

Reuse & the Circular Economy in the Built Environment

Austin Sustainable Building Materials Forum
6/30/17

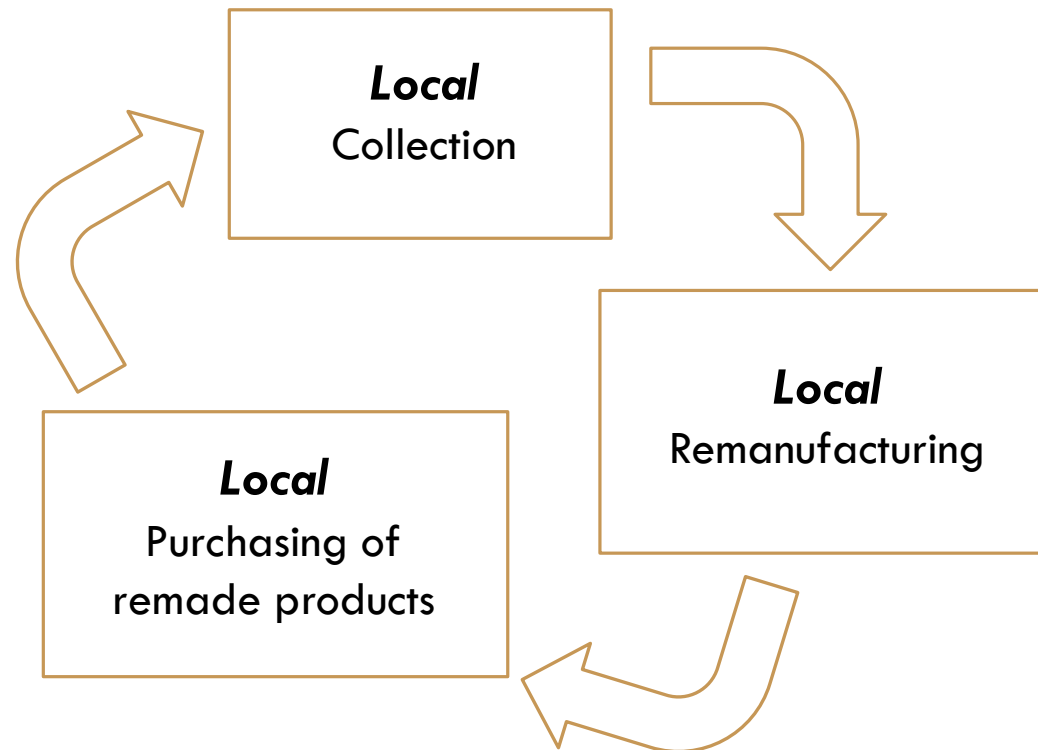
CITY OF AUSTIN

ECONOMIC DEVELOPMENT DEPARTMENT

AUSTIN RESOURCE RECOVERY



*The mission of the Austin Recycling Economic Development Program is to attract, retain, and grow zero waste businesses and entrepreneurs in order to **create local jobs** and foster a **resilient zero waste ecosystem** in Central Texas.*



A Joint Initiative of the Economic Development Department and Austin Resource Recovery

Austin's Prosperity Engine

The **City of Austin's Economic Development Department** (EDD) develops and leads the innovative programs that increase the prosperity of Austin's residents, our businesses, and our diverse neighborhoods.



Austin's Prosperity Engine

People

We build programs that create a better future for all Austinites.

Businesses

We help Austin's businesses and entrepreneurs reach their full potential.

Communities

We enhance the livability and vitality of Austin's diverse local communities and neighborhoods.



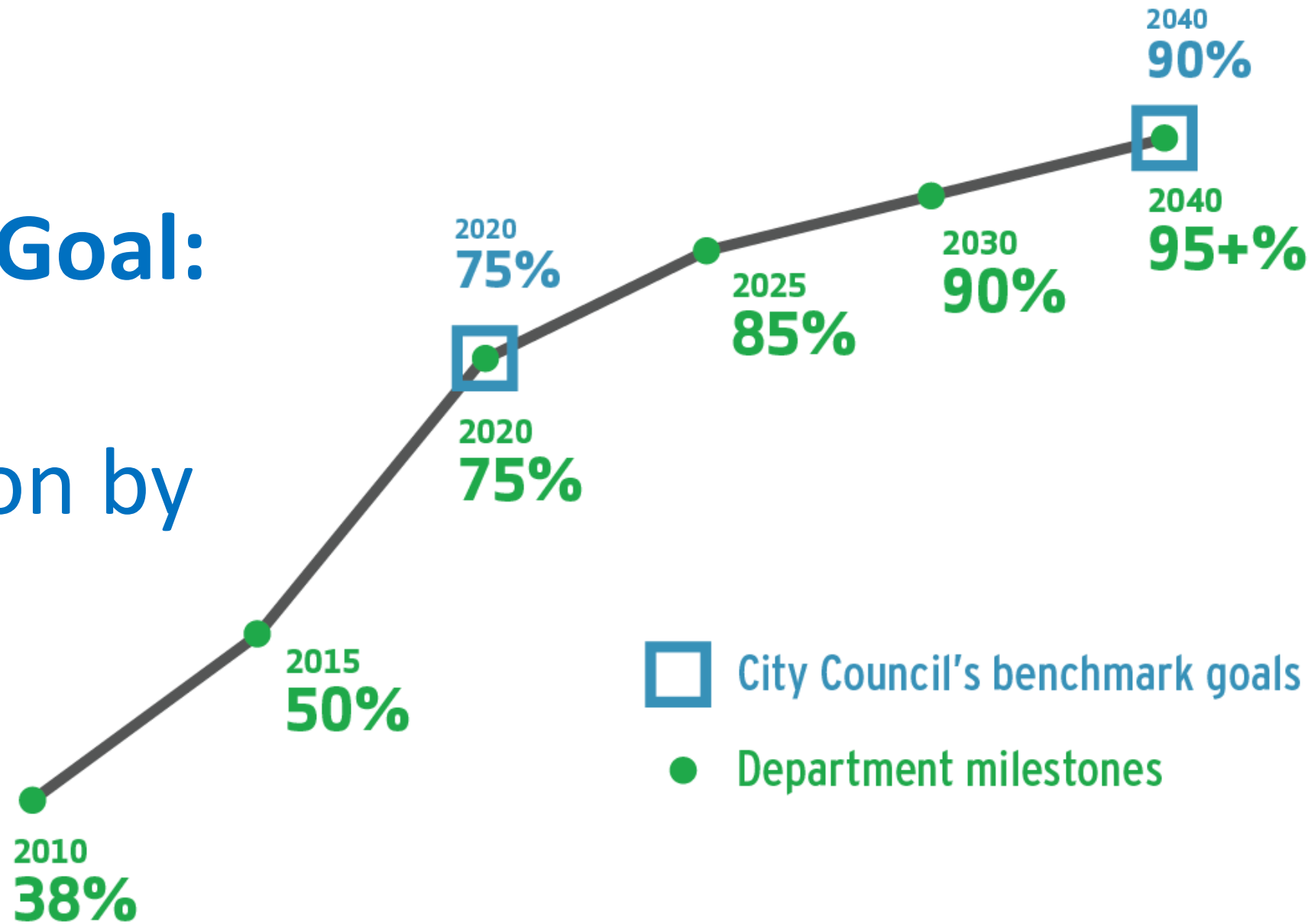
Leading the Way to Zero Waste



Austin Resource Recovery (ARR), a City of Austin service, works to achieve Zero Waste by providing excellent customer services that promote waste reduction, increase resource recovery and support sustainability.

Austin's Zero Waste Goal:

90% Diversion by
2040



Circular Economy

A circular economy is one that is **restorative and regenerative** by design, and which aims to keep products, components and materials at their **highest utility and value** at all times...

- Ellen MacArthur Foundation

Circular Economy & Sustainability

- Use existing resources efficiently
- Find new ways to create what we need from regenerative, rather than finite, resources
- Fully capture embodied energy



Economic Impact Study

- **Austin's Recycling and Reuse Industry Today:**
 - \$720 million economic impact
 - 2,600 jobs
 - Fall behind national average in recycling-related manufacturing
- **Austin's Recycling and Reuse Industry Potential:**
 - \$1 billion economic impact
 - 4,200 jobs

Circular Economy & Built Environment

- **Design for deconstruction**
- Design for adaptive reuse
- Repurposing old structures
- Reuse in design
- Recycled content building materials
- Construction and demolition debris recycling



Source: Ellen MacArthur Foundation

Circular Economy & Built Environment

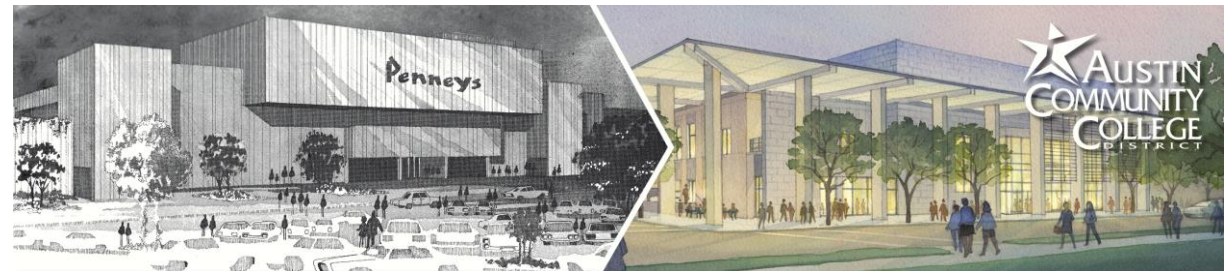
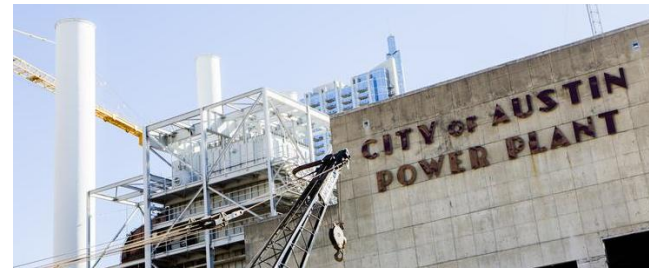
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Sources: Austin Business Journal, Boiler Nine, Austin Community College

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Source: Inhabitat

Circular Economy & Built Environment

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Source: UTSOA Materials Lab

| UNIVERSITY CO-OP MATERIALS CENTER | | | | |
|-----------------------------------|---|---|---|---|
| MATERIALS | | LAB | | |
| composition | | form | process | properties |
| applications | | | | |
| # | | | | |
| A | + |  |  |  |
| B | + | EcoStrate | Panelmax | 3-Form, Incorporated |
| C | + | 100 Post Consumer Content Products | 3-D panels | 3-Form 100 Percent |
| D | + | | | |
| E | + | | | |
| F | + | | | |
| G | + |  |  |  |
| H | + | 3-Form, Incorporated | 3-Form, Incorporated | 3-Form, Incorporated |
| I | + | 3-Form Chroma | 3-Form Struttura | 3-Form Varia Ecoresin |
| L | + | | | |
| M | + | | | |
| N | + | | | |
| O | + | | | |
| P | + |  |  |  |
| R | + | Abet Laminati | Abet Laminati | AcoustiBlok, Incorporated |
| S | + | Abet Laminati High Pressure Decorative Laminates (HPL) | Abet Laminati Tefor | AcoustiBlok Thermablock |
| T | + | | | |
| U | + | | | |
| V | + | | | |
| W | + |  |  |  |

Circular Economy & Built Environment

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City of Austin Resources

- Zero Waste Business Rebate: <http://austintexas.gov/zwbizrebate>
- Reuse & Recycling Enterprise Resource Guide: <http://tinyurl.com/rrresourceguide>
- Shop Zero Waste: <http://austintexas.gov/shopzero>
- Construction and Demolition Reuse & Recycling Facilities List (& Ordinance Information) at <http://austintexas.gov/cd>
- Austin Energy Green Building Program: <http://greenbuilding.austinenergy.com/>
- Austin Green Business Leaders: <http://www.austintexas.gov/department/austin-green-business-leaders>
- Austin Materials Marketplace: <http://austinmaterialsmarketplace.org>
- Free ReBlend Paint & mulch for non-profits: <http://www.austintexas.gov/department/austin-reblend>
- Recycle and Reuse Drop-Off Center: <http://austintexas.gov/dropoff>



Thank you!

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City of Austin - Economic Development Department & Austin Resource Recovery