Producers have 100% control
Municipalities and Industry part of the supply chain
MMBC controls collection
Green by Nature controls post-collection services

- Movement of materials from depots to facilities
- Processing at facilities
- Marketing of all products generated

GBN does not own any infrastructure

- Logistics coordinators
How Things Work in BC

31 RCTs
Receiving, Consolidation & Transfer Facilities

15 PCFs
Pre-Conditioning Facilities

1 CRF
Container Recovery Facility
Receiving Consolidation and Transfer

- Receives materials from curb and/or depots
- Bale fibres, cross dock through Vancouver or directly to market
- Bale containers
- Ship containers to Container Recovery Facility
  - NO processing of any sort
Receiving Consolidation and Transfer

- No more paper sorting
  - No newspapers by 2025

![Graph showing the decline in total daily newspaper paid circulation as a percentage of households in Canada from 1995 to 2014, with trend lines projected to 2025.](source: CNA; Newspapers Canada; ABC; AAM; CCAB; Statistics Canada; Communications Management Inc.)
Pre-Conditioning Facilities

- Repurposed existing MRF infrastructure
- Single Stream plants – about 50% of material
- Receive materials directly from curb, depots or RCTs
  - Still need to separate the fibres from the containers
  - Generates an OCC B grade
  - Take out the large residue, glass and steel
  - All other containers sent to baling
  - Let machines do most of the work
  - Reduced staffing as sorting needs reduced
Two stream plants – about 50% of material

Receive materials directly from curb, depots or RCTs

- Fibres – not sorted, directly to baler
  - Generates an OCC grade when markets dictate
- Take out the large residue, glass and steel
- All other containers sent to baling
- Reduced staffing as sorting needs reduced
Pre-Conditioning Facilities

- Containers sorting in two steps – PCFs sort

- Reduces contamination and weight for shipping
- Saves having to build in unnecessary redundancy
Container Recovery Facility

- **ALL** plastics, aseptics, polycoat, aluminum to Merlin Container Recovery Facility (CRF) in New Westminster
- More than $20 million in new equipment
- Manages upwards 30,000 tpy of mixed containers

185,000 ft²

- Bale Storage
- Optical
- Pre-sort
- Tip Floors
- GBN
- Loose Receiving
- Bales/Depot Receiving
Efficiency in System Design

- **Traditional MRF approach**
  - Slow to Respond, Expensive

- Mix Paper
- OCC
- Steel
- Glass
- Residue
- As/PMC
- PET
- HDPE – C
- HDPE – N
- Mix
- Plastic
- Aluminum
- Polypropylene

Change needed? Change x # of MRFs
Efficiency in System Design

- **GBN approach**
  - Rationalize, Repurpose

  - Mix Paper
  - OCC
  - Mixed Containers
  - RCTs

  Change needed?

- One Facility!

- **PCFs**
  - Mix Paper
  - OCC
  - Gall
  - Residue
  - Eng’d Plastics

- **CRF**
  - As/PMC
  - HDPE – N
  - PET
  - Mix Plastic
  - HDPE – C
  - Aluminum

- Polypropylene
Efficiency in System Design

- Use of a central CRF provides more flexibility for more sorting as product mix changes
  - One plant can readily adapt

- Recovery rates higher than are typically seen with “traditional” MRF infrastructure

- Increases the quality for end markets
  - Less export shipping
  - In house solutions
Application to Connecticut

- Harmonize programs to increase recovery
- Possibility for transportation efficiencies
  - Connecticut 1.3% of the size of BC in area
- BC and Connecticut handle about the same quantity of recyclables each year
  - One CRF would handle all containers generated
- Reduced processing need at five facilities could reduce capital costs and save money
  - Changes could be phased in over lifecycle of MRFs
Summary

- Consistent and harmonized – entire province on the same program
- Built the system to manage the package rather than forcing the package into the system
Summary

- Created a recovery environment that is motivated to find positive end of life solutions for all PPP
  - About the only thing we are not accepting is multi-laminated packaging
- Provide a low cost, sensible solution that works for the industry AND is acceptable to Producers
- Rationalized the supply chain – remove unnecessary redundancy
Thank you for your time today

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