



# ICI Waste Diversion in Calgary

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Edmonton, AB  
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**CALGARY**

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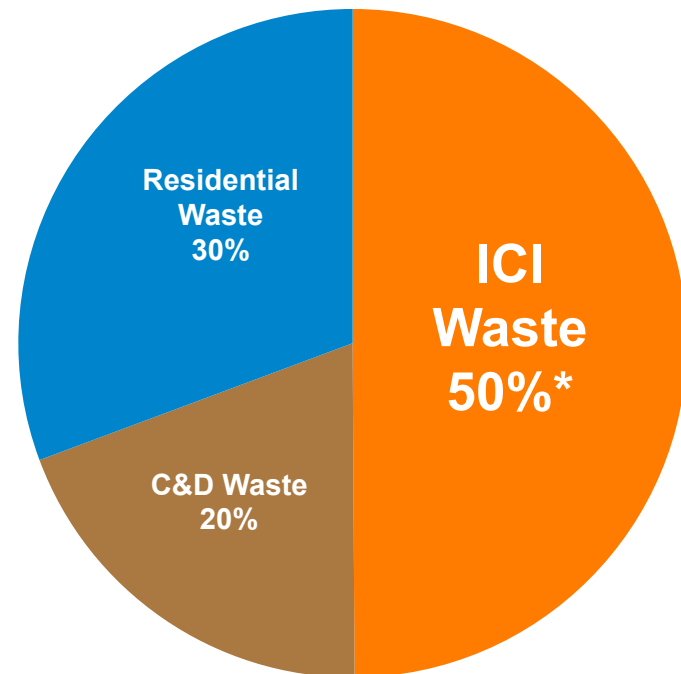
# 80/20 by 2020 Goal

- In order to reach Calgary's goal of 80% waste diversion by 2020 **Industrial, Commercial, Institutional (ICI)** waste must be addressed
- But how?



# ICI Waste is a big portion of Calgary's waste stream

- ICI waste is the waste material produced by Industrial, Commercial and Institutional activities
- ICI waste accounts for half of all waste (by weight) entering The City of Calgary's landfills



•Approx. 314,500 tonnes in 2010

# ICI Waste is Complicated

- In Calgary, ICI waste is produced daily by 834,000 employees working in 18 different business sectors
- No regulations on flow control or diversion activities
- ICI establishments come in all shapes and sizes thereby requiring various collection infrastructure, and servicing frequencies
- Waste streams are often very unique

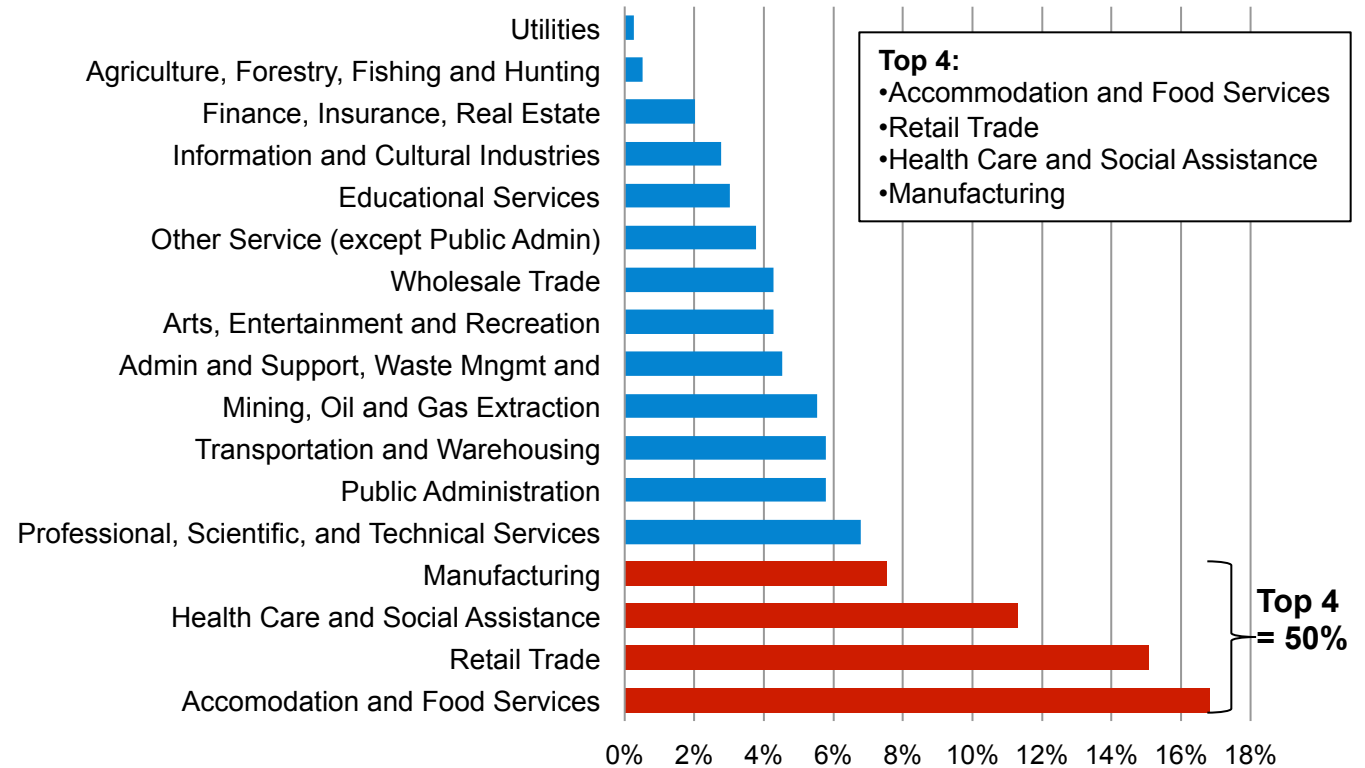




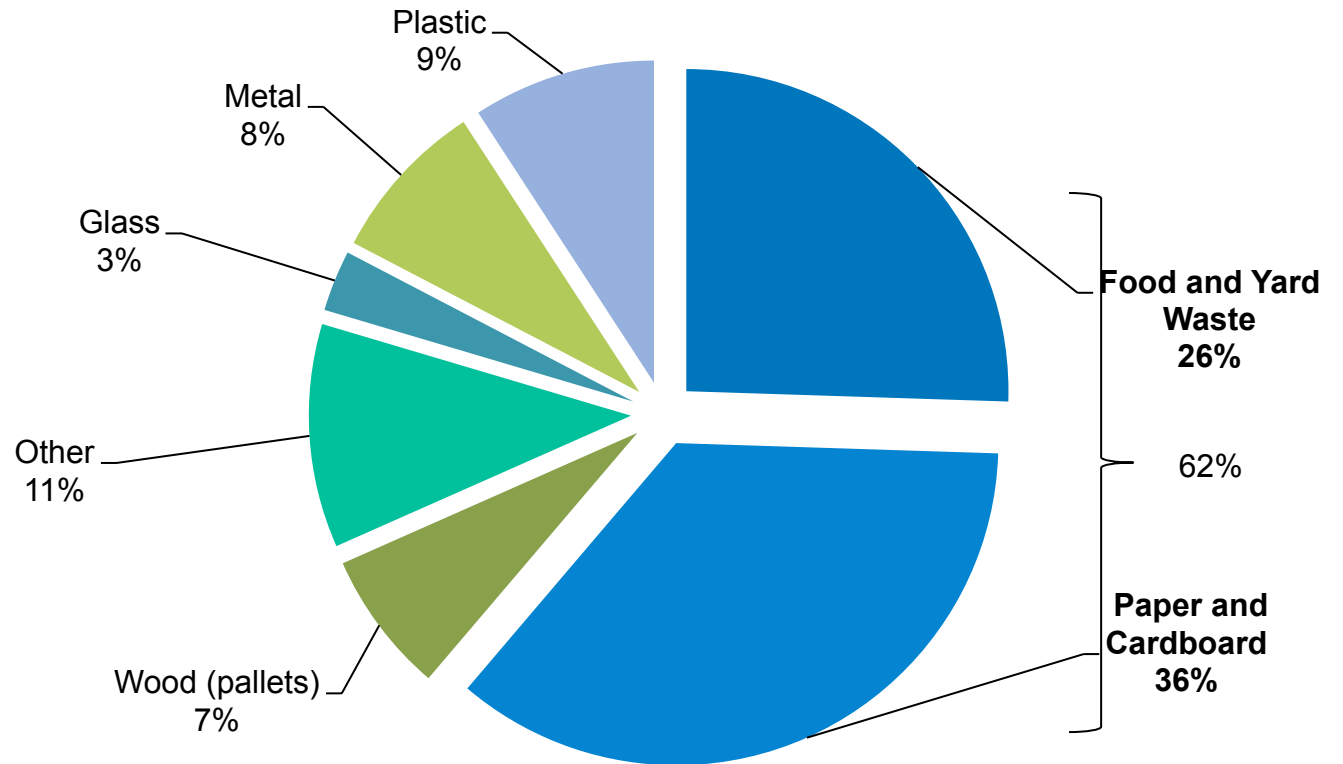
# Current Scenario

- The City influences ICI waste diversion through:
  - Setting landfill tipping fees for waste materials;
  - Supporting provincial initiatives such as electronics, paint, oil, and tire stewardship programs, and
  - Partnering with groups such as Green Calgary Association to support their ICI initiatives.
- Recently, The City has also:
  - Undertaken a Waste Composition Study in 2010, and
  - Initiated stakeholder engagement.




# Top 4 ICI Waste Disposers (Sectors)



# Top 2 ICI Waste Materials Disposed



# What's already being done out there?

ICI Group	Goal	Measured progress * (as of 2010)
<b>Calgary Board of Education</b> 	50% waste reduction from 2006/2007 baseline year by 2012	15% diversion
<b>University of Calgary</b> 	Zero waste starting with 80% diversion by 2020	40% diversion
 <b>BOMA Canada BEST program</b>	No specific waste goal	42% of participating buildings across Canada have between 60% and 90% recycling rates
<b>Select Shopping Centres in Calgary (8)</b>	No specific waste goal	52% diversion
<b>ICI Clients of Green Calgary</b> (mainly office buildings) 	No specific waste goal	Between 0 to 84% recycling rates with an average of 46%

# What's already being done – farther afield

- **Example 1 – San Francisco**
- 2009, San Francisco Board of Supervisors passed an ordinance requiring every property in the city to recycle and compost
- In less than 2 years, the number of commercial accounts on the composting program has more than doubled from 3,500 to more than 7,200. This includes about 95% of the more than 4,500 food establishments and 90 of office buildings
- One company, Recology Golden Gate, providing collection services in the financial and commercial centre
- California law, 1989, required municipalities to divert 50 percent of waste by 2000 or else pay a fine of \$10,000 a day





# What's already being done – farther afield

- **Example 2 – Ontario**
- Ontario – Regulation 103/94
- Mandatory Recycling Programs (collection, handling, storage, removal, recycling, advertising)
- Applies to
  - Retail Shopping establishments and complexes
  - Large construction and demolition projects,
  - Office buildings
  - Hotels (>75 units)
  - Hospitals
  - Educational institutions (>350 enrolled)
  - Large manufacturing facilities
- Dictates the materials to be included in source separation programs





# City of Calgary Initial Stakeholder Engagement

- Diversion programs do exist and are ongoing
- The ICI industry expresses interest to do more
- Some challenges for increased participation have been expressed
- Several opportunities for overcoming the challenges have been offered

# Challenges

- Limited access to co-mingled recycling processing capacity;
- Limited availability of organics processing capacity;
- Generators do not have enough storage space for source separated materials;
- Lack of regulations enforcing diversion;
- High staff turnover making training for proper waste management difficult, and
- Cost of diversion is sometimes higher than disposal.



# Opportunities



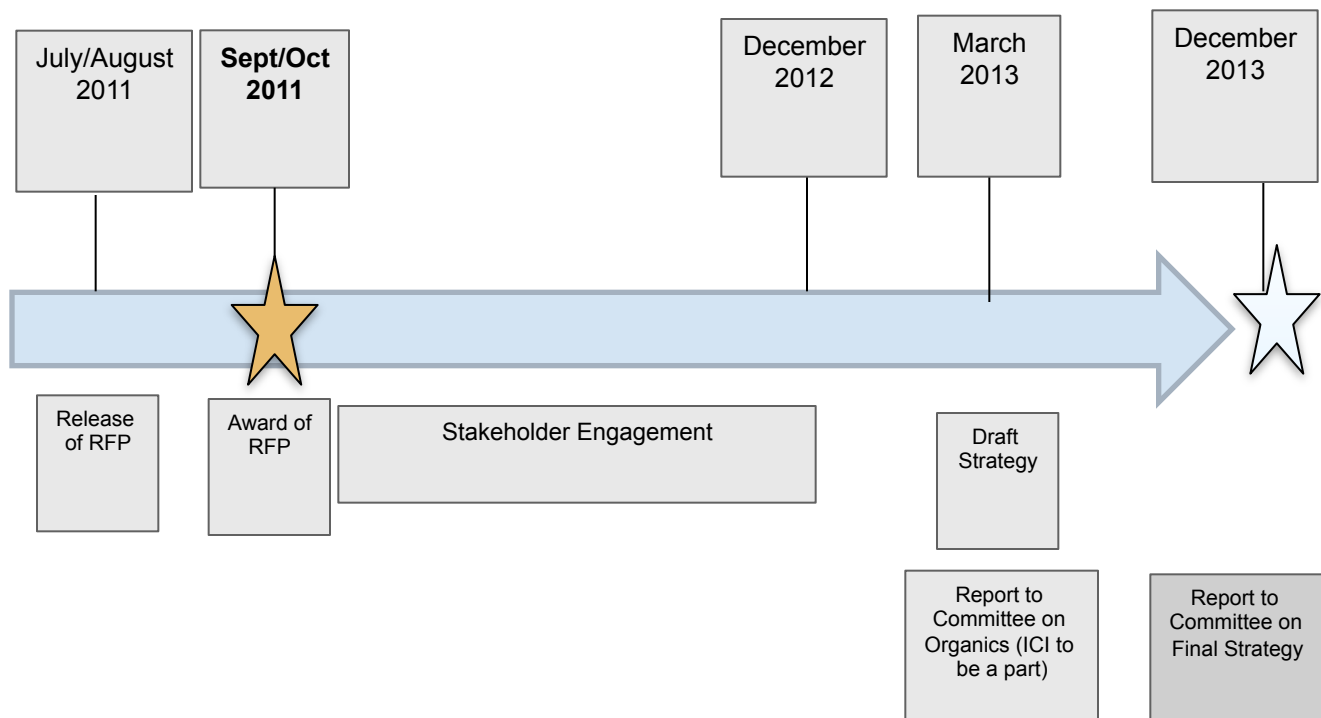
- Providing greater access to co-mingled recycling processing capacity;
- Providing greater access to organics processing capacity;
- Potential policies or regulatory requirements, and
- Expanding the Designated Materials list.



# Going forward Approach

- Recommended approach is to:
  - Target top waste generators;
  - Focus on top waste materials generated;
  - Build on already identified issues and challenges, and
  - Further engage with stakeholders.

# Timeline



# Future of ICI Waste Diversion in Calgary

- Back in 2014 with an update





# Thank you

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# What's already being done – farther afield

## ■ Example 3 -- San Jose

- 32% of City's solid waste is ICI
- 22% diversion rate
- 20+ Non-exclusive franchises
- Fees based on volume
- 79% of disposal recoverable



## ■ San Jose's Preferred System

- Single franchise for collection, recyclables processing & solid waste
- Single franchise for organics processing
- 75% diversion requirement
- Flat franchise fee
- 15 year term