

**Welcome Back...**



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IMPROVEMENT FUND

#### Afternoon Agenda

- Update on AMO activities
- Optimizing your recycling program
- Break
- Boosting program efficiency
- Bill 91 – The Waste Reduction Act: What You Need to Know

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## AMO Update October 8, 2013

Monika Turner  
AMO Director of Policy



## Optimizing Your Recycling Program

Carrie Nash, CIF



### Optimization in an IPR World

- Efficiency is critical in the changing landscape of BB recycling in ON
- Optimization projects test the waters for new approaches
  - permits & encourages harmonization
  - identify & test impacts of better practices
  - fine-tunes & builds on existing systems

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### Key Projects

- Efficient & effective use of resources
  - Work with landspace available & within constraints of set budgets
  - energy efficiency
  - collaborating to share the burden of resource development for
    - P&E
    - MR optimization

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### Speakers

- Bradley Cutler on behalf of Shaun Spalding, EBA, A Tetra Tech Company
  - Transfer Station Optimization: Lessons from the Town of Cochrane
- Kevin Mehlenbacher, Peel Region
  - MRF Residue Compactor Upgrade CIF # 376)
- David Faris Yousif, City of Hamilton
  - MRF Energy Efficiency Improvements (CIF #427)
- Renée Dello, City of Toronto
  - Multi-Residential Funding Initiatives
- Cathie Green, Lanark Highlands
  - CIF Small Program P&E Implementation
- John Watson, Halton Region
  - Joint P&E Project (CIF #834.4)

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## Transfer Station Optimization: Lessons from the Town of Cochrane

Bradley Cutler, CIF  
on behalf of  
Shaun Spalding, EBA, A Tetra Tech Company  
CIF Project #726



### Project Highlights

- **Project goal:**
  - Review transfer station construction & operational costs; provide guidance on possible future direction for Northeastern ON
- **Anticipated impacts:**
  - Determine if site has potential to be 'model' facility
- **More information:**
  - [sspalding@eba.ca](mailto:sspalding@eba.ca)
  - [www.eba.ca/www.tetrattech.com](http://www.eba.ca/www.tetrattech.com)

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### About This Project (CIF #726)

- **Key elements**
  - Address cost questions: what were construction costs & are operational costs reasonable?
  - Used Intermodal shipping containers rather than concrete foundation & push walls
  - Reviewed pre- & post- construction costs plus year 1 operational costs



### Transfer Station Design

- **Cochrane's Transfer Station**
  - 5 intermodal containers used for the sides & back walls
  - Translucent fabric roof supported on steel trusses allows light to enter & the facility is un-serviced
  - The interior (maximum tipping floor space) is 720m<sup>3</sup>; storage space for the recyclables is 200m<sup>3</sup>
  - Tip floor is paved asphalt
  - Operated & managed by Town staff
  - First year: 477 tonnes shipped bi-weekly to MRF
  - Site does not require an Environmental Compliance Approval (ECA)

### Impacts

- Construction cost effectiveness
- Operational cost efficiency



- Town's RFP determined construction costs, but operationally, year 1 costs may not be typical or sustainable

### Results & Findings – Construction

Town RFP Results		"Typical" Construction Cost Estimates (+/-20%)	
Awarded	\$133,000	Pre Engineered Steel Structure, Push Walls & Concrete Floor	~\$500,000
Final Cost*	\$149,650	Temporary Fabric Structure with Push Walls & Concrete Floor	~\$400,000
		Temporary Fabric Structure with Push Walls & Paved Floor	~\$300,000

- CIF Funding: \$71,768
- Net Town Construction Cost: \$77,782

\* Final cost includes costs associated with staff time for RFP development & evaluation & construction project management & additional site grading

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### Results & Findings – Operation (1)

First Year Operational Costs *		
Front End Loader	~\$17,000	Capital, fuel, maintenance
Staffing	~\$18,000	Loader operator, Supervisor, administration
Site Maintenance	~\$1,450	Litter pickup, snow ploughing, general other
Modifications to loader	~\$8,000	Debris screen fabricated to loader bucket
Total	~\$44,450	

- Operational cost per tonne = ~\$93

\* First year of operation: August 2012-July 2013

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### Results & Findings – Operation (2)

- No deficiencies noted or warranty repairs in year 1
- Durability of containers in this application is unknown
- Facility is out of warranty; operational cost risk due to unknown durability of containers
- Asphalt tip floor likely won't provide same degree of abrasion resistance as concrete pad
- Based on tonnage, bi-weekly transfer to MRF & costs are reasonable but may not be sustainable over long term



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### Conclusions - Construction

- Low capital costs - as compared to conventionally built transfer station
  - may be offset by higher long-term operational costs than would otherwise be expected
- Given relatively short operating life (to date), life cycle analysis was not completed
- Legal advice should be obtained in planning stages for permitting & construction



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### Conclusions - Operations

- No reported operational or maintenance issues in first year
- Traffic & tonnage is low
  - results in low operational & maintenance costs
- If tonnage were to double, shipments to MRF would have to increase to maintain compliance with O. Reg. 101/94 re: ECA exemption
  - likely result in double operational costs



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Region of Peel  
Working for you

### MRF Residue Compactor Upgrade

Kevin Mehlenbacher  
CIF Project #376

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### Project Summary

- Project goal:
  - Residue compactor upgrade project focused on reducing Residue management costs & increasing waste diversion
- Anticipated impacts:
  - Reduce Residue management costs
  - Address health & safety concerns (after hours unloading)
  - Eliminate Residue storage on MRF tipping floor
  - Increase waste diversion
- More information:
  - [kevin.mehlenbacher@peelregion.ca](mailto:kevin.mehlenbacher@peelregion.ca)
  - [www.peelregion.ca](http://www.peelregion.ca)

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### Issue

- MRF was constructed with 2 separate 2 cu yd compactors that filled roll-off type containers
- Numerous operational concerns:
  - Continuous material jams
  - Frequent need to empty roll-off containers
  - Health & safety issues re: after-hours unloading
- Residue stored on MRF tipping floor & loaded into open top waste transfer trailers for disposal
- Solved compactor jamming issues but health & safety concerns re: after-hours unloading remained



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### The Project

- Replaced 2 cu yd compactors with 1-11 cu yd compactor
  - would fill a full size 120 cu yd waste trailer
- Residue compactor upgrade project was joint effort by MRF Operator & Region to improve Residue management
- Key factors in project success:
  - Clearly-defined project management roles & responsibilities for MRF Operator & Region
  - MRF Operator motivated to complete project
  - No space restrictions to install new equipment



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### Projected Impacts

- Financial Impact
  - Business case identified potential cost savings of \$12.20/ tonne or \$193,579.17/year by replacing 2 cu yd compactors with 1-11 cu yd compactor
    - as opposed to the hiring 2 additional after-hours staff
- Tonnage Impact
  - Added benefit: MRF Operator agreed to receive minimum of 60% of Residue at their MRF to recover additional materials
- Environmental Impact
  - Reduced number of overall vehicle movements due to increased payloads

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### Project Implementation

- Preferred equipment vendor selected after MRF Operator & Region evaluated several proposals
- Site preparation involved removal of old compactors
  - sold for scrap
- No delays with delivery or installation of new compactor system
- No issues found during startup or commissioning of new compactor

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### Results & Findings

- Residue Management Costs
  - All-inclusive cost to manage Residue: \$704,649/year or \$66.08/tonne
  - Compactor upgrade saved Region \$177,322 in first year
    - this equates to a savings of \$16.63 per tonne
- Residue Haulage
  - Number of vehicle movements required to manage material has decreased by approximately 40%
- Waste Diversion
  - Additional 6,400 tonnes of materials were recovered & shipped to recycling markets in first year

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### Best Practices



- Overall, Residue compactor upgrade project has been successful
- Actual Residue management costs pre-upgrade & post-upgrade showed cost savings exceeding Region's initial estimates
- MRF operations have improved:
  - Reduced Residue management costs
  - Addressed all health & safety concerns (after hours unloading)
  - Eliminated Residue storage on MRF tipping floor
  - Increased waste diversion
- Future MRF Residue management systems should incorporate large capacity compactor/s
  - Allows for more efficient payloads, vehicle scheduling requirements & disposal options

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### Next Steps

- Region will continue to review & assess Residue management practices in order to identify most cost effective disposal option
- Areas for consideration may include:
  - Change haulage vendors using a competitive bid process
  - Purchase of dedicated trailers & utilize internal haulage forces

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 Hamilton  
**City of Hamilton Material Recycling Facility  
Energy Efficiency Improvements**  
  
 Dave Faris Yousif  
 CIF Project #427  
  


### Project Scope – Energy Efficiency Improvements

- Project goal:
  - Implement energy efficiency measures in the processing area of the MRF
- Anticipated benefits:
  - decreased energy use; lower hydro & gas bill; lower maintenance costs; & brighter work area
- More information:
  - david.yousif@hamilton.ca

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### City of Hamilton - Material Recycling Facility

- MRF owned by the City, operated by Canada Fibers
- Processing 45,000 tonnes of 2-stream residential BB recyclables
- Constructed in the 1950s by Firestone
  - 250,000 sq ft floor area
    - 100,000 sq ft processing area; 150,000 sq ft warehouse

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### Why This Project?

- Lighting system dates back to the 1970s
  - Highly inefficient, ~\$194,000 in annual hydro costs improvements
  - Required lots of maintenance
  - Poor light coverage
  - Lights were on 24/7, 365 days
- Heaters
  - Ran 24/7 during winter months (when ambient temp inside MRF reached a certain point)
  - ~\$43,000 in annual natural gas costs prior to improvements

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### Poor Lighting Coverage

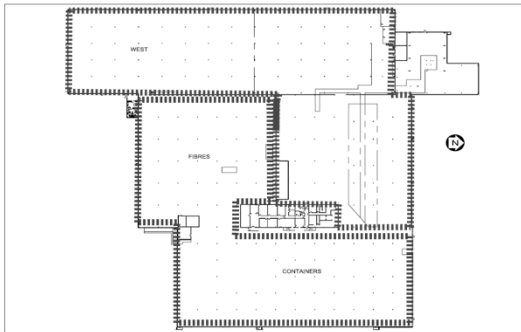


### Project Scope

- Contract awarded to Ambient Mechanical,
  - Total bid price ~\$225,000
  - CIF funding \$98,657
- Install of BAS & lights (late 2012, early 2013) in MRF processing area
  - Heater Controls
    - heaters put on a schedule - Monday to Friday, 6:00 a.m. – 6:30 p.m.
    - ambient temp. below 15° centigrade
  - Lighting Upgrades
    - Monday to Friday, 6:00 a.m. – 6:30 p.m.
    - photocell

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## Area of Scope

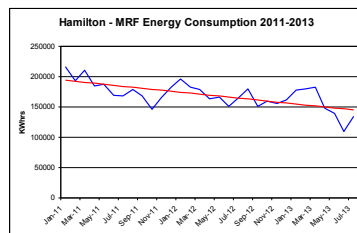


## Results

- Hydro Bill
  - From to \$194,000 to \$155,000, annual savings of \$39,000
- Natural Gas Bill
  - From \$43,000 to \$34,000, annual savings of \$9,000
- Light levels
- OPA Energy Retro-fit Incentives
  - \$15,505
- Payback is 4.4 years on full investment
  - 1.7 years for CIF-funded portion

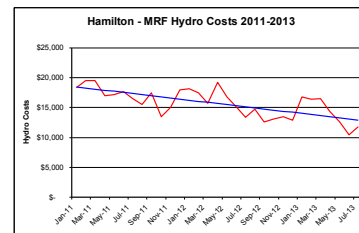
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## MRF Hydro Usage 2011-2013



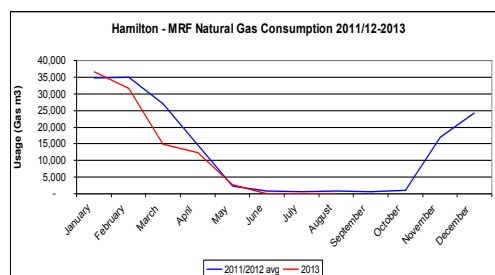
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## MRF Hydro Costs 2011-2013



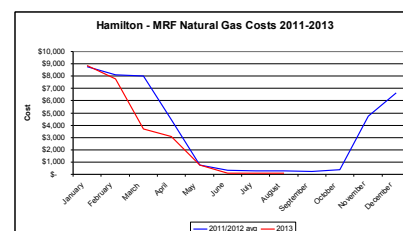
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## MRF Natural Gas Usage 2011/12-2013



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## MRF Natural Gas Costs 2011/12-2013



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## Improved Lighting Coverage



## Next Steps

- Continue to evaluate impacts of retrofit
- Final report summarizing energy & cost savings of project, as well as performance, impact & learnings to be available for review after attaining a full year's worth of data
- Implement energy efficiency improvements to rest of MRF due to success of Phase 1
  - Anticipated additional savings of \$28,000-\$40,000 annually

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## Multi-Residential Funding Initiatives

Renée Dello  
City of Toronto



## Project Highlights

- Project goal:
  - Maximize next least cost tonnes opportunities
- Anticipated impacts:
  - Closer alignment with curbside performance
- More information:
  - Renée: rdello@toronto.ca
  - Anne: aboyd@london.ca
- \$2.8M in CIF funding, to date

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## Why Improve Multi-Residential Programming?

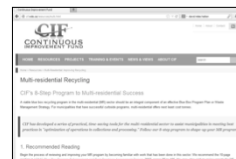
- Households (HH) in Ontario (ON): **5,192,895**
- Multi-Residential (MR) HH in ON: **987,900**
- **Nearly 20% of Ontario HH are MR**
- In Toronto, this jumps to HALF



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## Resources - CIF's 8-Step Program to MR Success

1. Recommended Reading
2. Launch your Project
3. Manage Your Data
4. Build Capacity
5. Promote & Educate
6. Training for MR Stakeholders
7. Report Back to CIF
8. Design Standards



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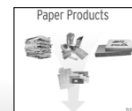
### CIF Microsoft Access Database for MR



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### P&E Support Through CIF

- P&E Material templates
  - Recycling Handbook
  - Posters promoting recycling
  - Signage & labeling for carts & bins
- Training for MR stakeholders
  - Planning & delivering MR workshops



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### MR Project Highlights

	Small Municipalities					Medium Municipalities					Large					Average
	Smith Falls	Dufferin	Stratford	Oxford	Perth	Barrie	North Bay	Peterborough	Quinte	Sarnia	Durham	EWSWA	London	Peel		
Capacity (Litres/Unit)																
Pre	9	37	28	45	4	47	43	52	44	34	46	33	25	20		
Post	45	51	33	69	42	50	52	54	65	50	52	42	40	55	50%	
%	410%	40%	18%	53%	1010%	6%	21%	4%	48%	47%	13%	27%	60%	175%		
Blue Box Diversion (kg/unit/year)																
Pre			42	42		85	42	115	110	60	99	70	68	94.6		
Post			53	95		103	72	125	115	75	100	90	73	98.8	28%	
%			26%	126%		21%	71%	9%	5%	25%	1%	29%	7%	4%		

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### Key Learnings

#### Barriers to Success

- Measuring & monitoring
- Database – initial investment & maintenance
- Making a culture shift in MR

#### Gaps

- Unclear if we have maximized next least cost tonnes
- Building relationships with MR stakeholders

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### Proposed Recommendations

#### Strategies to Match Curbside Programming

##### Proposed Future Directions


1. Develop MR "Measuring & Monitoring Strategy"
2. Continue P&E support
3. Continue CIF cooperative tenders for capacity
4. Continued tool development & support
  - Superintendent & Ambassador training tool templates
  - Facilitate ideas exchange

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### Future MR Considerations


1. Cultivate MR recycling culture shift
2. MR Monitoring & Measuring Strategy
  - Visual data → tonnage
  - Test conversion formulae & collection methods
  - Identify the MR analysis & programming costs
  - Consolidate info → "Measuring & Monitoring Toolkit"
  - MR programming to be in closer alignment with curbside

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**CIF Small Program  
P&E Implementation**

Cathie Green  
Lanark Highlands



### CIF - Small Program P&E Implementation

- **Project Goal:**
  - Develop & Implement a Communication Plan to meet BP
- **Anticipated Impacts:**
  - Improve program performance
- **More information:**
  - cgreen@lanarkhighlands.ca
  - carrienash@wdo.ca
- **To date:**
  - 53 projects
  - Funding approved of \$265,000

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### Small Municipalities – Background Information

- **Needs**
  - Educate Residents, Council, & Management
  - Tools, Resources, & Support
- **Challenges**
  - Limited resources
    - Staffing
    - Budget
    - Expertise

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### Resources Available Through CIF

One Stop Shop for P&E →



Project Name	Year	Amount	Status
Blue Box P&E Marketing Tool	2012	\$25,000	Completed
Blue Box P&E Marketing Tool	2013	\$25,000	Completed
Blue Box P&E Marketing Tool	2014	\$25,000	Completed
Blue Box P&E Marketing Tool	2015	\$25,000	Completed
Blue Box P&E Marketing Tool	2016	\$25,000	Completed
Blue Box P&E Marketing Tool	2017	\$25,000	Completed
Blue Box P&E Marketing Tool	2018	\$25,000	Completed
Blue Box P&E Marketing Tool	2019	\$25,000	Completed
Blue Box P&E Marketing Tool	2020	\$25,000	Completed
Blue Box P&E Marketing Tool	2021	\$25,000	Completed
Blue Box P&E Marketing Tool	2022	\$25,000	Completed
Blue Box P&E Marketing Tool	2023	\$25,000	Completed
Blue Box P&E Marketing Tool	2024	\$25,000	Completed
Blue Box P&E Marketing Tool	2025	\$25,000	Completed
Blue Box P&E Marketing Tool	2026	\$25,000	Completed
Blue Box P&E Marketing Tool	2027	\$25,000	Completed
Blue Box P&E Marketing Tool	2028	\$25,000	Completed
Blue Box P&E Marketing Tool	2029	\$25,000	Completed
Blue Box P&E Marketing Tool	2030	\$25,000	Completed

← CIF funded projects  
*Final Reports*

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### CIF – One Stop Shop for P&E

#### Communication plan template

- Demographic questionnaire
- Output: Word document

#### P&E Material templates (tactics)

- Posters
- Magnets
- Flyers
- etc.



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### P&E Highlights! Oneida Nation of the Thames

- **Objective**
  - Increase diversion to 15% by year 3
- **Tactics**
  - Calendar, flyers, information session, school presentations, & promotional items
- **Summary**
  - Tonnage: 38 MT & diversion 11%
- **Key Findings**
  - More data to evaluate success of program implementation
  - Future: participation & visual audits of setout



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### P&E Highlights! Mississippi Mills

- Branding
  - Logo
  - Feel
  - Consistency
- Harmonization
  - MWG
- Key Findings
  - Tonnage up 13%
  - Incoming calls down 65%



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### Project Highlights!

#### Key Learnings

- P&E Dollars → Participation, Capture, & Diversion
- Communication plan tool used extensively
- Areas for Improvements
  - Emphasis on Program performance
  - Goals & Objectives
  - Measuring & Monitoring



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### CIF Resources...Moving Forward (1)

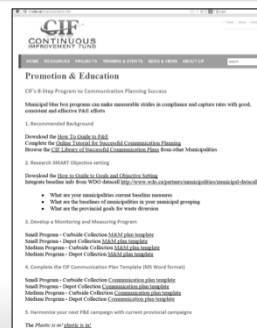
#### Key Questions

- What works?
- What does not?
- What improvements can CIF make?
- If you have ideas, or want to join the P&E working group, please contact [carrienash@wdo.ca](mailto:carrienash@wdo.ca)



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### CIF Resources...Moving Forward (2)



- CIF P&E Steps to BP
  - Templates (Word)
  - “How to” Guide
  - Online tutorials
  - Sample Plans
  - Image databank
- Key Changes
  - Click & go
  - Current P&E materials
  - P&E Community

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### CIF Resources...Moving Forward (3)

- CIF P&E Library
  - Templates (Word)
  - “How to” Guide
  - Online tutorial
  - Plans
  - Images



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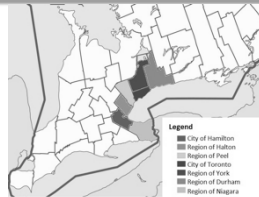
### GTA Joint P&E Project CIF Project #834.4

John Watson  
Halton Region



### The Partners

- Durham Region
- Halton Region
- City of Hamilton
- Niagara Region
- Peel Region
- City of Toronto
- York Region
- Continuous Improvement Fund
- Stewardship Ontario



Representing 7 million residents

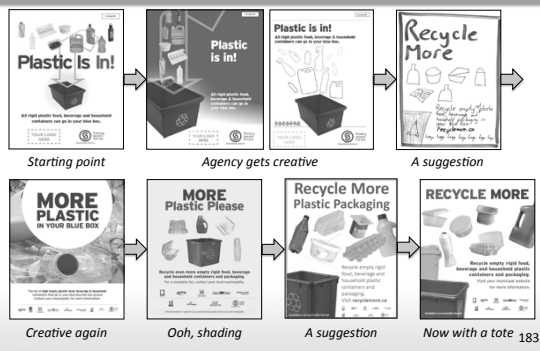
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### The Plan

- Purpose of the project:
  - To promote mixed plastics recycling across the GTA
- Target audience:
  - “On the go” mother/female
- How we’ll reach the target audience:
  - “We’ll surround them”
    - Newspaper advertising
    - Radio advertising
    - Online advertising
    - Billboard advertising
    - In-store advertising

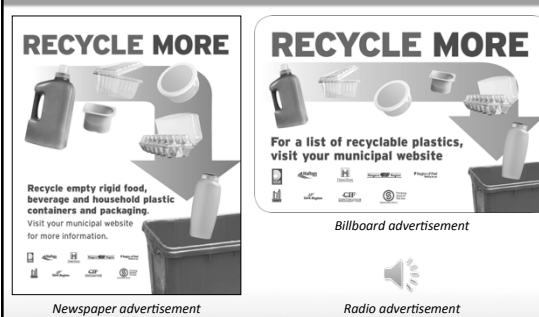
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### The Creative Process



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### The Final Creative



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### The Budget

What	Cost
Newspaper advertising	207,800
Radio advertising	129,815
Online advertising	25,850
Billboard advertising	111,500
In-store advertising	25,150
Management fees	39,885
<b>Total</b>	<b>\$540,000</b>

Who	Contribution
Municipalities (OCNA/CNA in-kind)	140,000
Continuous Improvement Fund	200,000
Stewardship Ontario	200,000
<b>Total</b>	<b>\$540,000</b>

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### The Challenges

- Different strokes for different folks
- How are decisions made?

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### The Big Questions

- What's the call to action?
- If contact your municipality, how do we want to be contacted?

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### The Impact

- 109,858,904 estimated total impressions (number of views/listens of advertising)
- Besides that, who really knows?
- Project did not identify any objectives regarding waste diversion, capture rate, participation, etc.

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### The Recommendations

- At the beginning of the process, develop a written communications plan which incorporates standard components: goal, objectives, campaign theme, key messages, evaluation tools
  - WDO Best Practices asks about P&E evaluation
- Ensure there's adequate funds available to design creative – be open to starting from scratch
- Ensure decision making process is clear & consistently used

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### The Contacts

John Watson EPT  
Waste Diversion Education Coordinator  
Halton Region

☎ 905-825-6000 x 8238

✉ [john.watson@halton.ca](mailto:john.watson@halton.ca)

🐦 @haltonrecycles

🌐 [ca.linkedin.com/in/johnwatsoncan](https://ca.linkedin.com/in/johnwatsoncan)

### Questions?



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### Enjoy Your Break



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## Welcome Back!



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## Boosting Program Efficiency

Rick Denyes  
Stewardship Ontario

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## Developing Best Practices

- Waste management is a constantly changing & evolving field
- There's no standard set of best practices that apply to all programs
- Its about trial & error & sharing results



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## What Works and Why

- Today's session looks 3 topics CIF is frequently asked to comment on including:
  - Weekly vs. bi-weekly collection
  - Single stream vs. two stream collection
  - Polystyrene management
- Consider:
  - The practice
  - The circumstances under which is it successful
  - Then do the math to understand the cost implications

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## Speakers

- William Mueller, Waste Diversion Ontario
  - Effectiveness of Recycling Policies: Lessons from the Datacall
- Janine Ralph, HDR Inc.
  - Assessment of Single & Dual Stream Recycling (#716)
- Joe Hruska, CPIA Post-Use Recovery Consultant
  - Key Learnings: Polystyrene (PS) Foam Recycling Market & Processor Perspective

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**WDO**

## Effectiveness of Recycling Policies: Lessons from the Datacall

William Mueller  
Waste Diversion Ontario

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### The WDO Municipal Datacall

- A tonne of data!
- 400 municipalities & 11 years of data
- Tonnage & financial information
- Can we learn how effective recycling policies are?

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### Recycling Policies

There is a range of municipal recycling policies such as:

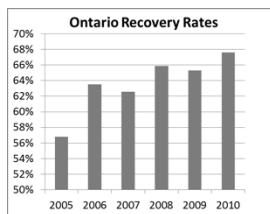
- User Pay schemes
- Bag limits
- Collection:
  - Type
  - Frequency
  - Stream
  - Private/Public
- P&E expenditures
- Materials collected
- ‘Best Practices’



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### Study Method

- Examined data between 2005-2010
- Two-step process:
  - Compared average recovery rates by policy (group data)
  - Combined effective policies (individual data)



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### Analysis–Step 1

- Compared average program recovery rates by policy over 2005-2010 (group)

Policy	Years of Higher Average Recovery
Bag limit ≤ 6	2009
Bag limit ≤ 3	2005-2010
User Pay (any)	2005-2010
Number of Materials*	2006-2010
P&E expenditures (<\$1/HH and >\$1/HH)	2006
Weekly Collection	2006-2010
Best Practice Score*	2009-2010
Single Stream Collection	2009-2010

\*Based on individual program data

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### Analysis–Step 2 (1)

- Combined effective policies as identified in Step 1 for 2010 data (individual programs)
- Baseline recovery for larger programs = 32%

Policy	Increase in Recovery
Bag limit ≤ 3	Not Significant
User Pay (\$ per bag)	Not Significant
Weekly Collection	Not Significant
% of Curbside Access	Not Significant
Number of materials	2.3%
Single Stream Collection	9.5%
Number of Households Served	Not Significant

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### Analysis–Step 2 (2)

- Used same approach but applied to all programs
- Baseline recovery for all programs = 28%

Policy	Increase in Recovery
Bag limit ≤ 3	6.9%
User Pay (\$ per bag)	Not Significant
Weekly Collection	Not Significant
% of Curbside Access	Not Significant
Number of materials	1.7%
Single Stream Collection	Not Significant
Number of Households Served	Not Significant

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## Conclusions

- Group data indicated a number of effective policies
- But individual programs identified only:
  - Larger Programs:
    - Accepting more materials
    - Single stream collection
  - All Programs
    - Accepting more materials
    - Bag limit  $\leq 3$
- Convenient factors important for larger programs
- **Caveats:**
  - Lots of unexplained variation among programs
  - Did not include costs!

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## In Practice...

- Use data to know if residents have capacity to recycle optimally – weekly or bi-weekly
  - How much do residents produce weekly?
  - How many BB do residents have?
  - What size?

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## Project-based Findings (1)

1. CIF Project 176: program comparison
  - Community 1: St Mary's - 86% capture; weekly collection
  - Community 2: Alvinston - 63% capture; bi-weekly collection
    - differences may be linked to increased convenience in St Mary's (larger recycling containers & greater frequency) plus new bag limit for residual waste
2. CIF Project 507.2 Waste Reduction Plan South Stormont
  - Consultant (Genivar) identified potential 41% increase in recyclables with weekly collection
  - Cited convenience plus alignment with Cornwall's recycling program as factors

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## Project-based Findings (2)

- Current CIF project with GP 7 municipality:
  - 64 munis in group; 61% of these have weekly collection
  - Weekly collection programs capture more than bi-weekly
    - avg. of 21% - or 28kg/HH
- Muni will be able to determine cost/tonne program impact & better option for community
  - Analyse # of HH matched with hauler's cost quote to increase to weekly collection OR provided additional capacity (i.e. more BB) & improved P&E

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Please contact me with questions  
or to request a copy of the article:

[williammueller@wdo.ca](mailto:williammueller@wdo.ca)

Thank you!

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**HDR**

Assessment of Single  
& Dual Stream Recycling (#716)

Janine Ralph  
HDR Corporation

**CIF**  
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### Project Highlights

- **Project goal:**
  - Review & discuss performance of Dual Stream (DS) & Single Stream (SS) recycling systems
- **Anticipated impacts:**
  - Inform decisions regarding system changes
- **More information:**
  - janine.ralph@hdrinc.com
  - www.hdrinc.com

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### Why This Project?

- Trends across North America regarding SS recycling
- Inadequate information available regarding actual system performance
- Concern that existing conditions influence degree of improved performance for SS
- Circumstances not necessarily applicable in ON context or for all jurisdictions

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### Project Description

- Scan of studies completed over past 10 years
- Concern regarding local circumstances/bias – focus on finding specific rationale to support findings
- Examined collection, processing, marketing, program participation & diversion rates
- Examined integrated systems & case studies
- Review 2008 to 2010 datacall results for Ontario

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### Collection

- **Expectation: SS collection costs are lower**
- Reports on potential cost savings.... \$9 to \$18 per tonne, \$0 to \$3 per tonne, 5 to 25%
- Vary based on current system efficiency, container choices, collection choices
- Variability also based on distance to drop-off
- Many performance improvements related to automation (productivity, litter, lost time)
- ON data: little difference

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### Processing

- **Expectation: SS processing costs are higher**
- Most (not all) studies indicate higher cost for SS processing
- Difficult to distinguish between effect of comingling & compaction
- Some inefficiencies related to material losses to residue stream & cost of disposal
- Some Best Practices – early removal of glass on processing line, improved sorting equipment
- ON data: DS residues ½ of SS residues

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### End Markets & Material Quality

- **Expectation: SS materials of lower quality**
- Most (not all) studies indicate some quality issues, decreased yield rate, increased rejects
- BUT.... Processors recognize both SS & DS can generate clean OR dirty loads
- Other factors: competition with lower standard commodity markets, reduced P&E, weather, allocation of MRF labour
- NO comprehensive studies of SS market impacts
- ON data: inconclusive

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### Program Participation & Diversion Rates

- **Expectation: SS increases participation & capture – including unwanted materials**
- Wide range of recovery rates for both program types
- Cannot 'correct' for effect of P&E &/or garbage disincentives
- Some studies indicate no relationship between DS/SS & recovery rates
- BUT..... SS appears to offer benefits to rural depots, multi-family
- ON data: DS programs range from 162 to 228 kg/HH, SS programs range from 164 to 253 kg/HH

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### Case Studies (1)

- Six case studies examined re: system changes
- Neither SS or DS holds general advantage – **when not taking into account local considerations**
- Depends on current system – those with poor collection efficiencies & poor material capture saw greatest benefits for SS
- Those with good current collection efficiencies, good processing costs & performance had less room for improvement – less benefit for SS

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### Case Studies (2)

- System planning - consider whole system & local context
- When broader set of options examined – \$ & performance improvements identified for DS programs
- Improvements: bi-weekly collection, co-collection, improved P&E, incentives/disincentives

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### Recycling Performance in Ontario (1)

#### Comparison of Ontario Large Municipal Dual & Single Stream Average Program Performance 2008-2010

(Derived from the WDO Tonnage & Financial Datacalls)

	Average HH per Program (2010)	Kg Marketed / HH	Net Cost / HH	Net Cost / Tonnes Marketed	Revenue / Tonnes Marketed	P&E Cost / HH	Collection Cost / HH	Gross Processing Cost / Tonne Marketed	Residue Rates
Dual Stream (8 Programs)	198,722	189	\$34.20	\$182.00	\$105.62	\$0.94	\$32.47	\$94.13	6.91%
Single Stream (4 Programs)	447,366	224	\$45.17	\$206.41	\$90.81	\$1.25	\$32.27	\$108.08	14.41%
Comparative Performance of Single Stream		35	\$10.97	\$24.41	\$(14.81)	\$0.31	\$(0.20)	\$13.94	7.49%
Percentage Difference		18.50%	32.09%	13.41%	-14.02%	33.10%	-0.60%	14.81%	108.42%

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### Recycling Performance in Ontario (2)


- Recovery – SS higher kg/HH, but can't isolate effect of bi-weekly garbage
- Little difference in collection costs, most DS programs in areas of lower population density
- SS processing cost ~20% higher (adjusted for outliers)
- DS reported revenues around 5% higher
- Net system costs – DS programs 32% lower per HH, 13% lower per tonne marketed
- SS higher kg/HH marketed for paper fibres, DS higher kg/HH marketed for most containers

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### Conclusions


- No consistent data to indicate SS is best practice – too much anecdotal info &/or limited data sources
- Old studies becoming dated..... shifts in waste stream & housing types/demographics
- There are many BP that can be applied to both SS & DS systems
- When decision-making – look at whole system & range of options – local context & priorities
- Need better empirical studies of MRF & collection performance

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## Key Learnings: Polystyrene (PS) Foam Recycling Market & Processor Perspective

Joe Hruska  
 Canadian Plastics Industry Association  
 Post Use Recovery Consultant



### Project Highlights

- **Bale & MRF audits project goal:**
  - Identify the origin(s) of bale contamination in the recycling process, households to MRF
  - Determine PS foam bale contamination in Waterloo, Kingston, Ottawa Valley programs
- **Anticipated impacts:**
  - Provide learning's to initiate improvements in collection, processing & marketing of quality PS Foam
- **Contact:** [jhruska@cogeco.ca](mailto:jhruska@cogeco.ca) or Cell (416) 930-1796
- **Resource:** <http://www.plastics.ca/Recycling/Polystyrene/index.php>

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### Polystyrene (PS #6) Foam Packaging

#### Foam Food Containers & Cushion Packaging



Meat trays and egg cartons

Clamshells

Cups, bowls and plates

Cushion packaging from electronics, etc

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### The Problem

- **Problem:**
  - Densifier operator(s) cannot sort contamination from dense layers of baled foam effectively & economically to make PS foam densifier-ready & meet manufacturers requirements
- Densifier operator suspended all bale shipments
- SO, CIF & CPIA examining PS Foam recycling options & system costs

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### PS Foam Market Unique in Plastics Recycling

- Requires clean process-ready densified foam
  - There is no washing or cleaning typically used to reprocess other plastics
  - Manufacturers using densified foam, grind & extrude directly into new products



Clean Densified Foam → Extruder → Finished Product

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### Baled Foam Impacts on Densifier Operations

#### Densifier Impacts

- Contamination cannot be sorted from bales to make foam densifier-ready :
  - Plugs & clogs blower & densifier reducing production & increasing sort costs
  - Lowers foam market quality, revenues & acceptance
- Non-PS Foams difficult to identify in bales:
  - Will not densify causing densified foam blocks to fall apart
- Metal & glass damages blowers & densifier equipment
- Other rigid plastics do not densify, foam blocks fracture

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### Densified Foam Contamination Impacts

#### PS Foam Products Manufacturer

- Metals, glass, wear & damage grinders & equipment
- Frequent screen pack changes at extruder for contamination
  - Increase yield losses
  - Reduce production rates
  - Interrupt polymer flow affecting quality
- All of above increase production costs resulting in:
  - Rejection of densified foam from curbside bales

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### Bale Contamination Levels

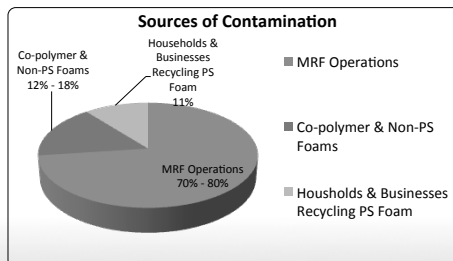
- Main issue – densifier operator cannot remove these levels from bales to make foam densifier & manufacturing-ready

Bale Types	Contamination
Curbside EPS Packaging & Food Foam	5.5% - 12.4%
Curbside EPS Packaging Foam (no food)	4.3%
Depot Foam Bale (mainly IC&I EPS)	7% (15% if OCC wrap included)

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### Key Finding – Sources of Baled Foam Contamination

- MRF audit compared tip floor, foam bunker & observed sort process vs. bale audits to establish sources



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### Key Learnings (1)

- Positive sorted loose foam allows densifier quality sort & production of manufacturing-ready densified foam
- Depot foam very clean vs. curbsides lower quality
  - Langley B.C. curbside bagged foam clean & densifier-ready



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### Key Learnings (2)

- MRF lines & balers re-introduce estimated 70% to 80% of baled foam contamination after sorting

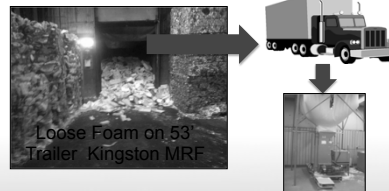
- Bale production order with other MRF materials may affect contamination levels



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### Key Learnings (3)

- "Loose foam" from depot & curbside is successfully sorted, densified & marketed
  - HGC Belleville & Markham programs
- Kingston testing loose shipments 800 to 900 kg/load



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### Recommendations (1)

- Baling of PS foam not recommended
  - Densifier cannot effectively or economically quality sort bales to produce clean densified foam



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### Recommendations (2)

- Densify PS foam at MRF or ship loose to a local densifier

#### Densify at MRF



#### Loose Shipments to Local Densifier



Other Options To Be Studied

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### Recommendations (3)

#### Implement Communication & Education For Quality

- Citizens will cooperate – Ottawa Valley program helped to reduce attachments on foam
  - All players in system play role ensuring quality



Sheet trays NOT acceptable for recycling due to plastic wrap and absorbent pad. Sheet trays not containing this material are acceptable.



Foam NOT acceptable for recycling. Very soft and bendable.

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### Next Steps

- Examine PS foam recycling system costs
- Options to collect (e.g. depot, bagged curbside foam), MRF processing & densifying, sorting, markets & communication & education
- Future PS foam recycling systems need to fit into Ontario long term plans:
  - collection through depot systems provide opportunity to expand quality PS foam collection
  - transfer of recyclables & consolidation of MRFs incorporating densifiers

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### Questions?



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### Bill 91 – The Waste Reduction Act: What You Need to Know

Mike Birett  
CIF

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### Putting it All In Context

- BC, Bill 91, Belgium, EPR,....
- The CIF does not have a position on these issues
- Our goal is to help prepare you for change
- That means helping program stakeholders to develop their knowledge & understanding the issues & each others' concerns
- While at the same time continuing to develop the system
- Its always about finding common ground

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### Today's Session

- Spring 2013 ORW included background on Manitoba, Saskatchewan & BC
  - Background on trends & issues of relevance to changing landscape in ON
- Today's session seeks to offer a view of EPR & IPR from steward, municipal & private perspectives
- It will highlight potential impacts of & concerns with Bill 91 & Waste Reduction Strategy

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### Speakers

- Maria Kelleher, Kelleher Environmental
  - Bill 91: The Waste Reduction Act & Waste Reduction Strategy – The Municipal Perspective
- Glenda Gies, Glenda Gies & Associates Inc.
  - Reflections on Steward Perspectives on Bill 91
- Rob Cook, Ontario Waste Management Association
  - Waste Reduction Act & Strategy: Assessment – Work in Progress

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Kelleher  
Environmental

### Bill 91: The Waste Reduction Act & Waste Reduction Strategy The Municipal Perspective

Maria Kelleher  
Kelleher Environmental

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### Presentation Outline

- Brief overview of Bill 91 & Waste Reduction Strategy
- Issues of interest/concern to municipalities
- Municipal response to Ministry of the Environment (MOE) on September 4<sup>th</sup>, 2013

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### Bill 91 – The Waste Reduction Act & The Waste Reduction Strategy

- Bill 91 – An Act to establish new regime for reduction, reuse & recycling of waste & repeal Waste Diversion Act (2002)
- Progress
  - First reading 6th June, 2013
  - Second reading started 24th September, 2013
  - After second reading goes to committee for debate; then third reading; becomes law; could happen by year end
- Waste Reduction Strategy is policy framework on which Bill is based

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### Bill 91 –IPR – Producers Are Responsible

- Moves to Individual Producer Responsibility (IPR) for diversion of designated wastes in ON
- Producers can discharge their obligations:
  - Individually
  - Through partnerships with municipalities
  - Through intermediaries (owned & controlled by producers) – effectively collectives
- Producers & intermediaries must:
  - Register in new Waste Reduction Registry
  - Report on achievements towards targets
  - Pay municipalities “reasonable costs” for managing designated wastes

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### Bill 91 - Municipal Role

- Bill 91 recognizes historical role of municipalities
- Municipalities can remain involved in BB collection & processing if they choose
  - Reg 101/94 to be reviewed as part of Strategy
- Municipalities can choose level of involvement in diverting designated materials (BB & other designated materials)
- Municipalities must be paid “reasonable costs” for designated materials they manage
  - Waste Reduction Authority will decide on “reasonable costs” if municipalities & producers cannot agree

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### Waste Reduction Authority

- WDO will transform to new Waste Reduction Authority responsible for:
  - Maintaining a registry
  - Enforcement
  - Establishing “compensation formula”
- Will be funded by producer registration
- New roles & new skills
  - Facilitation; arbitration; consultation; extensive data management etc.

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### Integrated Pricing

- Eco-fee must be included in price of product & not added on at cash register
- Amount of the eco-fee can be displayed on the receipt
  - Not an issue of interest to municipalities

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### Waste Reduction Targets & Standards

- Part VI - Regulations Under Bill 91 – ‘devil is in the details’
  - Do not know what the regulations will contain
  - There will be consultation on draft regulations...
- Detail on standards & targets will be contained in regulations...
  - Service standards
  - Accessibility standards
  - Processing standards (will be under EPA)
- Waste Reduction Authority will be responsible for enforcement

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### Close Link Between Bill 91 & Waste Reduction Strategy

- Sets out province’s roadmap for overcoming barriers & harnessing economic & environmental value of waste
- Waste Reduction Strategy
  - Describes the vision
  - Sets results
  - Provides blueprint of how we can get there through concrete actions including implementation of Waste Reduction Act

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### Highlights of Bill 91 Identified in Strategy

1. Makes individual producers responsible for products & packaging
2. Kick-starts waste diversion/recycling in ICI sector
  - Designates ICI printed paper & packaging
3. Recognizes important role played by municipalities
  - Lifts producer cap on 50% BB funding
4. Protect consumers from surprise eco-fees
5. Transforms WDO into Waste Reduction Authority

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### Identified Steps to Increase Recycling

- Building on BB success, designate ICI printed paper & packaging as next waste to target
- Develop a strategy to increase organics diversion
- Ban designated waste from landfill
- Transition existing waste diversion programs to new IPR framework
- Develop recycling standards for end-of-life vehicles (ELV)

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### “Producers, municipalities & service providers will need to address issues such as...”

- Roles & responsibilities for collection & post-collection management of BB material
- Opportunities to harmonize types of materials & type of collection activities
  - e.g., same BB list throughout ON
- How to address municipal infrastructure investments to support BB program & status of existing collection/post collection contracts
  - Stranded assets (MRFs) to be resolved
- Opportunities to lower overall costs through greater harmonization of printed paper & packaging management

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### Short Term Actions in Strategy: 1-2 Years

- Consult on BB funding model & roles & responsibilities
  - Who does collection, processing, stranded assets
- Consult & complete transition of WEEE
- Begin transition of MHSW
- Consult on designating ICI printed paper & packaging
  - Is there a role for municipalities in collecting some IC&I?
- Begin review of 3Rs regulations
  - Is Reg 101/94 in conflict with IPR? Two owners for same material?
- Consult on designating additional wastes (e.g., organics)
  - Consult on strategy for organics diversion was put into “4 years & beyond” timeline....
- Consult on use of disposal bans
- Consult on & implement new ELV recycling standards

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### Medium Term Actions in Strategy: 2-4 Years

- Continued BB consultation
  - First steps to increase funding & responsibility; begin transition
  - How are municipally owned MRFs addressed?
- Complete MHSW transition
- Begin transition of used tires
- Designate a subset of ICI printed paper & packaging under proposed Act
- Designate additional wastes – possibly carpets & additional WEEE products
- Ban WEEE from disposal once transition is complete
- Continue to consult on a strategy for organics diversion
- Continue implementation of ELV standards

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### Long Term Actions in Strategy: 4+ Years

- Continue transition of BB program
  - This is program with most impact on municipalities
- Complete transition of used tires
- Continue phase in of additional ICI printed paper & packaging
- Continue to designate wastes, possibly non-food organics & bulky items
- Ban MHSW from disposal once transition is complete
- Continue to consult on a strategy for organics diversion
- Continue to consult on ELV additional measures

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## RPWCO/AMO/MWA Response to Bill 91



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## The Process

- Survey of municipalities asked:
  - What do you like about the current Waste Diversion Act ?
  - What do you consider to be the 3 most problematic aspects of the current Waste Diversion Act?
  - What are up to 3 things you like about the new Waste Reduction Act?
  - What are the 3 greatest concerns you have about the new Waste Reduction Act as you currently understand it?
  - What are the 3 most critical elements you think should be contained in a new Waste Reduction Act?
- 2-day workshop August 15th/16th to develop municipal position

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## Broke Bill 91 & Strategy Down to 5 “Buckets”

- Bucket #1: Roles & Responsibilities
- Bucket #2: System Costs & Getting Paid
- Bucket #3: Waste Diversion Targets & Standards
- Bucket #4: Waste Reduction Authority
- Bucket #5: Waste Reduction Strategy & ‘Other’

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## Workshop Discussions

- Considered role of municipalities in other models for BB delivery
  - British Columbia
  - Fost Plus, Belgium
- Evaluated 3 risk Scenarios
  - Bill 91 is killed
  - Bill 91 is passed as currently drafted
  - Bill 91 is passed with changes

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## Six Core Positions (1) – Full IPR

1. Support Full Producer Responsibility
  - Endorse Ministry’s initiative to establish policy & legislative framework for system of full producer responsibility for products & packaging introduced in ON
  - Producers should pay 100% of cost of efficient collection, transfer & processing of BB materials
  - Want “made in ON” producer responsibility model
  - Any program changes must deliver greater waste diversion
  - Municipalities must be fully paid for costs of services provided

RPWCO/AMO/MWA Response to Bill 91/Strategy

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## Six Core Positions (2) – Strong Municipal Role

2. Want Strong Municipal Role
  - Support measures in proposed Act & Strategy that recognize/enable role of municipalities in design & delivery of waste reduction programs
  - Municipalities are “public face” of waste diversion for residents
  - Municipalities are “back-stop” or point of last resort for drop-off of designated materials – must be paid
  - Best Practice & reasonable costs – acrimony – must resolve core cost issue

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### Six Core Positions (3) – Effectiveness & Efficiency

#### 3. Support effectiveness & efficiency

- All waste reduction programs should be operated as efficiently & effectively as possible
- Municipal systems provide “good value”
- Development charges not used to build MRFs & infrastructure
- Remove “in-kind” as a way for producers to discharge obligations
- Fair compensation for municipal assets (stranded, e.g., MRFs, depots)

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### Six Core Positions (4) - Standards

#### 4. Standards need to address all aspects of diversion systems

- System of targets & standards required to define & support high levels of performance across full range of system criteria
  - accessibility for communities throughout ON
  - IPR must not allow “cherry picking” of high value materials
  - standard must include P&E
  - consultation needed before any standards set

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### Six Core Positions (5) – Waste Reduction Authority

#### 5. Support new Waste Reduction Authority & enforcement role

- Endorse formation of new Waste Reduction Authority to administer & enforce proposed WRA provided measures taken to ensure adequate resourcing & professional, independent governance
- Registry, enforcement, establishing compensation formula, all require specialized skills
- Authority must be properly resourced with skilled, trained professional staff
- Governance structure of Authority – unbiased & fully independent of all stakeholders; skills-based Board essential

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### Six Core Positions (6) – Managing the Transition

#### 6. Managing the transition to full IPR is critically important to municipalities

- Establish mechanisms to ensure transition to full producer responsibility & changes contemplated by Bill 91 do not lead to negative consequences
  - many risks to municipalities through fragmentation of municipal programs with multiple producer organizations
  - reduced waste diversion
  - administrative complexity & excessive costs with multiple producers, producer organizations & intermediaries
  - prevent negative impact to public & producers’ ability to meet targets
  - need assurances municipalities will get paid during transition

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### Specific Recommendations on Bill 91 & The Waste Reduction Strategy (1)

1. A strong municipal role is critical to success of waste reduction programs
2. Effective processes need to be established to define reasonable costs & ensure expeditious compensation
3. Waste Reduction Authority must be sufficiently resourced
4. Payments to municipalities should be ensured during transition to full producer responsibility

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### Specific Recommendations on Bill 91 & The Waste Reduction Strategy (2)

5. Curbside BB collection programs should be transitioned to 100% producer funding in reasonable, yet expeditious timeframe
6. Municipal Hazardous & Special Wastes programs should all be 100% producer funded
7. Organics diversion planning & implementation should proceed in a timely manner
8. Industrial commercial & institutional materials diversion needs greater attention
9. Other designated materials should be addressed through phased approach

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### Specific Recommendations on Bill 91 & The Waste Reduction Strategy (3)

11. Disposal bans should be considered under right conditions
12. "4Rs" waste reduction hierarchy should be followed
13. Development of regulations under the Waste Reduction Act should include active consultations
14. Waste diversion targets critical to measuring performance & outcomes
15. Standards should include accessibility & promotion & education requirements
16. Regulation 101/94 should be reviewed as part of process

RPWCO/AMO/MWA Response to Bill 91/Strategy

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### For more information:

maria@kellenv.com

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### Reflections on Steward Perspectives on Bill 91

Glenda Gies  
Glenda Gies & Associates Inc.

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### Presentation Overview

- Where are we & how did we get here?
- Why do stewards matter?
- Overview of steward sector
- Reflections on steward perspectives
- Is there a way forward?

### How Did We Get Here?

- Ancient history
  - MOE & stewards contributed funding to establish municipal recycling programs in 1980s/early 1990s
  - MOE implemented O. Reg 101 mandating municipal collection of Blue Box Waste in 1994
  - MOE then stopped funding municipal Blue Box programs
- Leading to
  - municipal lobbying for reinstatement of funding
  - Waste Diversion Act with 50% funding of municipal costs
  - Minister's request for Blue Box program cost containment

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### Blue Box Program Cost Containment Plan

- Drafted co-operatively by municipal & steward representatives through MIPC
- Proposed to fund municipalities based on best practice costs by 2008
- Approved by Minister in July 2005
- Since 2005, concerted effort to define best practices, compile relevant operating data, develop methodology to fund municipalities based on best practices
- Notwithstanding these efforts, payments from stewards to municipalities are increasingly a source of debate, dispute, acrimony, frustration, ill-will

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### Where Are We Now?

- With the result that
  - Stewards & municipalities are at odds
    - when they should be effective partners to improve services & increase diversion
  - Municipal frustration is leading to requests for government intervention to set steward payments
  - Steward frustration is leading to requests to move away from steward taxation – payment without ability to manage costs – to full producer responsibility

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### Where Can We Go From Here?

- How to bridge this gap in a way that delivers
  - Good service to residents
  - Increased diversion
  - Producer responsibility benefits from 'closing the loop'
  - Costs accepted as best value by those responsible for paying them

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### Why Producer Responsibility?

- Producers have unique ability to effect change through the entire life-cycle of a product or package
  - From design to utilization as secondary resources
- Producer responsibility represents the only approach that can address fundamental problem of 'waste'
  - Waste is symptom of an unsustainable society
  - Municipalities only able to manage at end-of-pipe
  - Producers can
    - address product/packaging design
    - close the loop by utilizing collected materials as input to their manufacturing processes

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### Overview of Steward Sector (1)

- Steward sector includes
  - manufacturers that
    - act only as manufacturers
    - operate their own retail system (e.g. Sony)
  - retailers that
    - act only as retailers
    - manufacture their own private label brands (e.g. Loblaw)

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### Overview of Steward Sector (2)

- Challenges to stewards acting as cohesive unit
  - dynamic tension between manufacturers & retailers
    - some common interests but also distinct self-interests
    - manufacturers need retailers to get their products to consumers but must negotiate access e.g. shelf space, visibility, etc.
    - retailers use their position as leverage to negotiate price, transport packaging requirements etc.

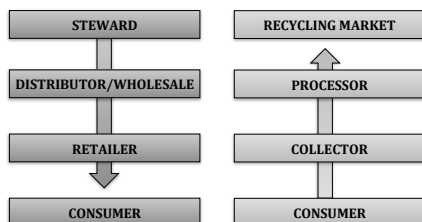
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### Overview of Steward Sector (3)

- Challenges to stewards acting as cohesive unit (cont'd)
  - some stewards have embraced producer responsibility
    - seeking to integrate sustainability as a core business activity
    - recognize customers' loyalty is affected by whether products/packaging are accepted in recycling collection systems
  - other stewards resist taking on new responsibility/costs
    - multitude of arguments – responsibility ends at sale to consumers; can't affect what consumers do; sector can't survive new costs; level playing field not possible; special status
  - those embracing EPR are working to bring on resisters but it is a work-in-progress

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### Those Embracing Producer Responsibility See Alignment of Supply Chains



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### Steward Sector Views on Bill 91

- General alignment on some issues
  - differing reactions on other issues
- Following comments focus on areas of general alignment related to
  - responsibilities of stewards
  - rights of municipalities
  - alternate approach to bridging the gap between stewards & municipalities

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### Responsibilities of Producers (1)

- Overview
  - Bill 91 is built on assumption that local governments are responsible for designing, delivering and managing recycling services
  - producer responsibility is defined as payment for producer materials in municipal systems
  - producers view this as taxation, not producer responsibility
- Contrary to stated purpose of Bill 91
  - Section 39: “The purpose of this part is to make producers responsible for waste derived from their products”

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### Responsibilities of Producers (2)

- Producers think ‘producer responsibility’ means
  - responsibility for collecting & recycling products & packaging at end-of-life
  - ability to decide how to fulfill this responsibility
    - legislation should set performance outcomes, not specify how
  - choosing partners, negotiating mutually acceptable terms
    - voluntary partnership - not arranged marriage
  - accountability for accessibility & diversion performance
  - financial responsibility for delivering outcomes

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### Responsibilities of Producers (3)

- 42: Requires producers to meet waste reduction & service standards for a designated material
  - standards to be defined by regulation
  - reinforces producers’ view that payments to municipalities are form of taxation, not producer responsibility
- 42(3): Enables producers to meet requirement by managing any waste in the same class as the designated waste
  - concerns will contribute to cherry picking
- 41(1), 32(2): Requires producers & intermediaries to register with Authority
  - concerns over Authority (current WDO transitioned) having commercially sensitive steward data

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### Responsibilities of Producers (4)

- 42(1)(1): Both producers & intermediaries accountable for meeting standards
  - concerns will lead to finger pointing, disputes, litigation
  - under IPR, producers should have sole responsibility
- 43: Sets out requirements for intermediary agreements
  - should be left to parties to establish commercial arrangements

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### Rights of Municipalities (1)

- Overview
  - under Bill 91, producer responsibility is being interpreted & implemented as responsibility to municipalities
  - form of taxation rather than producer responsibility
  - should be interpreted & applied as producer responsibility for end-of-life management

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### Rights of Municipalities (2)

- Part VII: Because of O. Reg 101, compensation formula determined through Cabinet Regulation
  - repeal/changes to O. Reg 101 could affect compensation formula mechanism without changes to Bill 91
- 32(2), 41(3): Provides municipalities with right to register to establish its right for compensation for collection costs
  - concerns that municipalities could register to establish rights if ICI printed paper & packaging designated

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### Alternate Approach to Bridging the Gap (1)

- Built on recognizing benefits of
  - engaging producers in end-of-life management through full producer responsibility
    - accountable for accessibility to collection services
    - accountable for diverting Blue Box materials from disposal
    - with clear consequences for failure
  - municipal role in delivering collection services
    - to maintain relationship with residents
    - to minimize disruption for residents
    - to allow integrated co-collection systems

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### Alternate Approach to Bridging the Gap (2)

- Built on
  - workable go-forward method to set price for municipal collection services – some options e.g.
    - negotiate incentive payment using Datacall data
    - negotiate content of RFP to be used by municipalities to procure collection services with producers paying bid price
  - shifting responsibility for processing & marketing to producers
    - critical to link producers with reality of end-of-life management
    - will require negotiation with municipalities that own MRFs for producers to purchase, lease or contract for access to capacity
    - will shift commodity demand/price risk to producers

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### Is There a Way Forward?

- Major change management effort
- New roles for both producers & municipalities
  - more likely to be effective if mutually agreed, rather than dictated by third party
  - process likely to create anxiety & points of disagreement
- But benefits are worth the effort
  - linking producers to end-of-life challenges is part of a sustainable society
  - driving more diversion through stretch targets supported by real consequences of failure
  - producers & municipalities could become effective partners based on a common interest in providing good service to producers' customers/ municipalities' residents

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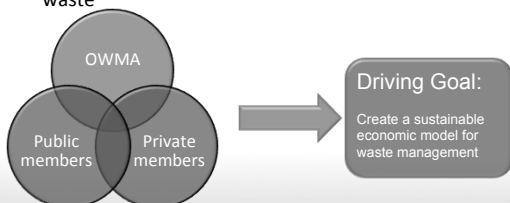
**Rob Cook**  
OWMA

Waste Reduction Act & Strategy:  
Assessment – Work in Progress



## Who We Are

- OWMA is non-profit sector trade association
- Represent over 300 private & public sector members
- Members manage roughly 85% of the province's waste



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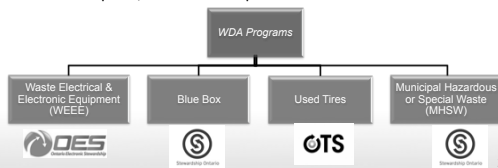
## Overview

- Current Framework
- Issues
- Purpose & EFW
- Individual Producer Responsibility (IPR)
- Waste Reduction Authority
- Ownership of Waste
- Waste Reduction Strategy
- The Politics of Bill 91

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## Current Framework

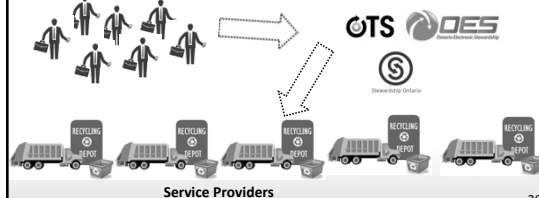
- Current framework is based on the Waste Diversion Act (WDA) & the 3Rs Regulations
- Regulation 101/94 require municipalities of 5,000+ to provide blue box & leaf & yard systems
- Regulations 102/94 - 104/94 require large IC&I operations to develop packaging audits & reduction plans; waste audits & reduction plans; & to source separate certain materials



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## Problems with WDA – Distorting Markets (1)

- WDA forces producers of certain waste materials into a collective agency (OTS, SO & OES) or purchasing monopoly
- Competition Act doesn't apply – regulated conduct defense
- Causes problems in the marketplace for all stakeholders



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## Problems with WDA – Distorting Markets (2)

- Producers:
  - Producers forced to join the collective even if they have a separate program
  - Focus on process rather than outcomes
  - Rules dictated in collective
  - Little ability for flexibility or innovation
  - Onerous to leave collective

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## Problems with WDA – Distorting Markets (3)

- Consumers:
  - Provides the ability to set single fee & pass directly onto consumers
  - Eco-fee externalizes costs & inhibits innovation (product & process)
  - Considered a regulated service - creates an HST issue (\$22 million annually)
- Service Providers & Municipalities:
  - Move from 100s of purchasers to one
  - One organization has almost complete control & dictate the rules & relationships

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### OWMA Process

- Membership engagement
- Membership surveys
- Committee reviews & assessments
- Legal opinions – one plus three peer reviews
- Engaged dialogue with stakeholders
- Advocacy with political parties & government

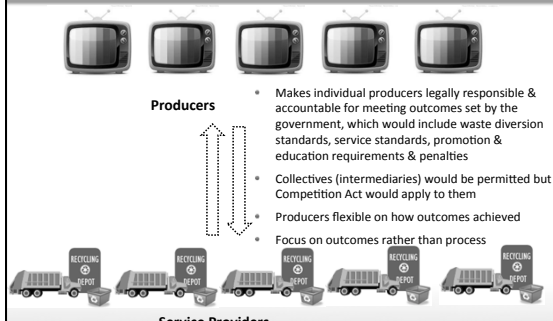
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### Purpose of the Act & EFW

- “Promote reduction, reuse & recycling of waste derived from products”
- The Strategy document further states “energy from waste for designated materials will not be allowed to meet waste reduction standards”
- Approach is permissive towards EFW – regulation possibilities

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### Individual Producer Responsibility



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### IPR - Potential Issues

- Role of municipalities
  - Is it EPR? – principle argument
  - Reasonable Cost provision is broad & far-reaching - will impact the competitive marketplace especially for IC&I materials
  - May also lead to a continuation of a single collective structure
  - Removes flexibility for stewards - continuation of IFO-like structure
  - Discussion on ‘boxing’ the provision – existing programs, curbside & depot, blue box only etc.
  - Concern with the inclusion of the concept of intermediaries could lead to continuation of IFO-like structures
  - Eliminate Intermediaries from the Bill

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### Waste Reduction Authority - Potential Issues

- Support the concept & provisions for a DAA – WRA
- Budget constraints & FTE limits makes it impossible for government to oversee adequately
- Authority given much greater powers & will be important they have the proper accountability mechanisms in place to avoid ‘empire building’
- Concern with mandate creep & cost containment
- The capabilities of Waste Diversion Ontario need to be properly assessed before transitioning it under this new structure
- Should be oversight & enforcement function over the recycling sector for recycling standards (designated materials)

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### Ownership of Waste – Potential Issues

- Ownership of waste framework challenged by producers
- Producers seeking ownership of waste & thereby re-asserting full control over the waste & recycling marketplace
- OWMA supports maintaining current regulatory framework
- Core issue is ‘control’ – who controls the system, sets pricing, directs movement of materials etc.
- The ‘Marketplace’

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### Waste Reduction Strategy - Potential Issues

- Transition of programs
  - Uncertainty in lengthy transition periods. Timelines will be set out in regulations & no sunset clause for the Waste Diversion Act
  - Inclusive pricing will essentially work as a manufacturing tax until programs are moved over to the IPR model
  - HST issue continues until programs transitioned
  - What happens to current IFOs & ISPs in the meantime
- Schedule of additional designations
  - Does the current schedule make sense given current infrastructure, end markets, & economic/environmental impacts?
- Disposal Bans
  - How do you ensure proper application to ensure leakage issue addressed & implementation manageable?

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### Politics of Bill 91

- Economy & Jobs Bill for government
- NDP support
- PC Opposition
- Stakeholder – support & opposing strategies

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### Thank You

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### Questions?



### Closing Remarks

Mike Birett  
CIF



### See You at the Spring 2014 ORW!

*Thank you to ORW  
speakers, attendees  
& support team*

