



**BUILDING MARKHAM'S  
FUTURE TOGETHER**  
2015-2019 Strategic Plan



# **Textile Recycling Report**

## **General Committee**

### **April 18, 2016**

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Management**

## “Best of the Best” - Diversion Strategy

- In 2012, Council approved the formation of a Diversion Subcommittee, to develop a package of diversion initiatives designed to increase diversion to 80%, and move Markham closer to being a Sustainable Community as recommended in the Green Print.
- Markham’s successful ‘Best of the Best’ diversion strategy contained ten diversion initiatives
- All of the initiatives have been successfully addressed with the exception of a program to provide expanded diversion opportunities for household textiles.

## ‘Fast Fashion’ Contributes to Textile Waste

- A major shift has been underway resulting in a growing amount of inexpensive, low cost, ‘disposable’ clothing being sold into the North American marketplace.
- Known as ‘Fast Fashion’, inexpensive trendy clothing is designed and priced to be bought, worn, then quickly discarded. The low cost of fast fashion can only be achieved because more than 98% of all garments sold in Canada are made off shore
- The carbon footprint of fast fashion is huge.

## Unregulated Donation System

- Municipalities leave textile collection exclusively to ‘charity’ and for-profit collection companies. These so called ‘charity’ boxes have posed a real challenge for GTA municipalities over the past several years.



## Markham Focus Group Results

- Residents have little understanding of what textiles are acceptable for donation - they were unaware that towels, sheets, purses, belts, and shoes etc. can be recycled. Most placed in garbage.
- Used charity boxes for convenience - had little allegiance to charitable causes
- When they had donations, residents preferred the of a 24/7 drop off system or home collection service.
- Would willingly recycle textiles - wanted more education on textile recycling
- Residents had strong confidence in Markham sponsored diversion programs. They would use a Markham managed textile recycling program if available.

## FCM Grant

- Textile recycling program approved 2016 Capital Project
- Matching grant of \$67,000 from the Federation of Canadian Municipalities (FCM) for Markham's textile recycling program
- FCM commented positively on Markham's application noting the initiative was not only unique, it addressed increased diversion, consumer education, and green house gas reduction.

# Smart Bin Donation Program

- New donation bins at Fire Stations
- 24/7 security
- Serviced by Salvation Army at no cost





## The Salvation Army

- Founded in 1865 - The Salvation Army is designed to meet the needs of all humans without discrimination
- Salvation Army Thrift Stores generate funds to support Salvation Army programs and services that help residents in the areas in which they operate
- Donated goods and household items are recycled and sold to offer practical assistance for children and families, often tending to the basic necessities of life
- Once operating costs are covered, 100% of all proceeds go towards supporting the charity
- Thrift stores are operated by The Salvation Army's National Recycling Operations division





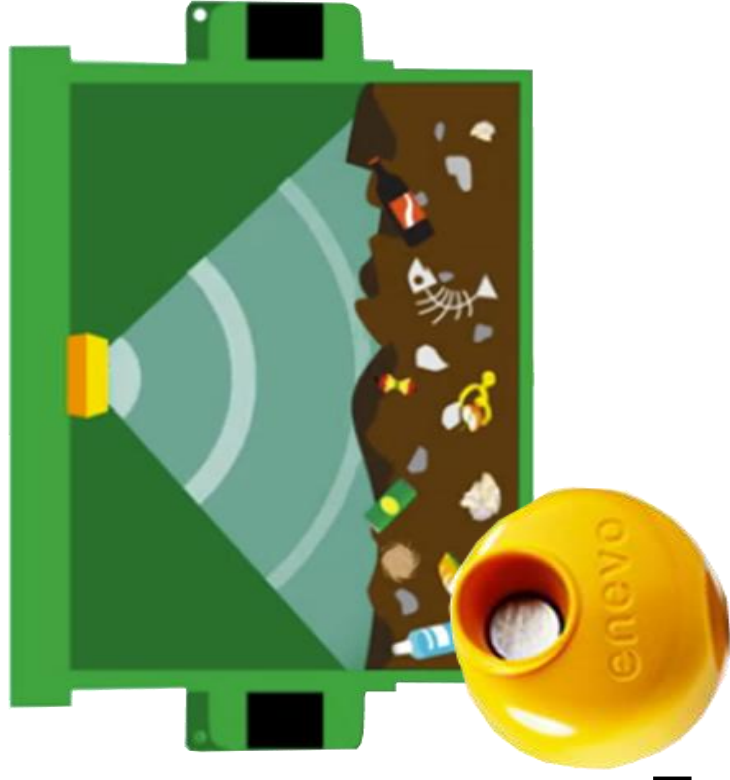
## SMART Bin

- Handmade by Mennonites
- Low carbon footprint
- Located at City Facilities
- Serviced by Salvation Army
- Sensor technology
- Solar lighting



## SMART Bin Technology

- Secured internally with theft proof hardware
- Programmed with container dimensions
- Online application displays transmissions, servicing schedules, alerts, forecasts
- Transmits a signal:
  - every 6 hours
  - when there is increase/decrease in volume
  - When high temperature levels detected





# SMART Bin Technology



**MICHAEL**  
Perimeter Institute

STATUS

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PLANS

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## Overview

### Alerts

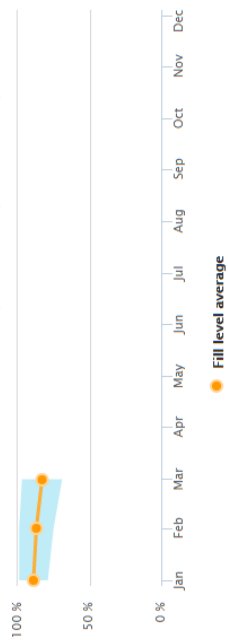


No alerts  
Everything is OK

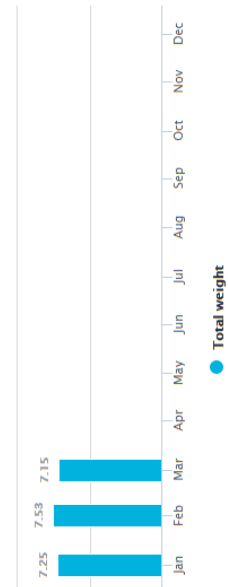
### Urgent containers

Today: 0  
Tomorrow: 0  
In 2 days: 1

### Fill level



### Collections



## Textile Recycling Symposium

- On May 4, 2016, Markham is sponsoring a Textile Recycling symposium at the Hilton Toronto/Markham Conference Center. In addition to speakers from San Francisco, New York City, and Halifax, Markham will be launching the textile recycling program and unveiling the new Smart Bin textile container.

