Small Business Lighting Program Implementation Guide

The following document is meant to serve as a guide for Local Distribution Companies (LDCs) to implement the 2016-2020 Small Business Lighting (SBL) Program.

Before an LDC begins with delivering this program, they should ensure that their CDM Plan is updated and approved by IESO.

The SBL program is expected to continue for the next five years, until December 31, 2020. However, it may be changed and optimized to reflect updating market conditions and new technology and ideas every year or few years.

Who are the participants?

The SBL program is open to any general service customers under 100 kW and residential customers who are classified as Recognized Farm Operations.

Previous participants of the historical 2008-2010 Power Savings Blitz or 2011-2015 Direct Install Lighting Program are eligible to participate again. Once a customer participates in 2016-2020, they will not be able to participate again.

Customers could include the following:

- Restaurants
- Convenience Stores
- Small Grocery
- Small Gyms
- Mechanics
- Florists
- Dry Cleaners
- Medical Offices
- Health and Beauty
- Other

What is the participant offer?

Each customer gets up to $2,000 of LDC funding for lighting. This doesn't necessarily mean that the project is free, since there will be instances where the customer will have to contribute financially towards the project.

The featured lighting equipment is:

- LED A Lamps
- LED PAR Lamps
- LED MR Lamps
- High Bay LED Lighting
- High Bay T5 Lighting

- LED Tubular Lamps (T8 or T12 Replacement, with some installation restrictions)
- Exterior LED Lighting
- Refrigerated Display Case LED Lighting

Each of these lighting categories has one or more measures associated with it. Each measure has maximum power and minimum lumen output requirements. The Measures List is attached to this document.

The financial incentive for the customer is determined on a measure-by-measure basis. Each individual measure incentive is calculated as the lower of an LDC-determined price or $0.22/kWh multiplied by the assumed energy savings. The LDC-determined price has currently been provided as a cap; if an LDC is able to obtain the measure and its installation below the cap, then they are free to do so. This is discussed in further detail later in this document. The energy savings financial incentive calculation ($0.22/kWh multiplied by the assumed energy savings) is determined through the use of the Assessment tool. The software tool will be discussed in the Assessment Tool portion of this document.

It is important to note that each measure's financial incentive might not be enough to cover the cost of measure and the install completely. This means that the customer will have to fund any remaining portion, which is the customer cost sharing portion of the program. The customer still receives the equipment directly installed (i.e. they don't have to do anything other than agree to participate), but it may not be completely free anymore. The $2,000 is intended to cover LDC funding for completely covered measures, and cost-sharing measures.

Finally, if certain projects are beyond $2,000 in LDC funding from SBL, and the customer wishes to pursue the project, they will be able to apply the Standard Incentives that match the Prescriptive incentives from the Retrofit Program. The added benefit to the customer is that they can apply for these incentives through SBL, without having to go through the Retrofit Program application process. The Assessment tool will include this feature. For clarity, the same measure can not receive an incentive from SBL and Standard Incentives from the Prescriptive incentives from the Retrofit Program.

Delivery Activities

The specific delivery functions to run the Program are listed below:

1) Generation and Maintenance of Customer List
2) Marketing and Promotion
3) Managing Appointments
4) Assessments
5) Measure Installation
6) Payments and Settlement
7) Quality Assurance and Quality Control (QA/QC)
8) Reporting

LDCs should determine how they wish to proceed with the activities above. A description of each activity is provided below, along with some delivery model options to consider.

1) <u>Generation and Maintenance of Customer List</u>

All general service customers are eligible if their average demand for the last twelve months is under 100 kW. LDCs will have to generate a customer list of eligible participants and ensure that it is maintained.
In order to determine which customers are Recognized Farm Operations, LDCs will have get a Farm Business Registration (FBR) number, which is a 6 or 7 digit number administered by Agricorp.

2) <u>Marketing and Promotion</u>

LDCs will have the ability to select a marketing and sales strategy of its choice. The IESO in consultation with the LDCs will assist in the province wide marketing strategy through the central services budget which will not be charged back to the LDCs. This includes such things as:

- Development of a central website
- Sub-segment case studies
- Province wide TV and radio ads
- Social media advertising
- Billboards
- Online banner advertising (including lead generation)
- Search engine optimization
- Program learning guides
- Channel and customer brochures
- Other materials

In order to support this effort, a request of $3 million per year is requested from the IESO Central Services budget to help support the marketing strategy.

The program website should feature information about the program, and a postal code look-up allowing potential customers to determine their LDC. Once the customer finds their LDC, they should see contact information for that LDC's SBL Program, and a link to that LDC's custom SBL website, if they have one.

LDCs have several options for marketing and promoting the program. Based on the potential uptake and budget that they forecast for this program, they may want to consider the following:

- Custom website development
- Targeted bill inserts
- Local radio
- Local newspaper
- Blitz approach → knocking on doors
- Community events
- Partnerships with program implementers, local contractors and/or lighting equipment supply companies
- Other

LDCs may want to undertake these activities alone, or in collaboration with other LDCs.

Forecasting Number of Projects

Before exploring delivery and procurement options, an LDC will want to forecast the potential uptake of projects from the SBL Program, as the results may influence their procurement decisions.

Two potential methods for forecasting the potential uptake are to look at historical participation and determine which opportunities are left. It is important to note that all previous historical SBL participants are eligible, the customer eligibility has expanded, and that the measures list has been streamlined with an LED focus.

Historically, the three most popular measures have been LED A Lamps, LED PAR Lamps and T8 installation. T8s are not featured on the measures list anymore, but LED tubular lamps are featured with certain restrictions.

3) Managing Appointments

Regardless of how an LDC decides to set up the customer intake and management process, it should ensure that it has a process. Typically, in response to Marketing and Promotion, customers may want to access the Program. Additionally, if a customer has a scheduled appointment, and wishes to request a change or cancellation, there needs to be a way of doing so. At the bare minimum, an LDC should have a contact number and email address for the Program, so that customers have the ability to communicate. LDCs are free to choose how they set this process up internally, or whether they outsource it to a program manager or contractor.

4) Assessments

Each potential customer will get an onsite assessment of their lighting efficiency opportunity. They may also be provided other information regarding energy conservation, and how their facility performs. An assessment may take thirty minutes to an hour, not including transportation time or installation. The assessment will likely contain the following steps:

- Introduction and Greeting
- Basic Information Completed
- Walk-through and photos (where applicable)
- Participant Agreement Completion
- Measure Installation and/or Future Measure Installation Appointment Scheduling
- Payment (if applicable)

If any of the measures don't require a licensed electrician for installation and can be completed by the individual conducting the assessment, then it may make sense to do the installation during the assessment visit. If any of the measures require a licensed electrician, or another date for installation, the appointment should be scheduled during the assessment.

Depending on the delivery model chosen, there may be a need for a payment from the customer to the individual conducting the assessment, for any measures that require cost sharing, or any standard incentive applications. The LDC may or may not have visibility on this process, depending on the commercial arrangements. The LDC should ensure that the agreed-upon measure cap is not breached.

5) Measure Installation

Some of the measures may be able to be installed by the individual conducting the assessment. Other measures may require installation by a licensed electrician. The LDC should ensure that all Program Rules and other required safety standards, rules and practices are followed.

Before measures are installed, a photo of the replaced equipment should be taken. After the measures installed, photos of the new equipment should be taken.

Again, there may be a need for a payment from the customer to the individual installing the measures, for any measures that require cost sharing, or any standard incentive applications. The LDC may or may not have visibility on this process, depending on the commercial arrangements. The LDC should ensure that the agreed-upon measure cap is not breached.

Opportunity for Price Reductions in the Measures

LDC should review the Measure Caps and determine whether they will be able to obtain the measures and installation at a cheaper price. If so, they are able to pursue this option.

A potential method for getting cheaper measure pricing is to look at bulk-buying. An LDC or a group of LDCs can examine the SBL Measures List and forecast the volumes of certain measures, if not all of them. The LDC or LDCs can then engage with measure suppliers or contractors to see if a price discount can be obtained for volume purchases either at or below those forecasted levels. If going down this route, the LDC or LDCs should investigate the risk of guaranteeing volumes, purchasing the measures in advance, and/or looking at inventory storage and management for the purchased measures. Any LDC considering going down this path should carefully investigate the risks of this approach, and determine if the benefits are worth the risk.

It may also be possible that certain measure suppliers or contractors may want an LDC's business and are willing to negotiate on price if a discount guarantees them work. Through individual size or collaboration, LDC's may have enough buying power where they are able to obtain equipment at wholesale or supply chain prices.

In making any commercial agreements, LDCs should follow their own procurement rules.

6) Payments and Settlement

There are two different payments that needed to be considered:

1. LDC Payment for Measures and/or Installation

For any project, LDCs may pay up to $2,000 under the SBL Program. The $2,000 includes both measures that are completely covered, and the LDC portion of any cost-sharing measures. It also contains the ESA fees that need to be remitted to the ESA. Beyond the $2,000, LDCs may pay Standard Incentives that map to the Prescriptive incentives from the Retrofit Program, and use the streamlined SBL Program application process. Each LDC needs to ensure that it develops processes to track these different payments. The Assessment tool will contain the relevant project information and provide it in database form for LDC use, but it will not execute payments.

2. Customer Payment for Measures and Installation

For any project, customers may pay a portion for the measures installed. There isn't a limit on the customer portion, but each individual agreed-upon Measure Cap can't be breached. LDCs may not have visibility on the payment process between the customer and the individuals conducting the assessments and/or measure installations, depending on the delivery model and applicable commercial arrangements. The LDC should ensure that the agreed-upon measure cap is not breached. A possible way to do that is to request a copy of the invoice between the customer and the contractor.

7) <u>Quality Assurance and Quality Control</u>

There are four main areas of QA/QC:

1. Ensure customer and appointment information is correct
2. Ensure project information is correct
3. Ensure LDC payment is correct
4. Ensure customer payment does not breach the Measure Caps

The software tool will be as granular as possible in ensuring that the customer and appointment information is captured correctly. It will features drop downs for selection where possible, to prevent typographical error.

The photo evidence for both the replaced measures and new measures will help confirm the project information is correct, and eliminate the need for real-time, on-site inspections.

Once the project information is confirmed, the LDC payment amount can also be confirmed.

LDCs will have to ensure that if they are involving third parties in the program delivery, they have a process to ensure that the customer payment does not breach the Measure Caps.

Beyond the four areas described above, the QA/QC process should ensure the Participant Agreement was signed, and that the Program Rules were complied with.

In terms of QA/QC, there is a need to follow the Sampling Protocol. In layman's terms, it is the lesser of 1/10 projects or what is required for a 90% Confidence Interval. If the photo evidence is deemed to be sufficient, on-site inspection is not required.

8) Reporting

Each LDC will have to adhere to the ECA reporting requirements, as well as any applicable Rules and Guidelines. The Assessment Tool will feature the database for all project information, and it can be developed to produce specific template reports.

Procurement of Delivery Options

As discussed above, there are eight main activities that are included in program delivery. LDCs may choose to work alone, or collaborate with others, as they may find certain delivery activities can be centrally coordinated and/or result in cost efficiencies.

LDCs have several options for how they can deliver the SBL Program. The following section has four different delivery approaches outlined; however an LDC has the flexibility to do what they wish, as long as the Program Rules and the Energy Conservation Agreement (ECA) and associated Rules are complied with.

Delivery Option 1: In-House

An LDC may look at the potential uptake of the program and determine that they can keep the entire program delivery in-house. The LDC will be responsible for all eight activities.

Delivery Option 2: Hybrid (*Outsourcing some functions*)

From determining the potential uptake of the program and looking at specific required skills, an LDC may choose to outsource some of the delivery activities. Historically, this has been the case for various LDCs. For example, LDCs may wish to outsource the Assessments and Measure Installation activities to local contractors. With regards to outsourcing any functions, LDCs should be aware of the transition points and the hand-offs between the functions so that the program is delivered smoothly. Additionally, LDCs may choose to have multiple delivery partners for a particular function, or allow one delivery partner to have sole responsibility for one function.

Delivery Option 3: Turnkey Implementer

An LDC may choose to outsource the entire program delivery to a program implementer. The program implementer deals with all of the delivery activities, and sub-contracts as required for specialized functions. The LDC does not necessarily need visibility into the individual activities, but it is always recommended to be informed and involved, especially from a customer service and program management perspective.

Delivery Option 4: LDC Publishes Measure Incentive List and Customers/Contractors Bring their Own Projects

This delivery model is identical to the current Retrofit Program. One of the major differences is that measure incentives calculated under the SBL Program are the lesser of the agreed-upon measure cap and the energy savings financial incentive. The software tool or some other mechanism for determining the incentive would have to be deployed before the payments from the project can be settled. The other major difference is that the application process would have to be altered to begin after the project is completed, so the Participant Agreement would have to be modified as required. This option requires a lot of training, reference materials and support since anyone can theoretically deliver the program so they need to have access to reference material and resources.

Summary Table of Potential Delivery Options

Delivery Activity	Option 1 – In House	Option 2 - Hybrid	Option 3 – External Turnkey	Option 4 – "Retrofit – like"
Generation and Maintenance of Customer List	LDC	LDC/Program Implementer	Program Implementer	LDC
Marketing and Promotion	LDC	LDC/Program Implementer/Marketing Firm	Program Implementer	LDC/Marketing Firm
Managing Appointments	LDC	LDC/Program Implementer/ Call Centre	Program Implementer	N/A
Assessments	LDC	LDC/Program Implementer/Contractor	Program Implementer	N/A
Measure Installation	LDC	LDC/Program Implementer/Contractor	Program Implementer	N/A
Payments and Settlement	LDC	LDC/Program Implementer/Contractor	Program Implementer	LDC
Quality Assurance and Quality Control (QA/QC)	LDC	LDC/Program Implementer/Service Provider	Program Implementer	LDC/Service Provider
Reporting	LDC	LDC/Program Implementer/Service Provider	Program Implementer	LDC/Service Provider

Sample flow charts of the discussed delivery options are included in the appendices.

<u>Assessment Tool</u>

As part of the program delivery, the IESO will centrally fund the development of a software tool that can be used for the following functions:

- Entry and Storage of Customer Information
- Entry and Storage of Project Information
- Incentive Calculator
    - LDC Portion of Payment
    - Customer Portion of Payment
- Project Savings Calculator
    - Simple Payback Analysis

The tool will be able to be deployed on computers and mobile devices, and will have database functionality for LDCs to be able to review all customer and project information that has passed through it. It will also provide reporting functionality.

Use of the software tool is optional for LDCs. They may choose to deploy their own delivery solutions as desired.

A skeleton of the Assessment Tool interface is provided as an accompanying document.

Evaluation Strategy

The data required to determine the impact evaluation (i.e. energy savings) will be housed in the Assessment Tool. For the first year (2016) of delivery, IESO's centrally procured database will also store individual project information.

Upon request, LDCs will need to provide to the IESO the following for each completed project:

- Customer Information
- Project Information
- Payment Information

Tracking Customer Satisfaction

LDCs may wish to monitor participant feedback and satisfaction with the program. LDCs may also wish to know how non-participants feel about the SBL program. In order to do this, it is recommended that the SBL Program phone and email address be reviewed frequently, and issues recorded. Additionally, LDCs may wish to conduct a follow up survey with a certain number of customers to track their satisfaction after participation. This activity is not mandatory, but it is recommended as good customer service and program management practice.

Assessment Tool Interface

The Assessment Tool design will be refined based on discussions with LDCs, potential users and developers.

General Information

LDC Name	Toronto Hydro-Electric System Ltd		
Date	1	January	2015
Business Name	ABC Flowers		
Owner Name	A B C		
Contact Number	111 222 3333		
Address	123 A Street		
City	Toronto		
Postal Code	M5H 1T1		
Account Number	100-200-300		
Annual Consumption (kWh)	36000		
Type of Business	Mechanic/Garage		
Operating Hours	4500		
Square Footage	10000		

LDC Payment Over $2,000?	No

Project Information

For defined base measure

Efficient Measure Name	Base Measure Name	Efficient Measure (kW)	Base Measure (kW)	Per Unit Energy Savings (kWh)	Measure Price Cap for LDC ($)	Quantity	Total Demand Savings	Total Energy Savings (kWh)	Total Measure Price Paid	Cost Sharing?	Amount Paid by Customer
17W – 23W ENERGY STAR® Qualified LED A Shape	38W Halogen	0.02	0.038	81	$10	4	0.072	324	$40	NO	$0
175W High Bay LED	400W Metal Halide	0.175	0.458	1274	$255	6	1.698	7644	$1,530	NO	$0
139W High Bay LED	250W Metal Halide	0.139	0.295	702	$140	2	0.312	1404	$280	NO	$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
		0	0	0	$0		0	0	$0		$0
				0		**12**	**2.082**	**9372**	**$1,850**		**$0**

Project Summary

Demand Savings (kW)	Energy Savings (kWh)	Quantity of Measures Installed	Total LDC Measure Payment ($)	Total Customer Measure
2.082	9372	12	$1,850	$0

Simple Payback	**0**

Remaining Opportunities

If some measures were not installed, please list the efficient measure, base measure and quantity here

Remaining Opportunities

If some measures were not installed, please list the efficient measure, base measure and quantity here

Efficient Measure	Base Measure	Quantity