# What is Zero Waste?

By Gary Liss, Gary Liss & Associates [Revised November 1997]

Zero Waste is the next step in the success story called recycling. Every day, millions of citizens do the right thing... they recycle. Now it is time to set our sights higher and start planning for the end to wasting resources and to our reliance on landfills, incinerators and other waste facilities. Zero Waste is a Policy, a Path, a Direction, a Target; it's a Process, a way of thinking, a Vision.

Zero Waste represents a new planning approach for the 21st Century. Free enterprise economic systems stand for individual freedom, entrepreneurship, and free-market capitalism. Zero Waste adds to that system the principals of conserving resources, minimizing pollution, maximizing employment opportunities, and providing the greatest degree of local economic self reliance. Zero Waste defines the discipline required to create more sustainable interaction with our natural world.

Zero Waste is the next logical step beyond short-term goals established for recycling by the year 2000. Where should we aim after 2000? Do we stop at 35% or 50% recycling to build landfills and incinerators to handle the rest of our waste? Or do we continue to build on the tremendous success of the past decade in recycling and begin tackling some of the more fundamental aspects of waste generation and work to eliminate waste at the source?

## Striving For Zero Waste Means:

- Moving up the waste stream to consumers, advertisers, manufacturers and product designers, to the "front end" of the system.
- Pursuing waste prevention, reuse, repair, recycling and composting, and banning materials and products that don't allow for those activities.
- Paying up front the full costs of environmental degradation and social fragmentation by including those costs in the price of products and services.
- Focusing on renewable resources and doing more with less.
- Defining economic success as delivering more services with fewer energy and material resources (e.g. for housing, food, transportation)
- Developing information like the Toxics Release Inventory to report wastes generated and materials and energy used, to provide hard facts to consumers to make good choices.
- Promoting repair, resale and reuse of durable products made of fewer material types and designed for recyclability when they outlive their usefulness.
- Manufacturers changing from delivering products to delivering services (e.g. leasing carpet squares.)
- Recognizing that most environmental impacts from products (e.g. pollutants created, energy consumed, habitat destroyed) comes from resource extraction and industries 'upstream' of consumers, rather than from their disposal in landfills.
- Eliminating subsidies for extraction and harvesting of virgin materials, and eliminating exemptions from hazardous waste rules for mining wastes.
- Moving from a linear consumption-driven economy to a cyclical service-oriented economy.
- Developing a sustainable system that everyone can benefit from, rather than continuing to have 20% of the earth's population use 80% of its resources.
- Harnessing the forces of the marketplace (e.g. through variable rate pricing for residential garbage collection systems) to achieve this goal.

## Will Zero Waste Cost More?

- NO. This is not a centralized public works project like sewage treatment where there are exponential increases in costs when plants are designed for 95% removal of wastes compared to 80%.
- In fact, some of the steps that are more difficult to achieve in the short term and more difficult to imagine now are product and process improvements and redesigns that will reduce the use of resources and prevent the formation of waste, through design for recyclability and durability. These should all save money rather than cost money. That's how many businesses are diverting 80-90% and saving money in the process.
- That's why it's important not to lock into one quick fix or centralized solution to achieve Zero Waste.

## Is Zero Waste Attainable? Businesses Do It:

- 97% diversion Mad River Brewing in Northern California
- 95% diversion Zanker Construction & Demolition Landfill in San Jose, CA
- 97% diversion Hewlett-Packard in Roseville, CA
- 95% recycling rates at office buildings in the EPA Green Buildings program
- 80-90% diversion rates at many businesses
- Some progressive businesses are now adopting Factor 10 goals to achieve a ten-fold increase in efficiency

#### Provincial, State And Local Governments Are On Their Way:

- Many have achieved approximately 50% diversion, in large cities such as Seattle; San Jose; Twin Cities, MN; and smaller cities like Poway in northern San Diego County and Takoma Park, MD.
- The State of New Jersey has reported a 56% statewide diversion rate and the Australian Capital Territory of Canberra has adopted a Zero Waste goal by 2010.
- Halifax, Nova Scotia and Toronto, Ontario have adopted a resource management strategy to achieve Zero Waste.

## Nature Is The Model:

- Nature does not waste.
- A waste to one species is food or a resource to another.
- Everything is connected.
- We may not get rid of all mines and landfills as we know them today, but we should not design our economy to be dependent on them.

#### Why Not Have A 50% (Or Some Other Number) Waste Diversion Goal?

- Then we will have to plan for more landfills and incinerators to meet the other 50% of our discards, on an on-going basis.
- Investment in waste disposal impedes entrepreneurs, businesses and governments from innovations in waste prevention, reuse, recycling and composting.

#### Instead, We Need To Open Up Our System To Achieve Zero Waste. We Need To:

- Provide economic incentives: Tax 'bads' (pollution and waste), not 'goods' (labor and income).
- Eliminate Corporate welfare for wasting.
- Encourage use of recycled content products by manufacturers.
- Work with manufacturers, product designers, advertisers and consumers to share responsibility for the products produced and used prior to disposal.

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