

# Recycling & Waste Reduction

## Chapter 8

### Recycling and Waste Reduction

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#### Why Recycle?

We all know that recycling saves water and energy, reduces pollution, and conserves natural resources, all of which preserve habitat for plants and wildlife. It also brings income and economic stability to many Oregon communities through the development of new recycling industries and modernization of existing facilities. Local collection of commodities provides feedstock to local companies. For example, Oregon paper mills continue to make major investments to allow increased use of recycled fiber which brings them substantial savings in energy costs. The two steel mills in Oregon produce 100 percent recycled steel and operated through the worst steel market on record and continue to thrive in today's economy.

Recycling also brings economic and environmental benefits to communities that participate in recycling collection programs. Overall, recycling creates five times as many jobs as incineration and nine times as many jobs as landfill operations. Diversion of waste to recycling also extends the useful life of solid waste landfills, lowering their ultimate cost to ratepayers. And recycling is a proven method of reducing greenhouse gas emissions, with resulting economic benefit.

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#### Oregon's Recycling History

Oregon has a national reputation as a leader in the area of recycling. During the past three and a half decades, Oregon's legislators have shown a keen awareness of the importance of effective solid waste management.

#### The Bottle Bill

Oregon's Bottle Bill is considered the single most effective recycling program in American history. Passed into law in 1971 under Governor Tom McCall, principally as a litter-control measure, HB 1036 is the nation's longest standing container deposit law. Within two years of its implementation, more than 90 percent of all carbonated beverage containers were being recycled, and more than 80 percent of roadside container litter disappeared. The Bill was also instrumental in creating a recycling ethic among Oregon's citizens, leading to an overall increase in all types of recycling. The Bottle Bill is administered and enforced by the Oregon Liquor Control Commission (OLCC).



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#### The Recycling Opportunity Act

Passed in 1983, the Recycling Opportunity Act (SB 405) was intended to provide all Oregonians with the opportunity to recycle in a voluntary and convenient manner. Pursuant to this act, curbside recycling collection is now offered in almost all cities of more than 4,000 people. In rural areas, drop-off depots are located at public landfills and other locations. The Department of Environmental Quality (DEQ) is responsible for implementing the provisions of the Recycling Opportunity Act and its later amendments.

## The Oregon Recycling Act

The 1991 Act (SB 66), which passed unanimously, set specific recycling goals for individual “wastesheds” (generally equivalent to county lines), aiming for a 50 percent recovery goal for the state by the year 2000. Wastesheds that did not meet their goals would have been required to add programs to increase the convenience of recycling. The Act also set targets for recycled content requirements for different materials (glass, newspaper, and telephone directories) to spur greater recovery of these targeted materials. Provisions were also passed that required most rigid plastic containers to either be made with 25% recycled content or have the Oregon plastic container recycling rate exceed 25%. Plastic food containers except beverage bottles were exempted.

## How is Oregon Doing?

The 1991 Act set a statewide recovery goal of 50 percent by the year 2000. After the state failed to reach this goal, the 2001 Legislature passed HB 3744, which postponed the 50 percent recovery goal to 2009, and made the wasteshed goals voluntary. Also, the 2001 legislation changed the way the recovery rate is calculated and made it easier for the wastesheds to meet these voluntary goals by crediting them with extra percentage points for doing reuse or home composting programs.

HB 3744 also set waste generation goals for the State. Waste generation is the sum of all materials recovered and disposed of. The goals are to have no increase in per capita municipal solid waste generation for 2005 and beyond, and for 2009 and beyond no increase in total municipal solid waste generation.

Partly because of these changes and extra credits, the recovery rate for 2005 was calculated at 49.1% - up from 38.9% in 2000. In 1992, Oregonians recovered almost 840,000 tons of materials. By 2005, we were recovering over 2.5 million tons. However, about one-third of the wastesheds in Oregon did not meet their 2005 recovery goals, though 20 others have exceeded their 2009 goals. Increasing discards by households and businesses caused per-capita waste generation to rise 4.6% in 2005, meaning the State failed to achieve its first waste generation goal.

In December 2006, for the first time since the Oregon Recycling Act passed, the DEQ determined that the recycling rate for rigid plastic containers fell below the required 25% for both 2004 and 2005, and that the projected recycling rate for 2007 will not meet the 25% level. Companies that package products in plastic containers may need to make additional steps to remain in compliance with state law.

## Some Areas of Concern

### Waste Prevention

**Problem:** While Oregon’s recycling rate slowly climbed throughout most of the 1990s, the amount of garbage generated per capita also steadily increased. Preventing waste saves more resources and reduces pollution more than recycling, while often saving money for businesses and consumers. In 1992 Oregonians generated 5.7 pounds of municipal solid waste (amount disposed plus amount diverted) per person per day. By 2005, that number shot up to 8.4 pounds per person per day, and Oregon’s population is steadily increasing. If we want to meet the goals set forth in HB 3744 of achieving no increase in total municipal solid waste generation, our habits must significantly change.



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**Solution:** Options include implementing a product stewardship system whereby all parties involved in designing, manufacturing, selling and using a product take responsibility for its environmental impacts at every stage of the product's life. This would create an incentive to reduce packaging and improve the recyclability of the products. Other options include Extended Producer Responsibility (EPR) whereby manufacturers are responsible for the ultimate disposition of their products. Implementation of EPR creates financial incentives to reduce packaging, to design products using less toxics, and to design for easier repair, reuse and recycling.

### The Bottle Bill

**Problem:** Oregon's Bottle Bill covers only carbonated and malt-based beverages such as soft drinks and beer. Containers for juice drinks, teas, and bottled water, although similar to those for beer and soft drinks, often end up on roadsides or in Oregon landfills because they aren't covered under the Bottle Bill. DEQ's preliminary figures for 2005 show that only 37% of beverage containers not covered under the Bottle Bill are recycled, while 82% of covered containers are recycled. Of the 82%, only 4% are recovered through curbside collection, the rest are redeemed for deposit. This means that 780 million beverage containers are being disposed of in landfills.

The cash deposit for each container has remained at five cents throughout its nearly thirty five year history, never being adjusted for inflation. In Oregon, all the unredeemed deposits remain with the beverage distributors as profit rather than going to litter-control or recycling purposes - this includes deposits from bottles that residents and businesses place in their curbside recycling bins.

**Solution:** The idea of expanding the Bottle Bill continues to be very popular with citizens. The last attempt to update and expand it was defeated largely due to the influence of the national beverage and packaging industries, which spent over \$4 million to do so. This defeat, however, does not indicate a lack of public support for increasing beverage container recycling. In fact, a 2005 poll showed 78% of Oregonians support adding other beverages to the bottle bill.

### Toxic and High Tech Wastes

**Problem:** Local communities are facing increasing costs for handling high tech and toxic wastes. Electronic waste, including computers, monitors and televisions, is currently allowed in Oregon landfills. These products contain toxic substances such as lead and mercury that should be safely recycled, not disposed of in landfills or incinerators or shipped off to developing countries. Unused paints, pesticides, solvents, and cleaners are expensive for local governments to collect for proper disposal, but it is even more costly to clean up polluted streams and aquifers if they are dumped improperly.

**Solution:** Implement a form of product stewardship whereby manufacturers of these problem wastes (computers, televisions, paints, and pesticides) are responsible for the reuse and recycling of their products and the environmentally sound management of any remaining toxic materials.

### Commercial Recycling

**Problem:** At least half of the waste in Oregon's landfills comes from commercial sources (DEQ, 2002 Waste Composition Study). Currently, while residential haulers must pick up recycling bins at every home one time per week, commercial haulers only have to pick up recycling when the business requests it. Consequently, many businesses are not even aware that they have recycling opportunities.



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**Solution:** Businesses over a given size could be required to separate certain recyclable materials, require haulers to collect these materials on a regular schedule, and accomplish minimum recycling rates. Targeted programs could increase recycling of specific materials such as office wastepaper, and increase recycling collection from particular types of businesses. If wastesheds don't meet their recovery goals, some consequence should follow.

### Organics/Yard Debris

**Problem:** Yard debris, food waste, and other organic materials account for a large portion of the waste that goes into our landfills (approx 23%). This is a waste of resources, transportation costs, as well as landfill space. Organic material also decomposes in landfills to create methane, a greenhouse gas that is twenty times more potent than carbon dioxide.

**Solution:** This material could be composted and turned into fertilizer and mulch for use in gardens and landscaping. We need to expand educational programs to teach about home composting. Commercial collection programs also need to be expanded for grocery stores, restaurants, food processors, landscapers, and others. Programs need to expand beyond the Portland and Eugene area. Additionally, Oregon should consider banning yard debris from some landfills, as 22 other states have done.

### Legislative Priorities

- ◆ Product stewardship is a powerful concept which drives change toward more sustainable products. Lawmakers should support “product stewardship” legislation that calls on product manufacturers to work with government, retailers, community organizations, environmentalists, and community leaders to design programs to first take back electronic waste, but be flexible enough to be expanded to additional toxic or otherwise troublesome products at the end of their lives.
- ◆ The Legislature should update the Bottle Bill to expand the number of containers covered to all beverage containers and increase the container deposit, while maintaining the ease of redemption for consumers. Unredeemed deposits should be used to fund additional waste reduction programs.
- ◆ Any attempts to further weaken our plastics recycling laws, the Oregon Recycling Act, or the Bottle Bill should be rejected. We need to move forward, not backward, in recycling policy.

### Key Messages

- ◆ While residential curbside collection programs in urban areas are getting close to their practical limit in terms of recovery, about half of the waste currently going into Oregon's landfills comes from commercial sources. In order for Oregon to meet its recovery goal, much progress will have to be made in increasing recycling opportunities for commercial establishments, composting food waste and other organic materials, and recovering more construction debris.
- ◆ Although the 1983 Recycling Opportunity Act placed waste prevention as the most preferred option in the hierarchy of waste management, there have been few statutory tools to help further that goal. Waste prevention (such as minimizing packaging) saves more resources and avoids more pollution than recycling, and should be emphasized much more than it currently is.

## Experts and Resources

Association of Oregon Recyclers  
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503-233-3056  
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www.aORr.org

Department of Environmental Quality  
811 SW 6th Ave.  
Portland, Oregon 97204  
503-229-5913  
<http://www.deq.state.or.us/lq/sw/>

Metro Recycling Information  
600 NE Grand Ave.  
Portland, Oregon 97232  
503-234-3000  
www.metro-region.org

Oregon State Public Interest Research Group (OSPIRG)  
1536 SE 11th Ave.  
Portland, Oregon 97214  
503-231-4181  
ospirg@ospirg.org  
www.ospirg.org

Recycling Advocates  
PO Box 6736  
Portland, Oregon 97228  
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Resource Recycling  
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