

RECYCLE
SMART

Enhancing Solid Waste Diversion in a Retail Environment: Edmonton, AB Case Study



RecycleSmart Solutions

- Waste and recycling consulting and management service
- Founded in 2008
- Offices in Richmond, Calgary, Kelowna and Toronto
- Service over 5000 locations
- Technology: sensors, monitors, remote cameras, customer portal



Kal Tire Social Responsibility

TIRE round-up!

Time to gather up and **RECYCLE** any **OLD TIRES** that have been lurking in your garage and yard



KALTIRE

DAWSON CREEK: 800 107th Avenue
Saturday, June 17th 10am to 3pm

Drop off your old tires,
on and off rim, **FREE** of charge

TIRE
Stewardship
BC

In Local Partnership With:

PRRDy says

NEAT



To find out more about tire recycling in BC visit: www.tsbc.ca



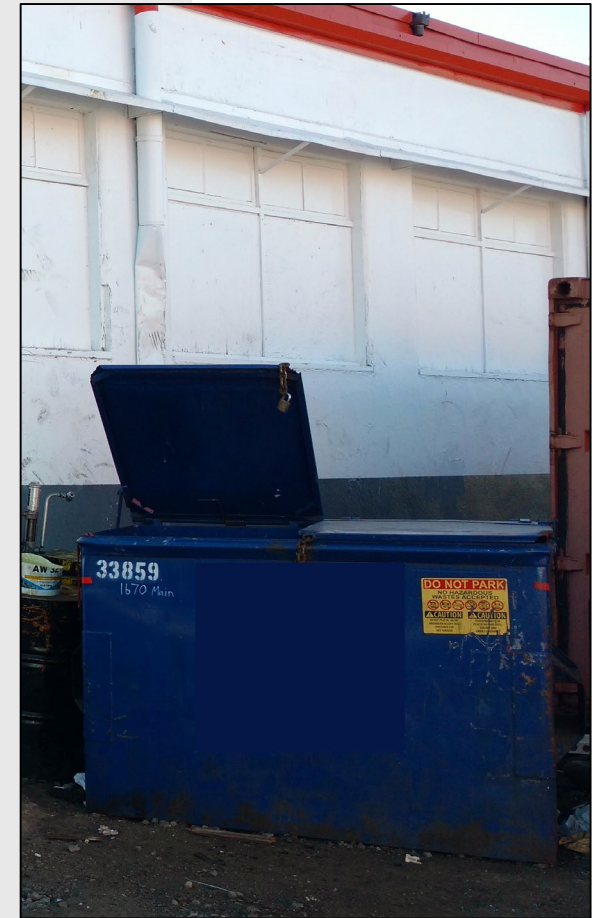
walksokidscantalk.ca

KALTIRE



Opportunities for Enhanced Diversion

- Existing recycling streams
 - Cardboard
 - Refundables
 - Tires
 - Shop waste (oily plastics, etc.)
- Opportunities for additional recycling
 - Non-confidential paper
 - Soft plastics
 - Tire bags
 - Seat covers
 - Steering wheel covers




Preparation and Project Planning

1. Collaborate with current haulers
 - Will processing facilities accept #4 soft plastics?
 - Confirm collection and disposal procedures
 - Review costs for implementation
 - Partner with Kal Tire Corporate Social Responsibility Coordinator
2. Develop educational material and a site training plan
 - Signage
 - Bin standards (front-of-house and back-of-house)
 - On-site training
3. Technology
 - RecycleSmart SmartService App
 - Bin Sensors



Signage Bin Standards & Decals

Showroom Recycling Bins



KALTIRE

Quantity of Showroom Bin Sets Ordered

Cost Per Set of 3 Bins: \$115.00 plus shipping

Bin Costs Are One Time Fees

Single-Stream Recycling means you can mix various materials such as paper, plastics, metal into a single, easy to use bin.

Mini Showroom Bins - 3 Bins Dimensions 34" L x 16.5" D x 21" H

Stores should consider ordering at least one of these showroom sets unless there is already proper bins and signage in place to divert these items from landfill.

Scan + Email or Fax Completed Form To: Kevin_McCarthy@kaltire.com - Fax: 250.558.3281

Shop Office & LUNCHROOM Recycling Bins

Order Form

Cost Per Bin: Wheeled Bin \$165.00, Square Bin \$84.00 plus shipping

Bin Costs Are One Time Fees

Stores will be billed through the version of the order that appears on their regular monthly usage bill, which appears on monthly profit and loss statements.

KALTIRE

Aim #7

Our aim is to continually improve every aspect of our company, recognizing our responsibility to our customers, each other, our communities, and the environment.

Stores should consider ordering at least one of each type of bin unless there is already proper bins and signage in place to divert these items from landfill.

Enhanced Recycling Program



Seat Covers & Tire Bags

Line tote with clear bag, stuff full with used tire bags/seat covers, tie off and put in single-stream bin outside when full.

Paper

Cardboard can be placed loose into the outside bin (do not bag)

Automotive Fluid Containers

Brake, Coolant, Transmission and Steering Fluid Containers

Line black tote with clear bag, when 3/4 full, tie off bag and place by used oil storage tank/drum.

RECYCLE SMART

HAVE A QUESTION? 1 888 892 1796

info@recycle-smart.com

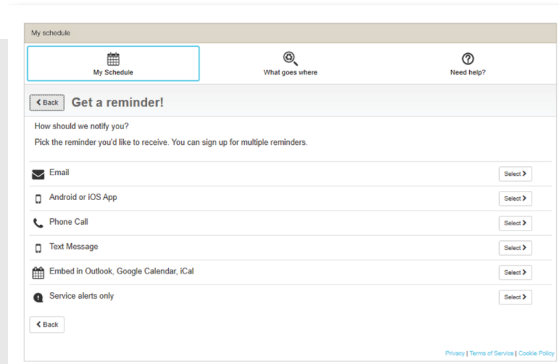
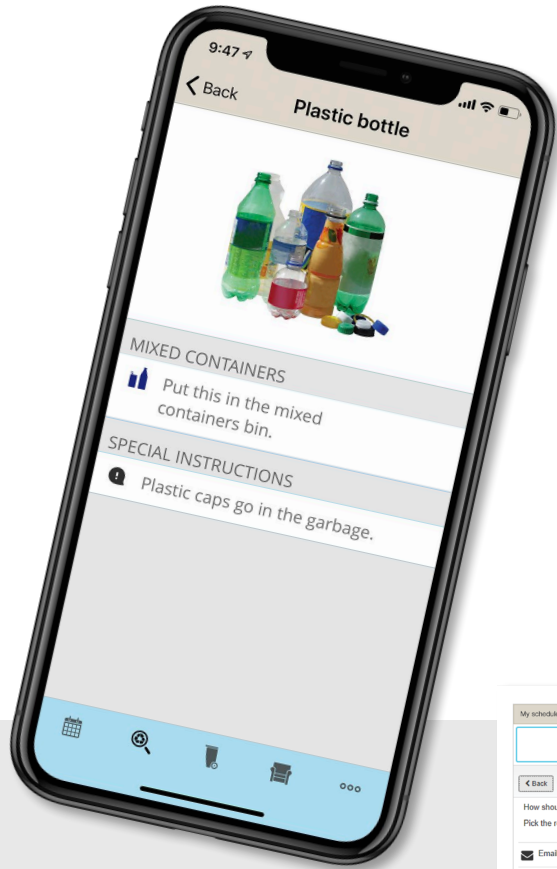
or download the RecycleSmart App:

Available on the App Store | ANDROID APP ON Google Play

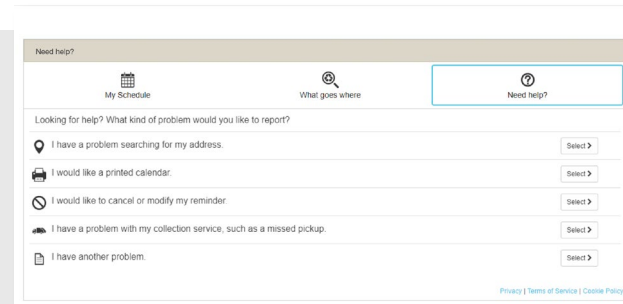



Technology SmartService App

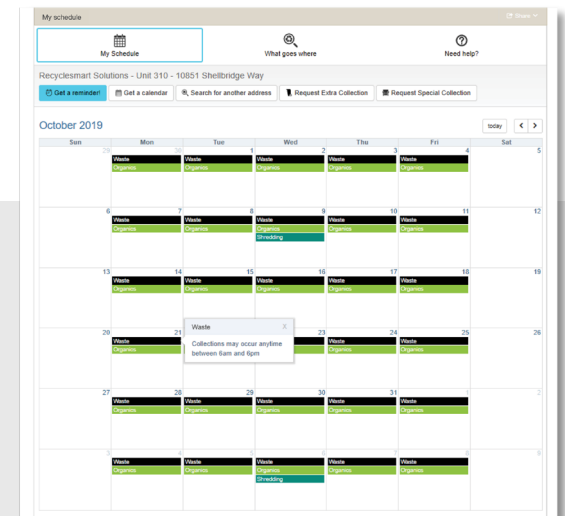
We understand that our partners are busy, and that waste/recycling is only part of their busy day. Our iPhone/Android smartphone app make it easy to check pickup schedules, book on call pickups, report problems and get instant recycling program information.



EASILY SOLVE QUESTIONS AND CONCERNS



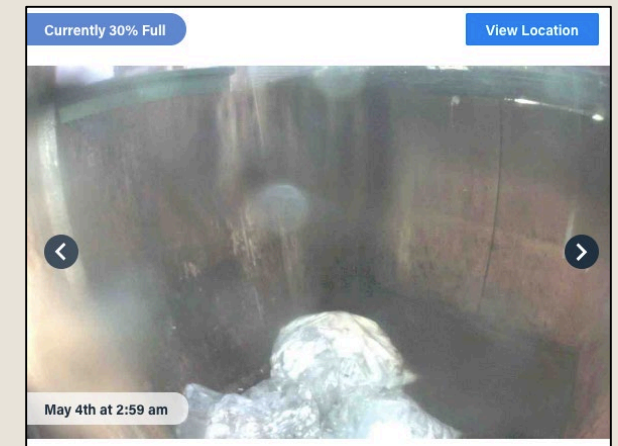
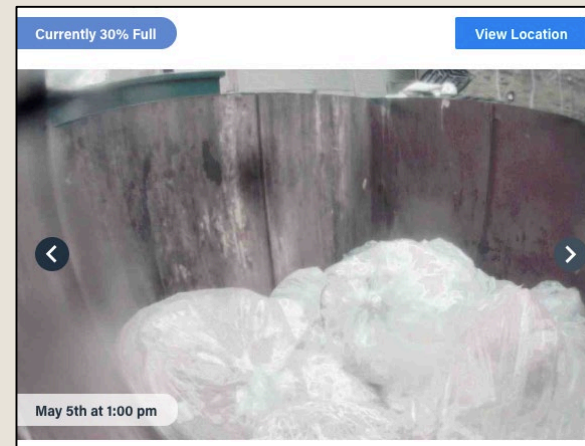
PROVIDE SERVICE INFORMATION TO LOCATION MANAGERS



Recycling Smart = Using Technology To Make Better Decisions About Waste And Recycling



- Container sensors to measure fill levels and monitor service performance of vendors.
- Diversion reporting to measure, monitor and manage.
- Web and app to provide service schedules, recycling information and request service.



Implementation Challenges

1. Change in commodities market
 - Haulers no longer accepting #4 plastic as part of their recycling program
 - Contacted all local recycling facilities to find a market
2. Hauler exchange
3. Border delays on bin sensors



Findings and Results





SINGLE-STREAM RECYCLING:
Cardboard, paper and bagged soft plastics (e.g. tire bags, seat covers
and steering wheel covers)

Garbage Only - No Tire Bags



Introducing Kal Tire Single-Stream Recycling!

What can go in my Single-Stream Recycling bin?

- * Loose cardboard
- * Bagged paper
- * Bagged soft plastics: tire bags, seat covers and steering wheel covers

Tire bags account for a large percentage of the garbage stream. If these materials are recycled there may be an opportunity to reduce waste service which would result in \$\$ savings!



Questions?
RecycleSmart Solutions
1-888-892-1796



Recycling Notice:



Please bag tire bags, seat covers and steering wheel covers. Once full, tie off the bag and place in the Single-Stream **Recycling** bin outside.



Findings & Results

Results	Per Month	Per Year
# of waste service trips saved	21	252
# yards diverted from the landfill	45	720
Tonnage diverted from the landfill	315 Kgs	5040 Kgs

Cost Review	
Pay-back-period (years)	3.69
Cost savings (monthly)	6.53%



Conclusions

1. Prepare for changes in the commodities market.
2. Continued monitoring and open feedback from haulers and members of the Kal Tire team.
3. Communication is key!
4. This project will be used as a case study to roll-out in other regions across the country.



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THANK YOU!