

PY2023 EM&V Key Findings and Recommendations

2021-2024 CDMF Local Initiatives Program (LIP)

No.	KEY FINDINGS	2023 EM&V RECOMMENDATIONS	IMPACT	IESO RESPONSE
1.	EcoMetric found that the savings listed in the "BizEnergySaver Measure Savings" spreadsheet (i.e., the reported savings workbook provided by the program delivery vendor) did not consider the impact of facility type on the savings for lighting and VFD measures. For example, there was no distinction made between key parameters for office buildings and multi-family residential facilities in the savings calculated by the delivery vendor.	Ensure key measure parameters are not facility agnostic. Office buildings have substantially different operating conditions than multi-family residential buildings. Key measure parameters such as operating hours and peak coincidence factors need to be facility specific to ensure accuracy in the savings claimed for the program.	High	The IESO will address this with the program delivery vendor.
2.	EcoMetric found that the information provided by the program delivery vendor in the BizEnergySaver Measure Savings (particularly the 'Measure Assumptions' tab) workbook and source documentation of key parameters that serve as inputs to savings algorithms could be improved to validate savings.	Provide more insight into the sources and assumptions behind baseline and efficient case parameters such as fixture wattages and hours of operation for BizEnergySaver measures. Key parameter assumptions should be supported by source documentation that can be traced and verified.	High	The IESO will address this with the program delivery vendor.

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3.	<p>Overall, the net-to-gross ratio (NTGR) for LIP was high. Little free-ridership was identified.</p> <p>The program level NTGR for BizEnergySaver is 96%. Four out of ten respondents received VFDs and the other six received lighting. The high NTGR was largely driven by the program's influence on the timing of completing the measures offered. Two out of ten respondents indicated they would have never installed the measure without the program, and seven indicated they would not have installed the measures within the next two years without the program. BizEnergySaver respondents indicated that the funding from the IESO was very important for getting the measures installed. All 10 respondents reported that the IESO funding was the only external funding they received for the project, and eight reported it was critical for completing the upgrades.</p> <p>The program level NTGR for CoolSaver was 98%. All seven CoolSaver respondents received AC tune-ups. Six out of the seven CoolSaver respondents reported they were very unlikely or unlikely to perform the AC tune-up without the program. Three respondents indicated in their verbatim responses that they would never have known about the benefits or thought to do a tune-up without the program marketing.</p>	<p>LIP is reaching a population that would not complete these upgrades without program support. EcoMetric recommends continuing the program and expanding at least its geographic coverage and likely expanding measures, as well. The EcoMetric team recommends continued monitoring of NTG as programs are expanded, as the change could lead to higher levels of free-ridership.</p>	High	<p>The IESO may consider extending BizEnergySaver and CoolSaver. The Richview South area may be expanded as planning has identified additional constraints in Toronto. We are not currently considering expanding measures but will consider those the program delivery vendor suggests.</p>
4.	<p>For BizEnergySaver, qualified contractor interviews revealed that postal code limitations are the greatest barrier to additional program uptake. On average, interviewees estimated that 200% more projects could be completed through the program each year if eligible postal codes were expanded.</p>	<p>The IESO should consider assessing if any postal code eligibility expansion will result in decreased electricity usage and/or peak demand reduction in areas with grid strain. They should also assess if such expansion still results in high NTGR.</p>	High	<p>The program is intended to relieve constraints at identified transformer stations (TSs) and is limited to those areas served by those TSs. The IESO will continue to assess needs across the province and identify areas may be suitable to include.</p>

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5.	EcoMetric found that for CoolSaver AC Tune Up measures, Richview South's Effective Full Load Hours (EFLH) were applied to measures installed in the Ottawa and York regions.	Apply region-specific EFLH values listed in the 'Appendix F – Energy and Peak Demand Savings Determination CoolSaver' document for AC Tune Up measures. Ensure accuracy and consistency in application of the key parameters that serve as inputs to savings algorithms.	Medium	The IESO will investigate this further with the program delivery vendor.
6.	For CoolSaver, qualified contractor interviews revealed that households may not understand the limitations of a tune-up and may expect contractors to repair the equipment when equipment is broken. For example, contractors have arrived at residences where customers think or hope they have a low refrigerant charge and thus need a top-up, only to learn there is a more serious problem like a "bone-dry" unit for which a refrigerant top-up is inappropriate. Customers then fear they are being scammed or at least bait-and-switched, as they believe a free tune-up should fix a problem in need of further repair. One contractor stated three times that using the term "top-up" when describing the program was unhelpful at best and noted that the IESO program delivery vendor could not screen residences with broken air-conditioning units. That same contractor ultimately felt obliged to provide free and unreimbursed repair services to two customers who were unhappy with the appearance of disingenuous upselling, for fear of bad social media postings.	It is recommended that the program delivery vendor should discuss with contractors what screening question(s) to add to the application form to ascertain the current working condition of the unit. If a customer indicates the system is not working well, the program delivery vendor should consider including a disclaimer that a repair might be necessary (subject to diagnostics) and is not covered by the program rebate. Also, program staff should re-consider using the phrase "top-up," at least not without context.	Medium	The IESO has confirmed with the program delivery vendor that they screen to ensure the unit is operating before scheduling the tune-up. Repairs are not intended to be addressed through the program. Top-up is only used on the webpage once to describe the refrigerant adjustment but we can revise to increase clarity.
7.	EcoMetric found that the EFLH values in Appendix F for CoolSaver AC Tune Up measures vary substantially between regions in geographical proximity as shown: <ul style="list-style-type: none"> Richview South – 803 York – 602 Ottawa – 421 Further investigation is needed to investigate why these values are substantially different.	EcoMetric recommends the IESO commission an in-depth measure parameter study to investigate the methodologies and assumptions used to calculate key parameters such as EFLH values for the program.	Medium	The IESO will investigate the methodologies and assumptions used within the program.