

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 23, 2019
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT	CURRENT AND PROPOSED ACTIONS FOR REDUCING AND MANAGING PLASTICS IN THE RESIDENTIAL SECTOR AND THE ROLE FOR THE HEFTY® ENERGYBAG® PILOT PROJECT

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, with the support of the Director, Environment, Fleet and Solid Waste,

- a) The following report containing the City of London's current approaches for reducing and managing plastics in the residential sector **BE RECEIVED** for information;
- b) Civic Administration **BE DIRECTED** to develop a more comprehensive plan to reducing and managing plastics in the residential sector including i) addressing upcoming Federal and Provincial legislation, regulation, policies and scientific studies; ii) how senior government direction with producer responsibility will support local policies with respect to reduction, reuse, recycling and recovery of plastics; and iii) report back by early 2021 as part of the 60% Waste Diversion Action Plan implementation process;
- c) The Hefty® EnergyBag® Pilot Project for flexible plastic packaging and hard-to-recycle plastics **BE APPROVED** for implementation in a phased approach starting October 1, 2019 using approved funds for 2019 and base program funds (Program 470300) for 2020 in the amount of \$25,000 per year for two years noting that the Canadian Plastics Industry Association (CPIA) and the Dow Chemical Company are major financial contributors;
- d) Civic Administration **BE AUTHORIZED** to expand the list of business and municipal project partners and funding sources (e.g., Continuous Improvement Fund, Federation of Canadian Municipalities Green Fund) interested in the Hefty® EnergyBag® Pilot Project for flexible plastic packaging and hard-to-recycle plastics including promoting these activities through the London Waste to Resources Innovation Centre and the Industrial Research Chair Agreement in Thermochemical Conversion of Biomass and Waste to Bioindustrial Resources with Western University;
- e) the attached proposed by-law (Appendix B) **BE INTRODUCED** at the Municipal Council meeting to be held on July 30, 2019 to approve the Grant Recipient Agreement with CPIA attached as Schedule "A" to the by-law;
- f) the Mayor and the City Clerk **BE AUTHORIZED** to execute the Agreement authorized and approved in e), above; and
- g) Civic Administration **BE AUTHORIZED** to undertake all administrative acts that are necessary in connection with executing this Agreement.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Relevant reports that can be found at www.london.ca under City Hall (Meetings) include:

- Update and Next Steps for the London Waste to Resources Innovation Centre (April 16, 2019 meeting of the Civic Work Committee - CWC, Item #2.4)
- Memorandum of Understanding with the Canadian Plastics Industry Association as Part of the London Waste to Resources Innovation Centre (February 21, 2018 meeting of the CWC, Item #10)
- Memorandum of Understanding with the University of Western Ontario (Institute of Chemicals and Fuels from Alternative Resources) as Part of the London Waste to Resources Innovation Centre (December 12, 2016 meeting of the CWC, Item #8)

COUNCIL'S 2019-2023 STRATEGIC PLAN

Municipal Council has recognized the importance of solid waste management and climate change in its 2019-2023 - Strategic Plan for the City of London as follows:

Building a Sustainable City

London has a strong and healthy environment

- Increase waste reduction, diversion and resource recovery
- Increase community knowledge and action to support the environment

Growing our Economy

Londoners experience exceptional and valued customer service

- Increase partnerships that promote collaboration, innovation and investment

Leading in Public Service

Londoners experience exceptional and valued customer service

- Increase community and resident satisfaction of their service experience with the City

BACKGROUND

PURPOSE

The purpose of this report is to:

- provide an update on the City's current approaches for reducing and managing plastics in the residential sector and the next steps for a more comprehensive approach, and
- provide Civic Works Committee and Council with the details to recommend the implementation of the Hefty® EnergyBag® Pilot Project for flexible plastic packaging and hard-to-recycle plastics in a phased approach starting October 1, 2019 including the execution of a funding agreement with the Canadian Plastics Industry Association (CPIA).

CONTEXT

Curbside and Multi-Residential Recycling Programs

The residents of London are currently involved in many different approaches to manage pre and post-consumer plastics in the residential sector. The requests to do more with plastics – reduce, reuse, recycle and/or recover - are quite common.

Municipal Council Approval of 60% Waste Diversion Action Plan

The 60% Waste Diversion Action Plan containing programs and initiatives to be phased in between 2019 and 2022 to achieve 60% waste diversion was approved subject to further financing considerations as part of the multi-year (2020-2023) budgeting process. The Action Plan includes an update on the progress of the long-term Resource Recovery Strategy that will be completed in 2020.

London Waste to Resources Innovation Centre

The London Waste to Resources Innovation Centre currently has activities in five main areas:

1. Research & Development
2. Training, Testing & Auditing
3. Resource & Waste Management Knowledge Exchange
4. Technology Demonstrations
5. Outreach & Engagement

Projects and activities to advance the management of plastic resources along with many other materials are underway in all the five areas. Western University, a partner in the London Waste to Resources Innovation Centre, has recently been awarded an Industrial Research Chair Agreement by the Natural Sciences and Engineering Research Council (NSERC) Collaborative Research. The focus is on projects related to the thermochemical conversion of biomass and waste to bioindustrial resources. CPIA is also part of the Industrial Research Chair program.

Addressing the Need for Action on Climate Change

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.

Understanding both the positive benefits and negative impacts of plastics to society and its role with climate change is important. The literature has conflicting information which is not uncommon. The goal of taking comprehensive action, working alongside industry, academia and the community will generate different actions, roles and responsibilities. A collaborative approach that is consistent with Provincial and Federal direction will ensure that current and future actions and investments are aligned as best as possible.

DISCUSSION

This section contains two parts with details provided in the appendices:

- PART A Current Approaches for Reducing and Managing Plastics in the Residential Sector (Appendix A)
- PART B: Flexible Plastic Packaging and Hard-to-Recycle Plastics Recovery Pilot Project (Part B)

PART A: Current Approaches for Reducing and Managing Plastics in the Residential Sector

Background

Over the last 5 years, London has been one of the most active communities in Canada looking at a wide variety of solutions (e.g., programs, approaches) to keep plastics out of the City's landfill and City parks, streams, rivers and roadsides. City staff carefully balance reduction/reuse, recyclability and recycling costs, what end markets are available (without end markets there is no recycling), newer approaches to resource recovery and also work on ideas and potential projects in partnership with industry and academia. In summary, through Council direction, City staff strive to balance environmental protection, affordability and community expectations. Further details on recent, current and upcoming actions with respect to plastics are contained in Appendix A.

Moving Forward – Next Steps

Advancements in policies, directions and approaches for overall resource recovery for plastics are changing. City staff propose to develop a more comprehensive plan for reducing and managing plastics in the residential sector including:

- addressing upcoming Federal and Provincial legislation, regulation, policies and scientific studies; and
- how senior government direction with extended producer responsibility (EPR) will support local policies with respect to reduction, reuse, recycling and recovery of plastics.

This work will be completed alongside related work as part of the London Waste to Resources Innovation Centre by early 2021 as part of the 60% Waste Diversion Action Plan implementation process.

PART B: Flexible Plastic Packaging and Hard-to-Recycle Plastics Recovery Pilot Project

The City of London has committed to reaching 60% waste diversion by the end of 2022. Over the last five years, the City has averaged about 45% waste diversion. The City of London operates, in conjunction with other partners, the London Waste to Resources Innovation Centre. Through the Innovation Centre, the City of London and partners work on solutions to turn more waste resources into valuable feedstocks for the economy.

The City was approached by Dow Chemical Company (Dow) and the Canadian Plastic Industry Association (CPIA) to implement the first Pilot Project in Canada using the Hefty® EnergyBag® program methodology (i.e., the costs of the program are paid for in the purchase price of the bags). The Pilot Project is going to focus on the collection and processing and marketing (i.e., recycling or recovery) of flexible plastic packaging and hard-to-recycle plastics. In the United States, most of the emphasis to date has been placed on energy recovery through pyrolysis and alternative fuels. The addition of a stronger focus on the recycling potential of this mix of plastics is a desirable solution for the pilot project due to the recent advancements in processing and markets in Canada and the northeast United States. London, Dow and CPIA have prioritized end markets for recycling the materials collected.

This Pilot Project fits many needs of London, the Innovation Centre, Dow, CPIA and potentially other funding partners. It also addresses many of the needs of municipalities as the materials to be recycled and recovered are waste products in other communities.

Background

Challenges to Recycling Flexible Plastic Packaging

Flexible plastic packaging is used for many consumer goods due to its ability to help prevent food waste, save money, and reduce environmental effects. Plus it helps keep

foods fresh and sanitary. Typically it is in the form of bags, pouches, liners, or overwraps, where the shape of the packaging can be readily changed or has unique application needs. Many types of flexible packaging currently cannot be mechanically recycled due to three main challenges:

1. **Technical Challenges:** In order to recycle plastics, each individual polymer needs to be separated from other polymers. Yet many flexible plastic packages are made from multiple materials, such as sealant layers, tie-layers, and various barrier layers, in order to enhance their performance for food freshness and extended shelf life. This however also makes these packages very difficult to recycle and consequently are sent to landfills.
2. **Infrastructure Challenges:** Currently flexible plastic packaging is not able to be sorted out at the vast majority of material recovery facilities (MRFs) in North America. Flexibles can cause operational issues for MRFs, as they can get entangled in the MRF disc screens, wrap around rotating shafts and interfere with proper equipment operation, which causes adverse downtime and expenses for MRF operators.
3. **Consumer Challenges:** In general, consumers want to do the right thing and recycle their discards, yet the complexities of plastic packaging and differences in recycling programs across communities leads to confusion as to what is allowed to be recycled.

There are also challenges with collection as these items tend to be very light. These items do represent an opportunity to be collected at drop-off depots or retail drop-off.

What Other Plastics Can be Collected with Flexible Plastic Packaging in the Hefty® EnergyBag® program?

The Hefty® EnergyBag® program methodology represents a unique opportunity to collect and potentially also recycle and/or recover many other plastic items that are considered “hard-to-recycle” such as:

- bags (e.g., food bags, produce bags, pet food bags) (NOTE: further discussion is required on bags as grocery bags and merchandise bags are returned to many retail outlets in London and this should be supported during the Pilot Project)
- foam cups, plates and bowls
- packing peanuts
- utensils and cutlery
- straws and stirrers
- toothpaste tubes

These items can be mixed with flexible plastic packaging and placed inside the same Hefty® EnergyBag®.

Communities with Hefty® EnergyBag® Programs in Place

The following communities have either full scale programs in place or opt-in program through either community replenishment or retail purchase of the Hefty® EnergyBag®:

- Citrus Heights, California, Pilot Project (2014)
- City of Omaha, Nebraska (2016)
- City of Bellevue, Nebraska (2018)
- City of Boise, Idaho (2018)
- Cobb County (near Atlanta), Georgia (Phase 1 2018)
- Lincoln, Nebraska (2019)
- Cobb County, Georgia (Phase 2 – 2019)

The City of London was selected by Dow and CPIA in 2018 to discuss the first Hefty® EnergyBag® program Pilot in Canada. Several planning, logistics and communication sessions have been held to layout the groundwork based on the United States projects. It is recognized that customization will be required for Canada; however the learnings

from the United States provide a good indication of how to prepare and launch in London. As a major funding partner, Dow stays very involved with pilot projects and ensures that the required expertise and experience is available from other programs for questions and advice.

How the Hefty® EnergyBag® Program Works and would be Applied in the City of London through a Pilot Project

The Hefty® EnergyBag® Pilot Project in London will address several of the challenges noted above by collecting currently non-recycled and hard to recycle plastic items – like juice pouches, chip bags, meat and cheese bags, cereal and cake box pouches, candy wrappers, and plastic dinnerware and utensils – at curbside or depots and diverting them from the City’s landfill. The operation of the Hefty® EnergyBag® Program requires four main steps:

1. Participating households will be provided with a supply of Hefty® EnergyBag® orange bags (supplied in a roll of 20 bags per roll and are expected to last 6 to 12 months depending on usage). Residents place all their currently non-recycled plastic materials, once clean and dry, into the orange bags.
2. When the orange bags are full, they are tied closed and put out at the curb in the residents’ Blue Box on the same day as regular recyclables, and then picked up by the City’s contractor (Miller Waste Systems). Recycling Carts would be used for the multi-residential sector component. Container choices at the depot have not been determined at this time (e.g., recycling carts, large bins, etc.).
3. The collected Hefty® EnergyBag® are delivered to the City-owned MRF where they are pre-sorted out at the front end (pre-sort room) and baled (whole orange bag) for delivery to the end user.
4. The end user will convert the orange bags into new valuable resources such as target recyclables into existing markets (composite plastic products), energy, fuels, or potentially, feedstocks for making new plastics and new plastic products. Potential end markets for the London program are being evaluated.

Preliminary - Approximate Quantities Available and Potentially Recovered

Preliminary estimates (Table 1) suggest that the materials eligible to be collected in the Hefty® EnergyBag® would range between 16 and 20 kg per year (between 3% and 4% the waste stream, by weight), from single family households. Similarly between 12 and 16 kg per year (between 3% and 4% the waste stream, by weight), from multi-family households. On a volume basis, these same items may take up between 3 and 5 times more volume of the waste stream. Further work on estimated quantities available and potentially recoverable will take place this summer.

Table 1 – Preliminary Estimates (Average) of Materials Available for Recycling and Recovery

Material Category	Single Family Households (Blue Box)		Multi-residential Households (Blue Carts)	
	Average Estimated Quantity Per Hhld (kg/yr)	% of Waste Stream (by weight)	Average Estimated Quantity Per Hhld (kg/yr)	% of Waste Stream (by weight)
Flexible plastic packaging	9	1.8%	6	1.5%
Hard-to-recycle bags	5.8	1.1%	6.1	1.5%
Expanded polystyrene - foam	1.5	0.3%	1	0.2%
Other plastic – non-packaging	2	0.4%	1.3	0.3%
Totals	18	3.6%	14	3.4%

There is limited Ontario experience for potential capture rates by material. However, using a range between 40% and 60%, the following estimate occurs:

- Single Family household would capture between 7 and 11 kg per year
- Multi-residential households would capture between 5 and 8 kg per year

From a collection perspective and based on previous United States programs the Hefty® EnergyBag® weekly set-out rate often grows to approximately 55 to 65 per cent. If this is the case in London, this means that in a route of 1,000 households, approximately 550 to 650 households may place an orange bag out on collection day. The average weight of materials placed in an orange bag is 0.4 to 0.5 kilograms. This means that in a route of 1,000 households in the pilot project area, a truck would collect from 200 to 300 kilograms of materials. United States experience suggests that a 20,000 household pilot project will generate between 140 and 210 bales of material.

Project Governance and Outreach

The Pilot Project will have many involved including a (primary) Project Team; project stakeholders; project advisors and interested organizations. It is being designed to “learn on the go” and will include representatives from:

Project Team (tentative)

- City of London
- Dow
- Reynolds
- Canadian Plastics Industry Association (CPIA)
- Miller Waste Systems
- First Star Recycling
- Other potential funders such as Continuous Improvement Fund (CIF) representatives

Pilot Project Working Group (Technical Operations) (tentative)

- Project team members
- PAC Next
- EFS Plastics (Ontario recycler)
- Western University
- Regional Public Works Commissioners of Ontario (RPWCO)
- Association of Municipalities of Ontario (AMO)
- Others

Size, Timing and Duration of Pilot Project

The size of the Pilot Project will be 20,000 households across 3 different collection methodologies with suggested implementation dates as follows:

Step 1	October 1/19	7,000 households with curbside service (Phase 1)
Step 2	October 1/19	6,000 households with EnviroDepot (drop-off) access
Step 3	January 8/20	1,000 apartment units (8 to 10 buildings)
Step 4	February 1/20	6,000 households with curbside service (Phase 2)

The length of the Pilot Project will be between 1.5 – 2 years and will depend on how fast participants use the bags, and the time needed to track and report results. The location of the Pilot Project areas will be determined in August/September. The goal will be to balance as much coverage in London as possible while maintaining operational efficiencies.

Proposed Pilot Project Budget and Funding

The proposed budget ranges from \$275,000 (basic pilot project) to \$475,000 for a more comprehensive pilot project (Table 2).

- Basic Pilot Project – minimum pilot project to meet London needs and primary industry funder needs
- Extended Pilot Project – increased activities and partially subsidized Hefty® EnergyBag® to meet industry and other funder needs

- Comprehensive Pilot Project – substantially increased activities and partially subsidized Hefty® EnergyBag® to meet industry and other funder needs including a greater focus on monitoring, data and measurement

Table 2 – Pilot Project Expenditures - Estimates

	Basic Pilot Project	Extended Pilot Project	Comprehensive Pilot Project
Supply of Hefty® EnergyBag®	\$170,000	\$230,000	\$230,000
Operations	\$20,000	\$30,000	\$50,000
Monitoring and Measurement	\$35,000	\$45,000	\$95,000
Communications and Engagement	\$25,000	\$35,000	\$50,000
Contingency	\$25,000	\$35,000	\$50,000
Total	\$275,000	\$375,000	\$475,000

Funding

Subject to Council approval, funding for the Basic Pilot Project has been secured at \$275,000 (Table 3; at time of writing this report). Discussions are underway with other funding partners. As noted above, additional funding strengthens the knowledge and experience gained during the Pilot Project.

Table 3 – Basic Pilot Project Funding

	Year 1	Year 2	Total	Percentage
City of London	\$25,000	\$25,000	\$50,000	18%
Industry - Dow	\$100,000	\$35,000	\$135,000	49%
Industry - CPIA	\$75,000	TBD	\$75,000	27%
Industry – Other (e.g., PAC Next)	\$15,000	\$0	\$15,000	5%
Sub-total			\$275,000	100%

Table 4 – Additional Funding Requests Being Examined

	Estimated Low	Estimated High
CPIA – Year 2	\$25,000	\$75,000
Stewardship Ontario (industry stewards/producers)	\$25,000	\$75,000
Continuous Improvement Fund (Blue Box Recycling)	\$50,000	\$150,000
FCM Green Municipal Fund	\$50,000	\$100,000
Other industry partners	\$10,000	\$20,000

In addition to the financial investment, there is a substantial amount of in-kind services and value to be provided by representatives from Dow, CPIA, Reynolds, First Star Recycling and others.

Moving Forward – Next Steps

The Grant Recipient Agreement with CPIA is attached in Appendix A. This will finalize the financial arrangement for the Pilot Project and permit the completion of remaining activities prior to launch.

ACKNOWLEDGEMENTS

This report was prepared with assistance of Anne Boyd, Manager, Waste Diversion and Legal Services.

PREPARED BY:	PREPARED AND SUBMITTED BY:
MICHAEL LOSEE, B.SC. DIVISION MANAGER SOLID WASTE MANAGEMENT	JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

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Appendix A Current Approaches for Reducing and Managing Plastics in the Residential Sector

Appendix B A by-law to authorize and approve a Grant Recipient Agreement between the Canadian Plastics Industry Association, and The Corporation of the City of London and to authorize the Mayor and the City Clerk to execute the Agreement.

Schedule A Grant Recipient Agreement

c Canadian Plastics Industry Association, Attention Joe Hruska, Vice President, Sustainability, 5955 Airport Road, Suite 125, Mississauga, Ontario, Canada L4V 1R9

Appendix A

Current Approaches for Reducing and Managing Plastics in the Residential Sector

Over the last 5 years, London has been one of the most active communities in Canada looking at a wide variety of solutions (e.g., programs, approaches) to keep plastics out of the City's landfill and City parks, streams, rivers and roadsides. Details on recent, current and upcoming actions with respect to plastics are below.

Policies and Directions

- The City is working closely with the Provincial Government and upcoming policies and regulations that will make industry 100% financially responsible for end-of-life management of the products and packages they make. This is called extended producer responsibility. Moving industry to 100% financial responsibility is essential. Recycling plastics ranges in complexity depending on the type and makeup of plastics. Complexity can add costs. When industry is responsible for the costs, they will make better packaging choices and ensure the cost of managing the package is included in the overall price. This will also be beneficial for London taxpayers as recycling program costs will be substantially reduced.
- The Federal Government has just announced an aggressive program to address plastic challenges. These important policies are best done at higher levels of government as it is more cost effective and a consistent approach is passed on to all residents, businesses and municipalities. The Federal Government highlighted the importance of making decisions based on science and evidence. London staff is following this very closely and will be making a contribution to the process through our London Waste to Resources Innovation Centre and Municipal Council.
- City staff are following the progress of research, direction and solutions at the Provincial and Federal government levels for microplastics (including microbeads) including local academic research at Western University. City staff will be examining effluent criteria (discharges from wastewater treatment plants) and potential modifications to plants as it is proposed and the potential role of low impact development (LID) and stormwater management ponds to reduce microplastics.
- Municipal Council signed a Memorandum of Understanding with the Canadian Plastics Industry Association in 2018 (the only municipality in Canada to do so) to work directly with them and Western University to help find a variety of solutions for plastics. Working directly with industry helps to influence them and make sure they understand consumer wants and needs. This also helps City staff to understand the challenges facing an important industry in Canada.
- Municipal Council approved the establishment of the London Waste to Resources Innovation Centre that includes goals such as:
 - creating a focal point (location or locations) for the ongoing examination of innovative solutions for waste reduction, resource recovery, energy recovery and/or waste conversion into value-added materials, chemicals, heat and power; and
 - establishing partnerships and collaborations between government, academia and businesses to synergistically build on existing strengths to create opportunities to prevent waste, to create products of value from waste, and to solve existing waste management challenges.

Reduction

- In 2019 as part of the London Clean & Green campaign, the partnership launched the idea of "refusables", encouraging residents to "say no" to items that are not needed, such as bottled water (use a refillable bottle); plastic bags (use reusable

bags), etc. This has strengthened the longstanding initiatives dealing with reduction and reuse.

- The London Clean & Green partnership program has grown over the years and now has a stronger focus on litter prevention in addition to the business and community-wide clean-up days.

Reuse

- City staff encourage the reuse of a wide variety of plastic products such as large pails, reusing plastic bags as garbage liners or for pet waste, reusing plastic food containers, resealable bags, enclosures, sending useable items to the reuse sector (e.g., Goodwill).

Recycling

- London recycles a wide range of plastic items in the recycling program commonly described as “plastic containers” (bottles and jugs) and “rigid plastic” (packaging around toys commonly referred to as blister pack) as follows:

- #1: PET (Polyethylene terephthalate) (beverage bottles, cups, other packaging, etc.)
- #2: HDPE (High density polyethylene) (bottles, cups, milk jugs, etc.)
- #3: PVC (Polyvinyl chloride) (some bottles, etc.)
- #5: PP (Polypropylene) (food containers, etc.)
- #6: PS (Polystyrene) (some food containers, etc.)
- #7: other – products stamped with a #7 are often made out of multiple plastic types or out of other types of plastic that can't easily be recycled.

The City does not collect #4: LDPE (Low density polyethylene such as bags) although the ones that do arrive at the Material Recovery Facility (MRF - recycling centre) are sent to local end markets for recycling. The City also does not collect expanded polystyrene such as foam packaging, plates, cups, etc.

The plastic items that are collected are sent to two recyclers in Ontario to make new bottles and other plastic products. These facilities are located within 90 minutes of London.

- Plastic bag recycling occurs at a number of retail locations in London. Recently a few have stopped accepting plastic bags and City staff are learning more about this situation. For those that still do accept the bags, it is an ideal solution that does not cost London taxpayers any money.
- City staff have been examining processing systems that can mechanically handle a wider variety of plastic products such as advanced MRF technologies and mixed waste processing systems.

Recovery

- For flexible plastic packaging and hard-to-recycle plastics, City staff have been working with the plastics industry and Western University to identify solutions to break down the plastics back to their original chemistry (called chemical recycling) so new plastic products can be created; to recover the energy potential from plastics as a synthetic fuel source through innovative technologies such as pyrolysis and gasification.

Appendix B

Bill No.
2019

By-law No. A.-

A by-law to authorize and approve a Grant Recipient Agreement between the Canadian Plastics Industry Association, and The Corporation of the City of London and to authorize the Mayor and the City Clerk to execute the Agreement.

WHEREAS section 5(3) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipal power shall be exercised by by-law;

AND WHEREAS section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS it is deemed appropriate for The Corporation of the City of London (the "City") to enter into a Grant Recipient Agreement with the Canadian Plastics Industry Association ("CPIA") to be a part of the Hefty® EnergyBag® Pilot Project to collect hard-to-recycle plastics – like juice pouches, candy wrappers and plastic dinnerware – at residential curbside, multi-residential buildings and residential drop-off depots and divert them from landfill and/or becoming litter by converting them into viable new resources; and the City and other Funders are prepared to support CPIA, and in return will receive operational experience and knowledge to be shared with others including those involved with the London Waste to Resources Innovation Centre program;

AND WHEREAS it is deemed appropriate to authorize the Mayor and the City Clerk to execute the Agreement on behalf of the City;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. The Agreement between The Corporation of the City of London and the Canadian Plastics Industry Association, attached as Schedule A to this by-law, is hereby authorized and approved.
2. The Mayor and the City Clerk are hereby authorized to execute the Agreement authorized and approved under section 1 of this by-law.
3. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council July 30, 2019

Ed Holder
Mayor

Catharine Saunders
City Clerk

First Reading – July 30, 2019
Second Reading – July 30, 2019
Third Reading – July 30, 2019

Schedule A

Grant Recipient Agreement

The Canadian Plastics Industry Association (CPIA), in collaboration with The Dow Chemical Company (Dow), has agreed to make a grant contribution to **The Corporation of the City of London, Ontario** (hereafter the “City”) through the Hefty® EnergyBag® Grant Program. The grant contribution is subject to the following terms and conditions (hereafter the “Contribution Agreement”).

Project Overview: The Hefty® EnergyBag® program collects hard-to-recycle plastics – like juice pouches, candy wrappers and plastic dinnerware – at residential curbside, multi-residential buildings and residential drop-off depots and diverts them from landfill by converting them into viable new resources.

CPIA’s role is to promote and administer the grant program. As such, CPIA will provide City with a grant exclusively for the establishment of a large-scale, pilot project with a goal of implementing a new full-scale, permanent Hefty® EnergyBag® program in London, Ontario.

1. **Program Name:** Hefty® EnergyBag® Grant Program
2. **Primary Partner Name:** Canadian Plastics Industry Association
3. **Grant Partner Representative:** Joe Hruska, Vice President, Sustainability
4. **Grant Recipient(s):** The City of London, Ontario
5. **Grant Amount (\$):** A) Grant funding for City from Dow is **Cdn \$64,695**. Dow will also provide matching funding, up to an additional Cdn \$50,000, to those communities who commit their own funding by time of initial purchase of the Hefty® EnergyBag® orange bags. The City agrees to commit Cdn \$50,000, of which Dow will match Cdn \$50,000. B) CPIA will also provide funding in the amount of \$75,000 in 2019, and a yet-to-be determined amount in 2020.
6. **Grant Conditions and Funding Distribution:** The grant offer is conditional on the following criteria being met, namely; 1) the initial order of Hefty® EnergyBag® orange bags is a minimum of 20,000 households. This level of participation must be reached within 6 months of program launch date, and 2) City agrees to actively and frequently promote the Hefty® EnergyBag® program on their website, through social media and using other forms of community outreach, beginning no later than one to two months prior to program launch.

Once the above conditions have been met, the grant will be distributed to the City prior to program launch once A) CPIA receives signed copy of this Grant Recipient Contribution Agreement from City, and B) CPIA receives signed Letter of Collaboration (LOC) from City (signed by all key local partners (City, Material Recovery Facility operator, Hauler, and Sponsors, if applicable) acknowledging their support and commitment to implement and operate a successful Hefty® EnergyBag® pilot project), and C) Dow and CPIA have formally announced the City as the grant recipient.

The grant money provided by CPIA is to be used solely for the purchase of the initial Hefty® EnergyBag® orange bags as part of the approved Hefty® EnergyBag® curbside collection program, related correspondence, and this Contribution Agreement. The funds may not be expended for any other purpose without CPIA’s prior written approval. Grant funds may not be re-granted or transferred to any other entity without CPIA’s permission, except as payment for goods or services to carry out the purposes of the grant. CPIA reserves the right to discontinue, modify or withhold any payments to be made under this grant award or to halt any further contributions of unpaid Grant funds, if it, in the CPIA’s sole discretion, determines such action is necessary: (1)

because the City has not fully complied with the terms and conditions of this Contribution Agreement, including timely implementation and successful management of program; (2) to protect the purpose and objectives of the grant or any other charitable activities of CPIA; or (3) to comply with any law or regulation applicable to the City, CPIA, Dow or this grant.

Upon request, the City will supply CPIA with any and all records of contributions or City activity related to the grant funding.

In order to maintain program consistency and integrity, the City is required to submit any and all external communications, marketing and publicity that refers to the Hefty® EnergyBag® program or Hefty® EnergyBag® Grant program to CPIA, Dow, and Reynolds Consumer Products for review and approval before release. The City is required to adhere to the Hefty® EnergyBag® trademarks, logos and other distinctive brand features in accordance with the Hefty® EnergyBag® Brand Guidelines provided by Reynolds Consumer Products.

In addition, the City agrees they will neither undertake nor cause, nor permit to be undertaken, any activity which is illegal under any laws, decrees, rules, regulations, treaties, or international directives in effect in Canada (including, without limitation, the Corruption of Foreign Public Officials Act and other applicable anti-corruption laws, Bill 198 (Canadian SOX), immigration and export laws, and applicable campaign finance and disclosure laws), or other applicable jurisdictions. The City agrees that, with funds from CPIA or from any other source, they will not, directly or indirectly, improperly give, offer, or promise, or authorize or tolerate to be given, offered, or promised, anything of value to any official, entity, or individual with the intent to (i) influence any act or decision of such official, entity, or individual, or (ii) induce such official, entity, or individual to use their influence to affect or influence any act or decision, in order to assist the City in any way. The City agrees to notify CPIA immediately of any extortive solicitation, demand, or other request for anything of value, by or on behalf of any official, entity, or individual, relating to the City work on behalf of its stakeholders and contributors.

Grant funding may not be used to intervene in any election, support or oppose any political party or candidate for public office, engage in a substantial amount of lobbying, or for fundraising, litigation, or terrorist activities.

7. Implementation Plan and Timeline:

Activity	Timing	Implementation / Responsibility
1) Identify Program Collaborators	Within 1 month after receipt of signed agreement	The City is responsible to identify acceptable community stakeholders (ex: materials recovery facilities, haulers, sponsor(s),) best suited for program success in approved community. The City will also assist identifying end market user facilities.
2) Program Implementation	< 6 months after receipt of signed agreement	The City is responsible to work with local partners to implement the Hefty® EnergyBag® program in designated community and distribute approved communications announcing the program (with approval from Dow and Reynolds Consumer Products as noted above). Dow, CPIA and City will jointly work together to ensure that all collected materials are sent to various recycling and/or energy recovery end markets and that no materials will be sent to landfill with the exception of items that might be collected but are considered contaminants (e.g., metal cans, glass container, etc.). Table continued

Activity	Timing	Implementation / Responsibility
3) Program Data Collection	After program launch	The City is responsible to collect and report data measurements including bags collected (# & lbs./kgs.) every month, as well as Hefty® EnergyBag® material composition data every 6 months, for the first 2 years, determining the quality of materials collected by package and plastic types. The composition audits will allow City to focus household communications as to what should & should not be put in the orange bags.
4) Program Institutionalized	Every month after program launch	City is responsible for ongoing tracking of key metrics and monthly reports to CPIA & Dow for the first 2 years, as detailed below.

8. Monitoring, Evaluation and Learning:

- A baseline measurement of recycling rates and MRF contamination will be taken at the on-set of the project. The City will work with the local MRF to acquire this information.
- Measurement throughout the programs will also be conducted by the City with assistance from local MRF. This includes monthly measuring of the number and weight of Hefty® EnergyBag® orange bags collected (# & lbs/kgs.). Additional measurements are included in the table below.
- The City will submit quarterly reports to CPIA & Dow detailing progress of key objectives and timelines, and a narrative summarizing expenditures of the grant funds, if requested. The City will promptly provide any additional information, reports and documents reasonably requested by CPIA and/or Dow during the first two years from program launch.

Key Objectives/Metrics	Outcome indicator
1. Successful implementation of Hefty® EnergyBag® program	- Curbside Hefty® EnergyBag® program available to full community, or in phases of a minimum 20,000 households per phase. - Target by end of initial 2 years is ~30% of households are participating in Hefty® EnergyBag® program
2. Increase the amount of plastic waste diverted from landfills	- # and pounds of Hefty® EnergyBag® orange bags collected - Total amount of plastics collected - % change in waste diverted from landfills based on collected Hefty® EnergyBag® orange bags - % of contaminants in orange bags by packaging and plastic types as determined via composition audits
3. Reduce contamination in MRF recycling streams	- % change in non-recycled plastics removed from recycling stream

On behalf of the City, I hereby understand and agree to the foregoing grant contribution terms and conditions, and hereby certify my authority to execute this Contribution Agreement on the City's behalf.

Ed Holder

Title: Mayor
The Corporation of the City of London

Date:

Joe Hruska

Title: Vice President Sustainability
The Canadian Plastics Industry
Association

Date:

Catharine Saunders

Title: City Clerk

The Corporation of the City of London

Date:

Carol Hochu

Title: President & CEO

The Canadian Plastics Industry
Association

Date: