



*Let's Recycle Better, Together.*



**IMPLEMENTING CENTRALIZED  
WASTE COLLECTIONS**

**TUESDAY OCTOBER 17TH 1:00PM ET.**

Presented by  | **GREENTHINKING**  
*Webinar Series*

The graphic features a photograph of a person sitting at a desk with a laptop, with a blue and green recycling bin in the foreground. The text is overlaid on a blue background.

📞 1-800-565-9931

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🏠 81 Rawson Avenue, Barrie, Ontario, Canada L4N 6E5

# Today's Panelists



**Joanie Burns**

*Environment, Health, Safety  
& Sustainability Manager*

Amgen



**Raene Barber**

*Sustainability Engineer*  
City of Lethbridge, AB

# Join the Discussion

From your toolbar:



Share your experience  
& opinions

Look for links  
to resources

Type direct questions  
for panelists

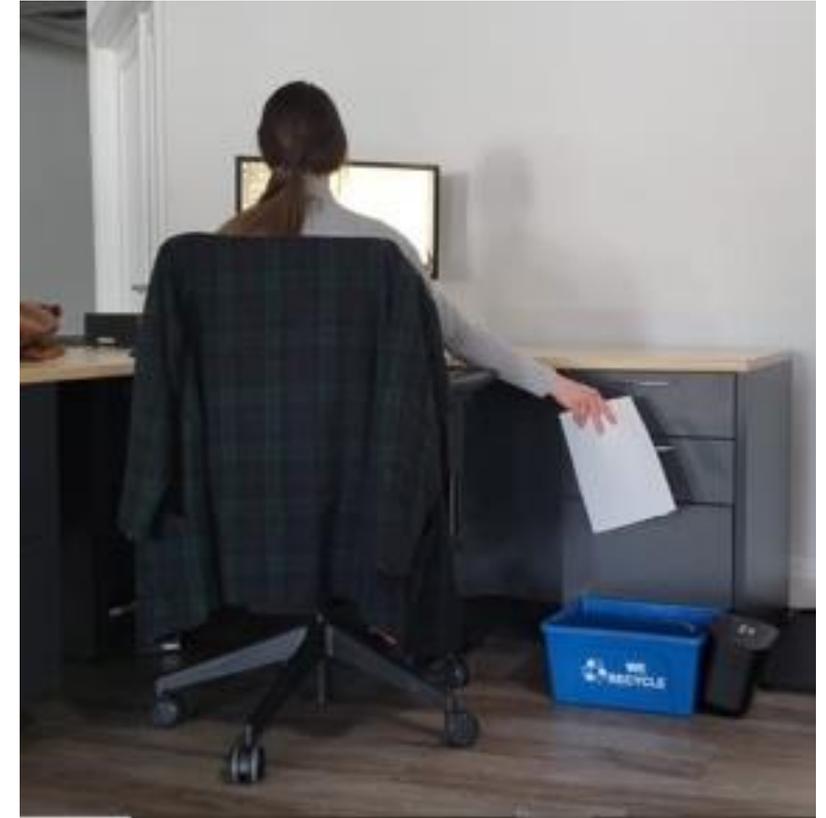
# Removing the Structural Barriers to Recycling



# Design Influences Behavior



# Design to Guide Recycling Behavior





# Trash-Free Zones (TFZs) at Amgen

Joanie Burns, EHSS Manager

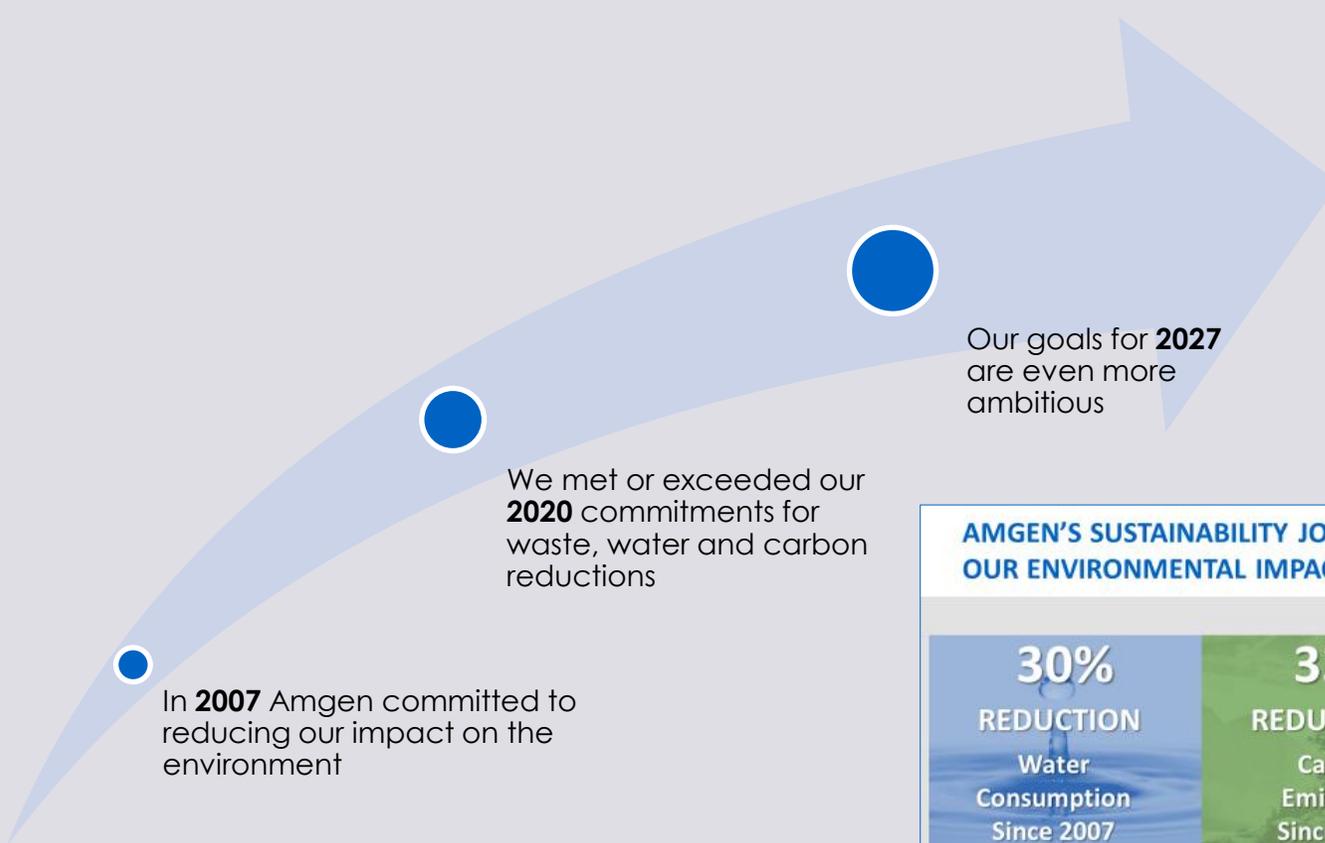
October 17, 2023

# About Amgen

Through 2027, we will harness this investment and our innovative capabilities to combat climate change and preserve natural resources. Our plan will drive specific environmental sustainability projects across our operations, such as:



# Where We've Been, Where We're Going



In **2007** Amgen committed to reducing our impact on the environment

We met or exceeded our **2020** commitments for waste, water and carbon reductions

Our goals for **2027** are even more ambitious

### AMGEN'S 2027 ENVIRONMENTAL SUSTAINABILITY GOALS

#### OUR GOALS

- 100%** Carbon Neutral  
ACHIEVE CARBON NEUTRALITY
- 40%** Reduction  
REDUCE WATER CONSUMED
- 75%** Reduction  
REDUCE WASTE DISPOSED

THE FUTURE IS IN OUR HANDS

#### OUR PLAN

- INNOVATION**  
Developing new solutions for core operations
- EFFICIENCY**  
Implementing manufacturing technologies to drive efficiencies
- RENEWABLE ENERGY**  
Converting fossil-fuel based energy to renewable sources
- SUSTAINABILITY BY DESIGN**  
Embedding sustainability into our culture as a factor integrated into business decisions.

**AMGEN**

### AMGEN'S SUSTAINABILITY JOURNEY HAS HELPED REDUCE OUR ENVIRONMENTAL IMPACT...

<b>30%</b> REDUCTION Water Consumption Since 2007	<b>33%</b> REDUCTION Carbon Emissions Since 2007	<b>28%</b> REDUCTION Waste Generation Since 2007
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**AMGEN**

# 2008 – 2009 “Trash Can Free (TCF)” Initiative

## Program Goals

- Reduce waste going to landfill
- Increase staff awareness about recycling opportunities
- Reduce Amgen’s spend on waste collection and disposal
- Maintain a positive record as a corporate citizen in the community
- Promote a sustainable environment

**THIS WAS A JOINT INITIATIVE INVOLVING OUR FACILITIES AND ENVIRONMENTAL (JANITORIAL) SERVICE PROVIDERS AND AMGEN’S EHSS DEPARTMENT**



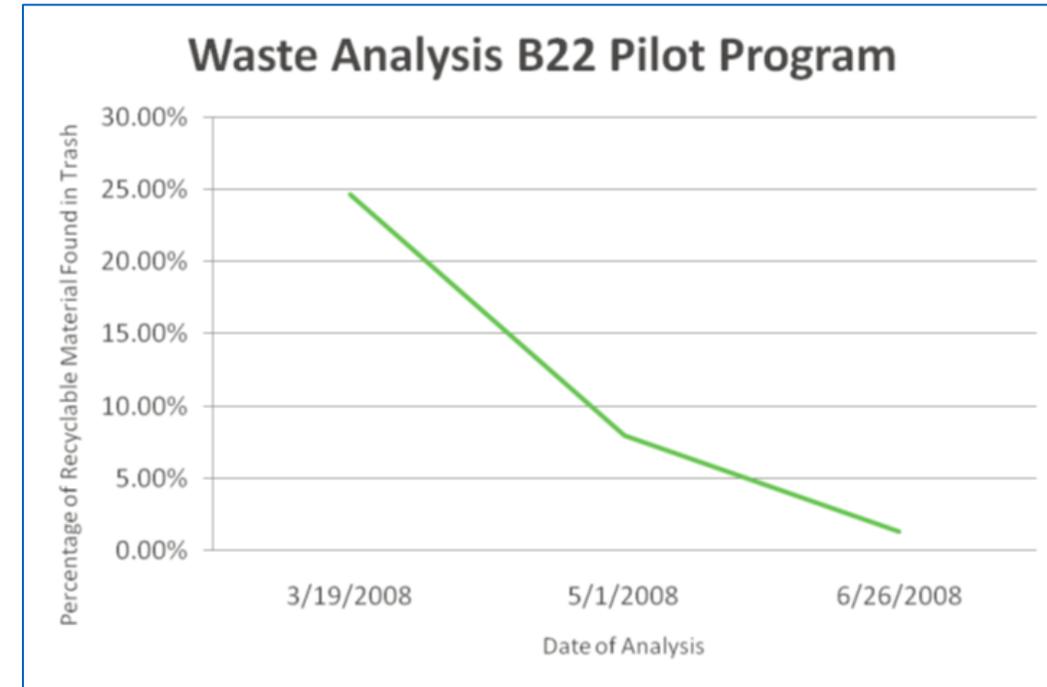
# Original Program Scope

- Eliminate trash and recycling pick up in offices and cubicles
- Place trash and recycling receptacles in central locations
- One location for approximately every 25 people
- Place mini trash cans at desks for tissues, candy wrappers, etc. – *individuals would be responsible for emptying these*
- In-office container (box) for paper recycling maintained – *individuals would be responsible for placing these outside their doors to be emptied by janitorial staff twice per week*
- **Phased roll-out**
  - Pilots at two sites (CO and CA)
  - Phase I – full implementation at four sites (CO, CA, RI, MA)
  - Phase II – all other North America sites following “janitorial vendor due diligence”



# CA Pilot Program

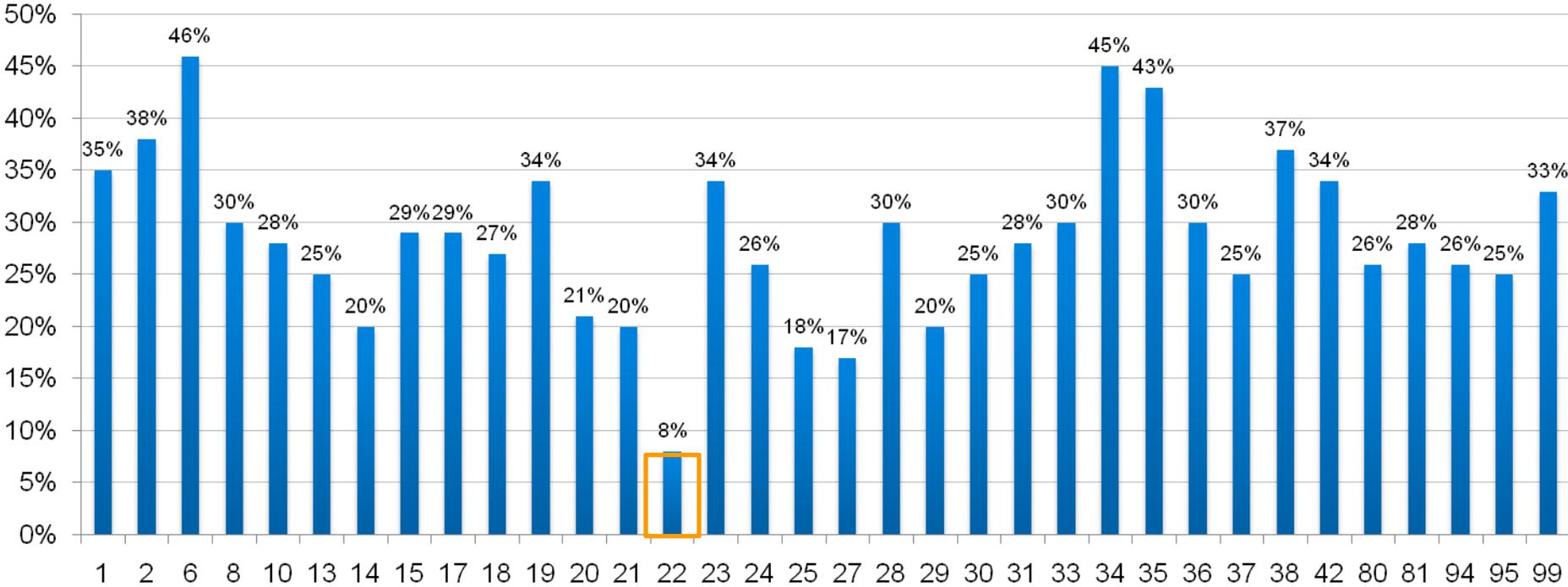
- TCF zones rolled out in four areas of one building (Building 22)
- Removed desk-side trash and commingle recycling; desk-side boxes for paper recycling maintained
- Approximately 75 employees participated; each employee received:
  - Mini trash can
  - Thank You note
  - Map showing centralized trash/recycling stations
  - Trash Can Free brochure explaining the program in detail
  - “Trash Can Free Zone” signage to be placed at the individual’s cube or desk



# The Results of the ATO Building Waste Analyses Found That Nearly 30% of Trash Was Recyclables

## Q2 '09 Waste Analyses by Building

Percentage of Recyclables Found in Trash by Building



**B22, which had 8% as compared to average of ~30%, had a Trash Free Zone program in place since March of 2008.**



# Estimated Labor Cost Savings (2009)

Site	Description / Size	Annual Savings
CA	Corporate HQ: offices, clinical and commercial manufacturing, research and process development labs 34 buildings, ~ 7,500 to 9,000 people on site/day	\$374,000
CO	Manufacturing 10 buildings, ~ 1,100 people on site/day	\$67,200*
RI	Manufacturing 6 buildings, ~ 1,000 people on site/day	\$55,200
MA	Research and Development labs 1 building, ~ 200 – 300 people on site/day	\$28,800

\* The program had been fully implemented at the time these figures were pulled together and the CO site was realizing savings of **\$5,600/month**

# Trash Free Zone (TFZ) Implementation at CA Site

## Phased Rollout by Building

- **Phase I (Blue):**  
Nov. 16th – Dec. 4th
- **Phase II (Green):**  
Dec. 7th – Dec. 11th
- **Phase III (Yellow):**  
Dec. 11th – Dec. 31st

**STAY THE COURSE!**

- Phase I
- Phase II
- Phase III
- Out of Scope



Containers and Communications...

*Through the Years*

# 2008 – 2009 Initial Roll-Out (the early days)

## Each Building Will Have Trash and Recycling Centers to Facilitate Collection



## Collection Centers Will Have Signage to Help You to Know What Goes in Recycling



### Mixed Recyclable Items Include:

#### • All plastics:



- Take Out Food Containers—just remember to wipe clean!
- Glass Jars and Bottles
- Aluminum and Light Metal
- Coated Paper Packaging



### Non-Recyclable Material to be Disposed Properly:

- No Sharps / Broken Glass
- No Used Filters or other Similar Items
- No Food or Soiled Plates
- No Styrofoam



# Program Maturity (circa ~ 2011 – 2012)





# 2019 Addition of Post-Consumer Compost



Indoors



Outdoors

# Lessons Learned (“Pro Tips”)

# Key Take-Aways



## Money Talks, Data Tells the Story

Take the time and make the effort to gather all the information you need – it will be worth it!

Make a strong business case by presenting all of the benefits: environmental, financial, health/wellness, pest control, etc.

Gain buy-in by sharing information not only with decision-makers but the affected stakeholders

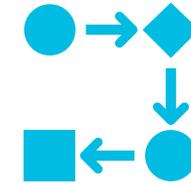


## It Takes a Village

Engage your service providers (e.g., custodial), Facilities, Purchasing, EHS/Sustainability – *anyone* who can help and/or should be involved in the planning

Recruit champions to help with outreach and education

Leadership support/sponsorship will help with any bumps in the road



## Change is Hard

Pre-planning is crucial – *anticipate everything*, even the things you think will never happen

You will never please everyone! Listen to, but don't guide your decisions by, the vocal minority

Communication, communication, communication

# The Fun Never Ends



**Photos taken: January 2023**

# Live Poll #1

**Which best describes your current collection arrangement for deskside / workstations?** *(check only one)*

- Custodial services trash / waste only
- Custodial services recycling only
- Custodial services both recycling and trash / waste
- Custodial only services centralized / common area bins
- Other *(share details in the chat)*

# The Transition to Centralized Waste Collection

**Raene Barber, Sustainability Engineer**  
**City of Lethbridge**

# Introduction and Agenda

- Targets and Stats
- The Waste Bylaw
- Transition to Centralized Collection
- Lessons Learned



Reference: [Naapi Katoyiss Seeds and Restoration KEPA \(naapisgardenkepa.com\)](http://naapisgardenkepa.com)

# So Many Benefits!

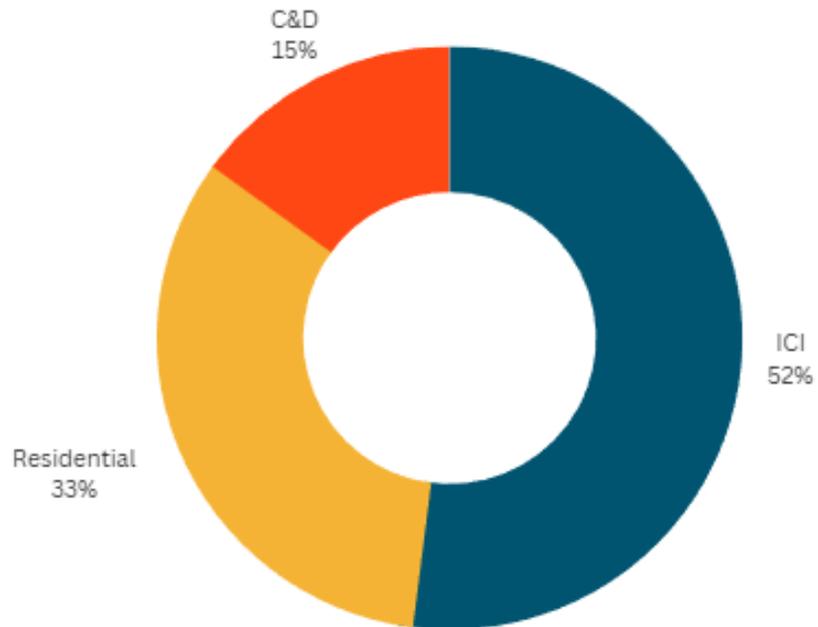
- Save on caretaking time and costs,
- Encourage waste diversion,
- Reduce garbage can clutter in your space,
- Provides consistency,
- And, it's a good reason to get up and walk around!

I'M TOO LAZY  
TO BE LAZY



# The Targets and Stats

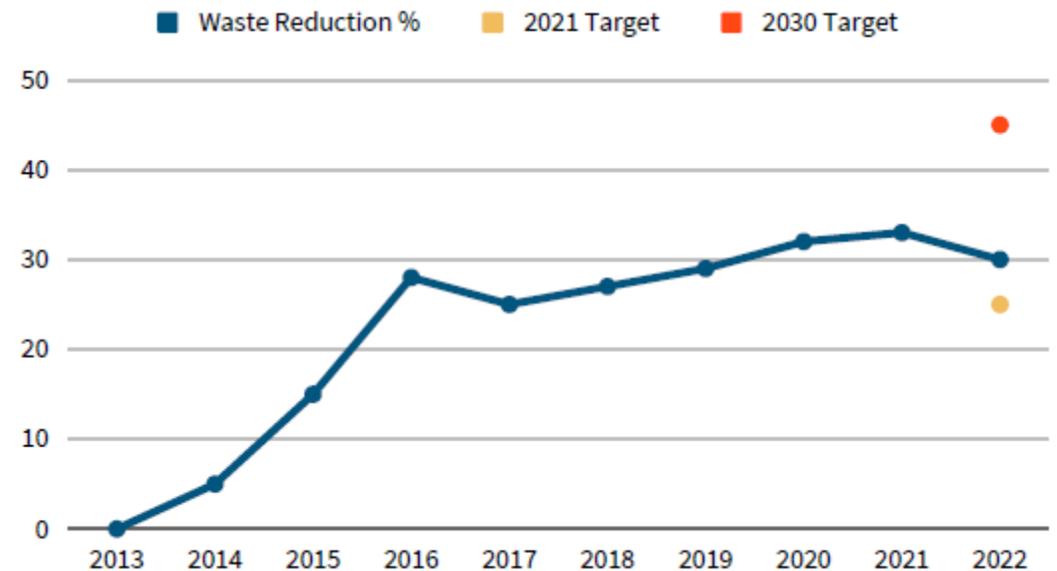
## Waste Generation



## Waste Reduction



45% in ICI and C&D sectors by 2030

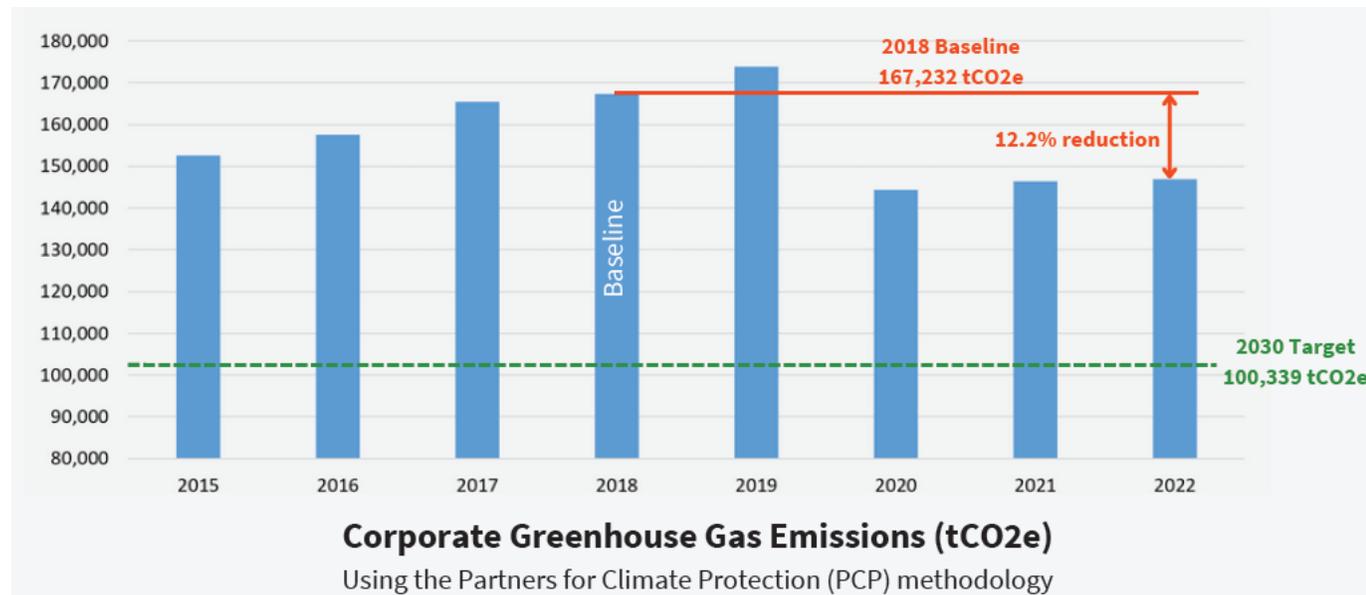


# The Targets and Stats

## Corporate GHG Emissions



40% from 2018  
baseline 2030



# The Waste Bylaw

## Strategy implementation timeline

- 2008** • Waste Diversion/Prevention Master Plan
- 2013** • ICI Waste Diversion Strategy Initiated
- 2015** • Waste Diversion Strategy approved
- 2018** • Waste Diversion targets revised
- 2020** • Partial implementation of Mandatory Recycling for ICI/Surcharges. Full Implementation put on hold due to COVID-19.
- 2023** • Full implementation of Mandatory Recycling and Mandatory Organics for ICI/Surcharges
- 2030** • 45% Waste Diversion Target for ICI and C&D sectors

Mandatory recycling and organics for the Industrial, Commercial, and Institutional (ICI) and Construction and Demolition (C&D) sectors.

Requires access to recycling and organics containers, with equal convenience to garbage containers.

# Enforcement



March 2020:

- \$50/tonne surcharge if load contains >25% designated materials

February 2023:

- Educational surcharge note issued for loads containing >25% designated materials including organic

September 2023:

- \$50/tonne surcharge if load contains >25% designated materials including organics

 <b>cardboard &amp; paper</b> newspaper, catalogues, magazines, mixed paper, boxboard, corrugated cardboard	 <b>drywall</b> clean gypsum wall board from new construction suitable for recycling
 <b>recyclable wood</b> dimensional lumber, pallets, tree pruning, and other items that are made of raw and un-processed wood	 <b>concrete</b> concrete foundations, sidewalks, brick, rubble, gravel & sand suitable for recycling
 <b>asphalt shingles</b> asphalt shingles from new construction or re-roofing	 <b>brick &amp; masonry block</b> structural or decorative, with or without mortar, crushed or whole
 <b>scrap metal</b> general scrap metal including appliances and structural or decorative metal and metal items suitable for recycling	 <b>asphalt pavement</b> road asphalt
  <b>organics</b> food waste, yard waste, food-soiled paper products and other wood/paper products (e.g. popsicle sticks, shredded paper)	

# City Compliance



# The Evolution



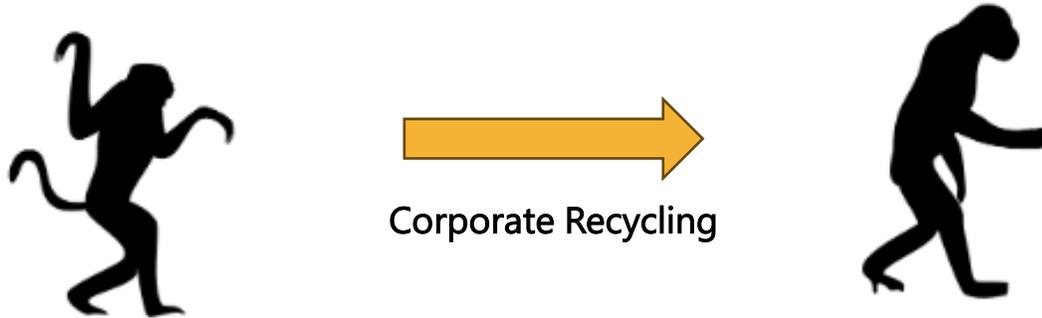
Corporate Recycling



Corporate Recycling and Organics



# The Evolution



## 1 Pilot Program – Initialization (2018)

- The pilot facilities must have effective Recycling Captains and the population using the bins should be diverse (office and operations staff).
- 3-bin station and outdoor recycling cart provided to each pilot facility.



# The Evolution



Corporate Recycling



## 2 Pilot Program - Review

- Visual audits conducted.
- Feedback gathered from employees.
- Standardize signage and waste management for City facilities.



# The Evolution



Corporate Recycling



## 3 Full Implementation (2019)

- Mixed recycling implemented at 30 additional facilities.
- Recycling pickup changed to weekly.
- Recycling captains still responsible for transferring contents to recycling cart.



# The Evolution



**COMPLETE**  
Corporate Recycling



Corporate Recycling  
and Organics



# The Evolution

**Recycling**

- ✓ Hard plastics #1-7
- ✓ Paper, cardboard, boxboard, newspaper & magazines
- ✓ Metal cans & clean foil
- ✓ Beverage cans, plastic bottles & cartons

**Organics**

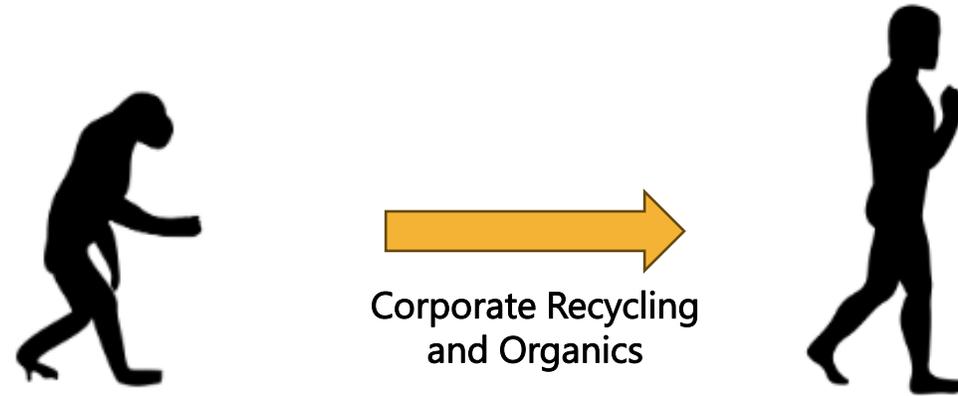
- ✓ Kitchen & table scraps
- ✓ Plants, leaves & small branches
- ✓ Food soiled paper products (e.g. paper towel)
- ✓ Coffee grinds/filters & tea bags
- ✓ Pizza boxes, popsicle sticks & shredded paper

know the  
**Ins & outs:**  
BUSINESS RECYCLING  
& ORGANICS

Still not sure what's in or out? Ask the Waste Wizard!

[curbside.lethbridge.ca](http://curbside.lethbridge.ca)

**WASTE WIZARD**



## 1 Business Case

- In 2017, 40% of waste from City Hall could be diverted from the landfill.
- 37% of the total weight was organic material.
- General waste: \$115 / tonne
- Recyclables: \$10 – \$75 / tonne
- Source separated organics: \$60 / tonne
- \$50 / tonne surcharge potential

# The Evolution



Corporate Recycling  
and Organics



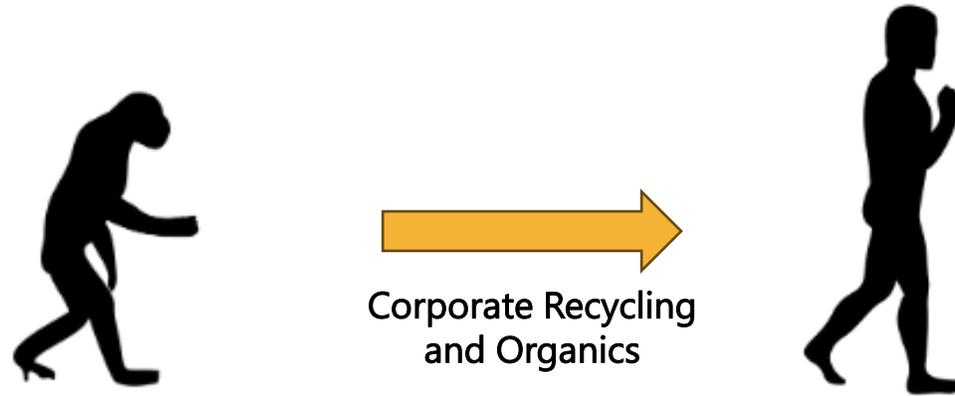
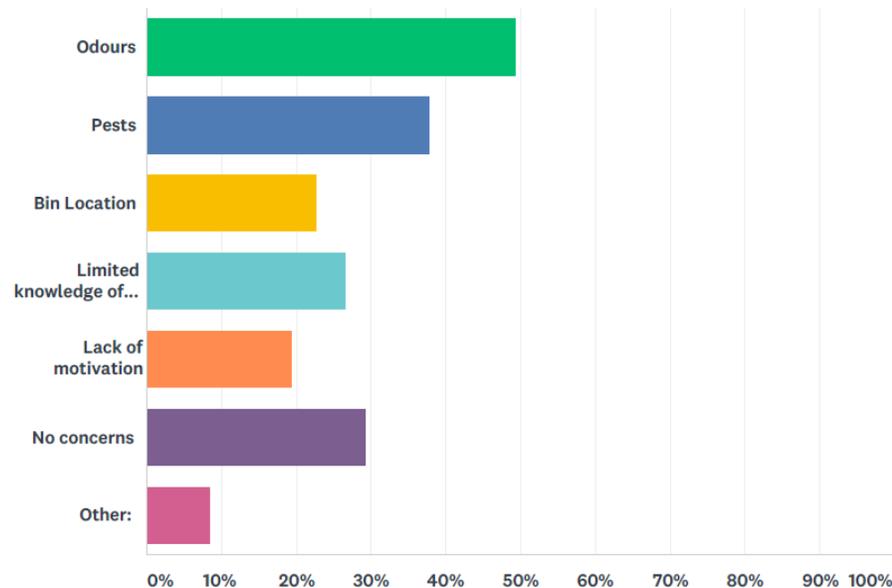
## 2 Pilot Program – Initialization (2019)

- 5 City facilities selected.
- Separate contracts executed for caretaking and hauling services.
- Organics at centralized locations, in bathrooms for paper towel only, and in individual offices.

# The Evolution

Q6 What are your concerns related to corporate organics collection? Please check all that apply):

Answered: 211 Skipped: 1



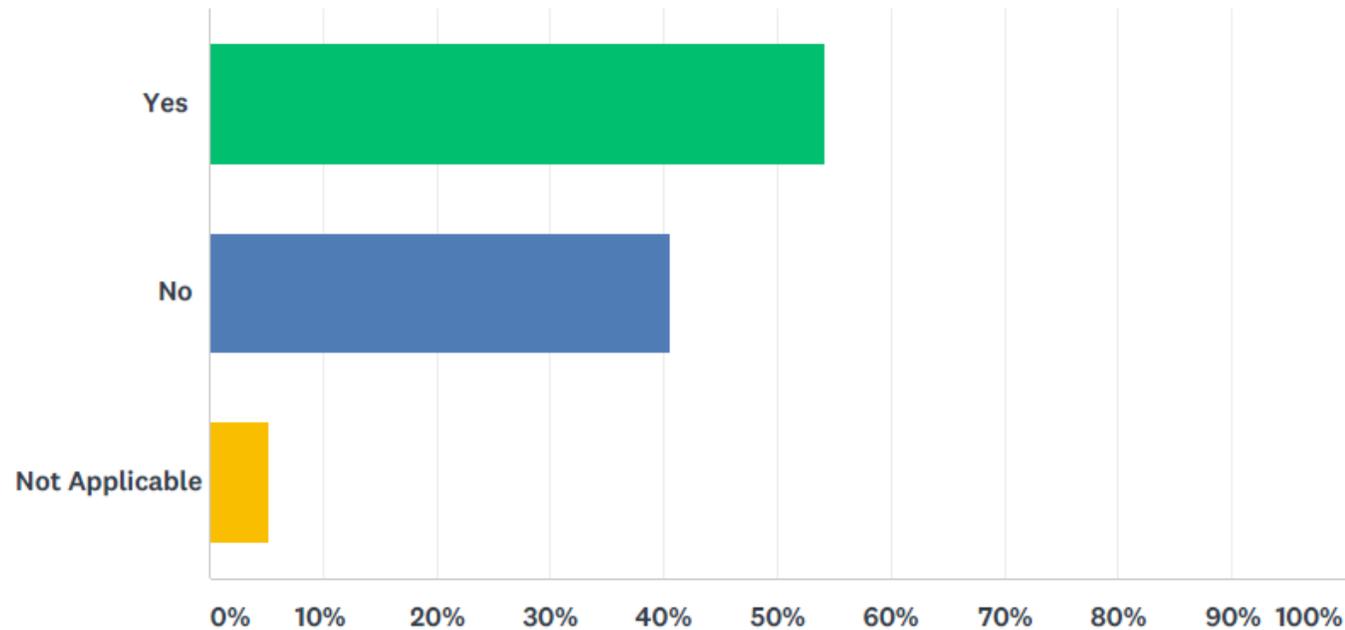
## 3 Pilot Program – The Grey Area

- COVID-19 pandemic put the program on pause.
- Employee surveys conducted during this time.

# The Evolution

Q8 Would you be willing to part with your individual office garbage can with the introduction of the corporate organics pilot to your office space?  
Garbage cans will remain available for use in all communal areas.

Answered: 212 Skipped: 0



# The Evolution

**Why wouldn't you be willing to forfeit your individual office garbage can?**

Would still have some materials that are not compostable or recyclable.

Walking to a communal garbage can is not an efficient use of time.

Convenience.



# The Evolution



## Centralized Waste Collection

Sustainability is pleased to introduce new hanging baskets for your office garbage, organics, and recyclables!

The new bins have limited capacity to encourage waste diversion to recycling streams and reduce waste production, as per the Business Waste Diversion Strategy.

Lids on the garbage and organics waste baskets reduce odors and hide unsightly bin contents.

Starting January 1, 2023, it is your responsibility to empty your green and black bins into the centralized waste stations and the blue bin recyclables into the blue carts.

Thank you for your cooperation and for contributing to the City's target of reducing commercial and industrial waste in Lethbridge by 45% by 2030.

# The Evolution



Corporate Recycling  
and Organics



## 4 Full Implementation (2023)

- Officially reinstated in 2022.
- An additional 40 facilities were added to the program.
- 45 City facilities currently have recycling and organics programs with centralized collection.

# The Evolution



Corporate Recycling  
and Organics



4

## Full Implementation (2023)

Facility site tours

Program set up

Caretaking

Education

# The Evolution



**January 2023: caretaking staff no longer emptying individual office bins**

# The Evolution



**COMPLETE**  
Corporate Recycling



**COMPLETE**  
Corporate Recycling  
and Organics



# Our Next Steps

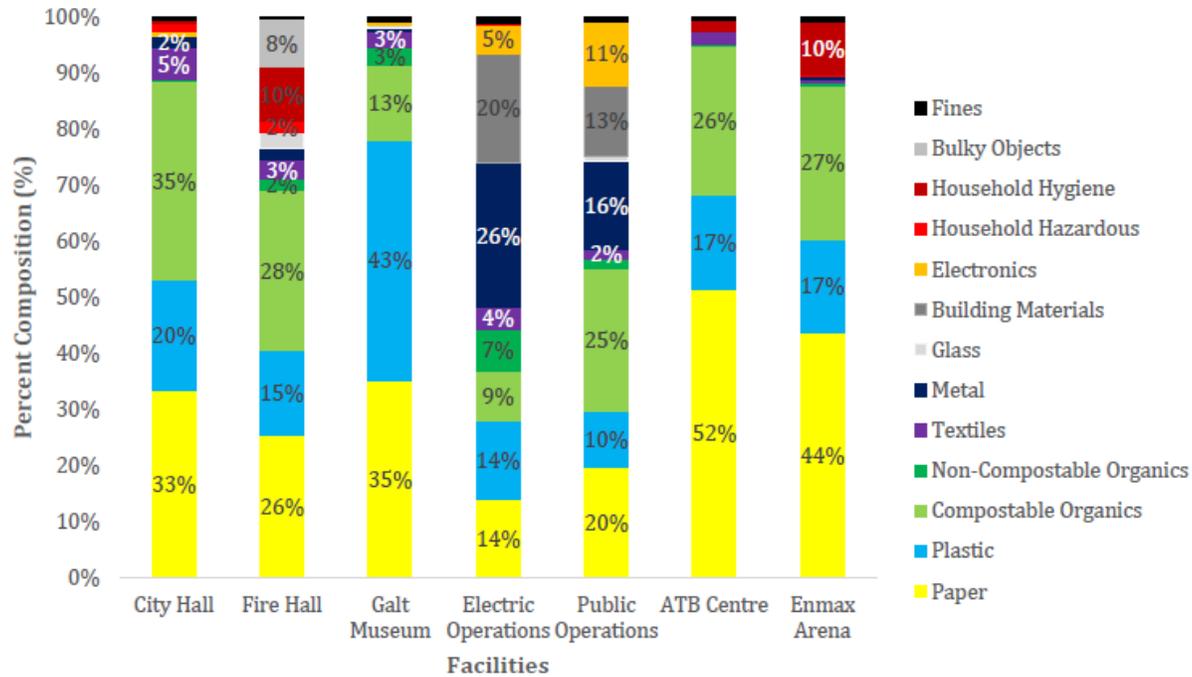


Figure 3-19: Composition of the Garbage Stream from Various City Facilities (Winter 2020)

City of Lethbridge Diverted Materials		
Year	Recyclables (tonnes)	Organics (tonnes)
2019	30.26	1.73
2020	25.62	2.90
2021	31.82	0
2022	20.64	1.81
2023 (YTD)	19.79	13.08

# Tips and Tricks

- Economic benefit of diverting waste (tipping fee for garbage > tipping fee for recycling or organics) and \$50/tonne surcharges for noncompliance
- Removing individual office waste collection can save caretaking costs and providing people with a smaller garbage bin can encourage diversion
- Clear signage and consistent bin types helps with program understanding

**Thank You!**  
**Any Questions?**

# Live Poll #2

*If Centralized system is in place:*

**What measurable impact(s) have you experienced?** *(check any that apply)*

- Increase in material recovery
- Less contamination
- Custodial labor savings
- Direct cost savings (hauling costs, eliminating bag liners, etc)
- No significant change to any of the above
- Actually made things worse *(share details in the chat)*
- Other *(share details in the chat)*

# Live Poll #3

**How has recycling / diversion been impacted by post-pandemic changes?** *(check any that apply)*

- Less overall waste generation because fewer people in office
- More waste being generated per person
- Lower diversion (recycling/ compost as % of total waste)
- Higher contamination rate
- No significant changes
- Other *(share details in the chat)*

# Next Up...

COMING IN JANUARY 2024

## WASTE REDUCTION & DIVERSION IN HEALTHCARE

Presented by



**BUSCH**<sup>®</sup>  
SYSTEMS

**GREENTHINKING**  
*Webinar Series*



# Today's Program Online

- Recording
- Presentation slides
- Links to Resources



## *Advancing Recycling* Blog Series

- Implementing centralized collections
- Signs above bins improve recycling
- Creating uniform bin standards
- Images vs words on signage

**Visit: [buschsystems.com/blog](https://buschsystems.com/blog)**



## Archived Webinar Recordings

- Food organics collections*
- Public space recycling*
- Strategic planning*
- Reuse & waste prevention*

**+ more**

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**December 5 & 6, 2023**

Topics:

- Local govt. communication strategies
- Glass recycling
- Extended Producer Responsibility
- Silver lining of China Nat. Sword
- Single use plastics
- Food service-ware Reuse systems
- Environmental & social justice

***Learn more at:  
[nrcrecycles.org/2023congress](https://nrcrecycles.org/2023congress)***



# Thank You to Our Panelists!



**Joanie Burns**

*Environment, Health, Safety  
& Sustainability Manager*

Amgen



**Raene Barber**

*Sustainability Engineer*  
City of Lethbridge, AB

# Please Share Feedback to Presenters

## Post-Webinar Survey:

- Prompt at end of program, or
- Look for Email tomorrow