

# **CIF**

**CONTINUOUS  
IMPROVEMENT FUND**



**2008 to 2013 Review**

# Executive Summary

The Continuous Improvement Fund (CIF) is a fund developed by the Association of Municipalities of Ontario (AMO), the City of Toronto, Stewardship Ontario and Waste Diversion Ontario (WDO). Its mandate is to improve the effectiveness and efficiency of Ontario's municipal Blue Box program.

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 MOU has been amended twice to extend the fund's operations to the end of 2016.

The fund began operations in late 2008 and as of the end of the first quarter of 2013 has distributed almost \$35 million in funding to 482 projects. This effort represents almost six times the number of projects delivered under the CIF's predecessor, the Effectiveness and Efficiency Fund, and 1.5 times the total investment over the same period of time.

CIF funding is a catalyst of change. Its financial and technical support allow municipalities to achieve more than they could acting in isolation, creating and demonstrating successes that promote best practices and setting the stage for consistent and rapid improvements to the Blue Box system in Ontario. CIF funding has leveraged a combined investment of almost \$85 million into Ontario's Blue Box program. This investment has resulted in the diversion of new materials, development of new programs, construction of new facilities and delivered real cost savings.

Selected successes based on the CIF's primary key KPI's include:

- Projected \$11.3 million in annual savings
- ROI of 4.3 years on cost reduction related projects
- Over 10,000 tonnes of plastics added
- Best Practise compliance increase of 27%
- Improved service levels to over 1 million households
- 25 transfer and compactor systems installed
- 100,000 tonnes of new processing capacity
- Successful diversion of thermoform PET and 3-7 plastics

CIF project funding, training and technical support for municipalities has more than doubled municipal compliance with the WDO prescribed best practices, expanded program accessibility and increased diversion of new material. Through investments in new infrastructure, the CIF has added additional single and two stream processing capacity into the market resulting in improved competition and lower processing prices.

Through the development of strategic partnerships with program stakeholders, the CIF has established and continues to develop stable, domestic supply chains for many of the problematic materials currently available in the printed paper and packaging stream. These joint efforts have focused on key issues such as thermoform PET, 3-7 plastics, plastic film and expanded polystyrene, collectively representing over 12% of the waste stream.

The CIF has built an extensive knowledge base on Blue Box diversions and provided technical support and funding to over 70% of municipalities with Blue Box programs in 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. The CIF's 2013 Operating Plan creates a suite of new funding opportunities with a combined value of over \$12 million. Using this funding, CIF will focus on strategic initiatives designed to support system rationalization, program harmonization and the development of a Centre of Excellence to ensure the continued improvement of Ontario's Blue Box system to the benefit of municipalities and stewards alike.

# 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.

In total, the CIF has received approximately \$62.5 million from municipalities and provided over \$35 million in funding to 482 projects across the Province. Twelve million has been allocated to fund projects in 2013. An additional \$8 million has been budgeted to fund projects in 2014 and 2015 with the balance being used for project support, the development of a Centre of Excellence and office administration over the next three years. The WDO Board has stipulated that the CIF must allocate all funding by the end of June 2015 and 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.

The CIF began operations in late 2008. During the first three years of operation, the CIF successfully engaged with municipalities across Ontario on a broad range of projects and activities. By mid-year 2011, applications from municipalities for best practice projects exceeded available CIF funding. With the subsequent reduction in funding levels and the directive from MIPC to set aside \$10 million to act on the results of MIPC's Study of the Optimization of Blue Box Material Processing in Ontario (Study), the CIF was obliged to close the Fund to new applications, reject all non-infrastructure related applications and put the remaining infrastructure related projects on hold pending the outcome of the Study.

The MIPC Study was completed in the summer of 2012 and after extensive consultation with municipalities and its partners; the Fund re-opened to new applications in the spring of 2013. The 2013 budget will invest \$12 million into the system and reflects a balanced approach to funding voluntary action in support of the MIPC Study outcomes while simultaneously supporting other cost reduction and system optimization initiatives. The budget also provides support for the development of a Centre of Excellence.

# Principles of Engagement

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. The success of the CIF has, to date, been premised on three key principles of engagement.

## *Leadership*

The CIF is ideally positioned to respond to issues affecting the operation of Ontario’s Blue Box system. Over the past four years, the Fund has played a central role in working with program stakeholders to develop new technologies, stable markets and supply chains for problematic materials such as 3-7 plastic, thermoform PET, film packaging and expanded polystyrene. The Fund has identified better practices associated with materials compaction and transfer, contract management and multi-residential recycling. It has fostered and coordinated multi-municipal partnerships across Ontario. The CIF has also undertaken fundamental research to guide systemic decision making and provided support to the WDO and program stakeholders on contentious issues such as the CNA/OCNA in-kind contribution.

***The CIF’s 2013 Goals***

- 1. Harmonization of the Blue Box program*
- 2. Increased focus on problematic materials*
- 3. System rationalization with interested municipalities*
- 4. Support for cost savings initiatives*
- 5. Improved training*
- 6. Provision of additional tools and resources*
- 7. Improved linkages between datacall requirements and CIF activities*



## Guidance

The CIF has positively influenced the design and development of municipal Blue Box initiatives and programs. Over 86% of jurisdictions participating in the Blue Box program are small or largely rural municipalities. In many instances, staff operating these local programs are clerks or public works employees without formal waste management expertise or the resources needed to optimize their program. The CIF has provided guidance and direct financial and technical support to over 160 small municipalities, First Nations communities and municipal associations during the four years it has been in operation.

Perhaps of greater significance to direct project support has been the CIF's outreach efforts. With the involvement of CIF staff, approved projects are focused on quantitative results and the dissemination of those results for the use by other programs. The learnings and successes of these projects are showcased at CIF organized public events and built into learning tools for dissemination to other municipalities to encourage other municipalities to adopt best practices approaches and strive for even greater innovation.

### **Municipal Benefits**

- 1. Financial aid for capital investments*
- 2. Support for adoption of best practices*
- 3. Training and program management tools*
- 4. Access to dedicated expert resources*
- 5. Support for northern and rural municipalities*
- 6. Assistance with contract procurement*

## Excellence

The CIF provides needed expertise and support to municipalities in areas such as service procurement, contract management, operations management, promotion and education and financial forecasting and tracking. The CIF has been active in the development and delivery of municipal staff training, raising the level of core competency and developing a consistent knowledge level amongst program operators. To date, over 270 program operators have taken training developed through the CIF or its predecessor program. The CIF has increasingly become a recognized source of information related to waste management programs with inquiries coming from around the world.

# Continuous Improvement ...

## Continuous Success

As of March 31, 2013 the CIF has reviewed 658 applications and approved 482 projects representing a Fund total investment of over \$35 million. This financial commitment by the CIF has also leveraged an additional \$50 million in contributions from municipalities and stewards for a total investment of almost \$85 million into the system over the past four years. These projects highlight the commitment and important work that municipalities are undertaking to optimize the Provincial Blue Box system and implement best practices in their operations.

### *Measures of success differ*

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.

### *Municipalities invest in optimization*

Ontario currently enjoys the benefits of over 20 “hub and spoke” and other cooperative initiatives developed by municipalities since the outset of the blue box program. Despite these efforts there are still areas of the Province that lack sufficient infrastructure to drive competition. The CIF has been active in four elements of infrastructure optimization including:

- *Asset protection*
- *Upgrading regional processing hubs*
- *Testing new processing technologies*
- *Expanding transfer capabilities*

To date, the CIF has invested almost \$16 million into 64 projects focused on optimization of the Provincial Blue Box infrastructure. Municipalities have contributed an additional \$32 million to these initiatives. This joint effort includes construction of a new 75,000 MT MRF in London and 25 new or upgraded transfer systems to address gaps in the existing infrastructure. The result has been a projected reduction in system operating costs of over \$9 million/yr.

This investment by the CIF includes \$5.5 million in funding to upgrade 14 of the existing MRFs throughout the Province improving their efficiency with modern equipment and expand their ability to manage a broader range of steward packaging for a projected savings of over \$4.8 million/yr.

Meeting the challenge associated with processing an ever-changing stream of packaging requires constant upgrading of MRF sortation equipment. The CIF has invested over \$3 million into the investigation and evaluation of new technologies such as optical sorters, film separation, polystyrene densification and glass reprocessing equipment in an effort to minimize the cost implications and improve recovery of changing packaging in the system.

Development of efficient transfer capacity represents one of the greatest opportunities for improvement in the system. Packaging stewards have made great strides to 'light weight' packaging, however, with fuel costs continuing to escalate, municipalities are incurring higher costs to haul and process these lower density loads making their programs appear to be performing poorly from a financial perspective. In response, the CIF has invested almost \$6 million into compactor systems and upgrades at 25 transfer stations and depots across Ontario resulting in almost \$3 million in annual savings.

*In 2011, the CIF co-funded construction of the London MRF because municipalities in the area were paying processing premiums of in excess of 20% above market value due to a lack of local competition. The facility, alone, is expected to reduce system costs by over \$1 million annually.*

*Municipalities in the area are already seeing reduced processing costs and are now cooperating on collaborative initiatives such as joint promotion and education campaigns and harmonized program delivery.*

Recognizing the embedded value of the municipal processing infrastructure and the fact that 65% of it is operated by private contractors, the CIF has also proactively invested over \$30,000 in training and development of asset protection programs for municipal MRF owners.



## *Technology improves collection efficiency*

Curbside collection represents over half the total Blue Box system costs in Ontario. Recognizing that the majority of collection services are contracted out by municipalities, the CIF has taken a two-pronged approach to collection services optimization. This includes developing core competency amongst municipal staff managing collection contracts and the introduction of cost saving technology.

The CIF is improving contract management efforts through the provision of sample procurement tools and templates, support in the procurement of private sector services and formal contract management training. The CIF has allocated \$300,000 each year for three years for the development and delivery of new training programs to meet current needs such as contract management, procurement document development and performance evaluation.

Additionally, the CIF has provided over \$600,000 in direct funding to investigate potential cost saving technologies such as alternative fuel vehicles and RFID tag technology as well as facilitating conversion of four municipally owned fleets to automated cart collection for a projected savings of over \$1.5 million annually.

*In 2011 the CIF tested the efficacy of hydrogen injection systems on recycling collection vehicles and achieved fuel savings of over 7%. Extrapolated across Ontario's recycling fleet, the result represents a potential savings in fuel costs of over \$3 million annually.*

## *Program accessibility is enhanced*

Meeting the challenge of improving multi-residential recovery can offer significant returns in material recovery and cost control. The extent of the multi-residential sector is considerable, representing 24% of total households in the province and more than half of Toronto's households. CIF responded to this challenge in 2009 by developing a set of best practices for multi-residential programs. To date, the CIF has contributed almost \$2.8 million in funding to 39 multi-residential projects. Participating municipalities have developed standardized tracking systems and promotional materials to better manage resources resulting in improved or expanded service to over a million multi-residential households (i.e., apartment units).

This effort has provided over 9,200 m<sup>3</sup> in additional collection capacity resulting in an average 29% increase in diversion on completed projects.

Many municipalities strive to provide consistent Blue Box recycling experience at home, at school and at public facilities such as parks and arenas. Yet, like the multi-residential stream, Blue Box recyclables from “open space” recycling programs tend to be highly contaminated. The CIF provided over \$900,000 to research, develop, test and implement best practice standards for open space recycling programs in response to this growing need. Based on the results from the 20 projects funded thus far, programs using the new standards were able to reduce their contamination levels by over 30% and improve capture of Blue Box material by 20% in these environments.

### *Light weight packaging is impacting at the curb*

Maximizing participation at the curb requires that sufficient curbside capacity be made available to the resident either in the form of blue boxes, roll out carts or other suitable containers. Provision of adequate capacity is increasingly critical as the waste stream loses density to the continuing trend towards ‘light weighting’ of packaging and single serving containers.

The CIF has addressed this issue through the design and provision of larger blue boxes, made from post-consumer (PCC) blue box material, increasing curbside capacity for plastic packaging by up to 50%. Through the Fund’s joint procurement processes, municipalities have purchased over 700,000 new boxes which represent over 800,000 m<sup>3</sup> in new capacity annually. To date, joint tendering for these boxes has resulted in cost reductions of 37%.

*In 2012, the County of Simcoe distributed 135,000, 22 gallon Orbis Blue Boxes made with 60% PCC throughout the County and achieved an immediate 6% increase in diversion.*

### *Better RFPs and contracts*

Currently over 68% of blue box collection and processing services in the Province are contracted out to the private sector. This translates into over \$206 million in annual contract value underscoring the importance of good procurement and effective contract management. Responding to this need, the CIF developed a suite of collection and processing procurement

and contract management templates and tools. To date, the CIF has invested over \$336,000 to assist municipalities across the Province with the procurement of contracted services. Anecdotal evidence from participants in the CIF contract management training programs suggest that municipalities continue to adopt the CIF's recommended procurement and contract clauses resulting in improved consistency and performance across the Province.

### *Improved P&E equals increased diversion*

The KPMG Blue Box Program Enhancement & Best Practices Assessment Project recommends an average expenditure of \$1 per household on Blue Box promotion and education (P&E) activities. While this metric represented a reasonable starting point for larger municipalities, for many communities the cost of developing effective program materials would exceed their annual P&E budgets and this benchmark. In response, the CIF developed a series of tools and template materials to aid municipalities in the evaluation of their programs and to assist with the production of low cost promotional materials that could easily be adapted to their specific programs. Over the last 9 months, 71 municipalities have already accessed the CIF's new, free P&E materials and communications plan template. The CIF has also funded over 33 initiatives to support the capture of priority materials such as plastics at a cost of approximately \$1 million. Since 2008, plastics diversion has been increased by almost 20%.

### *Market development – keeping an eye on the future*

Light-weighting of packaging and the move to single serving containers continues to be the single largest driver of costs in the Blue Box system. Redesign of packaging has implications throughout the supply chain. Development of stable, domestic reprocessing capacity for these new packaging trends has become a key element of reducing system costs. The CIF, in partnership with a broad host of program stakeholders, has invested over \$1.75 million to expand domestic markets for a range of challenging materials including thermoform PET, #3-7 plastics, expanded polystyrene, film packaging and mixed broken glass. As a direct

*Some of the simplest ideas are the best. Between 2011 and 2012, the Town of the Blue Mountains trialed the use of tags on bear proof bins to signal to the driver if the bin was empty or full. Province-wide, this best practice for seasonal residences would reduce collection costs by \$900,000 annually.*

result of these joint efforts, Ontario municipalities now have access to blue boxes made from 100% post-consumer resin sourced from local programs for the first time since inception of the Blue Box program more than 30 years ago.

## *Ensuring WDO best practice compliance*

In September 2006, the WDO commissioned the KPMG Blue Box Program Enhancement & Best Practices Assessment Project. The study identified eight fundamental best practices related to the operation of municipal blue box programs. These best practices form part of the basis for determining the amount of funding allocated to participating municipalities under the Blue Box Program Plan.

The CIF has been active in assisting municipalities to achieve compliance with the WDO prescribed best practices and the ongoing identification and implementation of new and other better practices.

*The Town of Smiths Falls implemented a recycling strategy in 2010. Through implementation of recognized best practices, the Town has seen a 28% increase in diversion and a 6% decrease in operating costs.*

To date, the CIF has provided over \$1.9 million to assist 102 municipalities with the development of recycling plans and an additional \$276,000 in funding to assist 80 small and rural municipalities to develop communications plans in accordance with the requirements of the WDO best practices. Participating municipalities contributed an additional \$2.1 million towards these initiatives.

These efforts have resulted in overall best practice scores more than doubling in a three year period for reporting municipalities. Recognizing that the WDO datacall process operates two years in arrears, it is reasonable to conclude that current compliance levels are actually much higher.

## *Wasteshed and system rationalization is occurring*

To date, the CIF has spent almost \$1.2 million on analysis of the current Blue Box system in Ontario. These efforts have encouraged over 43 communities to take steps to move towards regionalized collection and processing systems. While this work does not in and of itself

generate a savings, it is a critical part of the change management process. In assisting municipalities and program stakeholders to examine alternative collection and processing options, the CIF facilitates dialogue and ensures that accurate information is available to support effective planning and decision making.

### *The CIF provides support to stakeholders*

The CIF has been used to support a variety of initiatives developed by the fund partners and other stakeholders.

In 2010, MIPC set aside \$3 million in funds from the CIF to be allocated at their discretion. Initiatives have included wide scale municipal consultation, provision of support to municipalities with the WDO datacall and studies such as the MIPC Study of the Optimization of Blue Box Material Processing in Ontario.

In September of 2012, Stewardship Ontario informed MIPC that the 2013 CNA/OCNA in-kind obligation would increase to over \$6 million representing a doubling of the prior year's obligation. In response to municipal concerns, the CIF agreed to provide \$3.45 million to WDO for distribution to municipalities to mitigate the impact of the in-kind increase on the 2013 Blue Box Program cash pay-out to municipalities.

# Conclusions

The CIF has assisted over 160 municipalities and invested in projects valued at almost \$85 million 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 very clear public/private sector success story that has made Ontario's Blue Box program one of the best in the world.

MIPC's decisions in 2012 to extend the CIF for an additional three years, direct the CIF to develop a Centre of Excellence; provide additional funding for 2013 and accept the CIF's recommendations for the disbursement of the \$10 million holdback shows confidence and confirmation that they, and the participating municipalities of Ontario, value the role of the CIF. The CIF's 2013 funding opportunities have been developed to reflect this new direction and build on its past successes.

## CIF Partners

