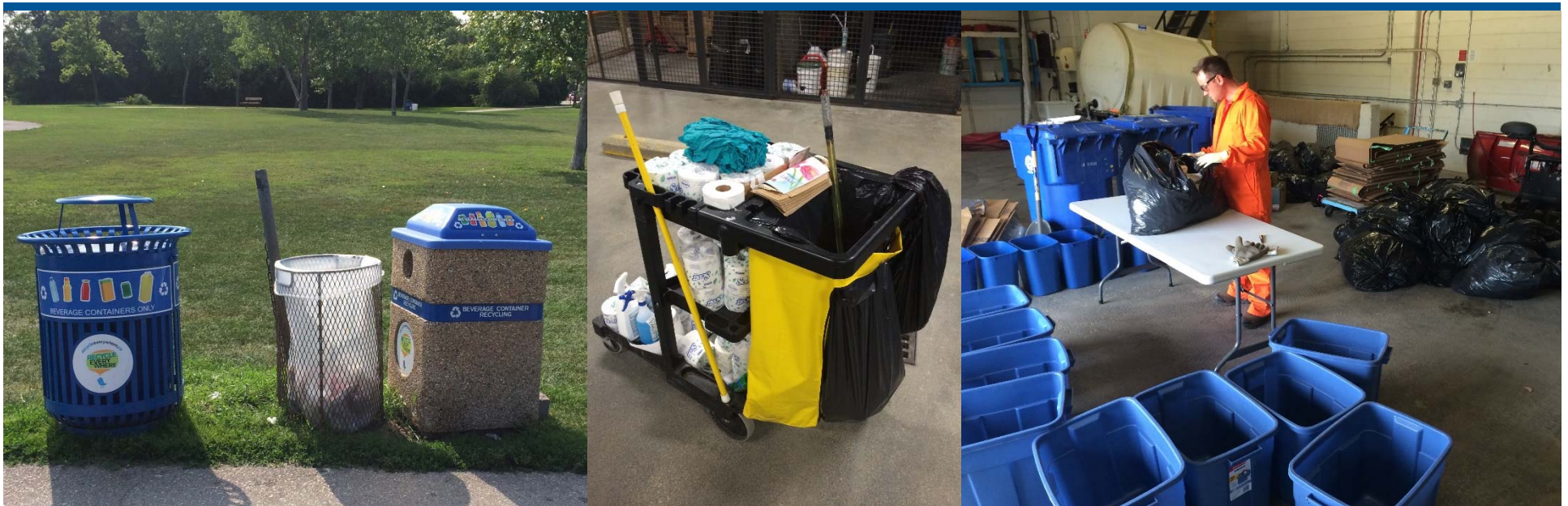


# City of Winnipeg Facilities and Operations Corporate Waste Reduction Strategy



May 14, 2015

# Presentation Outline

- Introductions
- Key Drivers
- Project Approach
- Results
- Implementation



# INTRODUCTION

Avery Gottfried, ME, P.Eng – Tetra Tech – Vancouver, BC  
Solid Waste Planning Engineer





# INTRODUCTION

Lindsay Mierau, B.Sc., MNRM – Environmental Coordinator,  
Department of Planning, Property and Development, City of Winnipeg



program was funded by the City. Because of higher cost of the material than conventional ones, property owners are also assessed for part of the lane construction costs. The City of Vancouver also applied for grant from Federation of Canadian Municipalities to fund the project.

As identified in the cases of Chicago and Vancouver, property owners' support and involvement will be a key factor that has an influence of the success of the green back lane pilot project. To gain their support, two aspects of the initiative pilot should be considered: a. The effectiveness of the pilot, and b. Construction and maintenance costs to neighbouring property owners.

## Looking Ahead: Winnipeg's Green Back Lane Initiative Pilot

As the first attempt to explore the possibility of greening Winnipeg's back lanes, the

If the pilot demonstrates positive functionality on addressing flood issue and/ or other environmental issues, it will definitely attract neighbouring residents to be involved in it. Meanwhile, reducing capital and maintenance costs to property owners can possibly reduce the potential doubt or objection.

The following methods can help to realize the purposes aforementioned

- Finding cost-effective techniques and materials and adapting them to fit to the Winnipeg's climate and soil conditions is important to ensure the project success

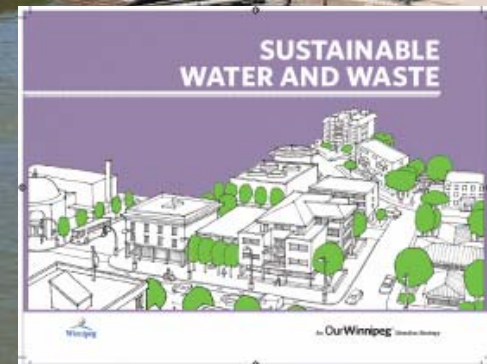
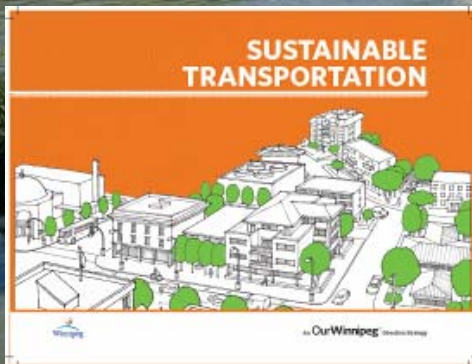


# The OurWinnipeg Planning Package

Development Plan



Direction Strategies



# PROJECT DRIVERS

## Our Winnipeg: A Sustainable Winnipeg (05-02; 09-03)

- Directs sustainability be incorporated into civic operations, programs and services
- Identifies need for CWR Strategy, including baselines & benchmarks

## Our Winnipeg: Sustainable Water and Waste

- Garbage and Recycling Master Plan establishes target of 50% diversion from residential sector

## EPC Direction (Sept. 2013) to develop a Corporate Waste Reduction Strategy

# Public Image is Priceless

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## NEW | City staffers red-faced over green shortcomings

CBC News Posted: May 17, 2011 6:03 PM ET | Last Updated: May 17, 2011 10:21 PM ET

0 shares



There are plenty of red faces at City Hall over the green reputations of its officials.

A new report says that hundreds of municipal facilities don't separate and recycle their garbage, sending everything from food waste to paper off to the dump.

As far as leading by example, it seems the City of Ottawa has some work to do, conceded councillor Peter Hume.

"Absolutely, it's embarrassing," he said.

Many facilities did not have enough green bins and blue bins, meaning the buildings were simply paying lip service to the concept of recycling, despite instructing ordinary citizens to follow the rules.

### 'Hypocrisy'

The city's own report showed that recreation complexes were only diverting 21 per cent of waste, well short of the target of 77 per cent. Athletic facilities only diverted 17 per cent of waste from landfills, as opposed to the target of 64 per cent.



While Ottawa residents have been encouraged to sort their recycling and other wastes, a new report reveals hundreds of municipal facilities are not following suit. (CBC)

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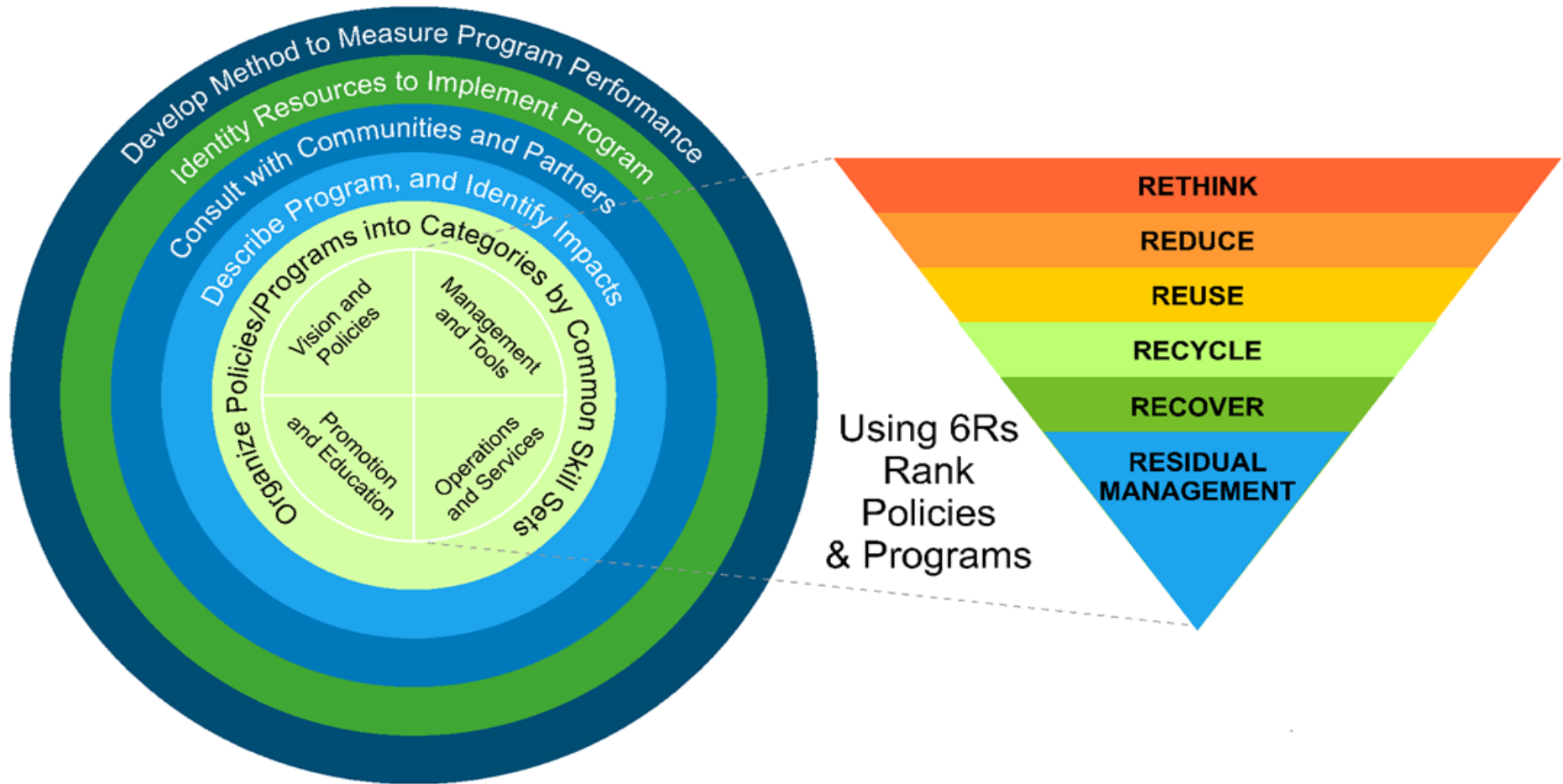
- Steph over re War M
- Ottawa gunman applied for Libyan shooting
- Harper demands expedited review

# PROJECT APPROACH

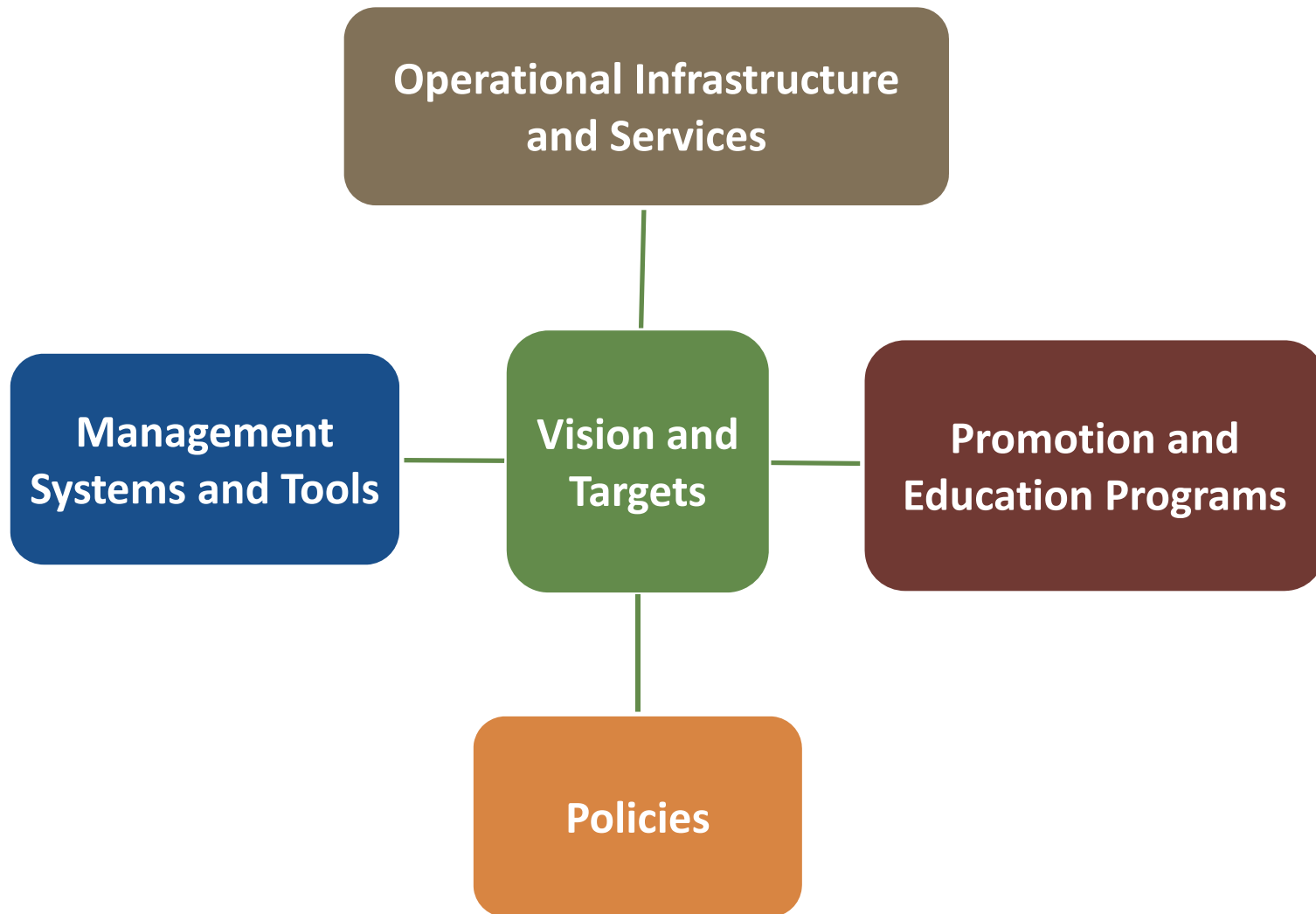




# Planning Approach



# Building a Strategy



# Best Practice Research

Municipality	Diversion Target / Examples
City of Vancouver, British Columbia	<b>Corporate offices: 90% (84% 2015)</b> <b>Public facilities: 70% (65% 2015)</b> Diversion rates are up to 91% in city facilities with the new systems
Markham, Ontario	<b>All Operations: 85%</b> Went from over 500 solo garbage containers in Civic Centre to 45 central stations without litter management issues over time
San Francisco, California	<b>All Operations: 80% by 2015</b> Established a 'Virtual Warehouse' for city supplies Procurement practice shift to recycled-content products and compostable food service ware

# Information Gathering

- Published Documents
  - Policies, Plans, Data and Reports
- Provincial Programs
- Baseline Generation Data and Infrastructure Assessment
- Facility Tours and Interviews with Management by Facility Group



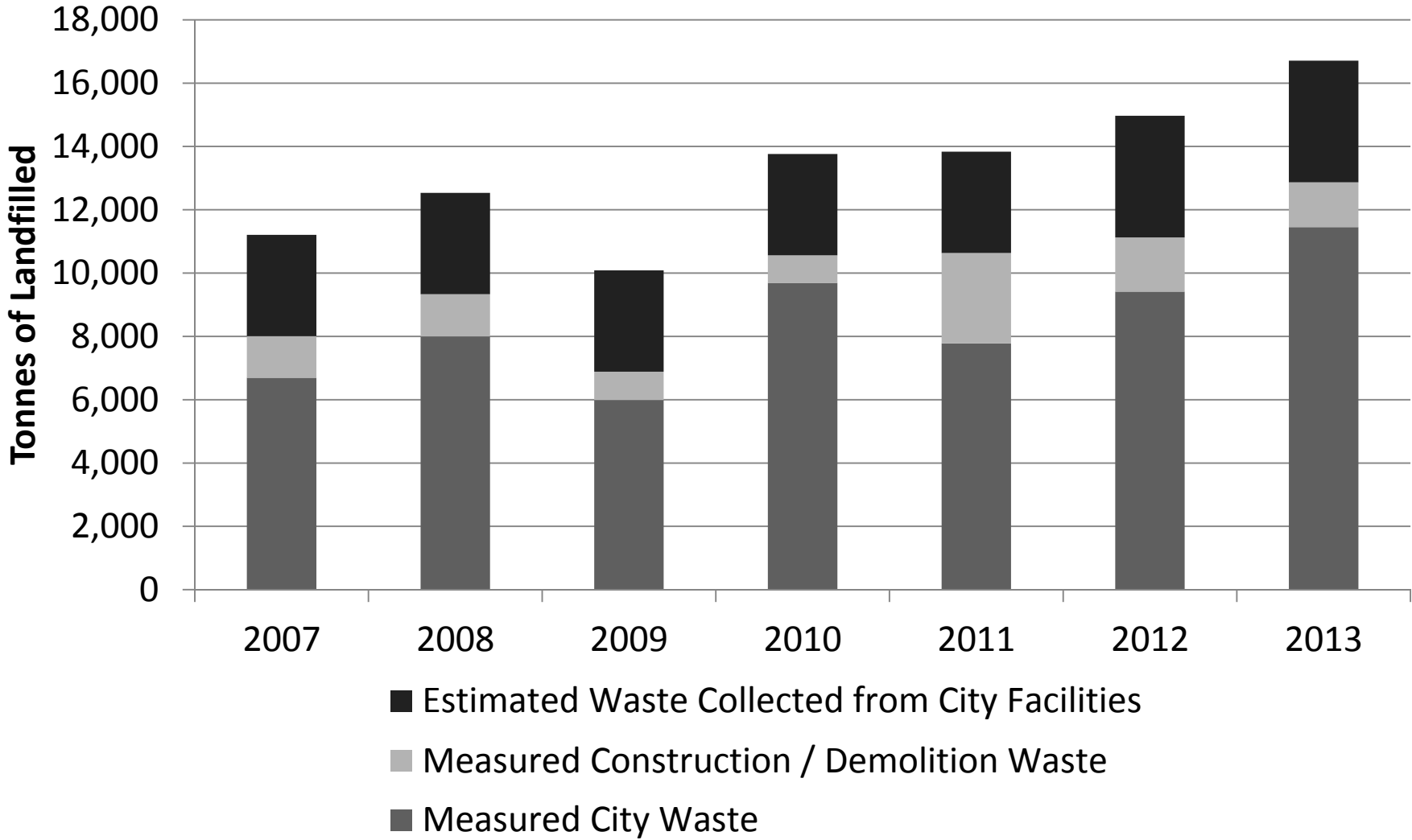
# City of Winnipeg Facilities

Facility Category	Examples
Corporate Office	City Hall, Planning Property & Development, Administration
Public Recreation and Community Service	Community Centre/Sports Venues and Arena/Pools, Library
Operations and Maintenance Yards	Transit Facilities, Garages and other Maintenance/Construction areas
Green Spaces	Parks, Green Spaces, Golf Course, Cemeteries, and Tree Removal
Open Spaces	Public Use Waste Containers (Street-side, Parks, Transit Stops, Parking Lots, etc.)
Public Service	Fire and Rescue Stations, Police, Daycare

# RESULTS



# Corporate Facilities Waste Disposal



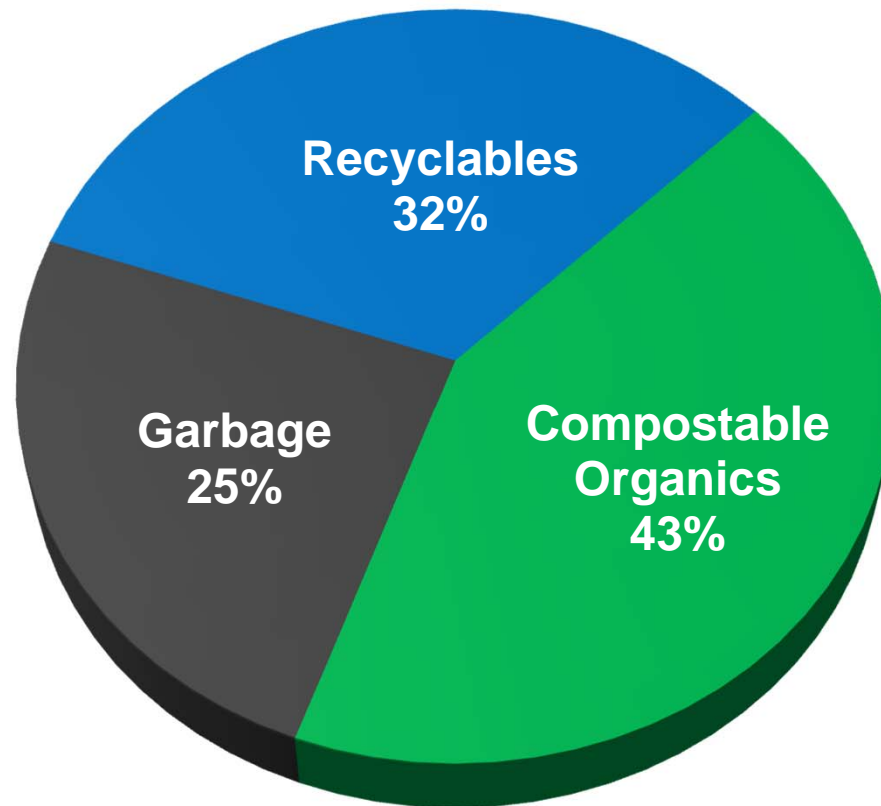


# Waste Audits





# Garbage Composition Cindy Klassen Recreation Complex



**Overall Calculated Diversion Rate  
(Garbage and Recycling) 13 %**

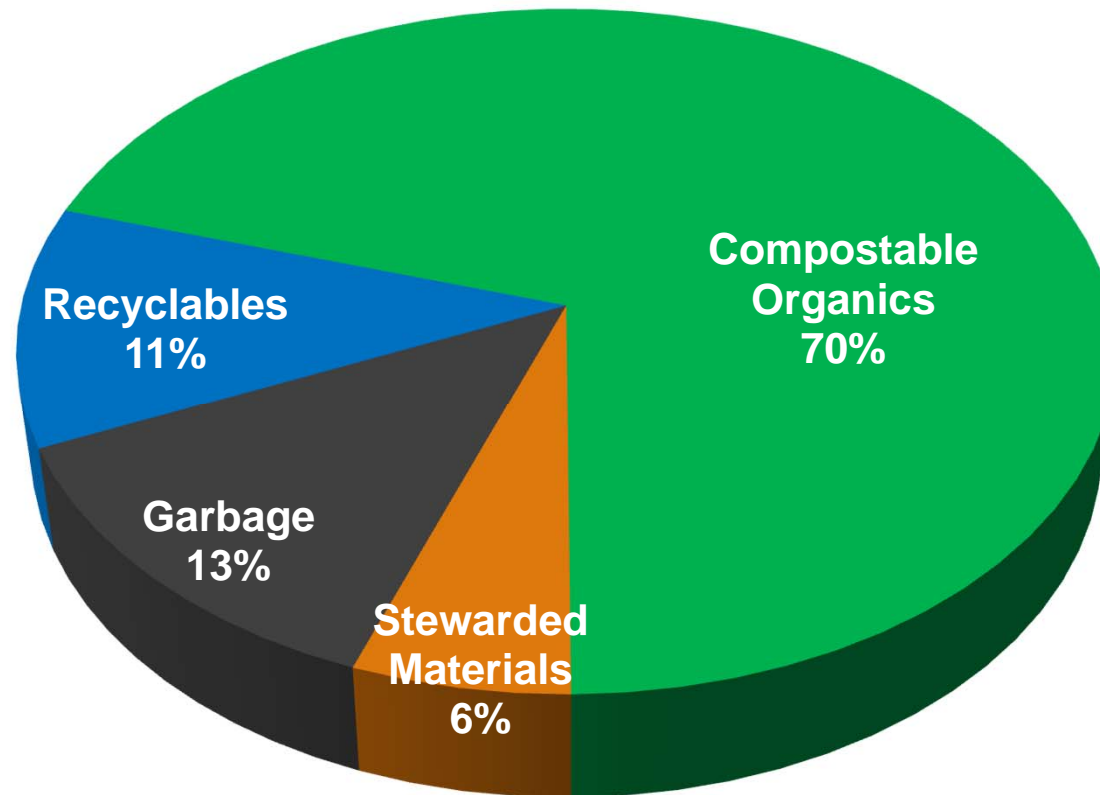
# Material Diversion

## Cindy Klassen Recreation Complex

Material Stream	Weight From Recycling Bins (kg)	Weight From Garbage Bins (kg)	Diversion
Paper - fine, office magazines, newsprint	7.7	7.2	52 %
Clean Old Corrugated Cardboard	8.6	41.8	17 %
Drink box - Juice Boxes	0.1	0.7	7 %
Drink box - Dairy	0.1	0.3	14 %
Plastic Beverage Containers (Non-Diary)	2.6	3.8	41 %
Rigid plastic containers and packaging with a recycling triangle #1-7	1.7	2.3	43 %
Metal Beverage containers	0.4	0.5	47 %
Food Containers all types	-	0.1	-
Glass beverage containers	4.6	0.5	90 %
Food containers	-	-	-
<b>TOTAL</b>	<b>25.7</b>	<b>57.2</b>	<b>31 %</b>

**Recycling Diversion Rate 31 %**

# Garbage Composition City Hall



**Overall Calculated Diversion Rate  
(Garbage and Recycling) 61 %**

# Material Diversion City Hall

Material Stream	Weight From Recycling Bins (kg)	Weight From Garbage Bins (kg)	Diversion
Paper - fine, office magazines, newsprint	21.8	2.6	89 %
Secure Shredded Paper	26.0	-	100 %
Clean Old Corrugated Cardboard	34.4	0.9	98 %
Drink box - Juice Boxes	0.1	0.1	33 %
Drink box - Dairy	0.3	0.1	75 %
Plastic Beverage Containers (Non-Dairy)	0.5	0.5	50 %
Rigid plastic containers and packaging with a recycling triangle #1-7	0.5	1.0	33 %
Metal Beverage containers	0.4	0.5	44 %
Food Containers all types	0.1	0.5	9 %
Glass beverage containers	0	0	-
Food containers	0	0	-
<b>TOTAL</b>	<b>84.0</b>	<b>6.2</b>	<b>93 %</b>

**Recycling Diversion Rate 93 %**

# Site Interview Trends

- Need for clearly defined “best practices”
- Collection-related concerns
- Resource and logistical limitations
- Existing management and administrative structure
- Procurement standards



# Interim Waste Reduction Targets

Facility Category	Diversion Rate	Waste Diversion Targets		
		Current (Estimated)	2015-2017	2017-2020
Corporate Office	40%	50%	65%	90%
Public Recreation, Community Service and Cultural Venues	15%	30%	45%	70%
Operations and Maintenance Yards	30%	50%	65%	80%
Green Spaces	80%	85%	90%	100%
Public Use Waste Containers	5%	20%	30%	40%
Public Service	30%	40%	50%	60%
Overall Diversion Target	29%	42%	52%	65%
Overall Reduction Target	--	2%	5%	10%

# IMPLEMENTATION



# Implementation Plan Priorities

- Vision and Strategic Priorities
- Management System and Tools
- Operational Infrastructure and Services
- Engagement and Education Programs





# Implementation Plan

	Strategies	Action Highlights	Pre-requisite	Timeframe	Noteworthy Considerations	Resource Requirements		Roles and Responsible Departments
						Dedicated Staff	Budgets (Capital and/or Operational)	
<b>A. VISION AND STRATEGIC POLICIES</b>								
1	Waste Reduction Targets	<ul style="list-style-type: none"> <li>Adopt clear targets (short-term and long-term) that provide corporate operations with goals and options for moving forward</li> </ul>	First step as planning is followed by action items	2014-2015	<ul style="list-style-type: none"> <li>Commitment that outlines the direction for corporate operations</li> <li>Having a clear definition of zero waste can be helpful when organizations are evaluating options</li> </ul>	0.5 FTE to advocate for strong policy framework in first two years of implementation	\$37,500 based on \$75,000 @ 1.3 to include benefits (\$57,690 Salary)	Centralized to one department: Solid Waste or Urban Planning
2	Zero Waste Commitment	<ul style="list-style-type: none"> <li>Adopt a commitment to pursue zero waste in City operations</li> </ul>						
3	A Sustainable Winnipeg – Direction 05 02	<ul style="list-style-type: none"> <li>Existing plan that can support the corporate waste management strategy</li> <li>Guidance for solid waste management goals and targets</li> </ul>		Complete	<ul style="list-style-type: none"> <li>Existing policy framework that solid waste management plans and strategy can build on</li> </ul>			
4	Corporate Solid Waste Management Plan (Annual Report)	<ul style="list-style-type: none"> <li>Solid waste management plan for corporate activities that include procurement policies and diversion initiatives – updated yearly</li> <li>Actively assess, collaborate and advocate as pertains to provincial and municipal solid waste programs, carbon offset opportunities and other waste-related policy issues</li> </ul>	Policy informs other solid waste components	Ongoing	<ul style="list-style-type: none"> <li>Opportunity to lead by example and incorporate waste diversion initiatives into corporate operations</li> <li>Assesses implementation priorities and opportunities for pilots and new programs in upcoming year(s)</li> <li>Used as a tool to inform policy decisions</li> </ul>			
5	Materials Management Policy and Purchasing Policy	<ul style="list-style-type: none"> <li>Harmonized and update policies to ensure they are in align with the corporate vision and targets set for waste reduction and diversion</li> <li>Ensure janitorial contracts and other contracted services have the necessary terms that are in line with the waste diversion strategy.</li> </ul>		Ongoing	<ul style="list-style-type: none"> <li>Keeping abreast of new initiatives that can affect City operations and mandates</li> <li>Improve contracts to include more sustainability requirements that align with the waste diversion targets</li> <li>Require quarterly meetings within contract periods to build in system efficiencies to promote diversion</li> </ul>			
		<ul style="list-style-type: none"> <li>Develop partnership models with Stewardship programs and provincial</li> </ul>			<ul style="list-style-type: none"> <li>Steward programs such as CBCRA and the</li> </ul>			

# Phased Implementation Approach

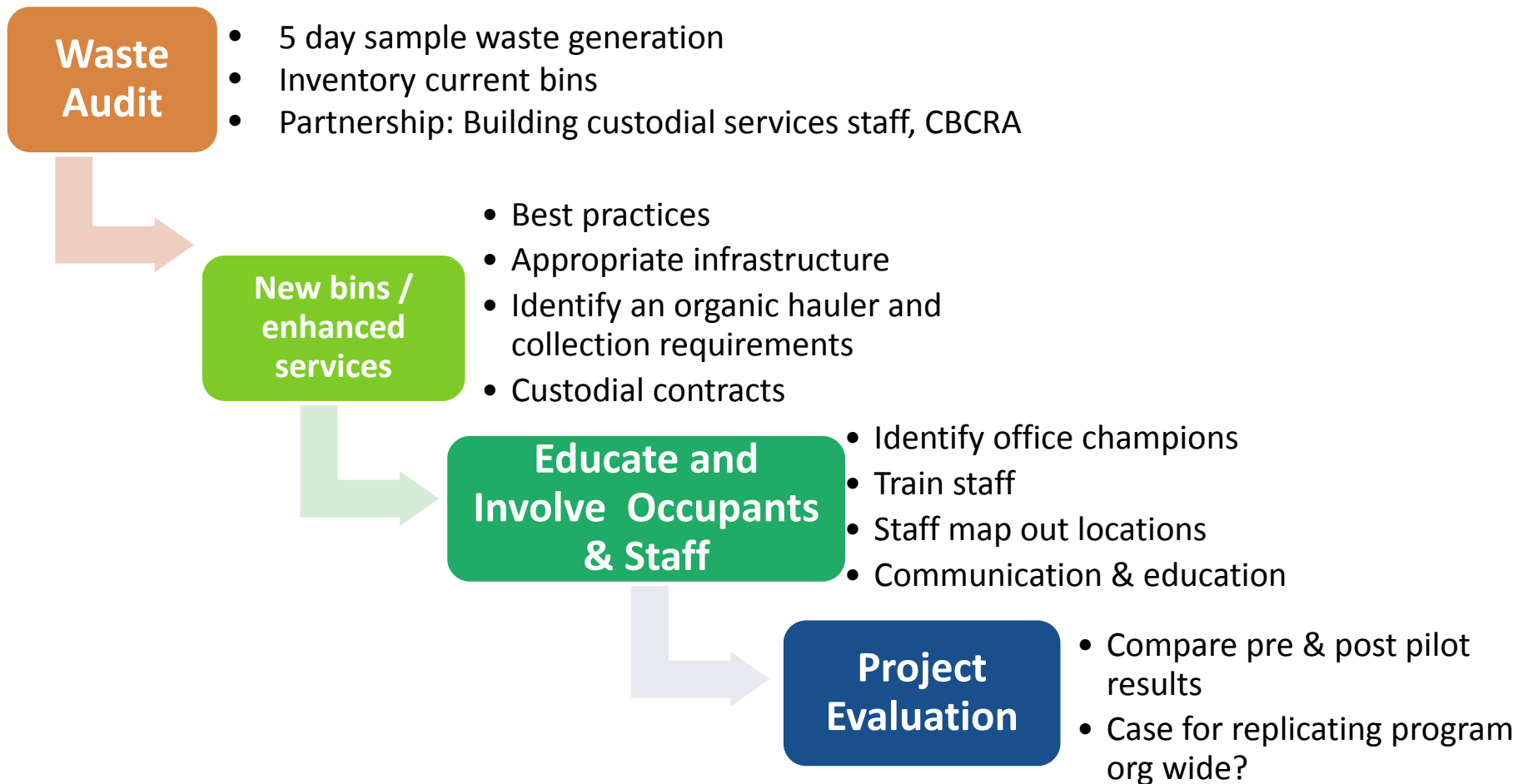
1. Achieve zero waste goals through effective diversion and **management of organic waste**
2. Focus on **waste reduction** in office facilities
3. Waste reduction in **operations and maintenance yards**
4. Enhance recycling systems in community centres by **removing excess waste bins**, pairing containers and **increasing recycling signage**
5. Finally, and the most challenging aspect of the waste stream, identify ways to **reduce waste in public spaces** (especially street side and in parks)

# Implementation Pilots – Office Waste Reduction Program (PP&D)

- Measure baseline and set goals - metrics allow you to manage what is measured
- Assess current system and gaps
- Develop recommendations and evaluate/pilot
- Finalize recommendations and identify resources



# Implementation – Pilot Project Office Waste Reduction (PP&D)




# Office Staff – Waste Audit (April 2015)



# Sample Communications

## RECYCLING AT WORK



1 2 3 4 5

Zero Waste Station  
RECYCLE

Illustration credit: Susan Milley

- 1 Put all of the recyclables you collect at your desk into your blue recycling container.
- 2 Put all of your organic materials and garbage into your mini-bin.
- 3 When either of your containers are full, take them to a waste station.
- 4 Empty your container by sorting your materials into the appropriate zero waste station container - either the recycling, organics or waste stream.
- 5 Bring your container back to your desk.

For more information, please contact  
Lindsay Mierau, Environmental Coordinator  
204-986-8589

## PLEASE SORT YOUR WASTE HERE



Together we can reach our goal of zero waste in City of Winnipeg offices.

# Sample Communications

**COMPOST YOUR PAPER TOWEL HERE**

**YES**  
Paper Towel Only

**NO**  
No human waste

The City of Winnipeg is proud to partner with The Forks Market to provide organic waste pick-up service to be composted in the on-site Biowator.

**FOOD SCRAP RECYCLING**

**YES**

- ALL FOOD
  - Fruits
  - Vegetables
  - Dairy
  - Breads & Grains
  - Meats
  - Seafood
- FOOD-SOILED PAPER
- PAPER TOWEL
- BIODEGRADABLE PLASTICS
- PLANTS

**NO**  
no plastic, styrofoam, glass, metal or liquids

The City of Winnipeg is proud to partner with The Forks Market to provide organic waste pick-up service to be composted in the on-site Biowator.

## OFFICE WASTE REDUCTION PROGRAM

### ORGANICS COLLECTION PROGRAM

Compost your food waste, including meat, bread, dairy, tea bags, coffee filters/grounds, paper towels, paper plates, plants, compostable coffee cups and compostable takeout containers. Recyclable materials and landfill waste belong in the appropriately marked container located at a waste station on your floor.

### What is Not Compostable?

Examples include: Plastic-lined paper coffee cups (e.g. McDonald's, Starbucks, Tim's), k-cups, plastic bags, plastic cutlery, foil packaging, used tissues, and styrofoam.

### MIXED RECYCLING PROGRAM

It's just like recycling at home – paper, glass, plastic, metal and cardboard go in the blue recycling bin destined for Winnipeg's Materials Recovery Facility (or MRF). Through separate programs, City of Winnipeg offices now recycle batteries and writing instruments (pens, markers, mechanical pencils) – ask about the specially marked recycling box located in your office. Other commonly recycled office materials include confidential paper for shredding, cell phones, and ink and toner print cartridges. Organic materials and landfill waste belong in the appropriately marked container located at a waste station on your floor.

### What is Not Recyclable?

Examples include: Paper towels, tissues, k-cups, snack packaging, plastic bags, plastic cutlery, styrofoam, coffee grounds, food products, paper plates and plastic-lined paper coffee cups (e.g. Tim's, McDonald's, Starbucks).

go green!



Please Recycle This Card!

**NOTICE** STARTING **MAY 1ST, 2015** (DATE)

**NO** DESKSIDE WASTE AND RECYCLING COLLECTION IN OFFICES

Take your materials to centrally located waste sorting stations

Please remember **your waste, your recycling, your responsibility**



For more information, contact Lindsay Mierau, Environmental Coordinator at 204-986-8598

# Implementation – Pilot Project Cindy Klassen Recreation Complex







# THANK YOU – QUESTIONS?

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