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Enhanced Blue Box Plastics Recovery

Capturing #3 through 7 Plastics

Municipal Workshop

AMO Association of Municipalities of Ontario | Stewardship Ontario | Toronto | Waste Diversion Ontario

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Introduction

Welcome

Purpose of workshop

Who's In The Room Today

- Municipal Reps
- GENIVAR (Phil, facilitation)
- CIF Representative ()
- Interested parties like consultants, plastic market representatives, stewardship representatives

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Agenda

- Agenda
  - 9:30 - 10:45 Objectives, background re plastics, plastics recovery and recovery targets
  - Break
  - 11:00 – 12:30 Market Development, Group Exercise #1, collection issues
  - Lunch
  - 1:00 – 2:30 Processing issues, Group Exercise #2, communications support
  - Break (optional)
  - 2:30 – 3:30 Policy support and funding assistance, wrap up

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Desired Outcomes

- Understanding the “Reserved” Capacity
  - Mixed Plastics have a domestic market for those who act
- Tackle the barriers to expanded plastics collection
  - CIF Funding support is winding down
- Expand
  - Knowledge of plastics stream
  - Range of plastics collected
  - Related strategies for collection, processing, communications, contracts and policies

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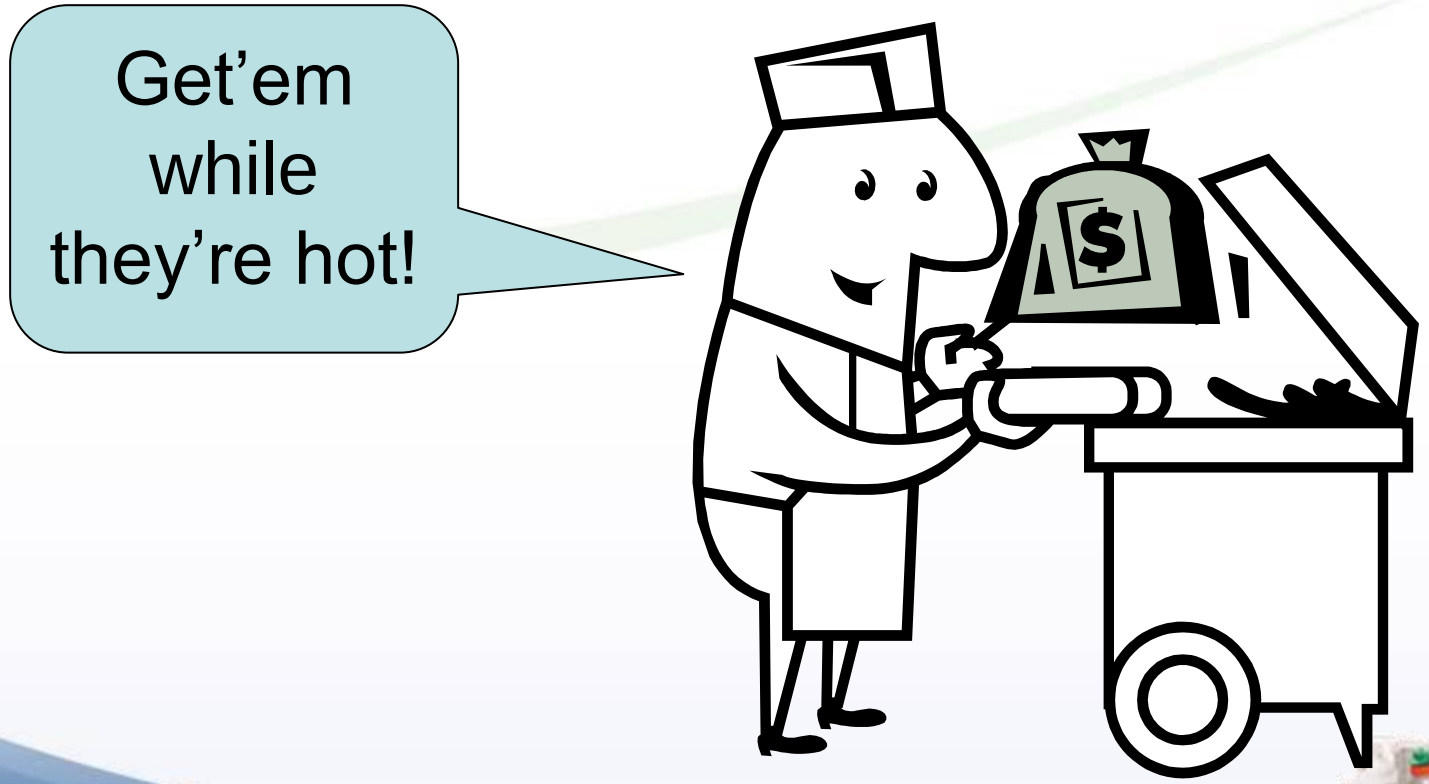
Desired Outcomes

- Get CIF funding for expanding plastics collection



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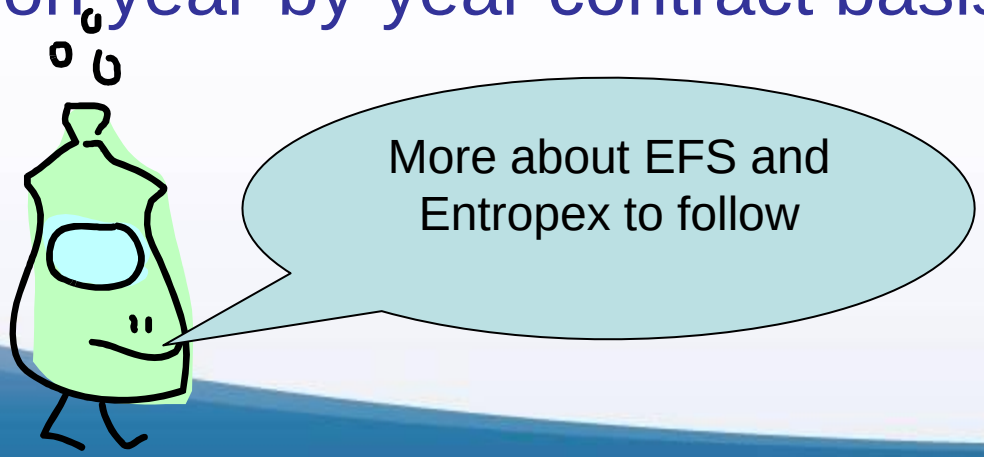
Mixed Plastics Opportunity

- CIF/SO Market development activities have resulted in mixed plastics processing capacity being reserved with EFS and Entropex
- Both EFS and Entropex are obligated to provide capacity for municipal tonnage first
- If that capacity is not filled, it can be offered to ICI sources on year-by-year contract basis



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Plastics 101

- Refer to the handout for information on:
  - The Types of Plastics
  - General Issues
  - Generation and Recovery Targets

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Types of Plastics

- #1 – Polyethylene Terephthalate (PET) bottles

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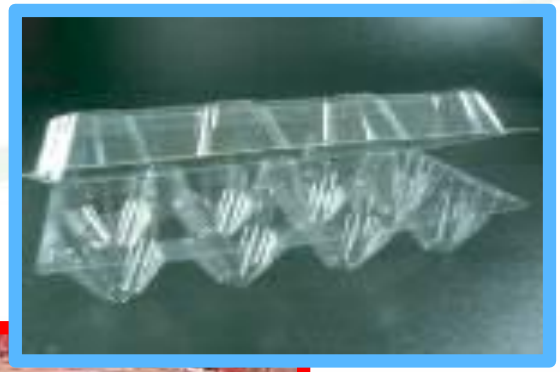
Types of Plastics

- #1 – Polyethylene Terephthalate (PET) non-bottles – i.e. Thermoform PET



Thermoforms 101

- Created from a plastic sheet (film) that is heated to a high enough temperature so that it can be stretched into or onto a mold
- Products include: disposable cups, containers, lids, trays, blister packaging, clamshells, and other products for the food, medical, and general retail industries
  - The blue box program focus is post consumer products, for which many Thermoform packages are made from PET

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PET Thermoforms and Bottles

- How are they different from PET bottles?
  - Thermoforms come in a variety of shapes and sizes, making them hard to sort
  - PET bottles easily identifiable
- However, not all Thermoforms are PET
  - While Thermoforms are made from a variety of resins, in the blue box stream, some are made from PVC
  - Small amounts of PVC severely contaminates PET (making the PET not recyclable)

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Thermoform Issues

- Collection:
  - High volume, low weight can result in “cubing” out of the collection vehicle, making collection less efficient
- Processing:
  - Manual sorters need to visually see the #1 symbol to recover correctly (which is costly and time consuming)
  - Optical sorters may not be financially justifiable for all MRFs

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Thermoform Economics

- While research is currently underway (more on this later), there not as many Thermoforms of a single resin type in the blue box stream as there are other plastic types (i.e. PET bottles) which makes the collection of an adequate supply difficult for marketing purposes
  - In some cases, isolating discrete Thermoform resins, in sufficient quantity, makes it difficult to justify recycling

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Thermoform Example

- Food packaging is required to demonstrate properties like preservation and safety (i.e. PET Thermoforms)
- Consumer electronics requires packaging properties like impact strength and protection against theft (i.e. PVC Thermoforms)
  - Both types of packaging are Thermoforms but both are made from different and incompatible resins

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Types of Plastics

- #2 – High Density Polyethylene (HDPE) Beverage bottles

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Types of Plastics

- #2 – HDPE Other bottles & Jugs

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Types of Plastics

- #3 – Polyvinyl Chloride (PVC)

Types of Plastics

- #4 – Low Density Polyethylene (LDPE)

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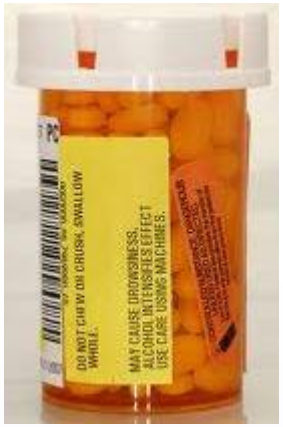
Types of Plastics

- #5 – Polypropylene (PP)

Types of Plastics

- #6 – Polystyrene (PS) - Rigid



Types of Plastics

- #6 – Polystyrene (PS) - Expanded

Types of Plastics

- #7 - Other

Polycarbonate bottles, blister packaging

Background, context and pressures

- Tonnes
  - Generated and Recovered
- Recovery Targets
  - WDO, BBPP
- Program Consistency
- Market Development
  - Mixed Plastics
  - Thermoforms
- Potential Impacts

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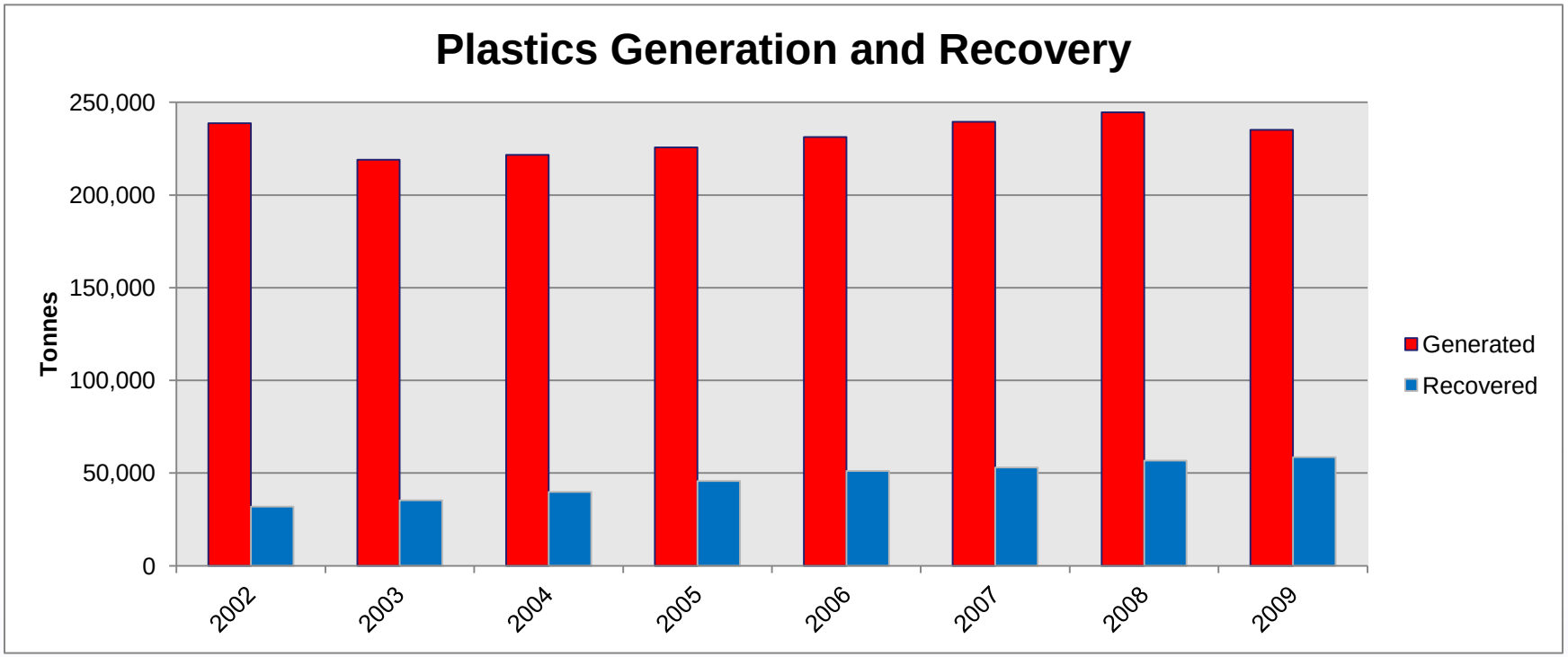
Blue Box Recovery Performance, all types



http://www.stewardshipontario.ca/stewards/library/Fee-Calculations

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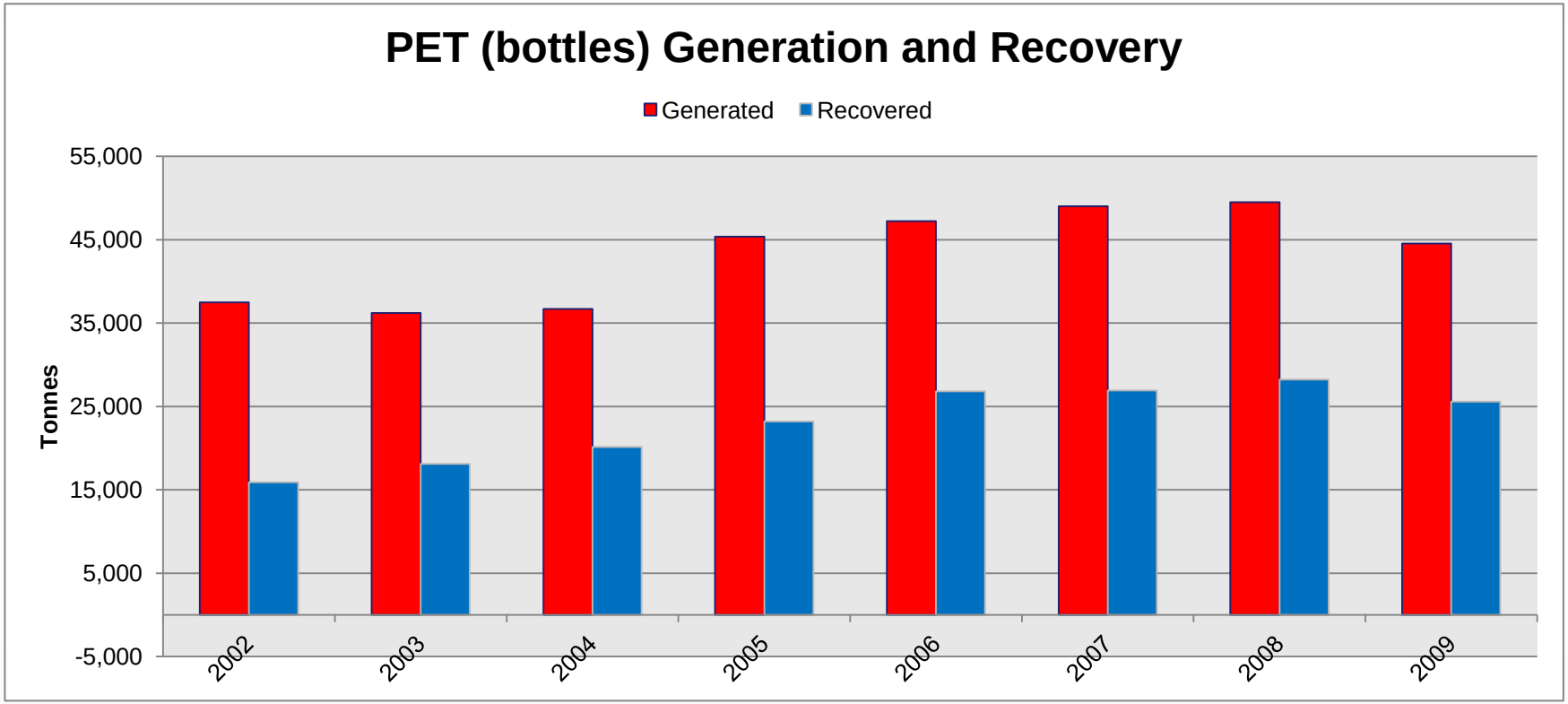
Blue Box Recovery Performance, PET



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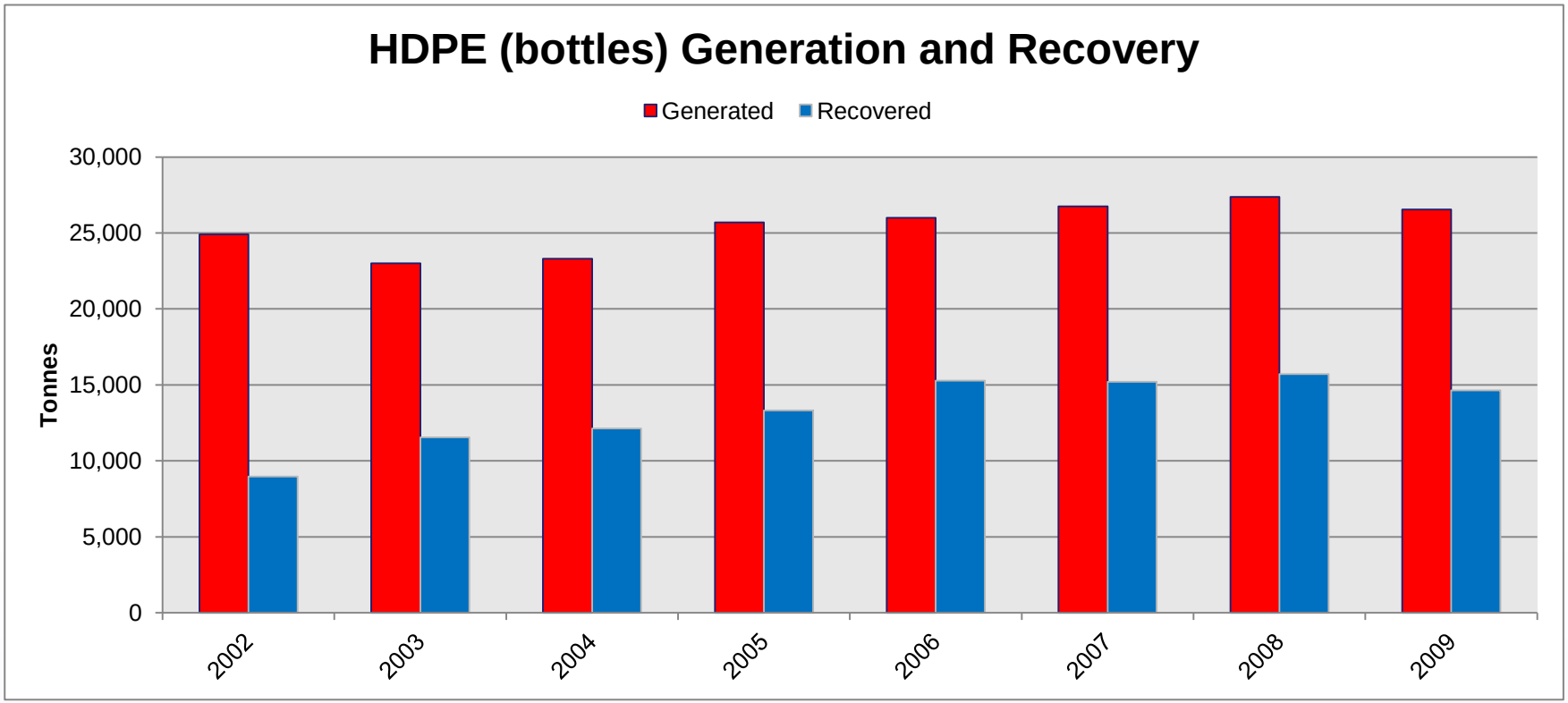
Blue Box Recovery Performance, HDPE



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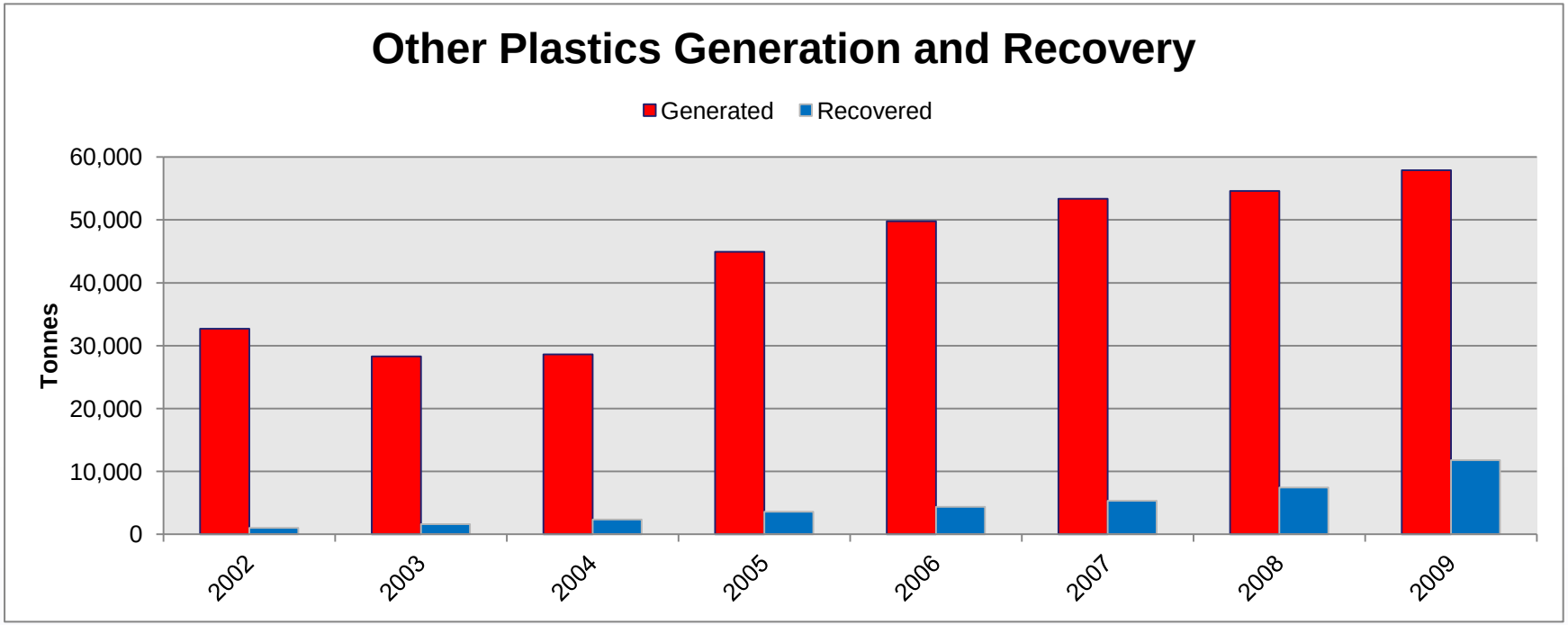
Blue Box Recovery Performance: Mixed Plastics

- Includes: Tubs & Lids, #3-7's and Thermoform PET



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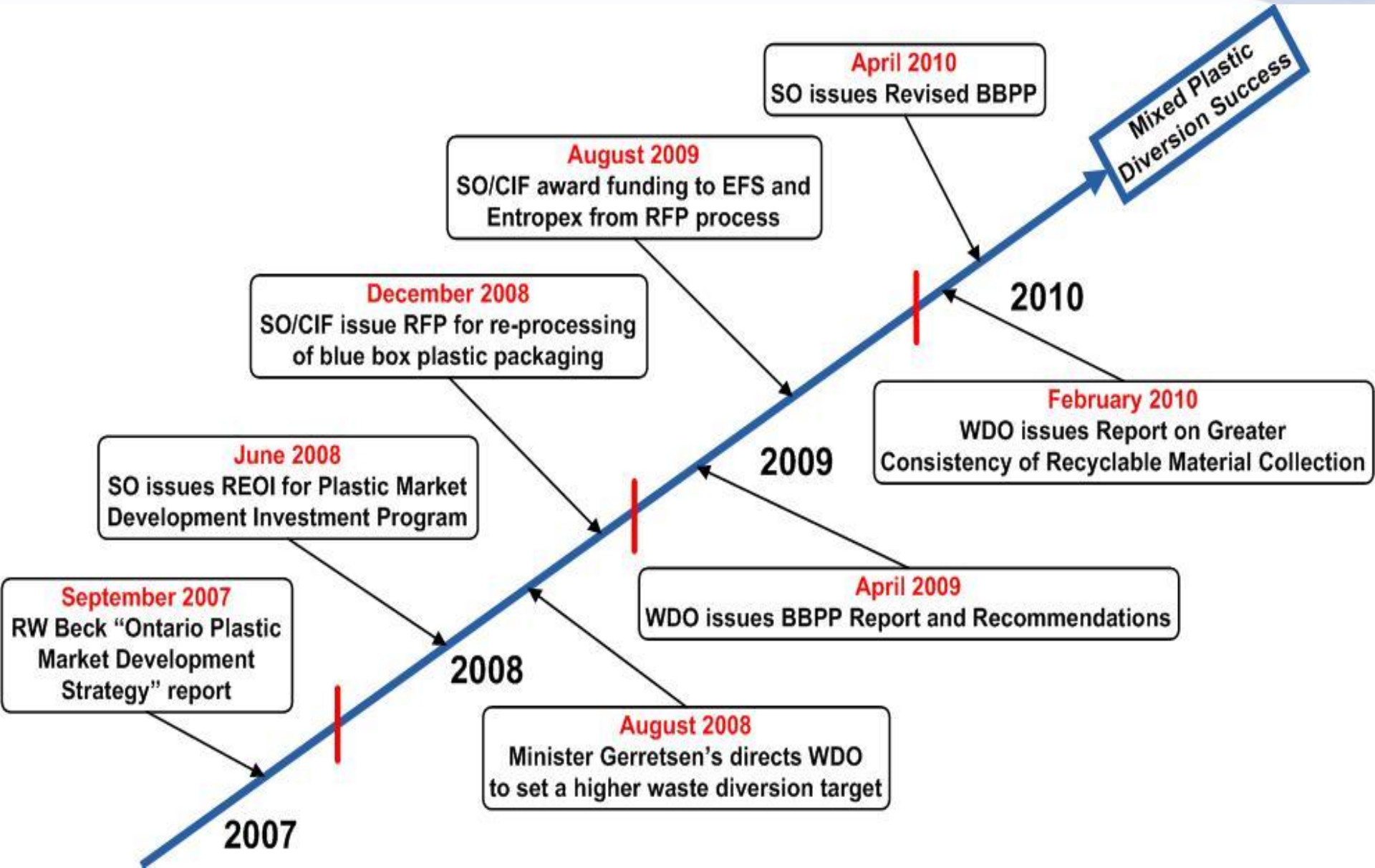
Chronology of Actions Aimed at Increasing Recovery



Recovery Targets

- August 2008
  - WDO directed by Minister to recommend a new waste diversion target (beyond 60%)

    http://www.wdo.ca/files/domain4116/09-08-14%20Minister%20BB%20letter%20to%20WDO.pdf
- April 2009
  - WDO presents BBPP Report and Recommendations
  - By 2015:
    - 75% diversion target (all materials)
    - diversion rate specific to Plastic Packaging of 50%

    http://www.wdo.ca/files/domain4116/Final%20Report%20with%20Recommendations%20re%20BBPP%20Review%20April%2014%2009.pdf

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Recovery Targets

- April 2010
  - SO issues Revised BBPP and projects diversion targets through 2011
  - Plastic Packaging diversion rate of 32% by December 2011

    http://www.stewardshipontario.ca/sites/default/files/docs/Final%20Revised%20BBPP%20-%20April%2029%202010.pdf
- May 2010
  - WDO issues *"Data Requirements for Monitoring Effectiveness and Efficiency of Waste Diversion Programs in Ontario"*
  - Reaffirms 50% diversion target of Plastic Packaging by year 5 of the BBPP (i.e. by 2015)

    http://www.wdo.ca/files/domain4116/Data_Requirements_Final%20%20for%20posting%20Aug%2020%202010.pdf

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Recovery Targets

- In short, the MOE, WDO, CIF and Stewardship Ontario are all aiming to increase diversion, for all products, but plastics in particular:
  - MOE: 70% diversion target by December 31, 2011
  - WDO: By 2015, 75% diversion target for all products and 50% for plastics
  - SO: By December 31, 2011, 32% diversion target for plastics

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Recovery Targets

- SO Revised BBPP (April 2010)
  - http://www.stewardshipontario.ca/sites/default/files/docs/Final%20Revised%20BBPP%20-%20April%2029%202010.pdf

Material	Baseline % (2007)	2009 % (Estimate)	2009 % (Actual) *	2010 % (Estimate)	2011 % (Estimate)
PET bottles	56.8%	57.8%	57.4%	58.8%	61.8%
HDPE bottles	57.5%	59.1%	55.1%	61.7%	64.1%
Plastic Film	6.9%	8.0%	9.8%	12.0%	21.7%
Plastic Laminants	1.0%	1.0%	1.0%	1.0%	1.0%
Polystyrene	3.5%	3.9%	4.8%	4.3%	5.1%
Other Plastics **	13.7%	15.0%	20.4%	18.2%	26.8%
Plastics Total	23.1%	24.5%	24.9%	26.9%	32.1%

* From 2011 Blue Box Fee Calculation Model (2011)

** Includes: Tubs & Lids, #3-7's and Thermoform PET

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Mixed Plastic Tonnes
(Tubs & Lids, #3-7's and Thermoform PET)

Revised BBPP Projection	2008	2009	2010*	2011*
Generated [1]	54,611	57,887	57,100	58,300
Marketed [2]	6,831	11,815	10,400	15,600
Difference	47,780	46,072	46,700	42,700
Recovery Rate	13.7%	20.4%**	18.2%	26.8%

* SO Revised Blue Box Program Plan, April 2010 - Mixed Plastic projections

** SO Revised BBPP Mixed Plastic Recovery Rate target (in 2009) was expected to be15% (target surpassed by 36%)

[1] *Per* WDO Fee Calculation Tables (includes: tubs & lids, #3-7's and Thermoform PET)

[2] *As* reported in the annual WDO Datacall (includes: tubs & lids, #3-7's and Thermoform PET)

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WDO Discussion Paper on Program Consistency (February 2010)

- Recommended for consistent collection at curbside as soon as practically possible and that province wide communications be used to inform residents that these materials are collected across the province:

Fibres

Newsprint *
Magazines/Catalogues **
Phone Books **
Other Printed Paper **
Corrugated Cardboard **
Boxboard **

Containers & Other Materials

Aluminum Food & Beverage Cans *
Aluminum Foil **
Steel Food & Beverage Cans *
Empty Aerosol Cans
Empty Paint Cans
Clear Glass Bottles & Jars *
Coloured Glass Bottles & Jars *
PET Bottles *
HDPE Containers **
Tubs and Lids (2009: 164 of 217 programs reported collecting T&L's)

* Basic Blue Box Waste – collection mandated under O. Reg. 101/94
** Supplementary Blue Box Waste – collection optional under O. Reg. 101/94

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WDO Discussion Paper on Program Consistency

Given material supply / utilization chain constraints, the following materials be collected at curbside:

- Gable Top and Aseptic Containers when NA facilities available or overseas facilities have EH&S standards similar to Ontario
- Thermoform PET and Polystyrene Crystal as soon as markets for thermoform PET are available
- PS Foam as soon as acceptable markets for material are available and collect in a manner that yields material that meets market requirements. If offshore, must have EH&S standards similar to Ontario
- Other Rigid Plastics as soon as these materials are processed at North American facilities or overseas have EH&S standards similar to Ontario

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Mixed Plastic Market Development

- September 2007
  - SO/EPIC funded the RW Beck "*Ontario Plastic Market Development Strategy"* (September 2007)
  - Objective to identify opportunities and market development strategies to improve the recycling rate of blue box plastics
- June 2008
  - SO issued Plastic Market Development Investment Program REOI
  - Purpose was to solicit interest from potential providers of technologies/facilities for the management of blue box plastic packaging

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Mixed Plastic Market Development

- December 2008
  - SO/CIF issued RFP for re-processing plastic packaging
- August 2009
  - SO/CIF committed $4.3M in funding to two demonstration projects for domestic mixed plastic processing capacity
- EFS (Elmira, Ontario)
  - Processor for #3-7 rigid containers and PE film
  - Mid-2011 capacity, ~15,000 tpy)
- Entropex (Sarnia, Ontario)
  - #1-7 rigid containers only
  - Current capacity ~15,000 tpy (long-term up to 30,000 tpy)

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EFS

- EFS (Elmira, Ontario)
  - Located in Elmira, ON and have been around for a number of years
  - Receive mixed plastics and film, grinds then washes them into pellets
  - Pellets sold to manufacturers to make: bags, tool boxes, piping and other consumer products

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Entropex

- Entropex
  - Located in Sarnia, ON and have been around since 1978
  - Re-processer of post industrial and post consumer plastics (8th largest post consumer recycler and 18th largest plastic recycler in North America)
  - Accepts #1-7, converts them into pellets
  - Finished materials shipped by bulk transport and bulk rail in North America and by containers internationally

Mixed Plastic Market Development (Thermoform PET)

- National Association for PET Container Resources (NAPCOR)
  - Market driven project as production of Thermoform PET is projected to grow to 50% of PET bottle production
  - SO/CIF working with NAPCOR to test processing and marketing
  - Currently testing bales of Thermoform PET
    - i.e. clamshells, cups, trays, boxes and lids
    - ~300 tonne shipped from Ontario to 9 reclaimers in USA
  - Options being explored:
    - Dedicated Thermoform PET bales
    - Mixed bales of Thermoform PET and PET bottles
    - Mixed bales of Thermoform PET and Mixed Plastics

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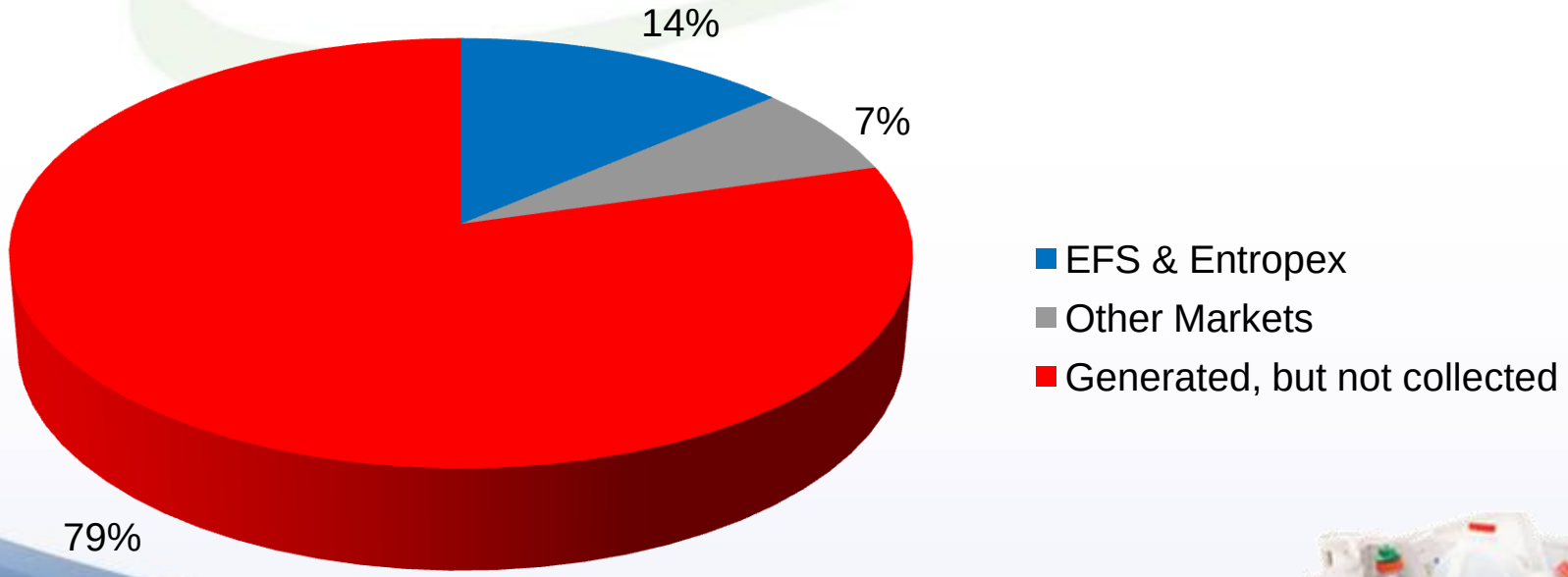
Mixed Plastic Markets

- Markets (2009)
  - EFS and Entropex: 14% (7,881 tonnes)
  - Other Markets: 7% (3,934 tonnes)
  - Generated, but not collected: 79% (46,072 tonnes)



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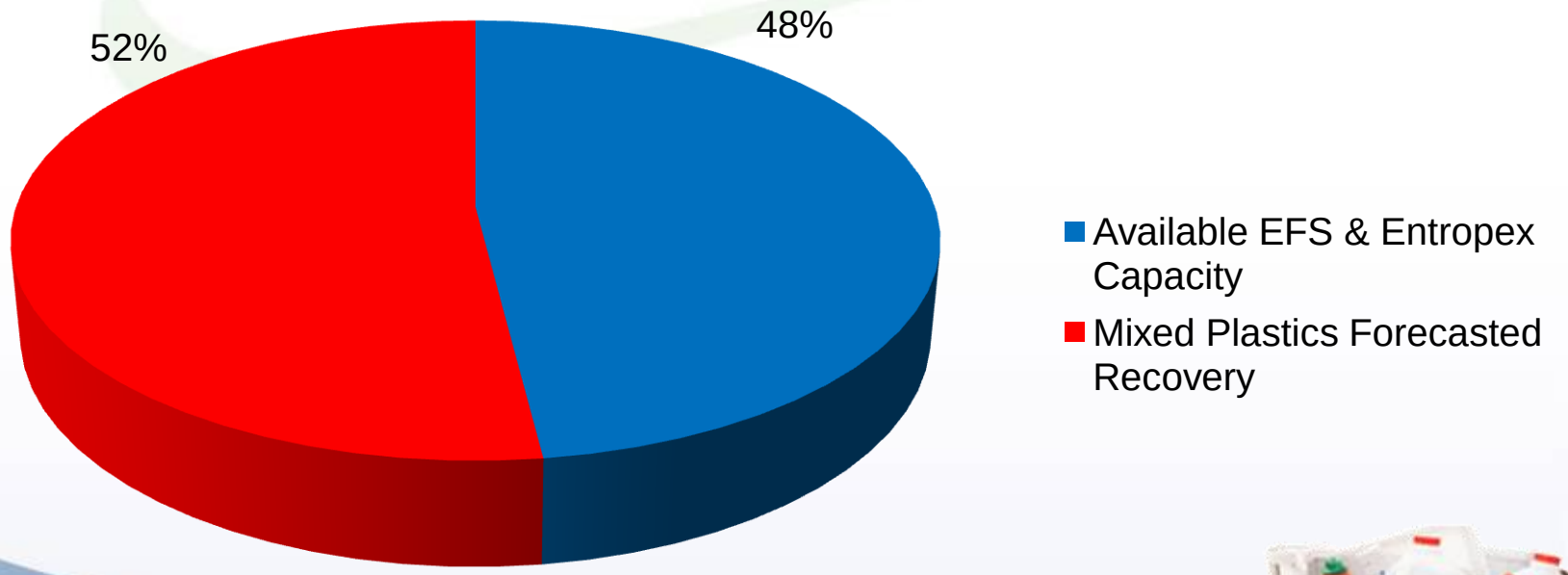
2011 Projected Mixed Plastics Recovery

Based on EFS and Entropex 2011 capacity of ~30,000 tonnes and SO's 2011 projection for mixed plastics recovery (15,800 tonnes), current processing capacity exceeds current recovery by 48%



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Availability, Capacity, Revenue

- About 58,000 tonnes (Tubs & Lids, #3-7's and Thermoform PET) available for collection (2011)
  - EFS (Elmira, Ontario)
    - mid-2011, ~15,000 tpy #3-7 rigid containers and PE film
  - Entropex (Sarnia, Ontario)
    - Up to 30,000 tpy (long-term) #1-7 rigid containers only
    - While #1's and #2's will also be accepted, many municipalities already have current markets for these (which may include Entropex!)
    - Keep in mind that the capacity we are talking about today is for mixed plastics; any pre-existing capacity for #1's and #2's are in addition to what is available for mixed plastics

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EFS Information

- Relevant details includes:
  - Agreement entered into with CIF and SO (Aug'09)
  - Contract runs 2019
  - By mid-2011: 5,600 tonnes capacity for film and 9,200 tonne for mixed rigid containers
  - Obligated to provide capacity for municipal tonnage first; if not filled, the capacity can be offered to ICI on one year contract basis
  - Pricing is negotiated and varies based on composition, volume and contamination

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Entropex Information

- Relevant details includes:
  - Agreement entered into with SO (August 2009)
  - Contract runs through 2019
  - Currently has 15,000 tonnes capacity for mixed rigid containers and is moving to 30,000 tonnes
  - Obligated to provide capacity for municipal tonnage first; if not filled, the capacity can be offered to ICI on one year contract basis
  - Pricing is negotiated and varies based on composition, volume and contamination

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Brokers

- While there are 2 Ontario markets for mixed plastics, there are many reputable brokers that can help you market your mixed plastics
- If you work with a broker, there are a number of considerations, including:
  - Will you have control over where the material is marketed (i.e. domestic or overseas)
  - Pricing and logistical arrangements (such as multi-municipal cooperative marketing)

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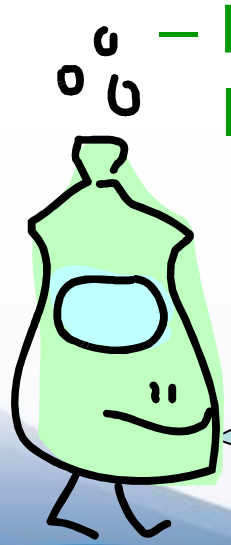
High Level "How To"

- If you are not currently collecting #3-7's or are contemplating it, what do you need to know?
  - Information required to develop a supporting business case
  - Business case elements: Tonnes, Operational Issues, Contracts, P&E



We won't give you specific cost or funding impacts for adding mixed plastics since "one size fits all" does not apply

We will point you to practices that will optimize the choice to add plastics

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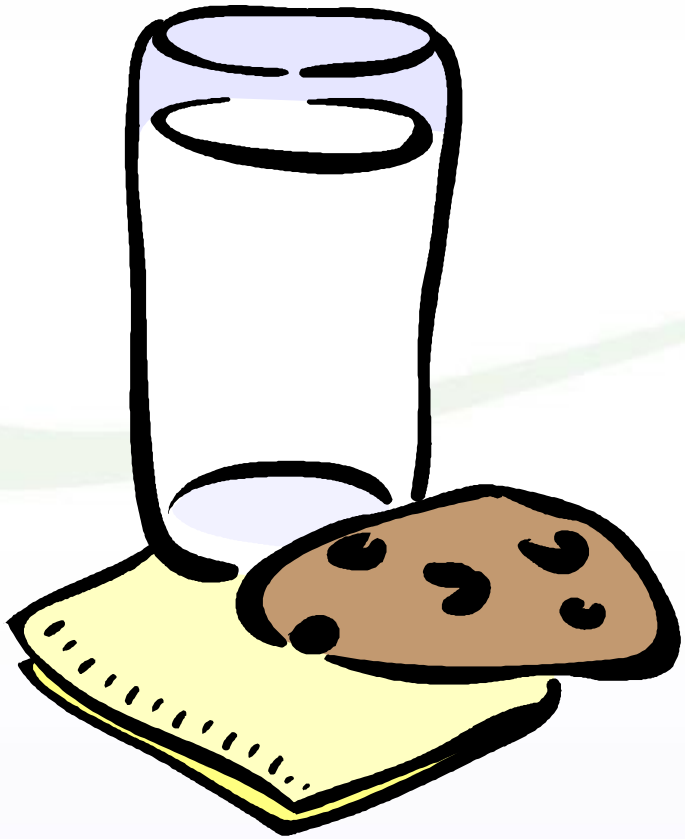
Let’s take a Break



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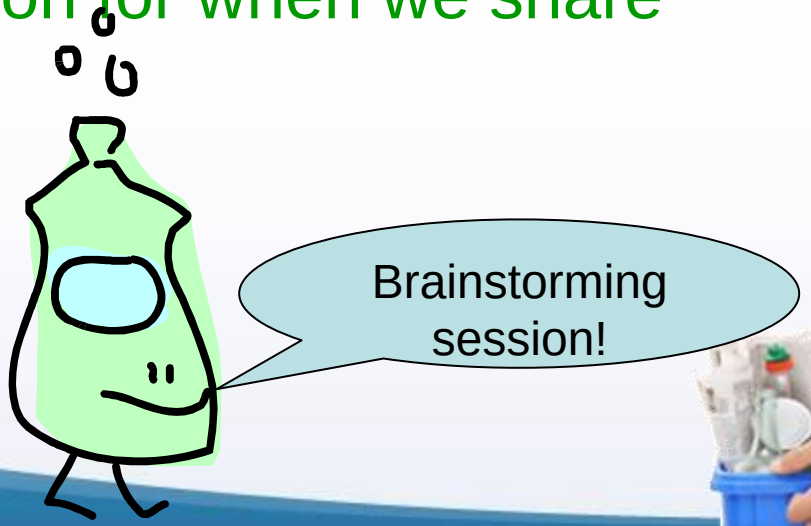
Exercise 1: Adding #3-7s

- You want to take advantage of the negotiated capacity for mixed plastics with either Entropex or EFS
- At your tables discuss you action plans:
  - Use the flip charts to record issues and questions, and whenever possible solutions
  - Assign a spokesperson for when we share thoughts as a group



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Planning Questions

- Some information needed to build a case:
  - Available tonnes
  - how much can realistically be collected
  - how will high volume/low weight materials may impact collection costs
  - impacts on the processing operations
  - Impacts on existing contracts
  - P&E requirements

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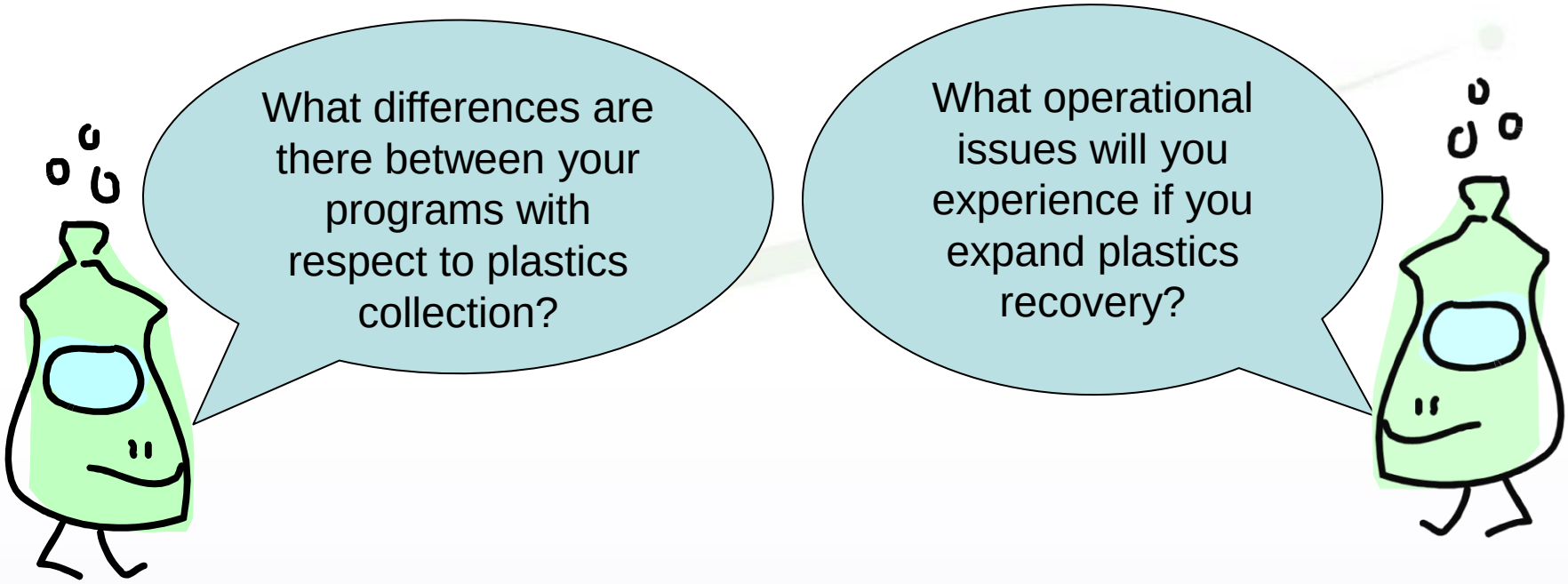
Plastic Collection Issues



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Potential Plastics Collection

- Issues:
  - Capacity on curb
  - Collection contract
  - Depot collection of problem materials
  - P&E
  - Funding
- Addressing issues may meet aspects of BP #4, Optimizing Operations:
  - Program assessments, service procurement, CIF funding

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Collection Issues - Addressed

- Capacity at the curb
  - Is there currently room for more?
  - Provide free/additional blue boxes
  - Apply to CIF for funding for blue boxes
  - Collective orders may keep $ ↓
- Collection contract
  - Discuss contract terms, costs & performance with your contractor
  - Address the compaction issue
  - Consider automated collection / increased collection frequency
  - CIF can assist with in contract discussions and publishes a model contract database

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Collection Issues - Addressed

- Depot collection
  - Ensure adequate signage
  - Ensure staff are appropriately trained
  - Consider compaction to minimize transportation

Address operating issues at the Collection RFP stage

Apply to CIF for funding of depot upgrades

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Collection Issues – Knowing what to Expect

- Determine how much you have available and how much you can realistically capture by:
  - Auditing the waste stream
  - Contacting SO as they may have an estimate or forecast for generation in your municipality
  - Reviewing Datacall statistics to assess how much the “like me” municipalities are collecting

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A Rough Rule of Thumb for Expected Capture

- Based on 2008 & 2009 Datacall statistics, #3-7 marketed tonnes is equivalent to approximately 15% of a municipality's PET and HDPE marketed tonnes
- So, if you currently collect PET and HDPE but not mixed plastics, by multiplying your current PET + HDPE marketed tonnes by 15%, you could quickly gauge your potential #3-7 tonnes

Source: http://www.wdo.ca/content/?path=page82+item35931

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Collection & Mixed Plastics

- Best practices indicate that waste audits, set out studies and capacity studies be undertaken to evaluate the current program and determine set out container capacity needs
  - By having this information, program capabilities and limitations become clear

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Collection & Mixed Plastics

- If the blue box is too small or recyclables are picked up infrequently, there is potential that new materials (i.e. mixed plastics) will end up in the garbage
  - The container has to meet the needs of the residents/consumers
  - In this respect decisions around adding mixed plastics reflect general best practices that support increased recovery

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Collection & Mixed Plastics

- Even though processing issues can dictate "what's in" your program, often you decide after you look at your collection system
- Determining "what's in" is a balancing act
  - Aim is to optimize system costs by taking into account capabilities and limitations
- When considering compaction, you also need to take a look at where the MRF is located and what form they require the materials in order to efficiently process them.

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Collection Issues – CIF Assistance

- Funding: Proposed 2011 CIF Operations Plan includes:
  - $600K for large blue boxes
  - $1M for P&E
- WDO funding
  - Increased recovery, CIF input, and supporting P&E and policies

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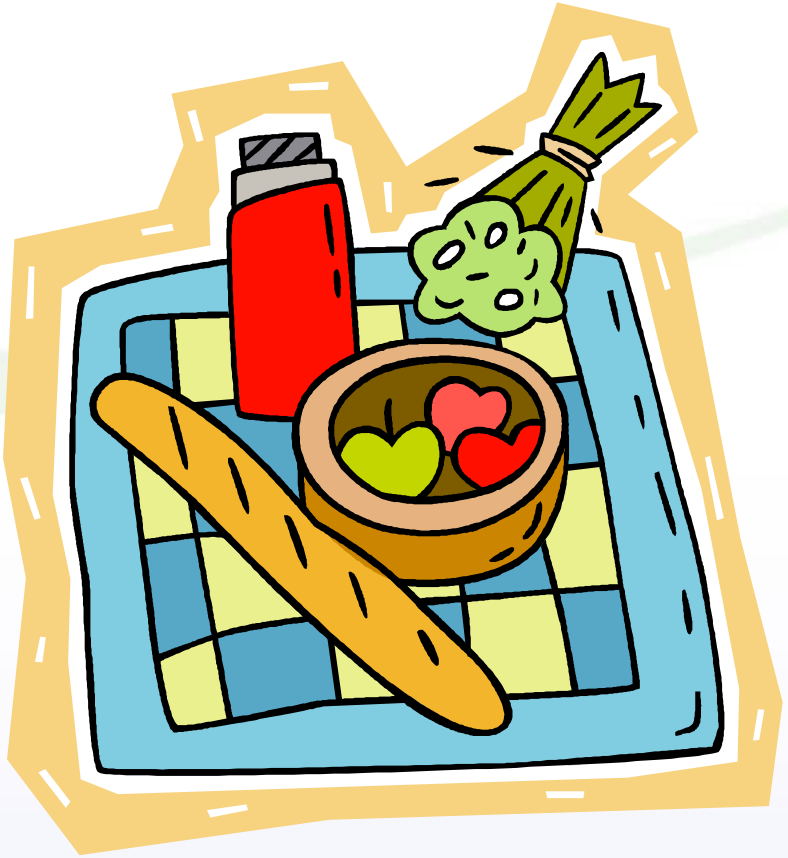
Lunch



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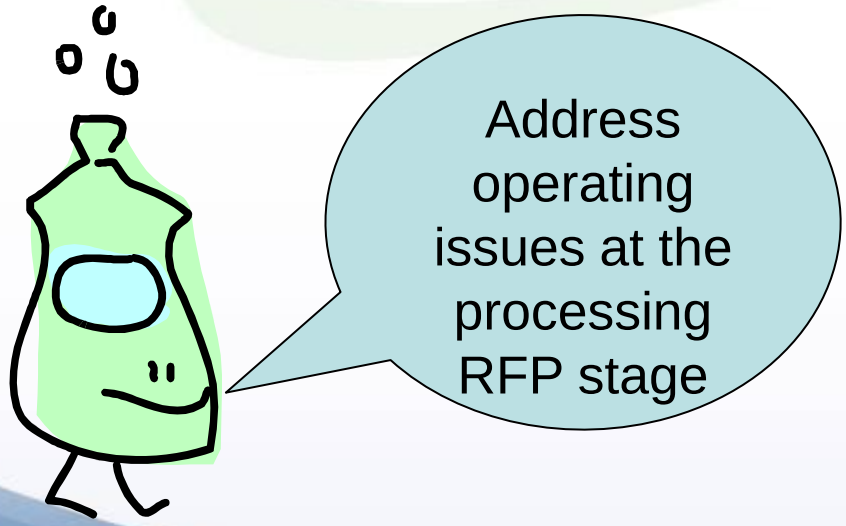
Processing & Mixed Plastics

- Issues:
  - Optical v. manual sorting
  - Storage and logistics
  - Contract (addition of new materials)



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Processing & Mixed Plastics

- Things to consider:
  - Volume and tonnage expectations
  - Manual sorting v. Optical sorting
  - End market quality specifications

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Processing & Mixed Plastics

- If using manual sorting, make sure your staff know what is acceptable and what is not
  - Monitor staff “picks per minute” to monitor cost effectiveness
  - If the cost for labour is outweighing revenues, consider adding more staff or additional training
- If using optical sorting, make sure your equipment is performing to specifications
  - Residue audits may be required to assess the volume, tonnage and revenue lost

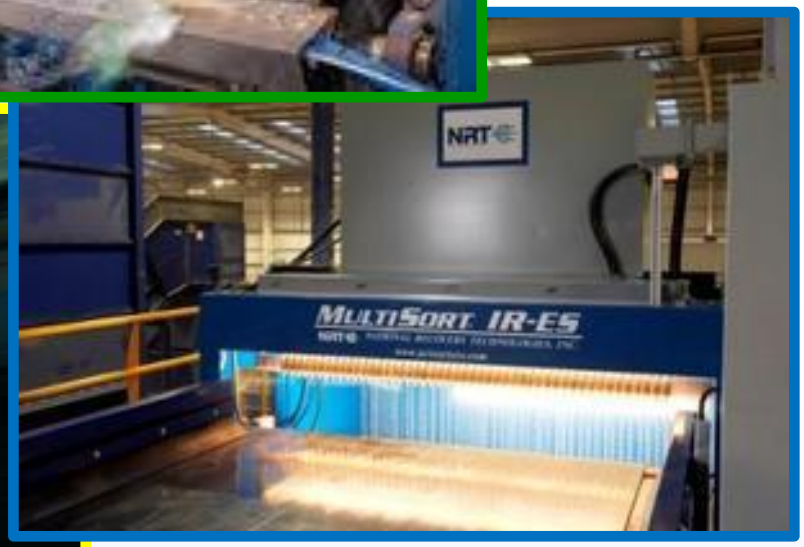
CIF CONTINUOUS IMPROVEMENT FUND

Processing – The OST Option

- Optical sorting (OST)
  - Consider your volume, tonnage and ROI
  - Ensure sufficient QC capabilities
    - Number of sorters for tonnage/volume processed
    - Reaction time and/or distance between OST discharge chute and manual sorters
  - OST for mixed plastics = “Improvement” to CIF = $

CIF CONTINUOUS IMPROVEMENT FUND

OST photos



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IMPROVEMENT FUND

Processing – Manual Sorting

- Manual sorting
  - Key is employee training and visible cues and prompts
  - Resin type identification
  - Picks-per-minute

CIF CONTINUOUS IMPROVEMENT FUND

Processing - Manual Sorting

- Manual sorting can provide:
  - High-quality, low-contamination loads
  - Lower automation can lead to less downtime
- Some disadvantages:
  - Can be dirty, dusty, dangerous and expensive
  - Not usually cost-effective for large volumes of recyclables (such as mixed plastics)

CIF CONTINUOUS IMPROVEMENT FUND

Processing and Marketing

- Is there merit in making a #1 through #7 bale rather than sorting three plastic types?
  - It really comes down to your circumstances
  - If you have a large quantity of PET and/or HDPE, it may make more sense to market these separately due to their market value
  - If you have lower tonnages, a #1-7 bale may make sense or consider cooperative marketing
  - Discussing your options with colleagues and the end markets is wise

CIF CONTINUOUS IMPROVEMENT FUND

Processing Questions – Space and Contracts

- Storage and floor space restrictions
  - Volume v. tonnage
  - Bunker and bale storage capacities
  - Facility retrofits and expansion
- Processing contract
  - Discuss contract terms, costs & performance with your contractor
  - CIF can assist with in contract discussions
  - May need to wrap into an RFP (CIF $ possible)

CIF CONTINUOUS IMPROVEMENT FUND

Processing – CIF Funding

- 2011 CIF Operations Plan and REOI includes:
  - $3M for MRF regionalization & transfer station construction
  - $1M for MRF upgrades for new plastic tonnage

CIF CONTINUOUS IMPROVEMENT FUND

Impact on Existing Contracts

- If you don't already, try to use your contracts like a strategic tool to:
  - Identify trends and potential risks
  - Identify opportunities for improvement
  - Work through issues to accommodate changes

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Potential Collection Contract Issues

- #3-7's are high volume, low weight materials
  - This may increase my per HH collection cost
  - Collection contractor may ask for more money
- Potential resolutions
  - Consider compaction during collection, but monitor its degree to ensure the material can be processed
  - Open dialogue with your contractor is always encouraged, but don't feel pressured
  - CIF can assist with contract negotiations

CIF CONTINUOUS IMPROVEMENT FUND

Potential Processing Contract Issues

- Adding #3-7's means more sorters, thus more $
  - Consider your volume, can your business case justify optical sorting?
- Mixed plastics are all volume, in order to manage, MRF retrofits are required
  - Again, consider your volume
  - If capital upgrades for bunkers, balers, storage space, etc are needed, CIF is here to help fund your capital expenditures

CIF CONTINUOUS IMPROVEMENT FUND

#3-7's: Impact on Existing Contracts

- Opening your contract mid-term can possibly lead to additional costs
  - Where possible, make program changes when contracts are up for renewal
- However, the mixed plastics "window of opportunity" won't last forever
  - You should evaluate the pro's and con's of opening your contract now by preparing a business case

CIF CONTINUOUS IMPROVEMENT FUND

#3-7's: Impact on Existing Contracts

- If you want to add mixed plastics mid-term of your contract but an increase in the collection and/or processing cost is likely, is there any possibility of compensation (until the contract is retendered)
  - Short answer, SO has indicated that they would consider compensation to increase the capture

CIF CONTINUOUS IMPROVEMENT FUND

#3-7's: Impact on Existing Contracts

- While EFS and Entropex are obligated to provide capacity for municipal tonnage first; if their capacity is not filled, it can be offered to ICI on one year contract basis
  - Note that there is no definite cut/off date during the calendar year
  - At the moment each has capacity
  - The key here is that arrangements for municipal mixed plastic tonnage can be made at any (we don't have to be specific date focused)

CIF CONTINUOUS IMPROVEMENT FUND

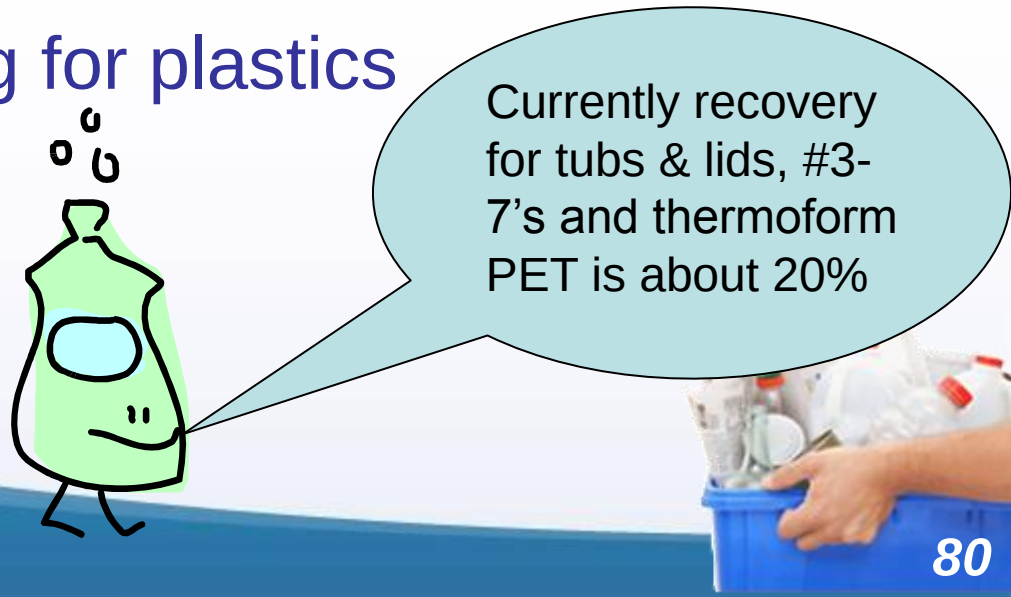
Exercise #2: Maximizing Capture

- You've decided to add mixed plastics. Discuss what do you need to do to maximize capture
  - 20 minutes, use the flip charts again.
  - Elect or appoint a spokesperson and we will discuss your tables discussion as a group

CIF CONTINUOUS IMPROVEMENT FUND

Communication Plan – CIF Assistance

- CIF Communication template
  - The P&E best practice requires that programs have an up-to-date communications plan with:
    - Identified goals
    - Measurable objectives
    - A program to monitor and evaluate the P&E efforts
- CIF enhanced funding for plastics communications



CIF CONTINUOUS IMPROVEMENT FUND

Focus on Plastics

- Issues and ideas on messaging to enhance plastic recovery
  - Identifying plastics
  - From garbage to recycle
  - Handling contamination
  - Enforcement

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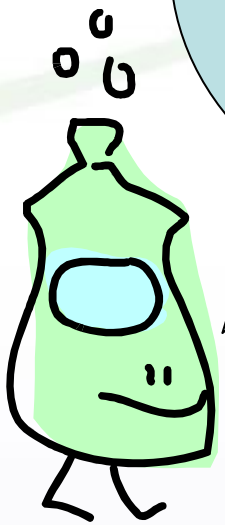
Sample Plan

- Purpose: to educate
- Audiences
  - Residents
  - IC&I generators
  - Staff, internal
  - Schools/community groups
- Objectives
  - Ensure awareness
  - Increase diversion: 5% IC&I sector, 2% residential



Some com plans have targeted plastics recovery with the understanding that this improves overall diversion

CIF CONTINUOUS IMPROVEMENT FUND

Sample Plan

- Strategic Considerations
  - Curbside vs depot
  - Seasonal populations
- Key messages
  - What is acceptable
  - How to participate
  - Importance of diversion
- Strategies
  - Extensive and ongoing promotion
- Action Plan

CIF CONTINUOUS IMPROVEMENT FUND

Measuring Communications

- Need to know
  - Historical performance
  - Reliability of data
    - Shipping cycles if using marketed tonnes
    - Collected tonnes
  - Confounding variables
    - Seasonal
    - Concurrent launches, activities, events
    - Operational influences
    - Outside influences

CIF CONTINUOUS IMPROVEMENT FUND

Policies that Support Capture

- Does your program have any of the following policies in place:
  - Bag limits
  - PAYT
  - Garbage collection frequency less than recycling collection frequency
  - Recycling incentive program for households that rewards increased recycling, set-out, and participation
  - Has your program commenced a reduction in garbage collection frequency or requirement for clear bags in the last year?
  - A tag and leave policy for unacceptable blue box (or the equivalent) set-outs?

CIF CONTINUOUS IMPROVEMENT FUND

Room Check

- Who has implemented some of the policies listed?
- Are there other policies that you have implemented that promote waste diversion or plastics recovery (not listed in the WDO examples)?
- For those who did, how did implementation go?
- Any lessons learned that you would like to pass along?

CIF CONTINUOUS IMPROVEMENT FUND

Implementation

- Anticipate public and media pressure and plan for it: educate residents, the media and businesses in advance
- Don’t assume that most residents object to the policy
- Get public input early: buy-in, contingencies, adjustments
- Prepare the public: long lead in, repeated messaging, coping strategies (helping public deal with change)
- Educate the local media along the way
- Prepare a contingency plan including press notices, key messages, enforcement approaches and follow up
- “Outcry” through calls, letters to the editor, and so on. Usually subsides and people learn to accept the policy

CIF CONTINUOUS IMPROVEMENT FUND

Implementation Example

- Hamilton adopted a one garbage container limit in May of 2010.
- City P&E supported implementation for a full year, mailing notices and using local media regularly
- Policy recommended through the City's WMS, which engaged public as part of an advisory committee
- At implementation
  - Negative letter-writing campaign
  - Newspaper tracked first garbage collection day: non-compliances = 800 out of 25,000 (3.2%)
  - Within 2 weeks letters supporting the policy appear

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The Role of Policy

- Critical component
- Changes behaviour
- Sets new rules
- Often required to reach higher, increase diversion, especially where progressive action and good programs have reached their limits

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Wrap up

- Plastics recovery is one of the next “frontiers” for Ontario recycling programs
- Best practices for recycling programs are best practices for plastics recovery
- Pressures to expand plastics recovery will continue
- CIF has a mandate to help

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CONTINUOUS IMPROVEMENT FUND

Funding Considerations

- CIF funding amounts and availability is limited

Can't expand in 2011 but are considering it in a year or two? Consider what you can do now with presently available funding to prepare for the future roll out (i.e. RFP or contract terms, infrastructure investment, etc)

CIF CONTINUOUS IMPROVEMENT FUND

Specific types of Activities suitable for CIF funding

- New Plastic Tonnage
  - MRF Upgrades $1,000,000
  - Increase curbside collection capacity $600,000
  - P&E Initiatives and Training $1,080,000

CIF CONTINUOUS IMPROVEMENT FUND

EFS & Entropex wrap up

- These markets are stable but there is limited “window of opportunity” for municipal mixed plastic tonnage
- Contracts with SO/CIF through 2019 for processing municipal mixed plastics
- 2011, ~30,000 tonnes of processing capacity
- SO has indicated that they would consider compensating municipalities for increased program costs to increase capturing mixed plastics

CIF CONTINUOUS IMPROVEMENT FUND

How to Initiate

- Contact EFS
  - Martin Vogt (519) 669-4011
    martin.vogt@efs-plastics.ca
- Contact Entropex
  - Keith Bechard (800) 665-5076
    kbechard@entropex.com
- Contact CIF
  - Andy Campbell (705)719-7913
    acampbell@wdo.ca

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Challenge

- What is holding you back from adding to and enhancing your plastic packaging recovery?
- Make 2011 a year to target and increase your plastic recovery
- Apply through the CIF REOI for help with getting more plastics in you program

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