

CIF

CONTINUOUS IMPROVEMENT FUND



2013/2014 CIF Update

Published September 2015

Executive Summary

The Continuous Improvement Fund (CIF) represents a joint undertaking between the Association of Municipalities of Ontario (AMO), the City of Toronto and Stewardship Ontario, operating as a committee of Waste Diversion Ontario (WDO), to oversee the investment of a portion of municipal Blue Box funding to improve the efficiency and effectiveness of Ontario's municipal Blue Box system.

The CIF fulfills its mandate through the provision of funding, technical support and training for municipalities. CIF staff actively engage stakeholders in the identification and development of best practices and technological and market based solutions to challenges associated with the operation of Ontario's Blue Box system. The objectives of the fund were initially established in the CIF's Strategic Plan. Subsequent direction from the program partners, as approved by the Municipal Industry Program Committee (MIPC) and the WDO Board, is reflected in the CIF's annual budget and Operations Plan.

The CIF operates under a Memorandum of Understanding (MOU) originally signed between the fund partners in 2008 that covered a three year timeframe ending in 2011. The current MOU has been amended twice to extend the fund's operations to the end of 2015.

This report builds on the program successes, previously summarized in the *2008 – 2013 CIF Review*, by reporting on program investments in 2013 and 2014. A future update will report on projects considered under the 2015 Request for Expressions of Interest (REOI).

Despite decreased funding levels, CIF funding remains a catalyst of change, recently shifting focus to concentrate on implementation of Best Practices, outreach and education and the continuing development of the Centre of Excellence to examine and promote continuous systemic improvements. CIF's financial and technical support continues to receive praise abroad and from municipal partners, steward partners and the Printed Paper and Packaging (PPP) recycling industry as a made-in-Ontario innovation which promotes system development while seeking to balance often competing pressures to reduce costs and recycle more with increasingly complex materials.

CIF funding has leveraged a combined investment of over \$117 M into Ontario's Blue Box program across 582 projects. This investment has resulted in the diversion of new materials, development of new programs, construction of new facilities and delivered real cost savings.

Recent successes, in 2013 and 2014, based on the CIF's primary key KPI's include:

- 28 new projects increased annual savings projections by \$2.5 M
- ROI remains below 5 years on cost reduction related projects
- Reductions of processing residuals and Blue Box materials in the waste stream increasing capture by 13,000 tonnes/yr
- Improved Best Practice compliance and outreach focusing on new Best Practice Objectives
- Promotion of regional optimization opportunities throughout Ontario including initiatives in six different areas
- Optimization of Provincial infrastructure through installation of 12 new or improved transfer and compactor systems
- Improvements in glass processing

In addition to saving \$2.5 M in annual costs & the addition of nearly 13,000 tonnes of material to the system, many of the recent Best Practices projects started in 2013 & 2014 will result in significant GHG reductions through improved transportation efficiencies and program modifications by allowing the use of more local MRF facilities.

CIF project funding, training and technical support for municipalities has improved overall compliance with the WDO prescribed Best Practices, expanded program accessibility and increased diversion of new and complex materials. In 2013 and 2014, CIF investments promoted waste shed optimization in five areas of the province; provided funds to test new technologies to dramatically improve fibre and glass quality, made investments to promote Best Practices in the operation of small municipal depots and, through the Centre of Excellence initiative, provided educational and technical resources to municipal staff delivering the Blue Box program, province wide. These investments have resulted in improved competition, greater recovery efficiencies and reduced costs.

#821.3.2 - Niagara Region installed a glass cleanup system which improved the quality of their MBG, allowing its use as a feedstock for manufacture of sand blasting material and thereby eliminating glass market costs, avoiding the need to export MBG, saved \$34.5 K annually, while benefitting a for-profit Niagara based Canadian sandblasting material manufacturing operation.

CIF's work with strategic partners continues to focus on development of domestic supply chains for many of the problematic materials currently available in the printed paper and packaging

stream. Recent efforts have focused on improving the quality of mixed broken glass (MBG), newsprint (ONP) and the handling of plastic film contamination.

The CIF continues to build on its extensive knowledge base of Blue Box diversion initiatives, providing technical support and funding to over 70% of municipalities with Blue Box programs in 2013 and 2014 through direct consultation, the CIF's Ontario Recyclers Workshops and targeted local consultations at six locations across Ontario. Its support efforts span the development of program standards and Best Practices, identification and evaluation of new technologies and development and delivery of program-specific training.

CIF has made significant capital investments that have had a direct and positive impact on the long term effectiveness and efficiency of Ontario's Blue Box system. Enthusiastic municipal response to the 2015 REOI required the infusion of an additional \$3.6 M to address the 74 applications with a combined project value of over \$40 M. Using this funding, CIF will focus on strategic initiatives designed to support system rationalization, program harmonization and the continuing development of the Centre of Excellence to ensure the continued improvement of Ontario's Blue Box system to the benefit of municipalities and stewards alike

CIF's Current Goals

- Harmonization of the Blue Box program
- Increased focus on problematic materials
- System rationalization with interested municipalities
- Support for cost savings initiatives
- Improved training
- Provision of additional tools and resources
- Improved linkages between Best Practices Objectives & CIF activities

Background

Between 2008 and 2010, the CIF received \$44,393,817 from municipalities representing 20% of the annual steward payments under the Blue Box program for that period. In 2011, the CIF received \$9,013,449 or 10% of the municipal Blue Box funds. In 2012, the CIF received a flat rate of \$4,450,757 representing approximately 5% and in 2013, the CIF was provided with \$4,618,014 in additional funds and a mandate to continue operations for an additional three years. Following the arbitration in 2014, CIF received \$2,000,000 in direct funding. WDO set the 2015 interim CIF funding at \$2,000,000, from which an allocation of \$500,000 was provided to AMO to offset municipal costs in the 2015 mediation and Cost Containment Panel process.

- Municipal Benefits from CIF**
1. Financial aid with key capital investments
 2. Guidance to effective adoption of Best Practices
 3. Training & program management tools
 4. Centre of Excellence - dedicated expert resources
 5. Support for northern & rural municipalities
 6. Assistance with contract procurement

In total, since 2008, the CIF has received approximately \$66M from municipalities and approved over \$48.4 M in funding to 582 projects across the Province with a total value of over \$117 M including municipal contributions. Because of the election year in 2014, funding requests fell off slightly, resulting in 37 applications submitted for a total project value of \$7.5 M, receiving a total of \$2.8 M in CIF funding. In 2015, the second year of municipal councils' mandates, the reverse happened. CIF received 74 REOI applications, with a total project value of approximately \$40 M, requesting a total of \$17.2 M in funding. To address this shortfall, CIF Committee directed allocation of an additional \$3.6 M, increasing the REOI budget to just over \$9 M and the deferral of consideration of two major projects until they were deemed ready to proceed.

#861 – Niagara Region will install two large Titech sorters to realize increased revenues from an improved ONP #8 product, projecting annual net cost savings of \$672 K with an ROI period of under two years.

Without a clear direction beyond year end 2015, CIF's remaining funds have been committed for use for project support, the continuing development of the Centre of Excellence and Fund administration over the next two years. The current CIF Operations Plan provides a course of

action for doing so while retaining sufficient funds to maintain Fund administration until the final projects are closed out.

Prior to the 2015 REOI release, CIF had 126 open projects with a total funding allocation of approximately \$18 M and had closed 450 projects with a total funding allocation of \$27.3 M. The 74 applications under consideration in the 2015 REOI still require approval to receive funding.

Projects by Category

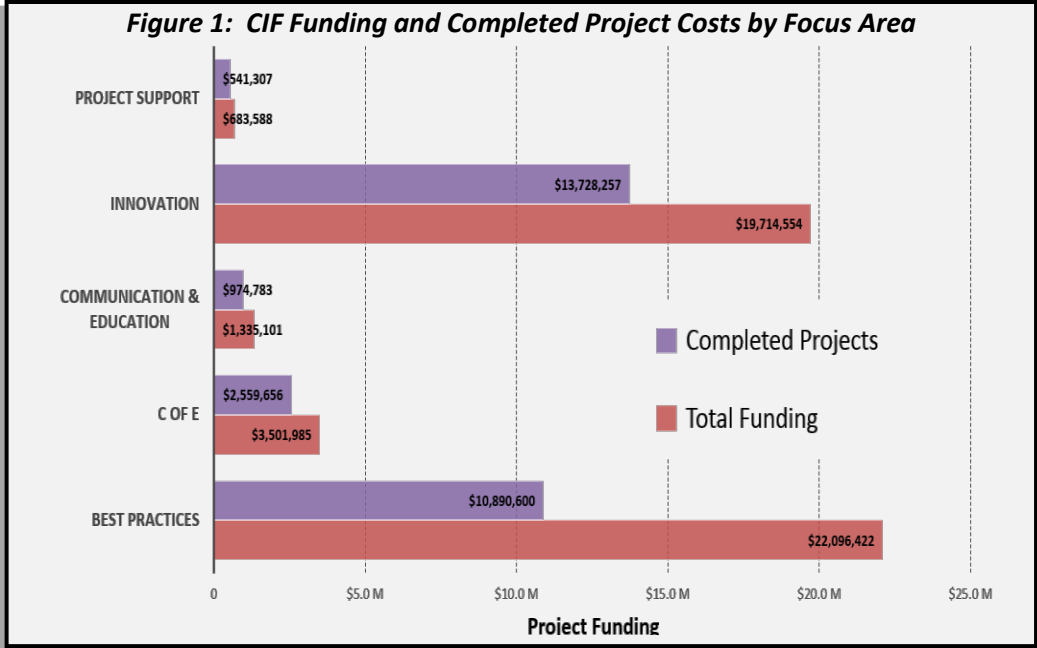
Ontario municipalities operate one of the most successful printed paper and packaging diversion programs in the world from both a diversion and a cost efficiency perspective. The CIF represents a unique and effective public/private sector partnership approach to continuous improvement of this system. Much of CIF's reputation as an effective tool to promote Best Practices has come from a balanced consideration of project applications involving input from Stewardship Ontario, AMO and the City of Toronto.

#805.3 – Central Frontenac purchased 18 top loading bins to place at two depots and one transfer station thereby reducing annual loading and transfer costs by \$21 K by allowing them to now access a closer MRF in Kingston.

CIF projects originally fell into one of five focus areas:

- Project Support
- Emerging Technologies
- Innovation
- Communication & Education
- Best Practices

Starting in 2012, many of the Innovation and Emerging Technology projects began to be considered under the Best Practices focus and a new Centre of Excellence was created to encourage continuous system improvement and promote excellent practices through training, outreach, a website and Ontario Recyclers Workshops. Figure 1 shows a breakdown of funding allocation to these foci since the inception of the CIF.



In 2013 and 2014, a total of 61 best practices projects with a total value of \$28.1 M had received approval.

Section 2.4 of the Datacall includes eight Best Practices Objectives developed jointly by SO, AMO, the City of Toronto and WDO and approved by MIPC. The current Best Practices Objectives, attached as Appendix 1, examine municipal practices thematically as follows:

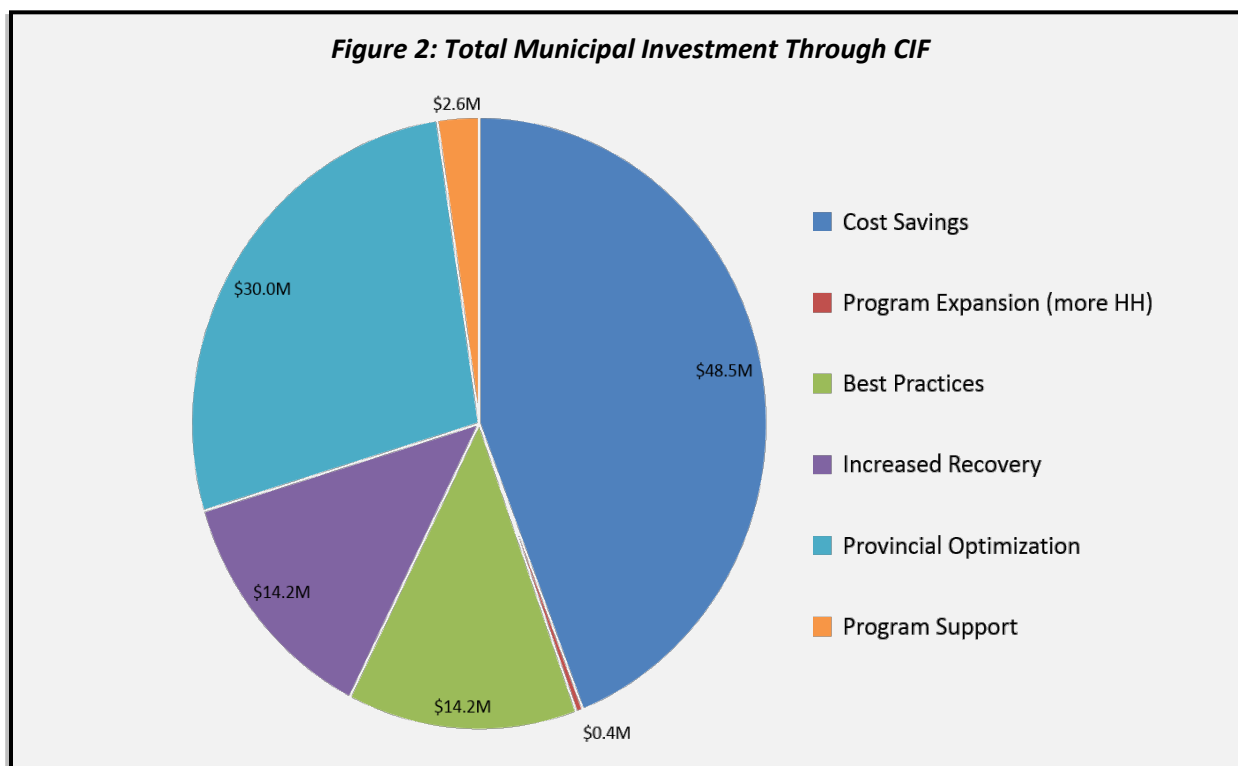
#816.3 - Hamilton installed a glass breaking and cleanup system, improving the quality of the sorted MBG, allowing access to local markets, reducing transportation costs, with projected annual savings of \$71 K and a 4.3 year ROI.

- Objective 1.* Effective forward looking planning & analysis of past performance (13.3%);
- Objective 2.* Efficiency assessments to monitor & improve operations (13.3%);
- Objective 3.* Regional optimization progress (6.7%);
- Objective 4.* Management by Results scoring (33%);
- Objective 5.* Training initiatives (13.3%);
- Objective 6.* P&E Planning & Initiatives (13.3%)
- Objective 7.* Effective General Policy development & delivery (6.7%)

Best Practice scores affect a program's funding level, representing 15% of available funds in the Municipal Funding Allocation Model (MFAM).

Measuring Success

In considering the efficacy of the CIF, it is important to recognize that many of the CIF activities are not directed at cost reduction. Funding for activities such as development of Communications Plans and Recycling Plans is intended to assist municipalities to achieve compliance with WDO prescribed Best Practices rather than cost savings. These activities represent over 15% of the funds invested to date and while they may lead to long term improvements in program management, their immediate impact on program effectiveness and efficiency cannot be measured. Similarly, over 31% of CIF funds have, to date, been directed to program expansion efforts, which result in increased diversion but understandably have expected increases in total program costs. Figure 2 illustrates the breakdown of municipal investments through CIF in the period from 2008 to just prior to the release of the 2015 REOI.



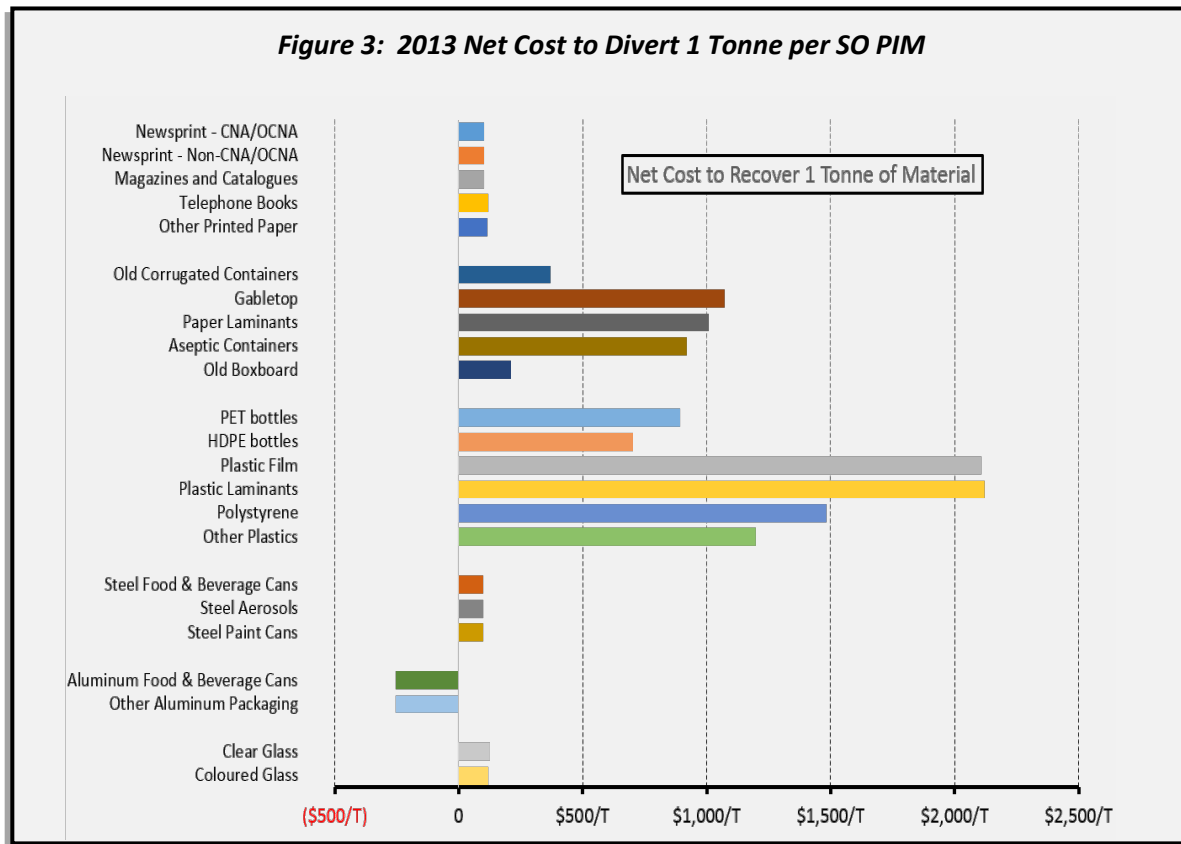
Projects can aim to achieve one or more of the following:

1. Reduce program or system costs;
2. Increase overall or material specific diversion;
3. Promote system Best Practices;
4. Develop and explore new ways of doing business; or
5. Provide educational or communications opportunities.

Obviously, projects that seek to reduce program or system costs should demonstrate measurable savings as that is their stated objective. On the other hand, projects that seek to increase diversion, unless they are aimed at increasing diversion of aluminum, will tend to increase costs. For projects proposing to increase the diversion of lightweight paper and plastic containers, this cost increase can be dramatic as shown in Figure 3.

#607.8 - Bancroft & neighbouring communities of Carlo/Mayo, Faraday, Hastings East, Hastings Highlands, Limerick, Tudor Cashel and Wollaston have proposed a local regionalization initiative, consolidating their depot and curbside collection programs, shifting to a front end bin and/or compactor system at a central transfer station, potentially saving \$50 K annually.

Figure 3: 2013 Net Cost to Divert 1 Tonne per SO PIM



Less obviously, programs that promote Best Practices or develop and explore new ways of doing business may result in changes that either reduce system costs or increase diversion, or some combination of both. Evaluation of the success of these endeavours can be complex and may not be evident in the short term.

Improved Best Practices Compliance

Mindful of the overall goal of improving Best Practices compliance, both at a provincial level and more granularly at an individual program level, CIF staff, Project Committee and the CIF Committee have given preference to projects that produce these results.

#832.3 – Sequin Township, in southern Parry Sound District, installed remote operated and monitored solar powered compactors and diesel generator powered units at four remote locations, reducing loading and transportation costs by \$100,000 annually with a 4.5 year Return on Investment period.

Both the CIF and its predecessor, the Effectiveness and Efficiency Fund (E&E) were established to promote Best Practices in increasing recovery and reducing Blue Box system costs. CIF is funded by municipalities through the allocation of a portion of the funds paid by stewards in the annual Stewards Obligation as required by the Waste Diversion

Act. Each year, representatives of municipalities and stewards have agreed on what portion of that year's steward obligation to municipalities will be paid by municipalities into the CIF. The CIF Committee, comprised of members from AMO/Toronto, Stewardship Ontario with observers from WDO, determine funding allocations and priorities for projects based on the recommendations of the CIF Project Committee that is comprised of members from AMO/Toronto and Stewardship Ontario. Recently, preference has been given to projects that demonstrate Best Practices by:

- Promoting regionalization of Blue Box infrastructure;
- Piloting new technologies to produce cleaner end products (e.g. glass clean-up);
- Improving capture of problematic materials; and
- Reduce costs at a program level through increased efficiency.

As a direct result, Best Practices compliance has steadily increased, requiring a reworking of the original Best Practices questions, creating new Best Practices Objectives with a tougher scoring scheme. These new questions additionally introduced an aspect of competition by incorporating Management by Results scoring directly into the Best Practices score. Table 1 illustrates the steady improvement in Best Practices scores, demonstrating effective leveraging of CIF funds by municipalities.

#827.2 – Sioux Lookout, in NW Ontario, responding to lack of competitive local bids for collection services, proposed purchase of a recycling truck to collect and haul Blue Box materials to Dryden, saving them a potential \$29 K annually compared to the bid prices. Staff leveraged the funding approval, re-negotiating a considerably more competitive local collection price without the need for any CIF funds.

BP Scores have steadily increased from inception to 2012.
 Difficulty of questions increased in 2013.

Table 1: Best Practice Scores by Year

Group	2008	2009	2010	2011	2012	2013
Group 1	83%	86%	91%	92%	92%	81%
Group 2	65%	78%	95%	92%	96%	80%
Group 3	47%	57%	69%	77%	71%	71%
Group 4	55%	61%	84%	80%	84%	76%
Group 5	27%	37%	60%	60%	48%	56%
Group 6	15%	21%	37%	45%	45%	42%
Group 7	26%	32%	51%	55%	60%	56%
Group 8	9%	9%	20%	31%	33%	35%
Group 9	12%	23%	42%	59%	48%	49%
All	68%	74%	86%	86%	87%	77%

Conclusions

The CIF has assisted over 160 municipalities and invested in projects valued at over \$117 M to drive dramatic improvement of the Blue Box program in Ontario. The Fund, in cooperation with municipalities and program stakeholders, has reduced system operating costs, optimized the related infrastructure, improved diversion of priority packaging, facilitated the diversion of problematic materials, and improved compliance with WDO prescribed Best Practices. The CIF represents a dramatic public/private sector success story that continues to keep Ontario's Blue Box program as one of the best in the world.

Appendix 1

2014 Best Practice Objectives

Township of Podunckt 2014 Blue Box Best Practices Report	WDO Program:	999
	WDO Group:	7

Objective #1 – Program Performance Projections and Analysis - (13.33%)

	2012	2013	2014 Projected	2014 Actual	2015 Projection
Gross Collection	<from DB>	<from DB>	<from DB>		/
Gross Depot/Tx	<from DB>	<from DB>	<from DB>		/
Gross Processing	<from DB>	<from DB>	<from DB>		/
Revenue¹	<from DB>	<from DB>	<from DB>		/
Marketed Tonnes	<from DB>	<from DB>	<from DB>		/
Net Cost	<from DB>	<from DB>	<from DB>		/
Households	<from DB>	<from DB>	<from DB>		/
Net Cost/Tonne	<calculated>	<calculated>	<calculated>	<calculated>	<calculated>
Net Cost/HH	<calculated>	<calculated>	<calculated>	<calculated>	<calculated>
kg/HH Recovered	<calculated>	<calculated>	<calculated>	<calculated>	<calculated>
Analysis of 2014 Performance	<i>2013 residential growth was below projections but per capita recovery exceeded projection because of effective P&E campaigns in the spring and fall of 2013. Costs increased below CPI.</i>				
Rationale for 2015 Projection	<i>New contract will reduce collection costs, resulting in decreases in net cost/tonne and net cost/HH. Recovery increases should match 2013 with continued P&E efforts.</i>				

¹ It is recognized that not all programs report revenues. Please provide this information if available.

Objective #2 – Efficiency Assessments - (13.33%)

Formal efficiency assessments are a good way to measure the overall success of a program. Does your municipality perform efficiency assessments on a regular basis? Please complete the following chart:

Type of assessment	Year last completed	Completed by internal staff	Completed by a third party
Collection	2014	<yes/no/n.a.>	<yes/no/n.a.>
Depot	2012	<yes/no/n.a.>	<yes/no/n.a.>
Transfer Station	never	<yes/no/n.a.>	<yes/no/n.a.>
Processing	2013	<yes/no/n.a.>	<yes/no/n.a.>
Summary of Most Recent Assessment	<i>Collection audit identified ...</i>		
Action Taken to Implement Assessment Recommendations	<i>In response to recommendations, changes were made to some routes to optimize ...</i>		

Objective #3 – Regional Optimization Initiatives (6.67%)

Have you attended AMO/CIF Consultation Sessions?

<which ones? discussion topics?>

Have you participated in or initiated forums to discuss options for regional optimization?

<details? who with?>

Have you presented a report to your Council on regional optimization options?

<when? summary>

Have you implemented any projects based on your regional optimization plan?

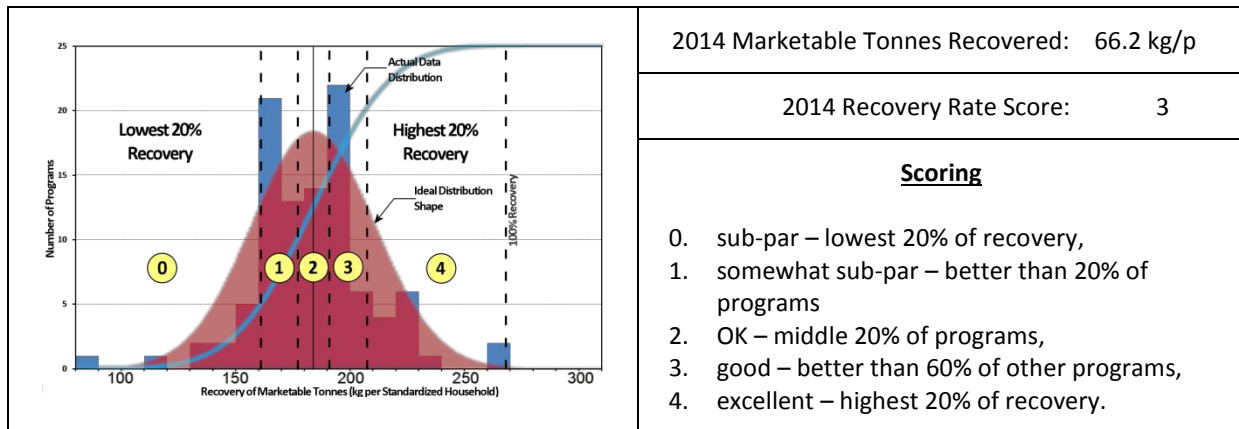
<details?>

Objective #4 – Program Performance Outcomes (33.33%)

1. Marketable material recovery rate comparison to peers - (16.67%)

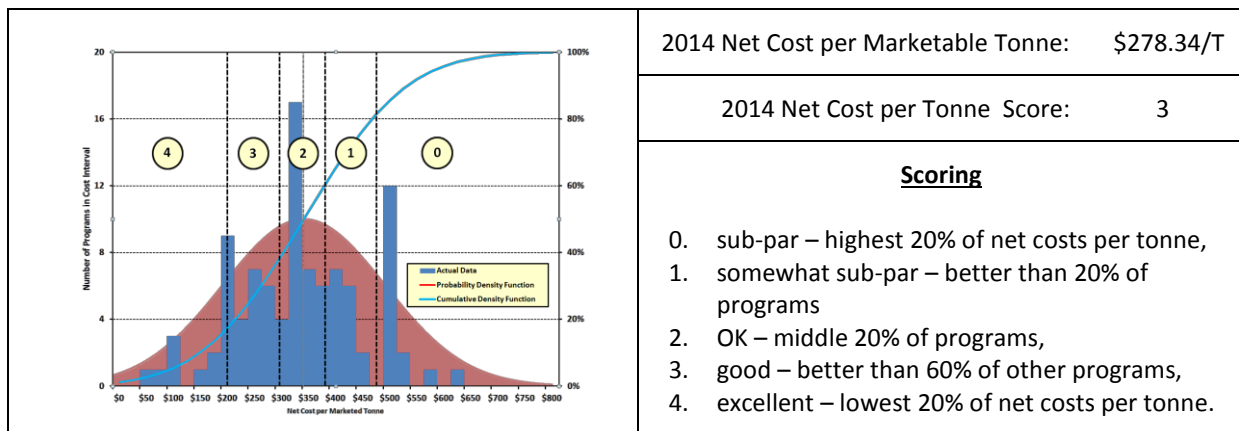
A program should optimize its operations so that it can recover as much material per household as possible. A comparison will be done of all programs for recovery per person and points will be awarded as follows:

Recovery per person presents a better metric for comparison between programs recovered tonnes ÷ generated tonnes that relies on a derivative generation number.



2. Financial comparison to peers - (16.67%)

A program should optimize its operations so that it is achieving a reasonable net cost per tonne when compared to other programs in its municipal grouping. A comparison will be done of like programs within a program group and points will be awarded as follows:



Objective #5 – Training of key program staff in core competencies (13.33%)

<i>Continuing Education Units (CEU)</i>	
<i>0 to 5,000 population</i>	<i>1</i>
<i>5,000 to 25,000</i>	<i>2</i>
<i>25,000 to 100,000</i>	<i>3</i>
<i>100,000 to 500,000</i>	<i>4</i>
<i>over 500,000</i>	<i>5</i>

Please complete the chart below denoting the number of staff and total days attended for 2014:

Course or Workshop	Number of Staff	CEU Assigned	Total CEU
Ontario Recycler Workshop		<i>0.5</i>	<i>0</i>
CIF Webinar on Optimization Plan	<i>3</i>	<i>0.5</i>	<i>1.5</i>
CIF Contract Management Course		<i>1</i>	<i>0</i>
AMO Blue Box Consultation Workshops	<i>1</i>	<i>1</i>	<i>1</i>
CIF Materials Marketing Course		<i>1</i>	<i>0</i>
MWA Spring Workshop	<i>4</i>	<i>0.5</i>	<i>2</i>
MWA Fall Workshop		<i>0.5</i>	<i>0</i>
Other: <i>box to insert text</i>		<i><evaluator></i>	<i><evaluator></i> <i>></i>
Other: <i>box to insert text</i>		<i><evaluator></i>	<i><evaluator></i> <i>></i>

Your 2014 CEU requirement was 7. You reported 5 CEU, resulting in a score of 71%.

Objective #6 – Promotion and Education achievements and initiatives (13.33%)

Name and Date of P&E Planning Document for reporting year (2014)	<i>Podunckt Township Blue Box Promotion and Education Plan, March 2011.</i>
Highlights of P&E Initiatives for reporting year (2014)	<i>Fridge magnets and Blue Box stickers detailing materials</i>
Key P&E Initiatives Planned for 2015	<i>Promotion of Plastics</i>

Objective #7 – Development of effective policies that promote waste diversion (6.67%)

a) Does your program provide Blue Boxes (or the equivalent) or replacement Blue Boxes (or the equivalent) free of charge, or below cost?

b) Does your program employ any of the following policies or practices?

- i) Increased recycling box size to 22 gallon or larger
- ii) Set out limits for garbage with 2 or less bags per week
- iii) Pay as you throw (PAYT) or tags for garbage
- iv) Garbage collection frequency less than recycling collection frequency
- v) Garbage collection frequency less than once per week
- vi) Blue Box recycling incentive programs that rewards increased participation
- vii) Requirement for clear garbage bags
- viii) Actively enforced 'tag and leave' program for unacceptable Blue Box set outs
- ix) Supervised recycling bins at depots