



BUILDING ZERO WASTE COMMUNITIES

KATE BAILEY ★ ECO-CYCLE

NRC ZERO WASTE CONFERENCE ★ MARCH 2020



Who is Eco-Cycle?

- One of oldest and largest NGO recyclers in the world
- Located in Boulder, Colorado, USA
- 65 employees, 50,000 tons/year
- Hands-on experience in every aspect of Zero Waste





INFRASTRUCTURE



PROGRAMS



POLICIES



COMMUNITY ENGAGEMENT

ZERO WASTE INFRASTRUCTURE

Six facilities to
replace landfills

RECYCLABLES

Materials recovery facility (MRF) for traditional recyclables



ORGANICS

Organics recovery facility (ORF) for composting and energy production



CONSTRUCTION

Construction, demolition and deconstruction (CDD) facilities for recycling and reuse of building materials



HARD-TO-RECYCLE

Center for hard-to-recycle materials (CHaRM) for non-traditional recycling



REUSE & REPAIR

Reuse and repair facilities for highest and best use before recycling



WHATEVER'S LEFT

Materials recovery biological treatment (MRBT) facility for "whatever's left"





PUBLIC-PRIVATE PARTNERSHIP: BOULDER COUNTY MRF COMMITTED TO CLEAN, HIGH QUALITY MATERIALS



Computers & Electronics



TVs & Monitors



Copy Machines, Printers & Fax Machines



Printer Cartridges



Office Phones (landline)



Mobile Phones & Devices



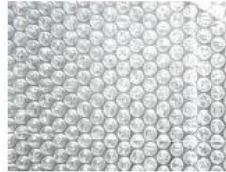
Scrap Metal



White Block Foam Packaging with a #6 (AKA Styrofoam®)



Stretch Wrap (Pallet Wrap)



Bubble Wrap



Plastic Bags with a #2 or #4



Big #2 Plastics



Large Appliances



Small Appliances



Textiles



Paired Reusable Shoes



Pallets



Books & Manuals



Bikes & Bike Parts



Yoga Mats (we're in Boulder County, after all)

CENTER FOR HARD TO RECYCLE MATERIALS (CHaRM)

- Opened in 2001
- 24 types of materials
- 41,000 customers per year
- 5 million pounds per year
- Goal: one new material per year

COMMUNITY ZERO WASTE ROADMAP

Three phases:

1. Access
2. Participation
3. Whatever's left

www.ecocyclesolutionshub.org/how-to-get-there/

PHASE 1

Access to Services
YEARS 1-5

Commit to the Zero Waste path and start measuring your progress

Universal household recycling with unit-based pricing (PAYT)

Universal recycling for all businesses and multi-family units (MFUs)

Universal composting programs for households, MFUs and some businesses

Product fees and bans

Public space, school and government initiatives including Zero Waste events

Incentives for construction, demolition and deconstruction (CDD) recycling

Community education

PHASE 2

Building Participation
YEARS 6-9

Recycling required for all businesses, homes and MFUs

Composting required for all businesses, homes and MFUs

Expand waste reduction and reuse initiatives

Biweekly trash service for residents

Landfill and incinerator disposal bans

Producer responsibility for hard-to-recycle (HTR) materials including electronics, paint, mattresses, carpet, batteries and other misc. products.

Recovering materials from mixed construction loads

Community education

PHASE 3

Recovering Whatever's Left
YEARS 10+

Enforcement of source-separation requirements

Public policy support for sustainable consumption

Economic policy changes and full-cost accounting

Residual waste processing and ban on incineration

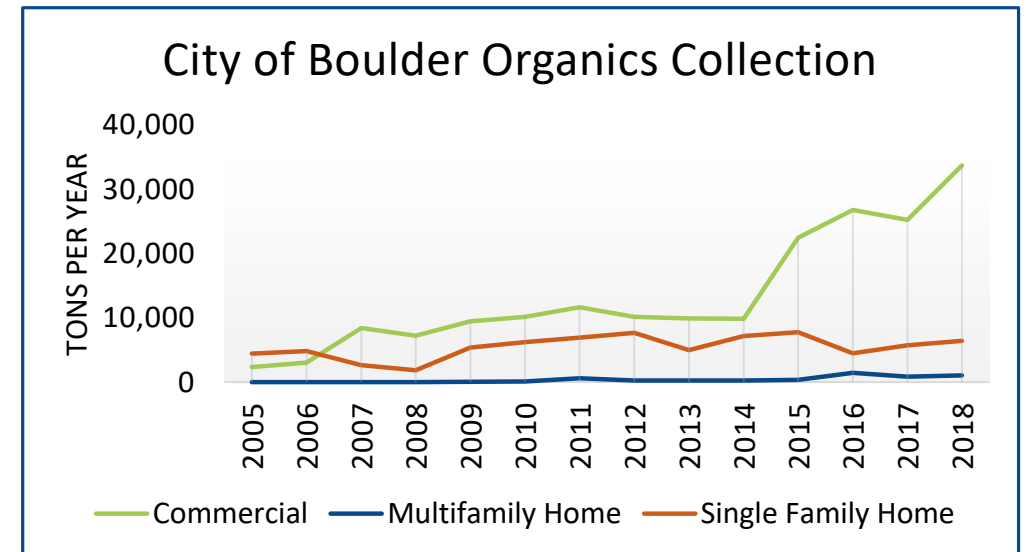
Community education

BOULDER, CO: UNIVERSAL ZERO WASTE ORDINANCE

Recycling and composting for all households, apartments and businesses

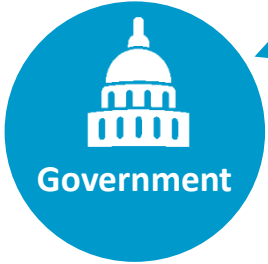
City-wide diversion jumped 17% in three years: 40% → 57%

Business diversion up from 26% to 58%



EVERYONE

HAS A ROLE



SCHOOLS EDUCATION AND RECYCLING



All public schools in Boulder have recycling, composting, waste reduction programs
2,000 presentations/year



COMMUNITY ENGAGEMENT: ECO-LEADERS



1000 Eco-leader volunteers

Trained community
ambassadors for Zero Waste

Adopt a business

Zero Waste events

Tabling

Advocate at local, state level

COMMUNITY ENGAGEMENT: PLASTICS



COMMUNITY ENGAGEMENT: CARBON FARMING



Nearly 300 citizen scientists
Measuring carbon storage in
lawns, gardens
Bridging connection with
soil health, climate

<https://ecocycle.org/take-action/community-carbon-farming>

CHANGING THE NARRATIVE: FASTEST, EASIEST CLIMATE SOLUTION



SAVES
ENERGY



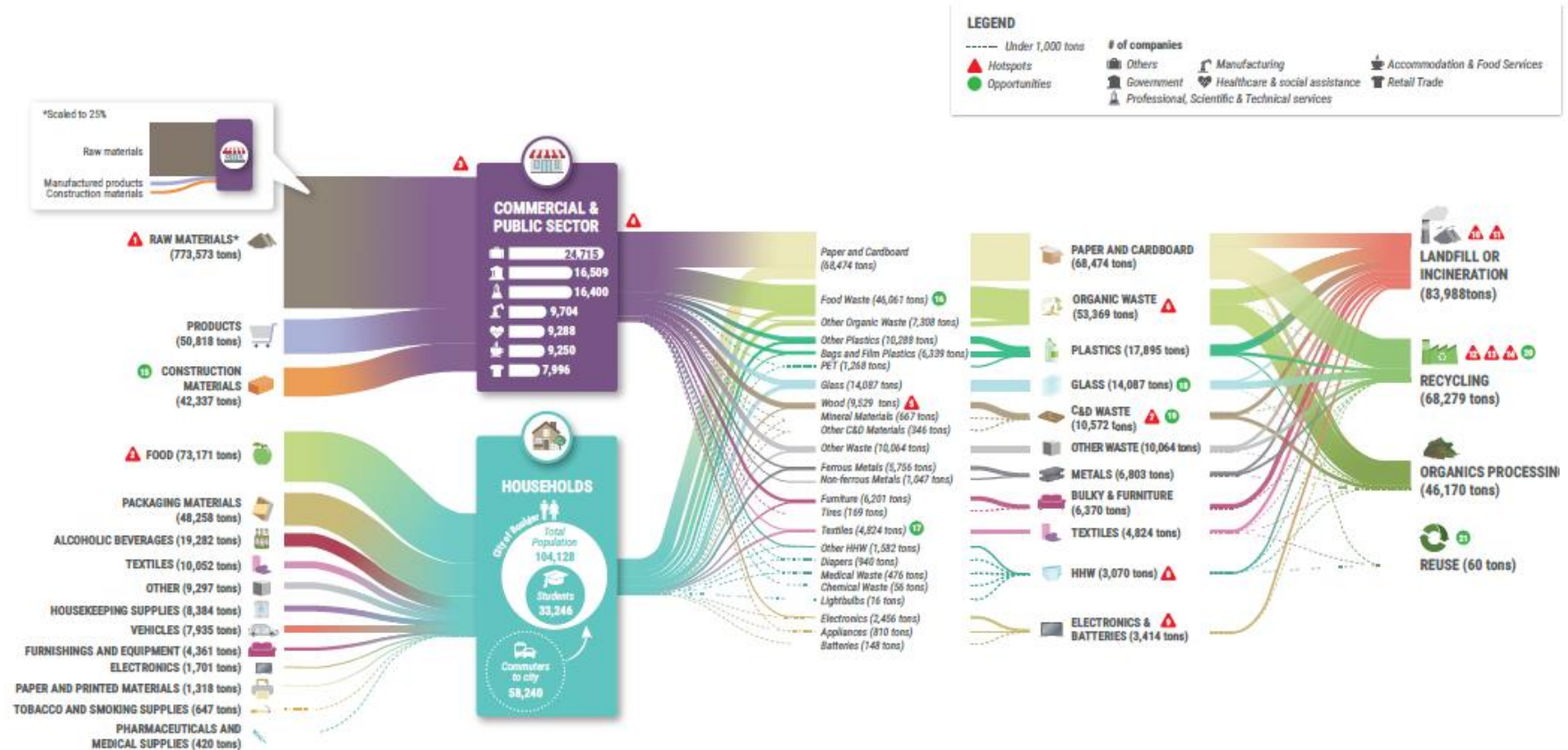
REDUCES
LANDFILL EMISSIONS



STORES
CARBON IN SOIL

BOULDER, CO: ROADMAP TO A CIRCULAR CITY

FLOW OF MATERIALS THROUGH THE CITY



www.metabolic.nl/publications/circular-boulder/

THE ROLE OF RESPONSIBLE RECYCLING

AMBR

Alliance of Mission-Based Recyclers



eco-cycle®



Building our Zero Waste future and a circular economy

- Community Zero Waste Roadmap
- Best practices and model policies
- Hands-on experience

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