

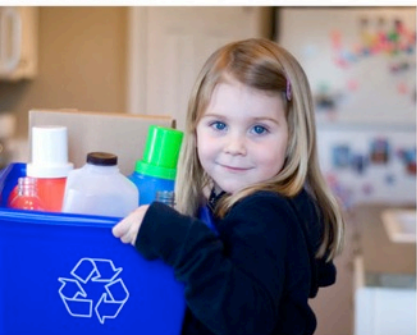
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2015 Conference on Canadian Stewardship  
October 2<sup>nd</sup>, 2015

# Curbside recycling optimization Project

Jean-Luc Plante, Vice-President Optimization



eeqr  
Éco Entreprises Québec

# Agenda



- About ÉEQ
- Facts about Quebec's curbside recycling system
- ÉEQ's curbside recycling optimization process
- ÉEQ's role as a value chain optimizer
- Partner in a new business model for curbside recycling in Quebec

# About Éco Entreprises Quebec



- Private, non-profit organization certified by RECYC-QUÉBEC in 2005 in accordance with the *Environment Quality Act*
- Represents more than 3,000 member companies and organizations who put containers, packaging and printed matter on Quebec's market
- Collects contributions from companies to compensate municipalities for curbside recycling services
- In 2014, \$135 million were paid to cover 100% of eligible net costs of curbside recycling programs



# Curbside Recycling Facts







# Curbside Recycling Facts

 **99%** of Quebec's population served

 More than **11,000** pieces of equipment for away-from-home materials recovery

 **62.5 %** rate of recovery

 **800,000** tonnes of recyclable materials recovered every year

 **275,000** tonnes of GHG (CO<sub>2</sub> eq.) avoided every year



# Curbside Recycling Facts



**1,108** municipalities



Over **550** municipal organizations oversee and manage the service



Over **50** collection companies



**24** sorting centres



**50** conditioners/recyclers



# Curbside Recycling in Quebec: an Industry in evolution



PERFORMANCE  
LEVEL

## Ad hoc

No process for governance,  
no performance measures

## Reproducible

Precise and clearly defined  
processes with performance  
measures



## CURBSIDE RECYCLING IN QUEBEC

## Defined

Defined processes with some  
performance measures,  
but a lack of integration

## Optimized

Constant innovation, shared global  
vision and cooperation among  
stakeholders

## Controlled

Controlled processes with  
dynamics for continuing  
improvement

MATURITY  
LEVEL

### Strategic Direction:

Define an **integrated vision** of the curbside recycling value chain, its issues and priority actions in order to **improve performance** and **optimize** the system

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## ÉEQ' Curbside Recycling Optimization Process

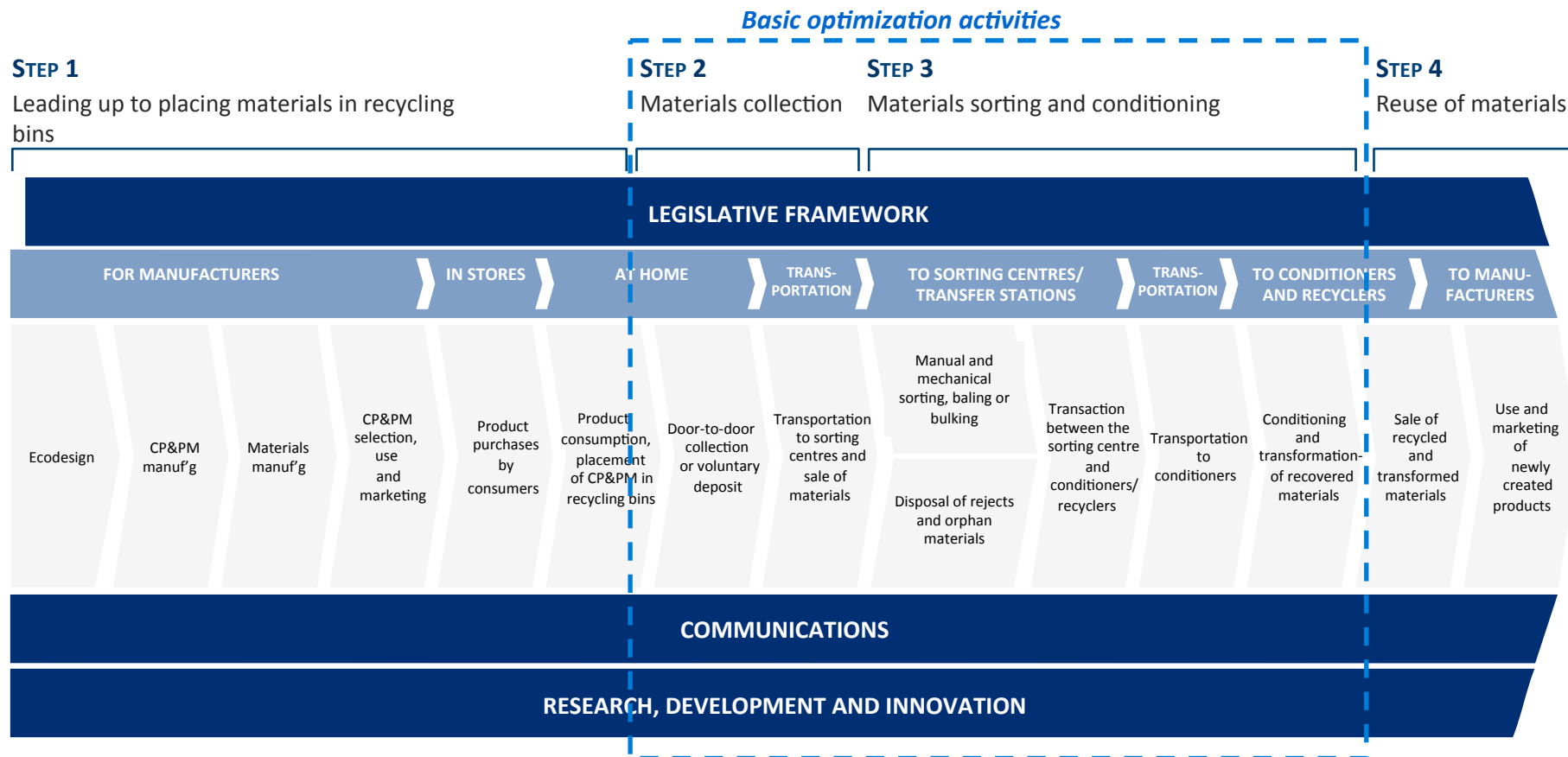




# The Initiative Focuses on Materials Collection, Transportation, Sorting and Conditioning

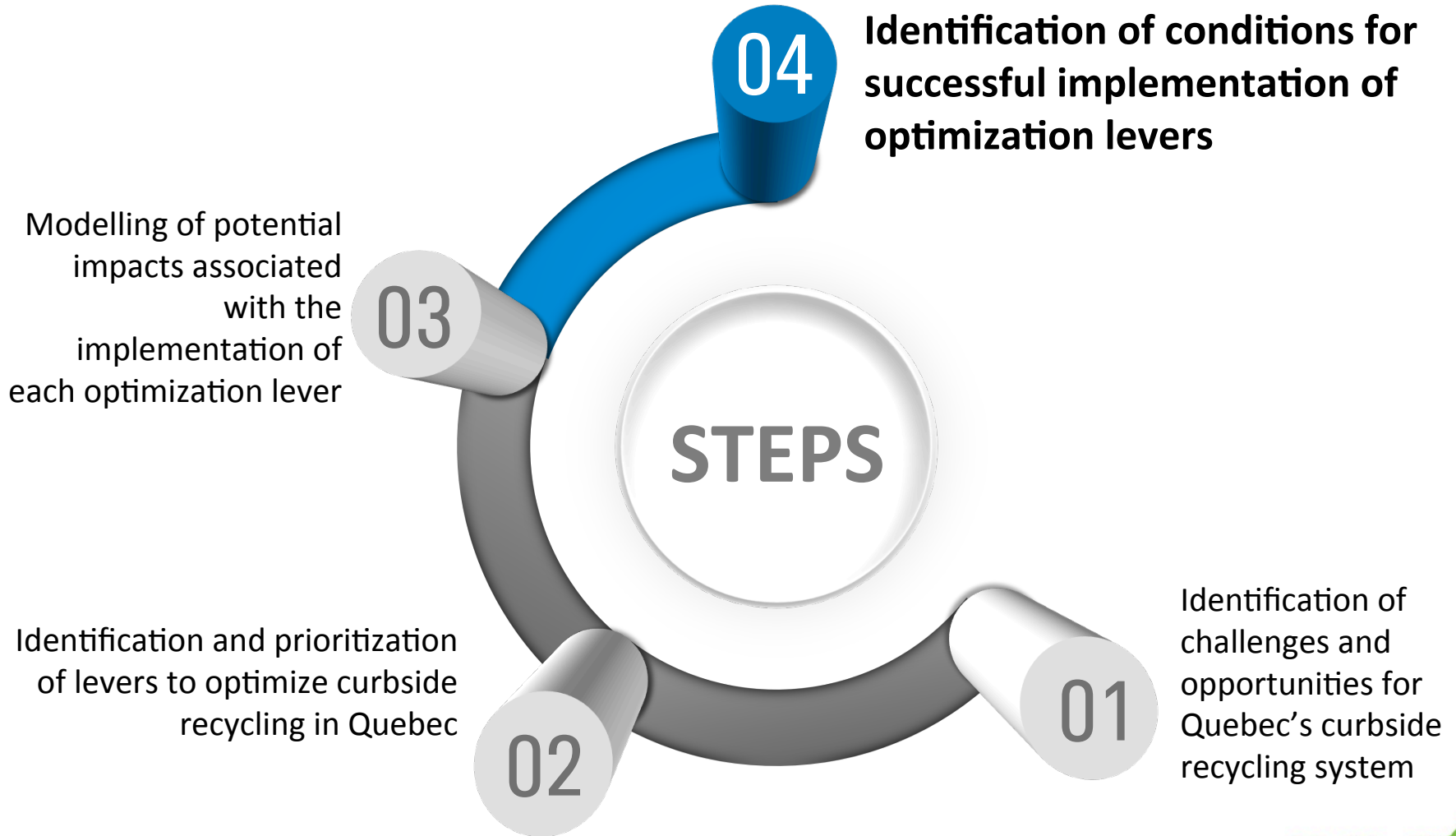


- ÉEQ seeks to identify opportunities for optimization within the curbside recycling value chain in order to improve overall performance



Sources: ÉEQ and KPMG-SECOR analysis

# 4-step Process



# 5 Optimization Levers to Support the Industry's Evolution



**Optimize how and what the public recycles**



**Improve the** quality of collected materials



**Encourage** information sharing **and the implementation of** best practices



**Improve** sorting centre performance and efficiency



**Apply a** regional or provincial perspective **to sorting and conditioning activities**

# Optimize How and What the Public Recycles

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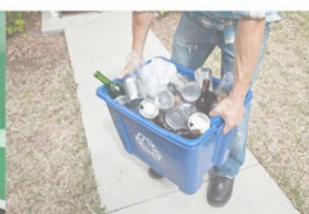


## OBJECTIVES

Help consumers better understand what to place in recycling bins



Improve the quality of materials placed in recycling bins





# Improve the Quality of Collected Materials

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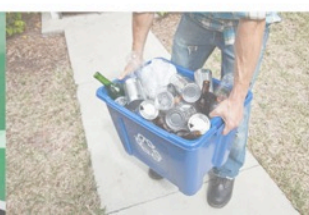


## OBJECTIVES

Raise awareness among municipalities and materials collectors regarding the importance of collecting good quality materials



Reward municipalities that apply best practices relating to materials collection and transportation



# Facilitate Access to Information on Collection and Sorting Contracts

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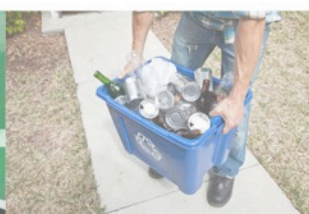


## OBJECTIVES

Foster transparency by encouraging municipalities to share and implement best practices



Encourage the optimization of collection and transportation contracts



# Improve Quebec Sorting Centre Performance and Efficiency

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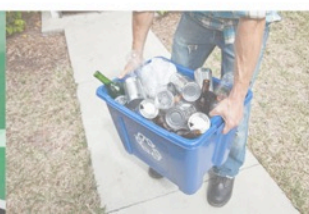


## OBJECTIVES

Encourage innovation in sorting centres



Improve the quality of sorting centre output in consideration of market outlets



# Apply a Regional or Provincial Perspective to Sorting and Conditioning Activities

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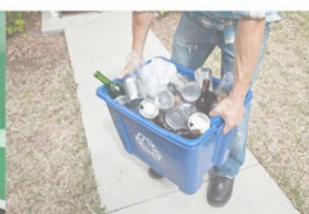


## OBJECTIVES

Align the entire sorting and conditioning stream on a common and sustainable economic vision



Define and deploy an optimal model for sorting management







# A Process with Targets

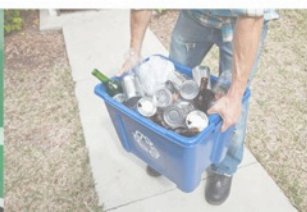
## PERFORMANCE

**Increase quantities of materials recovered from 800,000 tonnes in 2013 to:**

- **1 million tonnes in 2018**
- **1.2 million tonnes in 2023 (i.e. a 50% increase)**

## QUALITY

**Reduce by half the rate of recovered material contaminants by 2023**





# A Process with Targets

## RECYCLABILITY

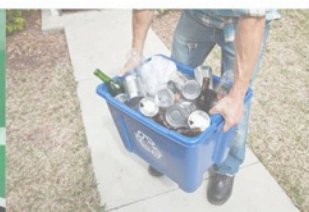
**Increase the materials recovery rate from 65% in 2013 to:**

- **71% in 2018**
- **73% in 2023**

## EFFICIENCY

**Projected reduction of the net costs of curbside collection and sorting:**

- **20% in 2018**
- **35% in 2023**

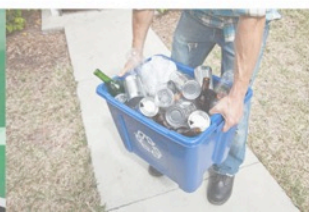


# Conditions for Ensuring the Success of Optimization Levers



The prerequisites to increasing the value of recycling bin contents and ensuring the industry's sustainability are:

- Investments ÉEQ is prepared to make
- Political will to make required changes and implement the necessary means
- Stakeholder commitment



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## ÉEQ's Optimizer Role in the Value Chain





# Our Range of Tools

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DISCOVER ALL THE TOOLS ÉEQ OFFERS  
TO MUNICIPAL ORGANIZATION  
REPRESENTATIVES TO RECOVER MORE  
AND BETTER...



## AT HOME...

### BEST PRACTICES INITIATIVE FOR EFFECTIVE CURBSIDE RECYCLING

An innovative forum for discussion and partnership with the  
municipal sector !

## AND IN MUNICIPAL PUBLIC PLACES!

### AWAY-FROM-HOME RECOVERY PROGRAM

A recycling bin next to every trash can!

### AMBASSADORS PROGRAM TO PROMOTE CURBSIDE RECYCLING

Involving teen citizens in the curbside recycling effort!

# Best Practices Initiative: Progress to Date



**OBJECTIVE: Optimize municipal program performance and efficiency**

- 9 regions visited, 17 workshops attended by 200+ elected officials and municipal waste program managers
- Topics:
  - Request-for-proposal specifications
  - Public awareness activities
  - Grouping of municipal organizations
  - Types and frequency of collection, container types
- Tools:
  - Bid analysis
  - Fact sheet on best practices



**BEST PRACTICES  
INITIATIVE**  
*For effective  
curbside recycling*

# Best Practices Initiative

- First-ever initiative to encourage information sharing and cooperative steps with first-line program managers
- Very positive comments:
  - Discussion forum that produces fruitful exchanges within given regions
  - Workshop formula appreciated by participants



# Away-from-Home Recovery Program

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A RECYCLING BIN NEXT TO EVERY TRASH CAN!  
TO INCREASE QUANTITIES OF MATERIALS RECOVERED

Since 2007:

- **\$5 million** in financial assistance
- Over **11,000 pieces of recovery equipment** installed in 17 regions





# Ambassadors Program to Promote Curbside Recycling

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- ÉEQ and industry partners invested **\$700,000** in 2014
- A program in partnership with the Regroupement des maisons de jeunes du Québec (Youth centres)
- Designed to support programs that increase away-from-home materials recovery in municipal public places



# ÉEQ is Searching for Optimization Solutions for the Glass Industry



## Glass situation prior to 2013:

### Problem #1 : Only one outlet

- Glass wool: 2009 recession slowed down the construction industry in the U.S., resulting in lower demand for this product

### Problem #2 : Monopoly held by one conditioner

- Québec's only glass conditioner, Klareco, closed down in 2013

**=> This led to the glass crisis**

### Temporary measures to alleviate the pressure caused by the glass crisis:

Glass is now used as a replacement for sand as landfill cover material and a component of road foundations.

# Identification of Concrete Measures

## Objective

- Ensure glass generated by recycling facilities is of sufficient quality to be used for variety of market outlets.
- Stimulate the recycling sector by supporting the commercial development of market outlets for glass

## Strategic planning

Measures are in line with EEQ'S optimization levers

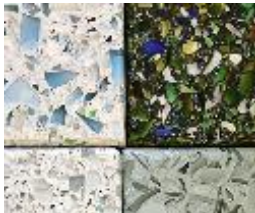
Optimisation Lever	
Lever #1	Optimize how and what the public recycles
Lever #2	Improve the quality of collected materials
Lever #3	Encourage information sharing and the implementation of best practices
<b>Lever #4</b>	<b>Improve sorting centre performance and efficiency</b>
<b>Lever #5</b>	<b>Apply a regional or provincial perspective to sorting and conditioning activities</b>

# Proposed Investment



ÉEQ announced last June its intention to invest and play an active role into Québec's value chain with the implementation of 2 measures:

1. Modernization of glass processing operations in recycling facilities
2. Stimulation of the recycling sector with financial support for the commercial development of market outlets for glass collected via curbside recycling programs



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# Partner in a New Business Model for Curbside Recycling in Quebec





# Partner in a New Business Model for Curbside Recycling in Quebec



- As an EPR organization, EEQ is a key player that:
  - has a global vision of the value chain
  - can play an active role as an agent of change
  - brings solutions to the table
- Through:
  - Partnerships with municipal organizations
  - Dialogue with key players in the value chain
- In order to:
  - Transform curbside recycling services into a business model
  - Move forward on the maturity curve
  - Increase quality, performance/price ratio for our stewards

**WE ARE A KEY PARTNER IN A NEW BUSINESS MODEL  
FOR CURBSIDE RECYCLING IN QUEBEC**