden on families in a very tough economy," said Assemblyman Ted Gaines, R-Granite Bay. Gaines estimated that his family would spend more than \$50 a year on paper bags.

According to Brownley, the proposed ban on single-use plastic and paper bags, is necessary not just to save the environment, but also "so consumers know what to expect when they get at checkout counters." What we can expect at the checkout counter if Brownley's bill passes, is higher bills at the grocery store.

With shoppers being forced to purchase grocery bags, hundreds of dollars will be added each year to already high grocery budgets. Costing upwards of \$3.00 per bag, reusable bags may have been tres' chic in recent years, but come with environmental issues as well.

A study conducted by the [Environment and Plastics Industry Council \(EPIC\)](#) in Canada found that the eco-friendly shopping bags are Petri dishes of disgusting bacteria. In a November 2008 study in Toronto, using swab testing of reusable shopping bags, found that there was considerable bacterial build-up, mold and yeast on the reusable bags, as well as significant levels of fecal bacteria. The reusable bags are used for gym clothes, and even as diaper bags, concluding that the millions of reported cases each year of food poisoning could be from contaminated eco-friendly grocery bags.

Ironically, San Francisco's ban on plastic grocery bags caused shoppers simply to switch to paper bags. Brownley's bag ban however will allow shoppers to purchase recycled paper bags from the stores, "for no less than 5 cents" according to the bill, if shoppers do not bring their own bags.

In a surprising liaison, Brownley's measure has the support of the California Grocers Association, because supermarket owners stand to profit from charging the bag costs to their customers. The grocers' association

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decided to back the bill after Brownley agreed to include all stores that sell groceries in the ban. Brownley stated that her bill would “level the playing field for all grocers in the state by making a uniform ban on plastic and paper shopping bags,” and charging for recycled bags if shoppers don’t bring their own bags to the store.

Some are arguing that this bill will not only hurt shoppers, but mom-and-pop store owners and independent markets will feel the burden, and inevitably have to pass along the additional costs to shoppers.

Opposed to the plastic bag taxes and bans, “Save the Plastic Bag,” was created “to respond to the environmental myths, exaggerations and misinformation that have been spread about plastic bags.” As a result of much misinformation, many people believe that plastic bags kill 100,000 sea mammals and a million seabirds each year. Brownley used this emotional argument at her press conference, and trotted out the much-used *turtle with plastic bag in its mouth* ([click here](#)) as proof. “Save the Plastic Bag” reports that not only is the story about the turtle not true, *The London Times* exposed the dead sea mammals and seabirds as a myth based on a typographical error. The report mentioned fishing discarded tackle including fishing nets, not plastic bags. David Santillo, a marine biologist at Greenpeace, told *The Times*: “It’s very unlikely that many animals are killed by plastic bags. The evidence shows just the opposite.” (Click [here](#).)

The American Chemistry Council estimates the bill would amount to a \$1 billion tax and threaten 500 jobs in the plastic bag manufacturing business.

Amy Kaleita with the Pacific Research Institute (CalWatchdog’s parent organization) writes, “biodegradable plastic bags cost between eight and 10 cents, compared to a penny for the standard plastic bag. Supporters of the San Francisco ban say the price of biodegradable plastic bags would drop if more municipalities required them, but this may not be the case. The biodegradable bags are made from soy and especially corn. Given the increasing demands for corn from the ethanol industry, the cost of producing these biodegradable bags is likely to increase by a significant amount.”

Plastic bag manufacturers argue that the problem is not the manufacturing of plastic bags, it’s a litter problem caused by careless people. Enforcing litter laws would go much further to helping the environment according to opponents of Brownley’s bill.

Brownley calls grocery shopping bags “single-use bags,” yet most people use plastic bags multiple times before tossing them into the trash. Everything from trashcan liners, storage and carryall bags, to doggie poop pickup bags, plastic shopping bags have many uses.

Brownley’s succession of supporters at the press conference included the strange coupling of the California Grocers Association and the United Food and Commercial Workers (UFCW) labor organization, together with the parade of environmentalist organizations including Heal the Bay, Environment California, and Californians Against Waste. Actresses Amy Smart (*Scrubs*), Rosario Dawson (*Josie and the Pussycats*), and Rachel Lefevre (*Twilight*) made impassioned speeches about animals in danger, polluted oceans and beaches. “The garbage patch is gross,” said Dawson referring to a huge floating island of plastic garbage in the Pacific Ocean.

The bill would require grocery stores to sell reusable bags beginning Jan. 1, 2012.

Does this bill prove that the Legislature has nothing better to do, or is this the best they can come up with? Driven by special interest and perhaps an abundance of time, Brownley’s bill will impose another unnecessary tax on the consumer and once again penalize private industry.

–Katy Grimes



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Comments(7)

1. **Ken Hunter** says:
[June 4, 2010 at 7:58 am](#)

This is the best article on this subject yet! A killer and no filler.
The political doctrine of environmentalism has reduced real concern about our environment to just that...a political doctrine.

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7. *Steven Quat* says:
[August 25, 2010 at 7:28 am](#)

A majority of all carry out grocery bags are made from clean burning natural gas not oil as most people think. These bags are 100% recyclable. By using plastic bags as opposed to paper bags we actually help the environment. How you ask? Paper bags require trees to be cut down for paper pulp to be manufactured, plastic bags do not. Trees are necessary in fighting air pollution. 1 bale of 500 grocery paper bags takes up the space of 6,000 HDPE grocery plastic bags and weigh 4 times as much as plastic bags. Plastic bags also help the environment by the reduced amount of fossil fuels needed to transport them to the stores

It is obvious why the grocery chains have come out in favor of this bill, they stand to gain millions of dollars in extra profits by putting the cost of the bags on the consumer for a product they had always had to supply for free. They also stand to gain huge profits from the reduced amount of space they need to store and transport the bags.

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Plastic Grocery Bags — Challenges and Opportunities

Why Plastic Bag Waste Is Drawing Public Attention

The best-documented environmental issues against plastic bags are visual: they litter the landscape, clog waterways and endanger wildlife. Plastic bags take hundreds of years to decompose, and recycling rates are low.

People are concerned about unsubstantiated reports of high rates of yearly shopping plastic bag use, which suggest up to 1 trillion and more bags are used worldwide and 100 billion in the U.S. These estimates are given without supporting research. The U.S. Environmental Protection Agency (EPA) does not track plastic shopping bag use or waste. EPA experts are not aware of any reliable estimates of use in the U.S.¹

To curb plastic shopping bag use, some countries have imposed taxes and bans. U.S. citizen and anti-litter organizations, largely in coastal regions, are proposing stepped-up recycling, reuse incentives, disposal fees, recycled-content requirements and taxes.

In 2007, San Francisco implemented America's first partial ban of plastic bags, requiring large food retailers and drug stores to provide customers with only paper bags made of 40 percent recycled content, compostable plastic bags or reusable bags.²

Environmentally, 'Paper or Plastic?' Is No Longer the Question

Compared with plastic bags, paper shopping bags make a much larger carbon footprint from production through recycling. For example:³

- A paper bag requires four times more energy to produce than a plastic bag — 2,511 BTUs vs. 594 BTUs.
- In the manufacturing process, paper bags generate 70 percent more air and 50 times more water pollutants than plastic bags.
- Nearly twice as much energy (91 percent) is required to recycle a pound of paper than a pound of plastic.
- Paper bags take up more landfill space and weigh much more. In fact, 2,000 paper bags weigh 280 pounds, compared with 30 pounds for 2,000 plastic bags, increasing the fuel consumed and the air pollution generated to transport them.

¹Many reports cite a *Wall Street Journal* estimate that 100 billion bags are used in the U.S. each year and 500 to 1 trillion worldwide. A search of the newspaper's archive over the past five years uncovered no articles substantiating these figures. Other reports cite an EPA estimate that 81-100 billion plastic shopping bags are used yearly in the U.S. Since the EPA does not track shopping bag use, paper or plastic, this figure lacks any statistical basis. These figures appear to be factoids repeated often enough to become facts despite the absence of an original source.

²The law took effect November 1, 2007, and applies only to food retailers and drug stores with annual sales of \$1 million or more.

³EPA. "Questions About Your Community: Shopping Bags — Paper or Plastic or ...?" February 28, 2006.

Food Marketing Institute (FMI) conducts programs in public affairs, food safety, research, education and industry relations on behalf of its 1,500 member companies — food retailers and wholesalers — in the United States and around the world. FMI's U.S. members operate approximately 26,000 retail food stores and 14,000 pharmacies. Their combined annual sales volume of \$680 billion represents three-quarters of all retail food store sales in the United States. FMI's retail membership is composed of large multi-store chains, regional firms and independent supermarkets. Its international membership includes 200 companies from more than 50 countries. FMI's associate members include the supplier partners of its retail and wholesale members.



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September 2008

The fact that paper bags degrade much faster loses significance considering that nothing decomposes substantially in modern landfills — which are lined with clay and plastic and sealed from water, light, oxygen and other elements to prevent materials from breaking down and leaching into the environment. Plastic bags could be a greener alternative to paper ones if recycling rates increase significantly and littering is controlled.

In the broadest environmental sense, the checkout question “Paper or plastic?” no longer has a simple answer. Leading environmental groups and green-minded retailers and shoppers are turning to a third choice: reusable bags.

A Short History of the Plastic Grocery Bag

In 1977, plastic grocery bags were introduced to U.S. supermarkets as an alternative to paper ones. The convenient versions with handles (“T-shirt” bags) followed five years later, and by 1996 four in five grocery bags were plastic — the ratio that exists today.⁴ Made of high-density polyethylene (HDPE) from natural gas, modern plastic grocery bags are lightweight and can carry heavy loads without breaking. These bags can be recycled to help produce building materials and plastic bags.

Plastic bags made from recycled resins offer significant environmental benefits in the production process, compared with bags made from virgin resins, according to United Kingdom reports: two-thirds less energy is consumed, 90 percent less water is used and two-and-one-half times less carbon dioxide is released into the atmosphere.⁵

More recently, manufacturers introduced degradable plastic bags of two general types:

- Biodegradable plastic — made from cornstarch, soy beans and other plant-based materials.
- Degradable plastic — resin-based and manufactured with a chemical additive that speeds degradation.

These types of bags do not degrade significantly in landfills; they do degrade when mishandled as litter and exposed to the elements required for decomposition. Waste management companies are starting to provide special composting facilities, which can process biodegradable bags. Neither type can be recycled.

As a result, companies and communities considering degradable bags should ensure that composting plants are accessible and provide a system for separating degradable bags from recyclable ones.

Government Campaigns to Address Plastic Bag Issues

Mounting concerns over the environmental impact of plastic bags are prompting state and local governments to take action. California became the first state to address this issue with the Plastic Bag Recycling Act of 2006, designed to curb the use of an estimated 19 billion bags per year in the state. The law requires supermarkets and large drug stores to institute plastic bag recycling programs and make reusable bags available. Among other provisions, the statute requires stores to:

- Provide bins to collect used plastic bags.
- Print on each bag the message “Please Return to a Participating Store for Recycling.”
- Maintain records for at least three years documenting recycling activities.

⁴ The Society of the Plastics Industry, Film and Bag Federation, “History of the Plastic Bag,” www.plasticsindustry.org/about/fbf/environment.htm#plasticbaghistory (visited April 4, 2008).

⁵ Waste Online, “Plastics Recycling Information Sheet,” p. 4, www.wasteonline.org.uk/resources/InformationSheets/Plastics.htm (visited April 4, 2008).

Since then, more than 40 states, counties and cities considered legislation to institute mandatory or voluntary plastic bag recycling programs, impose a tax on bags or ban their use. Illinois and Rhode Island enacted mandatory recycling laws, along with the cities of New York and San Juan Capistrano, CA, and Los Angeles County, CA, and Suffolk County, NY.

Many cities in California pursued plastic bag bans in 2007. All of these measures were defeated except the one enacted by San Francisco. Oakland enacted a similar ban, which was overturned by a court ruling that the city must conduct an environmental impact study before moving forward with the law. Opponents argued that a ban could increase use of paper bags, which generate more pollution and consume more energy to produce and recycle than plastic bags.⁶ Efforts to legislate bans were also defeated in the states of Hawaii, Maryland, Washington and Wisconsin.

The movement is continuing in 2008. Measures to ban plastic bag use are pending in Connecticut, New Jersey, Pennsylvania, Rhode Island and West Virginia. Others are weighing taxes on each bag used, including Alaska, Pennsylvania and Vermont. Seattle is pursuing a broader tax, recognizing the adverse environmental impact of plastic and paper bags. The city council enacted an ordinance imposing a 20-cent fee on all disposable shopping bags at grocery, drug and convenience stores. In this approach, retailers would receive 5 cents of each fee to cover administrative costs, and the balance would help fund city programs to promote reusable bags, waste reduction and recycling.⁷ This law is due to take effect on January 1, 2009.

How U.S. Manufacturers and Retailers Are Addressing Plastic Bag Use

Plastic bag manufacturers are following the lead of the Progressive Bag Affiliates (PBA), a division of the American Chemistry Council. PBA's mission is to "initiate programs that help businesses and consumers reduce, reuse, recycle and properly dispose of plastic bags." It is working to prevent plastic bag bans, taxes and other legislative initiatives to curb the use of disposable and recyclable plastic bags.

In part through PBA educational efforts, anti-plastic bag legislative issues emerging in communities are resolved by raising citizen awareness about the benefits of recycling and reusing plastic bags. For example, in 2007 after much collaboration among legislators, bag manufacturers and the PBA, the Suffolk County legislature rejected a proposed ban in favor of a plastic bag recycling law.

Food retailers across America are engaged in multiple efforts to encourage recycling, bag reuse and decreased reliance on plastic shopping bags. For the past 30 years, most U.S. food retailers have offered customers a choice of either plastic or paper bags. Many supermarkets provide recycling receptacles for used plastic bags. They are expanding plastic bag recycling programs, providing plastic and paper bags with recycled content, and offering customers a credit ranging from 1-10 cents for each bag reused.

In fact, more than nine in 10 food retailers (93.5 percent) offer reusable shopping bags for sale, and half of their customers (51 percent) use these bags at least one to three times a month.⁸ Many retailers are training employees to fill bags fuller and minimize double-bagging to reduce the number of bags used.

⁶Huus, Karl, "Plastics Industry Battles Grocery Bag Bans," MSNBC, March 14, 2008.

⁷Chan, Sharon Pian, "Seattle Officials Propose 20-Cent Grocery-Bag Fee," *Seattle Times*, April 3, 2008.

⁸FMI, *U.S. Grocery Shopper Trends 2008*, p. 96; *The Food Retailing Industry Speaks 2008*, p. 62.

One success story demonstrates how government and retailers can together make a difference voluntarily. In November 2007, the city of Phoenix, AZ, encouraged customers to use reusable shopping bags by distributing 30,000 free bags. The city launched this program in a partnership with the Arizona Food Marketing Alliance and Wal-Mart, Inc. Stores built special displays announcing this Bag Central Station program and handed out the reusable bags.⁹

Consumers Growing More Aware of Plastic Bag Issues

Until recently, the lack of consumer awareness has fueled the litter debate and demands to curb plastic bag use. There are indications that consumer sentiment is changing. Retailers across America report that consumer demand for reusable bags is increasing.¹⁰

In 2007, five FMI supermarket companies operating nearly 1,700 stores tracked consumer comments about bag use during various times throughout the year. These were unsolicited comments coming into their consumer affairs or corporate offices. They received 148 requests that their stores provide reusable bags, and 121 suggested that they offer consumer incentives for using these bags. Smaller numbers expressed a preference for paper (83) and degradable plastic bags (24).

The Growing Market for Recycled Plastic

There is a growing market for recycled plastic that did not exist 15 years ago. Recyclers can earn 15-20 cents per each pound of plastic bags recovered. It is less expensive to use recycled plastic resins than virgin resins, increasing the potential for recycling more plastic bags. Recycled plastic bag resins are used to make shopping bags, shopping carts and baskets, decking boards, pallets, patio pavers, laundry baskets, parking lot speed bumps, car stops and many other products.

With recycled plastic bags worth about \$400 per ton, increasing recycling at all levels presents a viable opportunity for food retailers and partnering municipalities. More than 1,800 U.S. businesses recycle post-consumer plastics, and most are food retailers. In 2006, an estimated 812 million pounds of post-consumer film, including plastic bags, were recovered for recycling — a 24 percent increase over the previous year.¹¹ These figures should increase as more states, counties and cities institute plastic bag recycling programs.

Increasing the recycling of plastic bags requires a variety of strategies. The following companies offer examples of current technologies used to produce bags and other products from recycled plastic and other products:

- AERT (Advanced Environmental Recycling Technologies, Inc.) has pioneered the use of recycled polyethylene plastic to manufacture composite building materials since 1989. The company is recognized as a leader in resource conservation innovation, receiving the EPA Award for Environmental Excellence in 1999 for its process of converting scrap plastic into composite outdoor decking. AERT converts reclaimed plastic and wood fiber waste into outdoor decking systems, fences and door and window components. It operates manufacturing facilities in Springdale, Lowell, and Tontitown, AR; Junction, TX; and Alexandria, LA. (www.aert.com)

⁹ *EV Living*, Phoenix News, "City Distributes 30,000 Reusable Bags to Promote Reduction in Plastic Shopping Bags," November 29, 2007.

¹⁰ Carr, Coeli, "In the Bag: A Greener Checkout," *Supermarket News*, December 1, 2007, p. 20.

¹¹ Moore Recycling Council Associates, *2006 National Post-Consumer Recycled Plastic Bag and Film Report*, prepared for the Plastics Division of the American Chemistry Council.

- Trex has been turning millions of pounds of recycled and reclaimed plastic and waste wood each year into decks, rails, fences and trim since 1996. Most of the raw materials come from recycled plastic bags, other plastic waste and hardwood sawdust. The company recycles 1.5 million plastic bags a year and reports that the volume is increasing as more cities and states promote recycling with education, waste management programs and laws.¹² (www.trex.com)
- NextLife, an alliance of recyclers and manufacturers, recycles plastic grocery bags and other materials into bags and other products. Mountain Valley Recycling and NextLife jointly develop closed-loop programs in which plastic is continuously reused to make products. Mountain Valley's technology transforms plastic waste into 100 percent certified post-consumer grade resins and durable plastic products. (www.mvrecycling.com)
- Hilex Poly Co. operates a "Bag-2-Bag[®]" recycling center in North Vernon, IN, that recycles used plastic bags into new ones. In the first quarter of 2008, it recovered approximately 3 million pounds of plastic resins from used bags and produced 150 million new bags. The company is partnering with three California cities — Dana Point, San Clemente and San Juan Capistrano — to collect plastic bags in curbside recycling programs for nearly 40,000 households. It provides supermarkets with plastic bag collection bins, along with systems to help them count bags, ensure that bags are fully packed and reduce their use. (www.hilexpoly.com/bag2bag.htm)

International Efforts to Curb Plastic Bag Use

Many countries have undertaken aggressive campaigns to reduce plastic shopping bag use and ban all plastic bags or ultra-thin ones (less than 30 microns thick), which are a major source of litter and cannot be reused or recycled. For example:

Among African nations, South Africa was the first to act by banning ultra-thin plastic bags and imposing taxes on thicker ones in 2003; Kenya and Uganda followed suit in 2007. Eritrea, Rwanda and Somalia banned all plastic bags in 2005, as did Tanzania (including Zanzibar) the following year.¹³

Australia began taking action in 2002. The nation's Environmental Protection and Heritage Council (EPHC) set a goal to phase out single-use bags by the end of 2008. The Australian Retailers Association adopted a Code of Practice for the Management of Plastic Bags in 2003, including a commitment by major supermarkets to a 50 percent reduction in HDPE bags by end of 2005. Industry and government campaigns to promote reusable bags and recycling and dissuade shoppers from using single-use ones produced significant results. Plastic bag consumption declined from 6.9 billion in 2002 to 3.9 billion in 2005.¹⁴ Debate continues over how to achieve further reductions such as through bans, taxes or surcharges. Some jurisdictions have taken independent action, including bans.

¹²Blake, Whitney. "Trex Sees 20 Percent Increase in Plastic Recycling." *The Examiner* (Washington, DC), April 3, 2008, p. 17.

¹³BBC News. "Plastic bag bans around the world," February 28, 2008, http://news.bbc.co.uk/2/hi/in_depth/7268960.stm (visited April 9, 2008).

¹⁴Environmental Protection and Heritage Council, *Consultation: Regulatory Impact Statement — Investigation of Options to Reduce the Environmental Impact of Plastic Bags*, January 2007, pp. 17-18.

In Canada, Leaf Rapids, Manitoba, became the country's first city to ban plastic bags, starting in April 2007.¹⁵ Ontario is moving to reduce plastic bag use with incentives, working with the Recycling Council of Ontario and grocer and retail associations. The incentives include store points redeemable for products, airline miles or cash for consumers who use reusable bags. Retailers are training clerks to double-bag less often, fill bags with more items and stop bagging large items.¹⁶

China is prohibiting all supermarkets, department stores and other retailers from providing customers free plastic bags, effective June 1, 2008. Retailers are required to charge customers for any bags they use at a rate equal to the cost. The country banned altogether the use of ultra-thin plastic bags, which have become a major source of litter. Retailers that violate this requirement could face fines of up to 10,000 yuan (\$1,431).¹⁷

In Europe, Ireland was the first to take action, imposing what became known as a "plastax" on plastic shopping bags, introduced in 2002 at 0.15 euros per bag and increased in 2007 to 0.22 euros (equaling about 34 cents¹⁸). This tax reduced plastic bag use in the country by nearly 90 percent.¹⁹ Today, plastic bags are also taxed in Italy and Belgium, and shoppers must pay for them in Switzerland, Germany and Holland. Spain, Norway and the U.K. are considering bans or taxes.²⁰

Plastic Bag Recycling Information and Education Resources

Best Practices Guide for At-Store Collection of Plastic Bags — Prepared by Canada's Environment and Plastics Industry Council, this guide shows retailers how to develop an at-store collection program for plastic bags. It brings together practices already used in many retail outlets throughout North America.

The Environment and Plastics Industry Council, Canadian Plastics Industry Association
905-678-7748, www.plastics.ca/epic

Penn Jersey's Bag Smart Plastic Bag Reduction and Recycling Model Penn Jersey — This Philadelphia-based retail equipment and supplies company manages "Bag Smart," a plastic bag and recycling initiative in partnership with Goodwill, Trex and participating businesses and retailers. The program features store bagging training tips, bag reuse ideas, plastic bag recycling solutions, consumer education and reusable plastic bag offers.
Penn Jersey Paper Company — 800.992.3430, www.pjponline.com

Progressive Bag Affiliates At-Store Plastic Bag Recycling Collection Toolkit — This resource provides retailers with a step-by-step process to implement an at-store bag recycling program including instructions on bag language (including language required by laws), setting up collection bins, signage, bag consolidation, sale of material and consumer education materials. www.plasticbagrecycling.org

¹⁵CBC News, "It's Official, Manitoba Town Gives Plastic the Boot, April 2, 2007.

¹⁶CTV, "Ontario Launches Program to Cut Plastic Bag Use, May 9, 2007.

¹⁷Associated Press, "China Bans Free Plastic Shopping Bags," published in the *International Herald Tribune* on January 9, 2008; *China Daily*, "Shops face fines for free plastic shopping bags," April 8, 2008. The conversion of yuan to dollars is based on the exchange rate as of April 22, 2008.

¹⁸Based on the euros-dollars exchange rate in April 2008.

¹⁹"Irish Bag Tax Hailed Success," BBC News, August 20, 2002; RTE News, "One Plastic Bag Now Costs 22c," July 1, 2007.

²⁰Roach, John, "Plastic-Bag Bans Gaining Momentum Around the World," *National Geographic News*, April 4, 2008, <http://news.nationalgeographic.com/news/pf/74875718.html> (visited April 9, 2008).

Additional Sources of Information About Plastic Bag Issues

American Chemistry Council, Plastics Division, Progressive Bag Affiliates — 703.741.5000, www.americanchemistry.com/plastics/

Commonwealth of Australia Department of the Environment and Water Resources

Plastic Shopping Bags in Australia report by the National Plastic Bags Working Group to the National Packaging Covenant Council —

www.environment.gov.au/settlements/publications/waste/plastic-bags/report-2002.ht

Environmental Advocacy Groups

Environmental Defense Fund — 800.684.3322, www.edf.org

Natural Resources Defense Council — 212.727.2700, www.nrdc.org

Sierra Club — 415.977.5500, www.sierraclub.org,

World Wildlife Fund — 202.293.4800, www.worldwildlife.org

Film and Bag Federation — 202.974.5218, www.plasticbag.com

Plastic Bag Manufacturers, U.S.

Advance Polybag — 800.504.5000, www.apicorp.com

Interplast — 800.896.3222, www.ibsbags.com

Superbag — 888.842.1177, www.superbag.com

Plastic Bag and Film Manufacturers and Recyclers

Hilex Poly Co. — 800.432.1050, www.hilexpoly.com

Mountain Valley Recycling, LLC — 561.274.4928, www.mvrecycling.com

NextLife, Inc. — 877.214.0501, www.nextlifeinc.com

Trex — 800.289.8739, www.trex.com

The Society of Plastics Industry — 202.974.5200, www.plasticsindustry.org

Use Less Stuff — Publisher of the *ULS Report*, www.use-less-stuff.com

U.S. Environmental Protection Agency Websites

www.epa.gov/msw/paper.htm

www.epa.gov/msw/faq.htm

www.epa.gov/epaoswer/non-hw/muncpl/pubs/mswchar05.pdf

“Questions About Your Community: Shopping Bags — Paper or Plastic or ...?”

<http://web.archive.org/web/20060426235724/http://www.epa.gov/region1/communities/shopbags.html>

Glossary

add-on packaging — a term used to describe any carryout bag or extra packaging provided by retailers.

biodegradable plastics — plastics that decompose in the natural environment and can include non-carbon-emitting starch-based plastics or oil-based plastics, which release carbon dioxide.

bioplastic — plastic derived from plant sources such as hemp oil, soy bean oil and corn starch or from a microbial source, rather than traditional plastics, which are derived from petroleum.

closed-loop recycling — reuses recovered plastics to manufacture new 100 percent post-consumer recycled products.

compostable — made from biodegradable substances capable of degrading in a properly managed compost process.

degradable plastic — plastic able to be broken down by mechanisms such as bacterial action, exposure to heat, light or oxygen within a short time frame.

high-density polyethylene — HDPE is a thermoplastic made from natural gas and has stronger tensile strength than low-density polyethylene (LDPE). HDPE plastic bags are recyclable and widely used in supermarkets.

life-cycle assessment — LCA (also known as a life cycle analysis, ecobalance or cradle-to-grave-analysis) is the investigation and valuation of the environmental impacts of a given product or service caused or necessitated by its existence. The goal of an LCA is to compare the full range of environmental damage assignable to products and services, to be able to choose the least burdensome one.

low-density polyethylene — LDPE is a thermoplastic made from natural gas, and its most common use is for plastic bags. LDPE bags are softer to handle and more pliable than HDPE bags.

non-government organization — NGO is a legally constituted organization created by private persons or organizations with no participation or representation of any government entity.

photodegradable or photodegradation — degradation caused by sunlight, and includes the breakup of molecules into smaller pieces by photons. For example, six-pack soda can rings have been photodegradable LDPE plastic since the 1990s. Some plastic bags are manufactured with properties making them photodegradable.

polyethylene terephthalate — PET is a thermoplastic polymer resin of the polyester family and is commonly used in the manufacture of soft drink bottles.

post-consumer recycled-content — a product containing post-consumer recycled material or a percentage of this content derived from curbside or other community recycling programs, if viewed as more beneficial, and helps support recycling as a solution.

recycled-content paper bags — paper grocery bags manufactured with up to 100 percent recycled fibers. Recycled papers may not be as strong as paper made from virgin fibers.

recycled-content plastic bags — primarily LDPE bags manufactured from a combination of recycled plastic resins and virgin resins. Recycled-content can comprise up to 100 percent of the material content of each bag.

renewable resource — a resource that has the ability to regenerate at regular intervals.

reusable bags — manufactured from strong durable materials that extend the life of the bag, eliminating waste from frequent disposal.

single-stream recycling — curbside recycling programs that combine all material types into one collection container, compared with “single-sort” or “source-separated” recycling in which glass, metal, plastic and paper are placed in separate containers.

thinned-walled plastic bags — disposable shopping or carryout bags, usually manufactured from high-density polyethylene (HDPE) or low-density polyethylene (LDPE).

waste-to-energy — WTE or energy-from-waste (EFW) refers to any waste treatment that creates energy in the form of electricity and/or heat from a waste source. In states and communities that have built reliance on waste-to-energy plants as strategic solutions for waste disposal, plastic bags as a source of waste energy may be more attractive to recyclers or processors.