# WASTE TO WEALTH
## 2007 PROGRAM ACTIVITIES REPORT

Institute for Local Self-Reliance

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*"Nothing happens without grassroots activity. Even this sweep of . . . corporations greening themselves, that's only because the grassroots is demanding it."*

— Neil Seldman, President, ILSR

*"Albert Einstein observed that a smart person solves problems, but a genius avoids them. Zero Waste activists strive to be geniuses."*

— Brenda Platt, Co-Director, ILSR

### INTRODUCTION

The United States consumes a disproportionate share of the world's resources and contributes a similarly lopsided portion of the world's pollution. Americans, for example, use one-third of the earth's timber and paper and generate almost one-quarter of its carbon dioxide emissions, but represent only 5% of the global population. Why do we consume so much? In part, because consumption and wasting are cheap and easy and subsidized, and because many products are designed to be thrown away. But this extravagant resource consumption by our economy comes with a steep price tag, contributing directly to pollution, toxic waste, global warming, deforestation, loss of biological diversity, and damaged ecosystems. Landfills are now the number one man-made source of methane, and the number three contributor to greenhouse gas emissions.

For 33 years ILSR's "Waste to Wealth" program has helped to convert wastes from environmental and economic liabilities into valuable resources that contribute to community development. In 2007, our work has focused on (1) encouraging sustainable biomaterials to replace fossil-fuel-based plastics, (2) developing green industrial parks, (3) salvaging building materials through deconstruction, (4) deterring waste incineration projects and promoting in their stead zero waste planning and recycling-based economic development, and (5) establishing a composting program in our home city of Washington, DC.

*"Your testimony was absolutely compelling. We look forward to working with you on developing needed legislation."*

— Blondell Reynolds Brown, Councilwoman At-Large, City of Philadelphia, commenting on the testimony of ILSR President, Neil Seldman, at a 2007 hearing on recycling.

### SUSTAINABLE PLASTICS

*"I want to thank you again for an excellent show. I hope that you are doing more interviews as I think you are an excellent spokesperson. It is rare to find someone who can talk a lot without getting into a cadence that bores the audience. You have that knack."*

— Greg Krouse, producer, Radio KZYX, commenting on the presentation of ILSR Co-Director, Brenda Platt on a radio call-in show (Toxic Trespass) in Mendocino, CA concerning plastics and healthy communities.

*"We shall grow annually many, if not most, of the substances needed in manufacturing."*

— Henry Ford, 1941, unveiling a plastic car, molded from soybeans and other crops.

The first commercial plastics were derived from plants. Developed more than 100 years ago, bio-plastics were made from cotton, milk whey, wood pulp, shellac, and natural rubber. These early plastics had durable applications, from combs and buttons to gramophone records, celluloid film, and even, as Mr. Ford made clear, cars. But, after World War II the price of a barrel of oil dropped to $1, and the petroleum economy boomed. The age of single-use disposable fossil-fuel-based plastics was borne. Since 1960, single-use plastic packaging has grown from 120,000 to 11,240,000 tons per year in the U.S. alone. The impacts are severe: strangled marine life, overflowing landfills, toxic chemicals, and more.

ILSR's Sustainable Plastics Project is exploring the potential of a new generation of bio-plastics to mitigate the detrimental impact that fossil-fuel-based plastics have on public

Photo credit: Brenda Platt, © ILSR 2007

Cedar Grove Composting (WA) is one of the premier sites composting bioplastic products. Here a bag of bioplastic products are being buried in a windrow to be tested for compostability. *See page 2.*

health and the environment. In 2007, ILSR continued to coordinate the Sustainable Biomaterials Collaborative (SBC) along with Clean Production Action, the Institute for Agriculture & Trade Policy, the Lowell Center for Sustainable Production, and the Healthy Building Network. This new network of organizations is working to promote the use of biomaterials by creating guidelines, engaging markets, and promoting policy initiatives.

SBC
SUSTAINABLE BIOMATERIALS COLLABORATIVE

To date, 14 organizations have formally joined the SBC. Another 15 have commented on and helped to improve the Sustainable Bioplastic Purchasing Guidelines. These are the first bio-based product purchasing guidelines aimed at promoting sustainable agricultural feedstocks and practices, clean production, and recyclable or compostable products. Also this year, we established a web site, http://sustainablebiomaterials.org, to disseminate the guidelines, and began working with companies to adopt them. We have joined efforts with Clean Production Action's Business-NGO Working Group to seek input from leading green businesses on the purchasing guidelines. The SBC has been actively engaged with Whole Foods, Seventh Generation, Interface Carpets, Aveda Cosmetics, Nau Clothing, Kaiser Permanente, and other leading green businesses. Our intention is for these businesses to adopt the guidelines and pull purchasing power to bring sustainable biomaterials into the marketplace.

Another focus of our work is documenting how bio-plastics can move us closer to a zero waste economy. We have conducted several site visits to venues using and composting bio-plastic products and are developing detailed case studies of these early adopters. Last year, ILSR joined with a network of recyclers to request that NatureWorks stop selling its bioresin for beverage containers because it interferes with the current, well-established recycling system for PET beverage bottles. NatureWorks has agreed to an 18-month moratorium for new bottle applications while it works with stakeholders to address recycling issues. The company is now conducting a pilot recycling program and telling potential bottlers they have to submit an "end-of-life plan" before they can buy the bioresin.

Throughout this year, ILSR has participated in and addressed a series of stakeholder meetings, conference calls, and industry conferences covering a range of bio-plastic issues. These included speaking to approximately 100 natural food packaging and product companies at *The Responsible Packaging Forum* organized by Whole Foods (Baltimore) and delivering the keynote address at the Bioenvironmental Polymer Society's conference, *The International Symposium on Polymers & the Environment* (Vancouver, WA). Our work has been featured in at least 15 articles, including Plastic News, CNN Money, and Biopak News. These presentations and attendant press have brought the importance of sustainable agriculture, labeling issues, safe additives, and need for composting infrastructure to industry, government officials, and environmental stakeholders.

## ENDING INCINERATION AND ADVOCATING ZERO WASTE

ILSR has a long history of working to stop the proliferation of waste incinerators in the U.S. In the 1980s, we helped defeat 300 facilities. Communities who said no to incineration helped institutionalize curbside recycling and composting. Today, communities who opt for non-incineration systems will help institutionalize zero waste planning, which has come of age in recent years. Together with recycling-based community economic development, our zero waste advocacy forms the heart of our anti-incineration work.

This past year, ILSR has worked primarily in Maryland and in Puerto Rico to battle waste incineration plans, and in Delaware to promote expanded recycling and better resource management. In Los Angeles, under a subcontract with the City, we started providing zero waste planning technical assistance, which will continue next year. In addition, we have teamed with environmental activists affiliated with Greenaction of San Francisco and Toxics Research Center of Boston to fight proposed incinerators, as well as with similar grassroots environmental organizations in Detroit, MI; Buffalo, NY; Erie, PA; and, Westley (Stanislaus County), CA. Our role in this collaborative work has been to analyze incinerator finances and provide project planning for alternative approaches that reduce costs, while creating small businesses and jobs. Here are some highlights of this work:

*Maryland*: ILSR continued to assist citizen, environmental and small business groups in Frederick and Carroll Counties in objecting to a planned 1,500-ton-per-day incinerator. As part of this work, ILSR has helped facilitate a citizens' forum, which has proven effective in training citizen activists. ILSR developed a budget and scope-of-work for a resource management study needed for decision making. In Carroll County, the Environmental Advisory Committee and then the Board of County Supervisors agreed, and this study is now underway.


ILSR staffer Brenda Platt makes a presentation to the Carroll County Environmental Commission (MD) on composting.

*Puerto Rico*: We have provided similar assistance to the College of Medical Surgeons and the Sierra Club of Puerto Rico.

Photo credit: Neil Seldman, © ILSR 2007

Through site visits and meetings with Commonwealth and local government officials, ILSR's team of experts have been working with the Department of Solid Waste – Autoridad de Desperdicios Solidos, San Juan – to plan and implement a comprehensive recycling and composting program.

*Michigan*: In Detroit we assisted environmental justice networks (Detroiters Working for Environmental Justice, Detroit Sierra Club and the Ann Arbor Ecology Center) in presenting a resource management system as a replacement for an aging incinerator that has cost the city over one billion dollars in the past 20 years, polluting the region's air and groundwater in the process. ILSR has estimated that a non-incineration system for Detroit – based on salvaging, processing and remanufacturing materials from the City's waste stream – could create almost 1,700 new jobs and 64 new businesses. Incinerating or landfilling these same materials would result in less than 40 jobs, while destroying discarded materials that are extremely valuable to industry and agriculture. With the current incinerator contract up for renewal starting in June 2008, ILSR's analytical work provides timely and vital information that could benefit Detroit's environment and economy.

*Delaware:* At the prompting of the grassroots group Green Delaware, ILSR was hired by the Delaware Department of Natural Resources and Environmental Control to prepare a resource management analysis and suggest policies that could help realize comprehensive recycling and composting in the state. ILSR conducted over 100 interviews with stakeholders throughout the state and produced a comprehensive report for DNREC. The report recommended a $6 per ton surcharge on waste destined for landfill disposal, sunsetting after 6 years. ILSR concluded that monies raised through this tax on wasting could spur investment in recycling and composting and lead to the creation of 1,500 new direct jobs, while avoiding $240 million in disposal costs over the 6 years.

*Los Angeles*: In LA, the City Council has issued a zero waste plan which calls for diverting 90% of the City's municipal waste from landfills by 2025. ILSR is serving as an advisor to the City's Department of Sanitation on zero waste planning and implementation and has a long history of working with LA city agencies and community groups, dating back to 1985. Each month we participate in a city meeting with various concerned groups to discuss facilities, strategies and market conditions.

## COMMUNITY ECONOMIC DEVELOPMENT

ILSR and People for Community Recovery in Southeast Chicago completed a 3-year program to determine the feasibility of a clean manufacturing industrial park to create living wage jobs for local residents in one of the most polluted industrial areas of urban USA. The project ended with specific plans for four local companies, working together as the Green Energy Collaborative, to locate on an industrial site at 120th Street and Pullman Avenue.

In EPA Region 3, we continued our coordination role of the Mid-Atlantic Consortium of Recycling and Economic Development Officials (MACREDO) serving the five Mid-Atlantic states and the District of Columbia. A main goal has been partnering with EPA in its efforts to increase the national recycling rate to 35%. Our focus has been supporting the emerging food scrap material infrastructure in the region. On February 15, 2007, we worked with EPA in organizing a strategy session for the states and established committees on education and outreach, streamlining the permitting process, and increasing processing capacity. As a follow-up, we organized a food recovery workshop in cooperation with the Pennsylvania Food Merchants Association and the PA Recycling Markets Center on June 21, 2007. Forty-five people from both the public and private sectors attended this event. Building on the workshop's success, we are exploring opportunities for involving farmers in composting food residuals, as well as a possible location for composting organic materials from supermarkets.

## DECONSTRUCTION: SMALL BUSINESSES AND TRAINED WORKERS

The recovery of usable building materials through deconstruction directly impacts the extraction of virgin materials from forests and mines. This reduces water and air pollution, industrial waste and industrial energy needs. Training workers in this field can yield jobs with up to $25 per hour wages and benefits worth $10 an hour.


Second Chance workers at NJ deconstruction project.

In 2007, we continued to provide direct assistance to deconstruction projects and traditional demolition companies across the U.S. ILSR staffers have helped city departments, school districts, housing authorities, trade unions and private companies that work closely with neighborhood councils and community development corporations.

**Building Materials Salvaged from the Summit, NJ Deconstruction Project**

| Material | Quantity |
|---|---|
| Windows | 200 |
| Doors (interior) | 100 |
| Doors (exterior w/trim & frames) | 15 |
| Wood work | All 5 houses |
| Wood paneled rooms | 3 "libraries" |
| Mantels | 10 |
| Flooring (reclaimed oak & pine) | 8,000 sq ft |
| Joists/wall framing | 100 pc of 2x10x8' |
| Stairways | 4 |
| Wavy glass window sashes | 200 |
| Porch posts | 12 |
| Shutters | 30 |
| Bluestone | 120 sq ft |
| Appliances | 6 |
| Shelving (metal units) | 4 |
| Exterior aluminum fencing | 300 feet |

ILSR estimated the following results from the Summit Project's recovery of materials:

- Elimination of the need for the harvest of 330 trees.
- Reduction of the volume needing landfill space up to 84,200 cubic yards.
- Preservation of 234 million BTUs of embodied energy with reuse of the recovered lumber.
- Avoidance of 5,000 pounds of greenhouse gases through reuse of the wood.

Photo credit: Chloe Seldman, © ILSR 2007

We act as a coordinator, putting community groups in touch with exemplary deconstruction projects. As a result, new small businesses are being established and workers trained for living wage and benefits jobs. For example, ILSR facilitated a partnership between Newark's New Community Corporation, the nation's largest Community Development Corporation, and Second Chance, Inc., a nonprofit deconstruction/ resale enterprise with a large retail store that sells architectural antiques, building materials and related items, based in Baltimore. This partnership resulted in paying work for Newark residents as they developed their deconstruction and architectural salvage skills on job sites in Summit and Clifton, NJ. In addition, the Summit project received recycling credits towards its green building LEED certification.

ILSR's award winning publication for the Metropolitan Washington Council of Governments

*"With your help our Environmental Commission drafted and passed a Construction and Demolition Recycling award winning ordinance. . . . Thank you for helping New Jersey and Woolwich Township become more environmentally sound!"*

— Frank Wagner, Chair
Woolwich Township Environmental Commission

## OUR HOME TOWN

ILSR continued efforts to help develop a full-scale composting program for the District of Columbia's 9,000 tons of fall leaves. Much of this year's efforts focused on exploring the potential for a long-term site at the University of the District of Columbia's Agricultural Experiment Station in Beltsville, MD. We prepared a joint venture plan and preliminary capital and operating budgets for UDC and the Department of Public Works. ILSR also identified alternative, private sector options for composting the City's leaves until a permanent facility at UDC can be built. This fall, for the first time, all of the City's vacuumed fall leaves are slated to be composted at Pogo Organics in Sunshine, MD, 30 miles from DC. Previously, most of DC's leaves have been hauled to landfills in Virginia 160 miles away.


First load of DC fall leaves delivered to Pogo Organics, November 2007.

In 2006, ILSR was contracted by the Metropolitan Washington Council of Governments (COG) to produce the *Builders' Guide to Reuse and Recycling: A Directory on Construction and Demolition Materials in the Metropolitan Washington Region.* Over 8,000 "pocketbook" copies were printed and distributed. It was also posted on the web for updates. This year this widely acclaimed directory was recognized for its excellence, receiving the internal COG award for best publication in 2006.

## NETWORKING

In the past year, we have worked with many organizations, including:

AFSCME, Buffalo, NY
Alameda County, CA, Solid Waste Reduction and Recycling Authority
Blue Ridge Environmental Defense League, NC, SC, VA
Clean Production Action, MA
Clean Water Action
College of Medical Surgeons of Puerto Rico
Coker Composting & Consulting, VA
Delaware Department of Natural Resources and Environmental Control
Department of Public Works, Washington, DC
Department of Sanitation, Los Angeles, CA
Eco-Cycle, Boulder, CO
Ecology Center of Ann Arbor, MI
EENDUSA, Inc. (e-scrap recycling) Frederick, MD
Eureka Recycling, Minneapolis, MN
Global Anti-Incinerator Alliance/Global Alliance for Incinerator Alternatives
Greenaction, San Francisco, CA
Green Delaware
Green Harvest Technologies Inc.
Institute for Agriculture & Trade Policy, MN
Lowell Center for Sustainable Production, MA
Lower East Side Ecology Center, NY
New Community Corporation, Newark, NJ
People for Community Recovery, Chicago, IL
RecycleWorlds Consulting, Madison, WI
Second Chance, Baltimore, MD
Sierra Club of Maryland, Catoctin Group
Sierra Club of Puerto Rico
St Clair Superior Community Development Corporation, Cleveland, OH
Teamsters Union, Washington, DC
The Reuse People, San Francisco, CA
University of the District of Columbia
Urban Ore, Berkeley, CA
US EPA


Recycling Pioneers gather at Blue Mountain Center to initiate archival history of the recycling movement.

### *Recycling Retreat: Pioneers Gather at Blue Mountain Center*

One of our most exciting projects in 2007 was organizing a retreat for 23 pioneering recycling activists at Blue Mountain Center in upstate New York. At this meeting, June 1-4, participants began archiving an oral history of the modern recycling movement. The archives project was co-sponsored by Urban Ore of Berkeley, CA. During the last two days of this retreat, participants developed four key messages and identified immediate actions needed to stem the flow of wasted materials in our economy and sustain the planet for future generations. Getting organics out of landfills and back to the soil was one central message. The Stop Waste Program of Alameda County, CA supported this part of the event. Via our web site at www.ilsr.org/recycling, ILSR is now soliciting feedback on the suggested goals and policies.

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