


Zero Waste


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By:
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GBB Overview



- Headquartered in Fairfax, VA
- Established in 1980 as an objective adviser to governments, institutions, and businesses
- 28 years implementing innovative solutions for waste and recycling industry
- Dedicated exclusively to solid waste management; more focused than broad-based firms
- “Change Agents” to produce better services and facilities


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GBB Network of Clients

- Clients in 45 U.S. States; from largest cities/counties to rural communities
- Canada, Hong Kong, Australia and Chile

<p>ALASKA Anchorage Law Firm</p> <p>ALABAMA Solid Waste Disposal Authority of Huntsville</p> <p>ARKANSAS Tri-County Solid Waste District City of Fort Smith</p> <p>CALIFORNIA City of Oceanside City of Avalon San Gabriel Valley, San Marino City of Beverly Hills City of San Fernando City of Torrance San Bernardino County City of Oxnard City of Santa Clarita Disney Imagineering City of Santa Monica City of Pasadena City of Ontario</p> <p>COLORADO City and County of Denver</p> <p>CONNECTICUT Town of Shelton Town of Southbury Town of Windsor City of Norwalk CT Resources Recovery Authority Southeastern CT Regional Resources Recovery Authority</p> <p>DELAWARE Delaware Solid Waste Authority</p> <p>DISTRICT OF COLUMBIA U.S. Postal Service Headquarters Aluminum Association National Soft Drink Association U.S. Conference of Mayors St. Elizabeth's Hospital</p> <p>DISTRICT OF COLUMBIA Eagle Maintenance District of Columbia Government</p>	<p>FLORIDA Palm Beach County FL Dept. of Environmental Resources Broward County Lee County Miami-Dade County Kissimmee Emerald Coast Utilities Authority</p> <p>GEORGIA Owinnet County Coastal Georgia Regional Development Center, Brunswick College Park and East Point Statesville</p> <p>HAWAII Maui County Kauai County</p> <p>ILLINOIS Pecorin County Comer/Biore Material Recovery Champaign and Urbana U.S. Department of Energy</p> <p>INDIANA City of Valparaiso City of Wabash</p> <p>IOWA Metro Waste Authority, Des Moines Iowa Dept. of Natural Resources East Central Intergov. Association Hardin County Scott Area Solid Waste Management Commission, Scott County Carroll County Audubon, Crawford, & Shelby Counties Marshall County Landfill Commission Marshall County Ottumwa-Wapello Counties Sioux City Caltoun County Upper Explorerland Region Iowa Energy Policy Council Artistic Waste Services Phoenix C&D Recycling</p> <p>KANSAS Kansas Department of Corrections Harper County</p>	<p>LOUISIANA Shreveport Chamber of Commerce Jefferson Parish City of New Orleans City of Baton Rouge-Parish of East Baton Rouge</p> <p>MAINE Aroostook County Waterville-Winslow City of Portland</p> <p>MARYLAND City of Annapolis City of Baltimore Baltimore County Washington County Frederick County Ocean City City of Gaithersburg Harford County MD Office of Attorney General Montgomery County Northeast Maryland Waste Disposal Authority, Baltimore Anne Arundel County Calvert County Caroline County Town of Easton Charles County Somerset County Talbot and Queen Anne's Counties Wicomico County USPS - Baltimore Division Maryland Recyclers Coalition MD Dept. of the Environment St. Mary's County McCormick and Company Prince George's County Office Paper Systems, Inc. Maryland Enviro. Service Maryland Reclamation Legg Mason Wood Walker, Inc.</p> <p>MASSACHUSETTS City of Pittsfield City of Springfield City of Fitchburg North Andover Massachusetts Department of Environmental Management</p>	<p>MICHIGAN Michigan Dept. of Natural Resources Lapeer County Livingston County City of Marquette Muskegon County City of Alpena Southeastern Oakland County Resource Recovery Authority City of Pontiac</p> <p>MINNESOTA Metropolitan Council of the Twin Cities Area St. Cloud Hospital, St. Cloud Ramsey County Lyon County Blue Earth County East Central Minnesota Martin County Milwaukee MISSISSIPPI City of Meridian</p> <p>MISSOURI Kansas City City of Springfield</p> <p>MONTANA Yellowstone County (Billings)</p> <p>NEW HAMPSHIRE New Hampshire Office of State Planning City of Portsmouth City of Nashua Plymouth - Franklin ERRCO (Epping)</p> <p>NEW JERSEY Ocean County Pollution Control Financing Authority of Warren County Salem County Essex County Cape May Municipal Utilities Authority New Jersey Department of Environmental Protection and Energy Atlantic County City of Sayreville Pennsauken Solid Waste Management Authority</p>
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<p>NEW JERSEY (cont.) Financial Guaranty Insurance Co. New Jersey Clean Communities Council</p> <p>NEW YORK New York State Energy and Research Development Authority Town of Babylon City of New York, Department of Sanitation Seven Towns in Westchester County St. Lawrence County Private Developer in Onondaga County Town of North Hempstead Utahn Harvest Corporation</p> <p>NORTH CAROLINA Mecklenburg County New Hanover County Town of Chapel Hill Container Corp of the Carolinas Department of Transportation Materials Reclamation (Raleigh) Patriot Waste (Burlington) City of Charlotte Wake County Montgomery County</p> <p>OHIO Solid Waste Authority of Central Ohio (SWACO) City of Edmond</p> <p>OREGON Metropolitan Portland Deschutes County Marion County</p> <p>PENNSYLVANIA City of Allentown City of Pittsburgh Borough of State College City of Uniontown Fayette County City of Philadelphia Water Department City of Philadelphia Streets Department Pennsylvania Department of Environmental Resources National Association of Demolition Contractors, Doylestown Union and Snyder Counties</p>	<p>PENNSYLVANIA (cont.) Centre County Clatsop, Crawford, Forest and Venango Counties Dauphin County McKean County Solid Waste Authority, Mt. Jewett Mifflin County Solid Waste Authority City of New Castle Newtown/Fordley Potter County Schuylkill County Subsaharria-Wyoming Counties Pike County Westmoreland County City of Erie Clinton County Solid Waste Authority Indiana County Municipal Services Authority Monroe County Municipal Waste Management Authority Lawrence County Lancaster County Carbon County Blair County Exeter Township City of Altoona Wayne County Lycoming County Greene County Bedford, Fulton, Huntingdon Counties SWA</p> <p>RHODE ISLAND RI Solid Waste Management Corp. Town of South Kingstown Town of Narragansett</p> <p>SOUTH CAROLINA City of North Myrtle Beach Lexington County South Carolina DHEC</p> <p>SOUTH DAKOTA State of South Dakota</p> <p>TENNESSEE City of Bartlett City of Chattanooga City of Collierville City of Franklin City of Memphis Johnson City Metropolitan Government of Nashville/Davidson County Container Corp. of America City of Gallatin</p>	<p>TEXAS City of Arlington City of Houston City of Plano City of Corpus Christi City of Carrollton City of Fort Worth City of Lewisville City of Frisco</p> <p>UTAH Salt Lake County</p> <p>VERMONT Northeastern VT Development Association Northeast Kingdom</p> <p>VIRGINIA City of Chesapeake City of Norfolk City of Richmond City of Alexandria U.S. Army Engineer District, Fort Lee Prince William County Stafford County Chessterfield County Virginia Recycling Association Central VA Waste Management Authority Fairfax County Appalachian Regional Recycling Consortium, Commonwealth of VA Southeastern Public Service Authority of Virginia City of Manassas Arlington County James City County Culpeper County Virginia Dept of Environmental Quality Virginia Power Rivanna Solid Waste Authority City of Harrisonburg Henrico County City of Suffolk Wythe and Bland Counties</p> <p>WASHINGTON King County Clean Washington Center, Seattle City of Seattle City of Spokane Snohomish County Washington Department of Ecology</p> <p>WEST VIRGINIA City of St. Albans South Charleston WV Solid Waste Management Board Jefferson County</p>	<p>WEST VIRGINIA (cont.) Kanawha County Solid Waste Authority, Charleston Morgantown and Huntington West Virginia Resource Recovery Solid Waste Disposal Authority</p> <p>WISCONSIN West Central Wisconsin Regional Planning Commission Waukesha County Richland Center Dane County Winnebago County Outagamie County Brown County City of Janesville Wisconsin Dept. of Natural Resources Eau Claire County La Crosse County Manitowish County City of Milwaukee Southeast Wisconsin City of Prairie du Rocher City of Madison</p> <p>INTERNATIONAL Greater Toronto Area Government of Hong Kong U.S. Virgin Islands Sodley Associates - Australia Santiago, Chile (C&D)</p> <p>OTHERS American Forest & Paper Association American Paper Institute Solid Waste Association of North America U.S. Air Force Council for Solid Waste Solutions Johns Hopkins Health System Marrriott Corporation Mobil Chemical Company U.S. Conference of Mayors U.S. Postal Service, Northeast Region U.S. Environmental Protection Agency U.S. Department of Energy Office of Technology Assessment U.S. Department of Housing and Urban Development U.S. Department of Agriculture, Forest Service National Demolition Association Construction Materials Recycling Association Various Confidential Clients</p>
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The Ethical Principal of Zero Waste


“Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.”

—Brundtland Report¹

1. *Our Common Future: Report of the World Commission on Environment & Development.* <http://ringofpeace.org/environment/brundtland.html>



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The Goal of Zero Waste

"If it can't be reduced, reused, repaired, rebuilt, refurbished, refinished, resold, recycled, or composted, then it should be restricted, redesigned, or removed from production.


The goal is to combine aggressive **resource recovery** and **industrial redesign** to eliminate the very concept of waste.

Eventually, the community's resource-use system will emulate natural cyclical processes, where no waste exists."

Source: Martin Bourque, Berkeley, CA Ecology Action at the GRRN Zero Waste Conference in NYC in 2005



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WASTE & RECYCLING NEWS POLL – February 8, 2010

Final Poll Results

Do you think zero waste is possible?

Yes — **46.0%**

No — **39.5%**

Maybe — **14.5%**

Total Votes: 276



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The Forms of Zero Waste

Micro Commercial	Public Policy
Total Quality Management	Sustainability
Zero Defects	Resource Allocation Management
Maximize Profits	Politically Viable



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Zero Waste Public Policy Movement

Grass Roots	Establishment
Outside Looking In	Mainstream
Suspicious of Technology	Trust in Science
Consumerism to Sustainability	Making Consumerism more Resource Efficient

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REACTION AGAINST THE TREND

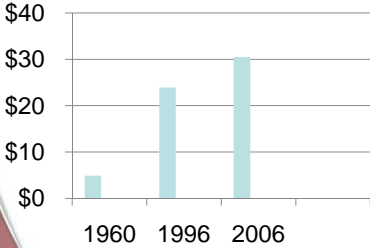
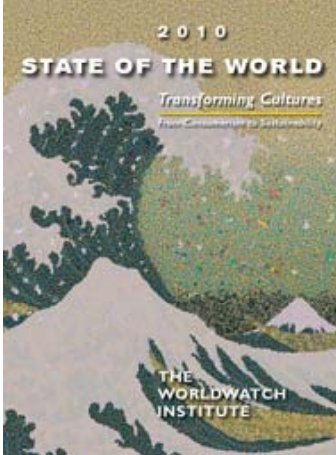
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2010 State of the World: Consumerism to Sustainability


- 60 writers and researchers
- 2 years in the making
- Sustainability is a reaction to the dramatic growth of consumption
- Consumption in Trillions:



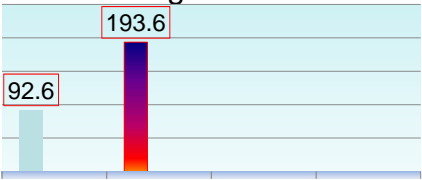
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2010 State of the World: Consumerism to Sustainability

- Between 1950 and 2005:
 - Metal Production Grew Sixfold
 - Oil Consumption Grew Eightfold
- 60 Billion Tons of Resources Extracted Annually
- Daily Consumption Equals 112 Empire State Buildings

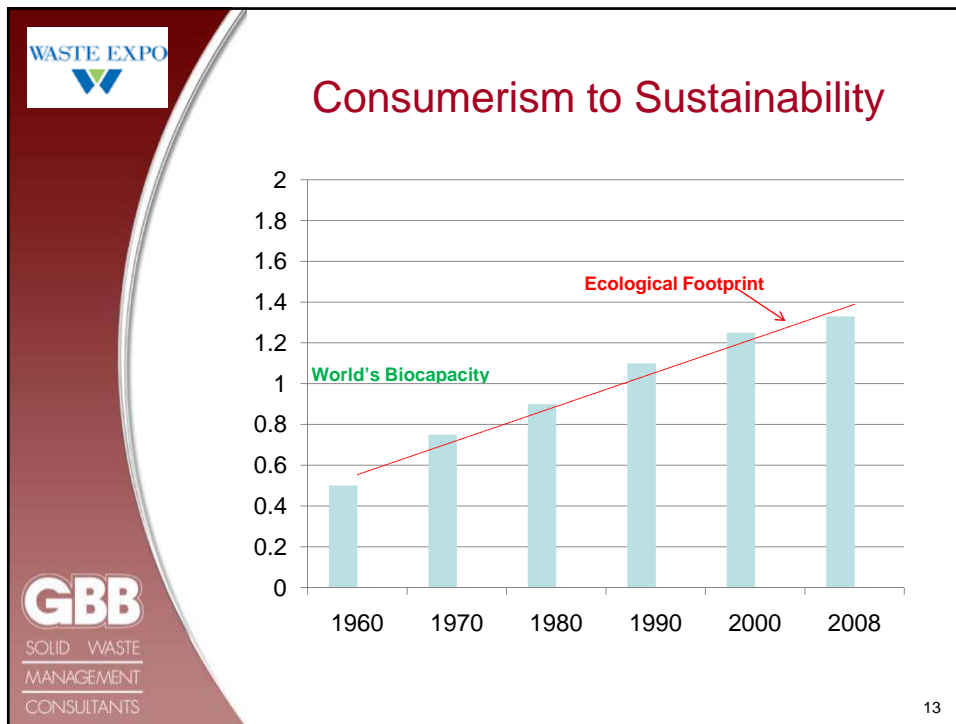


Daily pounds of resources used per person



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Responding To Consumerism

Mobilization


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Then There Was Canberra

- Capital City of Australia
- 345,000 population
- Zero Waste Policy inaugurated in 1996



GOAL: A WASTE FREE SOCIETY BY 2010

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Canberra's Plan

Waste Inventory and Benchmarks

- Developing a waste inventory and identifying the full costs of each type of waste
- Setting benchmarks to monitor performance towards achieving the 2010 target

Smart Buying

- Developing programs that will allow consumers and resource users to make well informed choices for minimizing waste in their purchasing and production decisions

Reduction Agreements and Cleaner Production

- Establishing waste reduction agreements with key industries operating in the ACT and region

Waste Audits and Legislation

- Introducing mandatory waste audit processes before development approvals
- Explore the use of economic instruments or legislation, as appropriate, to support new waste management initiatives

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New Zealand Grassroots & Business

- Sir Stephen Robert Tindall
- Gerry Gillespie
- New Zealand Trust



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Kaitaia Conference in 2000

- Dec. 7 – 9, 2000
- 26 Councils had declared zero waste as a goal
- Attended by people from various parts of the world
- Key Note: Tachi Kiuchi, Counsellor of Mitsubishi Electric Corporation



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Kaitaia Conference Inspires Zero Waste In UK

- Two Camps Developed:
 - Zero but anti incinerator out of New Castle
 - Zero and not opposed to incinerator out of Cardiff, Wales
- Mal Williams Leads the Wales Group
 - 2001 Welsh Conference
 - Dragon Zero Waste Accord
- Ralph Ryder working with other European activists to set up a network to fight planned expansion of waste-to-energy incinerators throughout Europe



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UK Zero Waste Movement


- All three main political parties acknowledge Zero Waste as their policies
- Scotland and Wales have embraced the term formally –
- Scotland has a Zero waste Officer and
- Wales' new national strategy is called "Towards Zero Waste" with a target of 2050 for achieving it.

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**ZERO WASTE IN
THE UNITED STATES**



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The U.S. Road to Zero Waste

- J. Winston Porter & 25% Recycling
- Recycling Becomes Mainstream in the '90s
- Zero Waste in Del Norte
- Tindall Foundation
- Kaitaia Conference in 2000
- 2002 San Francisco's Zero Waste Goal
- Rick Brandes, Retired EPA: 45-45-10
- 60-30-10 Waste Conversion meets Zero Waste



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Zero Waste Organizations

Who	What
• Zero Waste Inter. Alliance	Zero Waste Resources
• GRRN	Zero Waste Resources
• GAIA	Zero Waste for Zero Warming
• ZERI	Zero Emissions Res. Initiatives
• Eco-cycle	Zero Waste Resources
• Earth Resource Foundation	Zero Waste Business Conferences
• ILSR	Stop Trashing the Climate Report
Zero Waste New York City	NYC ZW program
• Zero Waste Businesses	ZW reference list



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Certifying Zero Waste

California Resource Recovery Alliance (CRRA)

- Initiated zero waste certifications:
- 32 hours of training in 8 seminars
- Under 5 years experience, required courses
- Over 5 years experience, elective courses
- Course Selection Samples:

Rethinking Waste	Zero Waste, Resource Management
Organics Management	How Businesses Get to Zero Waste
Extended Producer Responsibility	Businesses: The Triple Bottom Line



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A ZERO WASTE PLAN: AUSTIN, TEXAS


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Austin, Texas Landfill Situation


- Five active landfills in Travis County and one in neighboring Williamson County take trash from 33 counties
- In 2001 two neighboring problem landfills - run by BFI & Waste Management – planning major expansions which mobilized opposition
- In 2004, the City of Austin Solid Waste Services Department proposes a long-term contract to combine city's old problem landfill with adjoining landfill
- Texas Campaign for the Environment (TCE) fights for Zero Waste Plan in 2004



Austin American
Statesman story in 2002


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Zero Waste Momentum Increases

- Long-Range Solid Waste Planning Task Force is appointed in early 2005 with landfill neighbors, landfill company representatives, long-term recycling advocates, Goodwill and local government reps
- Mayor Will Wynn signs U.N. Urban Environmental Accord in May 2005
- 2007 City Council passes Resolution for Climate Protection




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Austin's Zero Waste Plan

- Resolution 50 (Zero Waste) passed January 15, 2009
- Four Policy/Program Areas:
 - Upstream
 - Downstream
 - Green Economics
 - Regional Coordination & Development



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New Solid Waste Director

- January 2010: Bob Gedert
 - Former Director of CRRA
 - California Product Stewardship Council
- Solid Waste Department Being Redesigned
 - 6 Month Process
 - New Mission: Away from “Command and Control” to “Collaboration and Resource Sharing”




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Final Thoughts

1. A Sense of Growing Political Support
2. Populist Movement is Small In Number
3. “Upstream, Midstream, Downstream”: Is there a Bureaucratic Lag In Government?
4. Are Public Administration Curricula Preparing Future Managers?
5. Zero Waste Advocates are not Monolithic



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Thank You!

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