



Take Back the Light Consultation Summary May 20, 2020

Background:

Since 2015, the Independent Electricity System Operator (IESO) has, in partnership with local distribution companies, offered a combination of incentive and rebate programs to encourage the institutional, commercial, and industrial (IC&I) sector to improve energy consumption, enhance consumer awareness, and change behaviours.

As a market-based solution, Save on Energy is one of the conservation programs established to help businesses reduce the cost of efficiency investments and overall consumption over time through lighting improvements and retrofits.

Over the years, the Save on Energy program has evolved, along with application requirements. In April 2019, the provincial government centralized the delivery of the rebate program under the IESO, and in conversation with a lighting supplier, we learned that the application requirements for proof of disposal do not take into account how lamps are managed at end-of-life.

Currently, the rebate program now requires specific details for recycling for each individual project. This approach poses issues as it requires project by project report as opposed to consolidated reports for multiple projects into one lamp recycling shipment. This creates administrative burdens for some suppliers because they need to request recycling services for each separate project. As each shipment includes a significant transportation fee, this approach has inflated costs and dissuades participation.

To support the supplier, Take Back the Light convened a meeting with IESO to outline concerns, and to recommend using Take Back the Light as a standard order to satisfy verification of recycling requirement. IESO responded positively requesting a summary of how the program can help to alleviate uncertainties around decommissioning of assets and proof of disposal.

To inform our response, we conducted additional interviews with program partners to get a better understanding of the issues, if any, concerning Save on Energy and discuss opportunities to improve meeting its requirements.

The following is a summary of what we heard, our response to IESO, and recommendations moving forward.



Summary of Concerns from Suppliers and Contractors:

1. Save on Energy Program Structure:

- Prior to the centralization of the program on April 1, 2019, the requirements lacked standardization and differed between local distribution companies.
- Changes to the program requirements occurred without prior notice, which made the application process difficult and labour intensive.
- For some companies, internal logistics do not allow the tracking and reporting of individual projects and these requirements increase labour costs.
- There is no tolerance or threshold around lamp breakage which is unrealistic.
- The program lacks flexibility around record keeping.
- Focus should be placed on those don't comply with the program requirements instead of the companies that consistently and transparently meet the program requirements (e.g., Take Back the Light participants).

2. Proof of Recycling vs. Market Realities:

- Prior to recent requirements for the rebate program, bulk certificates were accepted to process the rebate application.
- Sometimes proof of recycling is accepted in the form of an invoice that lists recycling as a line item. Sometimes a disposal document is required. No standardization around recycling certificate.
- New requirements expect exact details per project, which is not necessarily tracked by vendor.
 - Details include name, address, dates of project, type and quantity of lamps.
 - Also have to submit individual invoices, which prohibits consolidation of projects into one shipment that is most cost effective and environmentally friendly to manage lights.
- Recycling of lamps is fluid. Sometimes a shipment is sent but some lamps from a particular project are unintentionally missed. They are then sent in a separate shipment, which creates issues with providing invoices that are required to be submitted with application.

3. Recycling of Other Lamp Components:

- The program requires recycling of ballasts and fixtures, which can be an issue.
- Ballasts are a significant issue because government regulations concerning management are prohibitive and do not allow for storage on site without proper permits.
- Finding vendors to take ballasts and fixtures is difficult for some because of geography. It is difficult to find certified scrap yards. Most are too far away and cost prohibitive.
- Transportation can also be an issue because of weight and geography, which adds to the cost.
- Getting proof of recycling of ballasts and fixtures to be submitted with application in an issue.
 - Can't store, can't transport and frankly, want to be hands off completely because of fines and other cost implications.



Take Back the Light Considerations for IESO:

Proof of disposal is of particular concern for IESO. Section twelve of the *RETROFIT - Participant Agreement regarding the Equipment Disposal and Decommissioning* states (emphasis added):

1. a) Subject to Section 12)b), the Participant will take all necessary steps to have equipment that was removed or replaced as part of any Project disposed of or decommissioned in accordance with appropriate disposal or decommissioning processes, applicable laws and regulations, and in accordance with commercially reasonable environmental practices and shall evidence such activities by appropriate disposal certificates or similar documentation.
2. b) Notwithstanding Section 12)a), the Participant may utilize their removed or replaced air compressor for emergency back-up situations and/or scheduled maintenance purposes only. The Participant shall record the number of hours the removed or replaced air compressor is utilized which shall not exceed 4% of the annual average run time of the air compressor. The Participant shall provide the log of recorded emergency and/or scheduled maintenance use to the IESO upon request.

The reasons behind the disposal requirements in the participant agreement, as indicated by IESO:

- Ensure proper disposal according to regulations and laws.
- Ensure removal of less efficient equipment from the market.
- Confirm the base case equipment to assist in our energy savings verification – this entails verifying the quantities, wattage and type of lighting that was disposed of. (This is what is asked for on the certificate or declaration).

With its strict and detailed operational standards, Take Back the Light is able to support IESO and Save on Energy, and alleviate concerns around the decommissioning of assets.

1. Ensure proper disposal according to regulations and laws

To maintain the credibility of Take Back the Light and ensure transparency and accountability for the proper recycling of mercury-containing lights, suppliers and program partners are required to sign an agreement when they join the program or renew their participation. The agreement contains several clauses that ensure proper disposal:

Section 2.1 Exclusivity: Participants will ensure that all lamps collected are recycled exclusively under Take Back the Light, and will deliver all spent lamps received from customers to processors who have been approved to service the program.

Section 2.2 Participant Reporting: For each load of lamps delivered to a processor, Participant will deliver a report to RCO setting out the quantity and type of lamps to be recycled, where the spent lamps were generated, and such other information as RCO may reasonably request in advance.



Section 2.4 Compliance with Law: Participant will comply with applicable law and best industry practice when collecting, handling, transporting and disposing of lamps covered by Take Back the Light.

Section 2.5 Subcontracting: Participant may use third party subcontractors for collection, transportation, storage or other services in respect of spent lamps, provided that Participant will remain liable to RCO for any acts or omissions of subcontractors that contravene Participant's obligations under this Agreement.

Recycling Council of Ontario (RCO) also developed *Program requirements for mercury containing lamps recycling processors*. Processors that wish to service Take Back the Light must be audited and approved, independent of RCO, against the program requirements. The intent of the program requirements is to provide direction on the best environmentally sound management of mercury containing lamp recycling. The criteria aim to ensure that all lamps recovered through Take Back the Light are processed in a way that minimizes negative impacts under strict health and safety procedures, and that the maximum amount of each bulb collected is recycled, (i.e., that mercury and other components: glass, metal and phosphor) and recovered for reuse in new products, where possible, to support and advance a circular economy.

As such, all lamps generated and collected by Take Back the Light suppliers and program partners as part of Save on Energy are processed by an approved recycling processor that adheres to the highest environmental, health, and safety standards as outlined.

- 2. Ensure removal of less efficient equipment from the market. Confirm the base case equipment to assist in our energy savings verification – this entails verifying the quantities, wattage and type of lighting that was disposed of.** (This is what is asked for on the certificate or declaration).

Transparency and accountability of materials throughout the entire life-cycle are the guiding principles of Take Back the Light. We work with program partners to track lamps from generation to final disposition with the ability to report on the total lamps recycled by lamp type. Through our tracking and verification process we are able to compare the quantity and type of lamp that is sent for recycling against data received from the processor once lamps are recycled. This process is one mechanism that ensures the removal of less efficient equipment from the market. We also allow for a five per cent discrepancy rate when verifying total lamps shipped and recycled as it is important to recognize that breakage can happen.

The majority of our lighting suppliers and partners have been involved in Take Back the Light for nearly a decade and have embedded proper end-of-life management of lighting into their business models. Partners are provided a certificate which can be shared with IESO to maintain transparency.



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Recommendations:

The following recommendations have been identified by Take Back the Light and program partners for consideration by the IESO.

1. Use Take Back the Light as a third-party standard and leverage its auditing features to track, verify, and report on lamps recycled for program partners to replace the existing proof of disposal requirement.
2. Adopt a discrepancy rate, recommended at five per cent, to allow for breakage and add flexibility to reporting process. Breakage may happen during transport, which is a market reality. Safe management of broken materials is important and part of the Take Back the Light service agreement.
3. Recommend Take Back the Light's approved recyclers and program requirements for processors to ensure proper end-of-life management of lamps that are part of the IESO Save on Energy program.
4. Work with Take Back the Light and program participants to standardize the Save on Energy and ensure level playing field for all participants
5. Redefine and replace "disposal" in the participant agreement as it does not promote recovery and recycling. Remove "similar documentation" as this creates confusion around what exactly is required.
6. Work with Take Back the Light to advocate for an amendment to regulations concerning ballasts to allow for proper management, storage, and transport.
7. Work with Recycling Council of Ontario and the Canadian Association of Recycling Industries to identify and recommend metal recycles for fixtures to ensure resource recovery, and support circular economy.

About Take Back the Light

Take Back the Light is managed by Recycling Council of Ontario (RCO), a not-for-profit membership-based organization committed to minimizing society's impact on the environment by eliminating waste. RCO's mission is to inform and educate all members of society about the avoidance of waste, efficient use of resources, and the benefits and/or consequences of these activities. Take Back the Light is an extension of RCO's commitment to Reduce, Reuse, Recycle, and uses the market to drive the efficient use of resources and advance the circular economy. With Take Back the Light's business model and partner network, post-consumed materials are integrated back into use and production cycles.

Take Back the Light advocates for using procurement to drive circularity in the marketplace. By working with suppliers and contractors to provide value-added services such as light bulb recycling, clients demand more than the lowest price, and as a result, businesses evolve. Working with Take Back the Light shows customers that they care by ensuring all spent light bulb components are funneled back into the production line and not lost to disposal. Participating in this program demonstrates value alignment with Take Back the Light, and a commitment to innovative business models that advance the circular economy with clients that want it done right.