

ZERO WASTE

ILLINOIS

Program Vision · Highlights · Next steps

ILLINOIS SUSTAINABLE TECHNOLOGY CENTER
APRIL 2015



Outline

- I. Program Overview
- II. 2014 Highlights
 - I. Material assistance
 - II. Event assistance
 - III. Manufacturing assistance
 - IV. MSW industry assistance
 - V. Community assistance
- III. We'd like you to join us





Program Vision



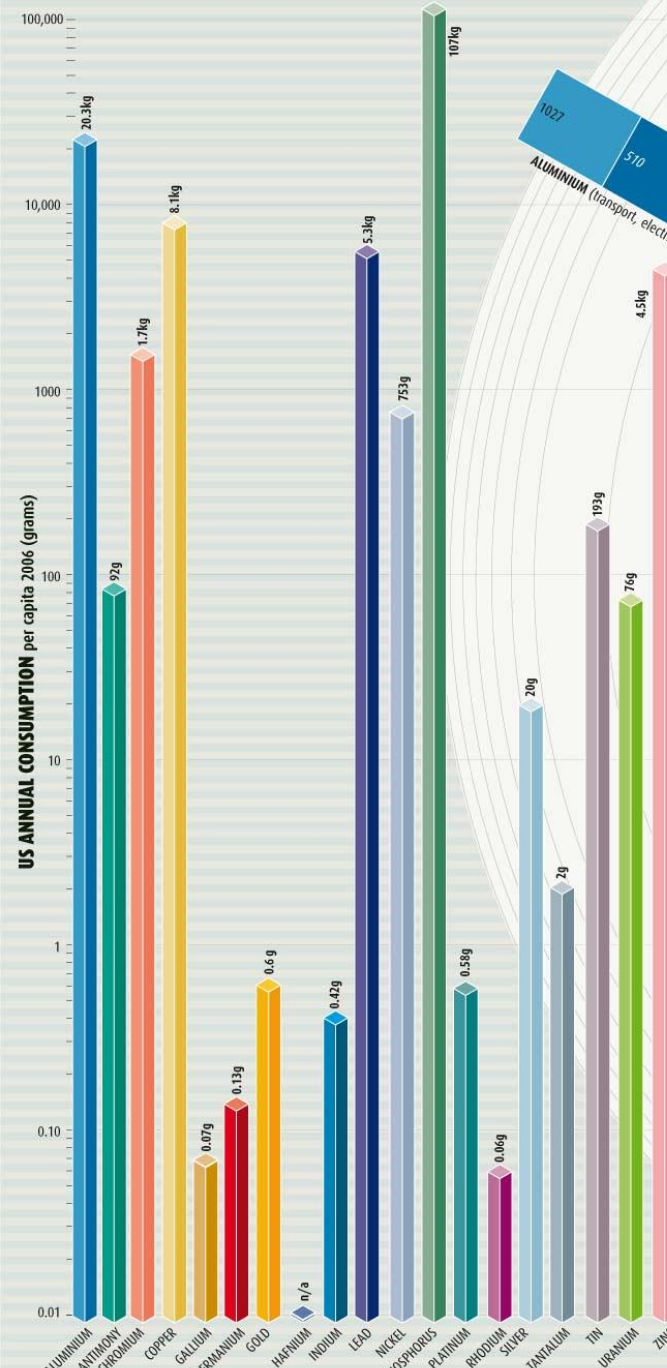
Internal Program Vision

Zero Waste is an approach to the way materials are handled through their entire life cycle.

In our vision of zero waste, materials are designed to cycle infinitely through phases of useful life, improving environmental and human health wherever possible.

In striving toward this vision, materials not designed for zero waste should be put to their highest and best use.

HOW LONG WILL IT LAST?



IF DEMAND GROWS...

Some key resources will be exhausted more quickly if predicted new technologies appear and the population grows

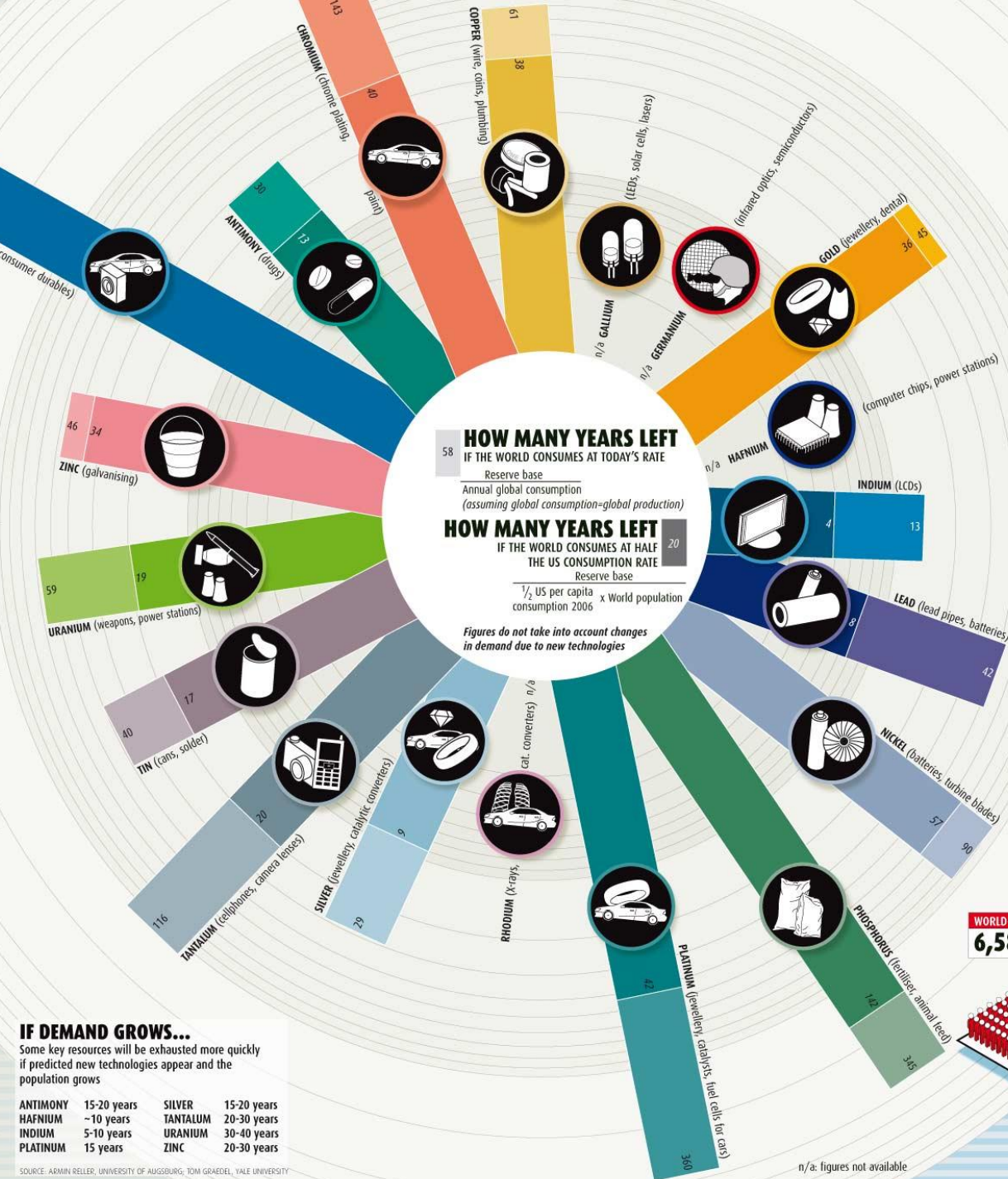
ANTIMONY	15-20 years	SILVER	15-20 years
HAFNIUM	~10 years	TANTALUM	20-30 years
INDIUM	5-10 years	URANIUM	30-40 years
PLATINUM	15 years	ZINC	20-30 years

SOURCE: ARMIN RELLER, UNIVERSITY OF AUGSBURG; TOM GRAEDEL, YALE UNIVERSITY

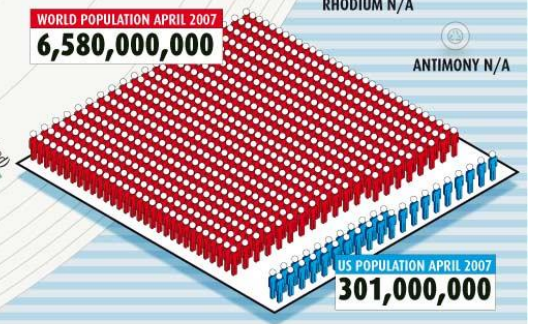
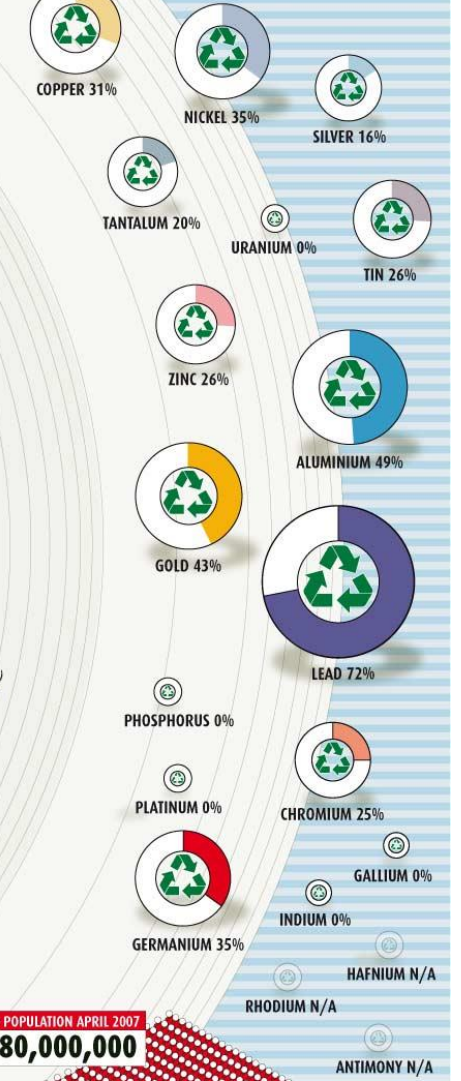
HOW MANY YEARS LEFT
IF THE WORLD CONSUMES AT TODAY'S RATE
Reserve base
Annual global consumption
(assuming global consumption=global production)

HOW MANY YEARS LEFT
IF THE WORLD CONSUMES AT HALF
THE US CONSUMPTION RATE
Reserve base
 $\frac{1}{2}$ US per capita consumption 2006 x World population

Figures do not take into account changes in demand due to new technologies



PROPORTION OF CONSUMPTION MET BY RECYCLED MATERIALS (%)



n/a: figures not available

Zero Waste Saves

Illinois Sustainable Technology Center's staff of engineers and scientists provides a variety of cost-effective, sustainable materials management services.

We conduct research and technical assistance that help organizations minimize waste and increase recycling, leading eventually to zero waste. **Our project work includes waste audits, supply chain optimization, recycling market research and recycling/compost program implementation.**

istc.illinois.edu/zerowaste

2014 Highlights

3,500 +

Recipients of Zero Waste Program
launch announcement
Feb 2014

8

In-depth project with Illinois
businesses/organizations

250,000 + pounds

Material diverted by Zero Waste
Program

30

Organizational partnerships formed

3,248 pounds

Food scraps diverted from landfill
through Chicago Compost Collection
Network

2nd place

National Gameday Recycling
competition (organics diversion)

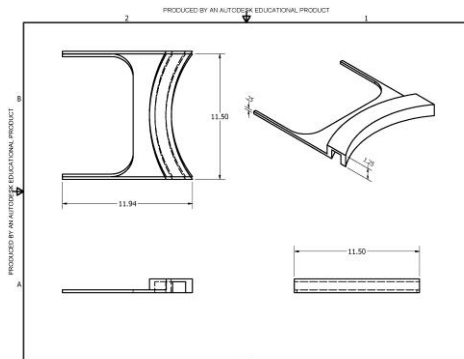


Material assistance

Opportunity: A new to find end markets and solutions for unique materials.

Solution: Partner with manufacturers/other programs/recyclers to create a robust network.

Status: Over 25,000 gloves recycled per month through campus.





Event assistance

Opportunity: A large portion of the material generated at events can be diverted.

Solution: Partner with various departments on campus to coordinate a zero waste homecoming game.

Status: Diverted over 60% (9 tons) of material from the event.



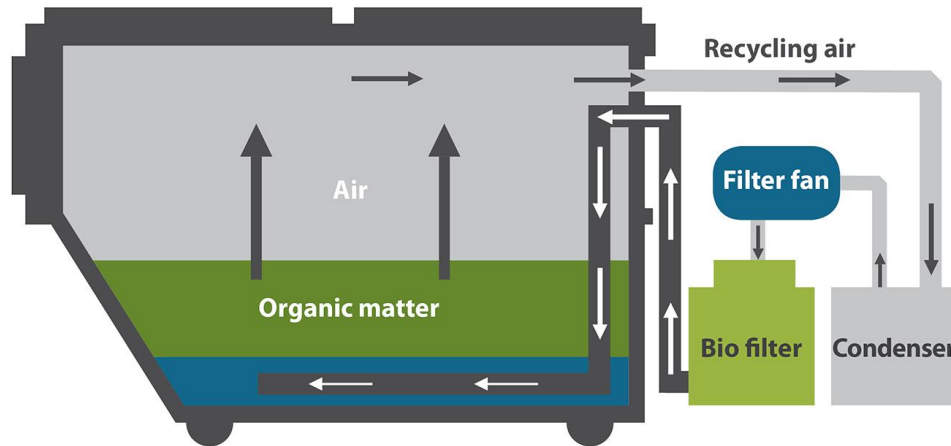


MSW Industry assistance

Opportunity: There is a growing demand for food scraps hauling and diversion in Illinois.

Solution: Assist Roy Strom Co. pilot the BioBin system through the DCEO FSCRAP grant.

Status: Since the program began in October they have sent over 15tons to a compost facility and enabled seven new establishments to divert food scraps as well.





Manufacturing assistance

Opportunity: ISTC has three decades of experience working in manufacturing waste reduction assistance.

Solution: Assist Illinois manufacturers better understand or reduce their material generation.

Status: In 2014 we were able to divert and reduce over 200,000lbs of material.

Schedule Your Free Site Visit

Sign up to receive a site visit and opportunity assessment at no cost to you.

* First Name:
Middle Name:
* Last Name:
Title:
* Organization / Company Name:
* Street Address:
* City:
* State:
* ZIP Code:
* Phone:
* E-Mail:

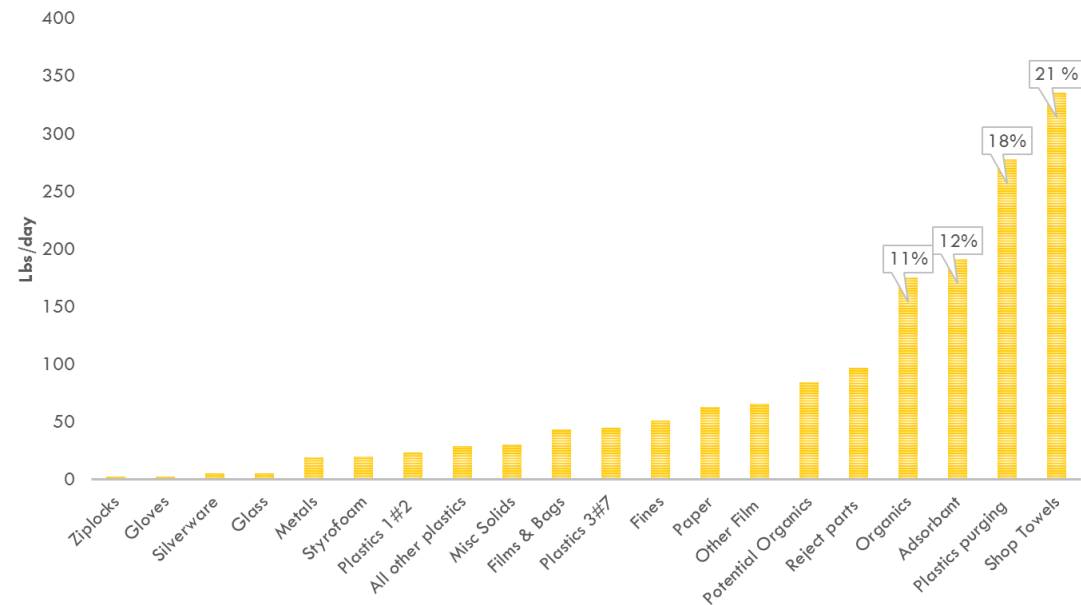
Have you worked with ISTC before: ☐ yes ☒ no

Assistance requested:

- ☐ General Site Assessment
- ☐ Waste Focused Site Assessment
- ☐ Energy Focused Site Assessment
- ☐ Water Focused Site Assessment
- ☐ E3: Economy - Energy - Environment Site Assessment

* Spam prevention - Please enter the sum of 1 plus 2:

* Denotes required field





Solution: Partner with communities to reevaluate portions or all of their material handling processes and policies.

Status: Assisted two communities in 2014. Working with the Forest Preserve of Cook County to implement some of our recommendations in 2015.



Meet the Technical Assistance Staff

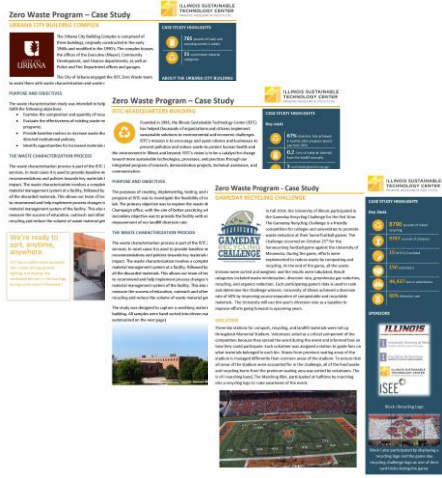
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Retail, Hospitality, & Hospital Zero Waste

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Zero Waste Events

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Zero Waste Program - Case Study

UNIVERSITY OF ILLINOIS SUSTAINABLE TECHNOLOGY CENTER

THE CHALLENGE

The University of Illinois Sustainable Technology Center (USTC) was established in 2007 to provide a central location for sustainability efforts across the university. The USTC's mission is to develop and implement sustainable practices across the university, from research and education to operations and administration.

THE SOLUTION

The USTC has implemented a variety of sustainable practices, including:

- Reducing energy consumption through the use of energy-efficient lighting and equipment.
- Reducing water consumption through the use of low-flow faucets and toilets.
- Reducing waste through the use of recycling and composting programs.
- Increasing the use of sustainable materials in construction and renovation projects.

THE RESULTS

The USTC has achieved a number of significant results, including:

- A 15% reduction in energy consumption.
- A 10% reduction in water consumption.
- A 20% reduction in waste.
- A 10% increase in the use of sustainable materials.

Illinois Green Lunchroom Challenge Program

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To gain assistance or schedule a site visit, please contact the following or go to:

www.istc.Illinois.edu/sitevisit

Manufacturing & Community Zero Waste

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ZERO WASTE

ILLINOIS

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ILLINOIS SUSTAINABLE TECHNOLOGY CENTER
DECEMBER 2014

