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# PY2024 EVALUATION OF CAPABILITY BUILDING INITIATIVES

IESO Save on Energy 2021–2024 CDM Framework

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Prepared for: The Independent Electricity System Operator (IESO)

Prepared by: EcoMetric

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### **EcoMetric Staff**

Mike Honeychuck | Senior Managing Consultant

Sharon Mullen | Senior Managing Consultant

Presley Powers | Analyst

## Abbreviations

Acronym	Meaning
<b>CBI</b>	Capability Building Initiative
<b>CDM</b>	Conservation and Demand Management
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>EBCx</b>	Existing building commissioning
<b>EEM</b>	Expanded Energy Management
<b>EER</b>	Energy efficiency ratio
<b>EM&amp;V</b>	Evaluation, Measurement, and verification
<b>EPP</b>	Energy Performance Program
<b>GHG</b>	Greenhouse gas emission
<b>IEEP</b>	Industrial Energy Efficiency Program
<b>IESO</b>	Independent Electricity System Operator
<b>KF&amp;R</b>	Key finding and recommendation
<b>kW</b>	Kilowatt
<b>kWh</b>	Kilowatt-hour
<b>LIP</b>	Local Initiatives Program
<b>LUEC</b>	Levelized unit energy cost
<b>MW</b>	Megawatt
<b>MWh</b>	Megawatt-hour
<b>NEB</b>	Non-energy benefit
<b>NRCan</b>	Natural Resources Canada
<b>NTG</b>	Net-to-gross
<b>PAC</b>	Program administrator cost
<b>PY</b>	Program year
<b>QA/QC</b>	Quality assurance / quality control
<b>RR</b>	Realization rate
<b>SEER</b>	Seasonal energy efficiency ratio
<b>SEM</b>	Strategic energy management
<b>TRM</b>	Technical reference manual

# EXECUTIVE SUMMARY

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This report summarizes Program Year 2024 (PY2024) achievements of the Capability Building Initiatives (CBIs) in the 2021-2024 Conservation and Demand Management (CDM) Framework. EcoMetric evaluated 65 initiatives with 2,874 attendees divided among 32 webinars, 12 workshops, 5 coaching support sessions, and 1 in-person training in the PY2024 evaluation. EcoMetric leveraged its evaluation of three Independent Electricity System Operator (IESO) CDM programs—Energy Performance Program (EPP), Local Initiatives Program (LIP), and Strategic Energy Management (SEM) program—to evaluate the influence and benefit of CBI attendance<sup>1</sup>.

## E.1 PROGRAM DESCRIPTION

The IESO's CBIs provide educational and training resources to increase energy-efficiency knowledge and drive conservation actions that result in electricity savings from key end uses, sectors and channels in Ontario. The initiatives are organized into three tiers:

- ▶ **Foundational:** Introductory training and basic knowledge aimed at organizations with limited experience and resources for energy efficiency.
- ▶ **Specialized:** More advanced training and resources aimed at organizations in key target sectors with a higher level of knowledge gained through training and project experience.
- ▶ **Advanced:** Direct support through the facilitation of integrated approaches to energy efficiency decision-making targeted at experienced organizations.

In the CBIs, a “project” refers to an ongoing or recurring initiative to educate and build capabilities among Ontarians through targeted information sharing.

This evaluation focused on the 65 initiatives where EcoMetric had attendance records, listed in Appendix B, and surveys of participants in Save on Energy's EPP, LIP, and SEM to access the program influence and project benefits from CBIs.

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<sup>1</sup> Future CBI evaluations may leverage other IESO programs such as Retrofit and Small Business Lighting if the timing of the CBI data collection can be synchronized with the evaluations of those programs.

## E.2 EVALUATION OBJECTIVES

The primary focus is the degree to which the initiatives are enabling participation in the IESO's programs active in the 2021–2024 CDM framework, including EPP, LIP, and SEM. For PY2024 EcoMetric surveyed the three IESO CDM programs to detect influence and benefit of CBI attendance to estimate CBI's channeling effect. EcoMetric also conducted a process evaluation of CBI participants to gather participant feedback and improve processes.

The process evaluation and value for money components of this evaluation analyzed project and program participant and cost data and identify potential improvements to CBI delivery.

Specific evaluation objectives included:

- ▶ Assess the degree to which the CBIs are influencing participation in IESO CDM programs and implementation of energy efficiency projects outside of IESO's programs,
- ▶ Evaluate the effectiveness of CBI delivery
- ▶ Determine opportunities to grow influence and improve evaluability of the initiatives
- ▶ Quantify the influence of CBIs on energy efficiency projects implemented by participants as part of CDM programs or outside of the programs

Specific questions EcoMetric researched included:

- ▶ What percentage of participants are influenced by CBI to participate in other IESO programs?
- ▶ What percentage of participants report their incented projects benefited from CBI in improved efficiency and/or quality?
- ▶ What is the overall effectiveness and comprehensiveness of the initiatives?
- ▶ How does attendance vary between the CBIs, if at all?
- ▶ How can CBI content, delivery, processes, and evaluability be improved to further IESO business goals and ensure positive customer experiences?

## E.3 EVALUATION APPROACH

The primary focus of this evaluation was to estimate the effectiveness of CBIs on energy efficiency projects implemented in Ontario. The evaluation also focused on researching how CBIs influenced and led to increased participation in other Save on Energy programs ("channeling") and measuring the increase in awareness from participation in the CBIs.

The evaluation analyzed satisfaction, time in attendance, and other metrics that drive the influence and benefit of initiatives, energy efficiency project implementation, and CBI cost data to identify potential improvements to delivery. Specific evaluation objectives included:

- ▶ Assess the degree to which the CBIs are influencing participation and savings in IESO CDM programs and outside IESO CDM programs,
- ▶ Evaluate the effectiveness of CBI delivery, and
- ▶ Determine opportunities to grow influence and improve evaluability of the initiatives.

Specific questions EcoMetric researched included:

- ▶ What percentage of participants are influenced by CBI to participate in other IESO programs?
- ▶ What percentage of participants report their incented projects benefited from CBI in improved efficiency and/or quality?
- ▶ What is the overall effectiveness and comprehensiveness of the initiatives?
- ▶ How does attendance vary between the CBIs, if at all?
- ▶ How can CBI content, delivery, processes, and evaluability be improved to further IESO business goals and ensure positive customer experiences?

## E.4 SUMMARY OF RESULTS

### E.4.1 PARTICIPANT PROFILE

The majority of respondents (67%) reported that their highest role regarding energy involves either signing contracts or approving funding for energy efficiency projects (21%) or recommending or approving such projects (46%). Another 9% of respondents reported roles tied to project management or contractor oversight, reflecting active involvement in project execution rather than strategic approval. Additionally, 21% of respondents indicated roles focused on supporting or analyzing energy efficiency projects, suggesting the survey reached a broad range of organizational roles beyond executive decision-makers.

Most respondents (82%) indicated awareness that Save on Energy offers additional programs beyond the CBIs they attended. Among those aware, the most frequently recognized program was Business Retrofit (64%), followed closely by Existing Building Commissioning (EBCx, 62%), SEM (58%), and Custom Retrofit (58%).

Most respondents (59%) reported that their company has participated in at least one Save on Energy project that provided incentives for energy efficiency improvements. Among those who have participated, responses varied in the extent of their involvement. Thirty percent of respondents

indicated that their organization had completed between one and five incentivized projects, while 7% reported completing six to ten projects. Notably, 23% of respondents stated that their organization had completed more than ten projects, demonstrating a high level of ongoing engagement with energy efficiency initiatives. At the same time, 18% of respondents said their organization had not participated in any incentivized projects, and an additional 23% reported that they did not know whether their organization had been involved.

#### E.4.2 PARTICIPANT AWARENESS

Respondents most frequently reported that they became aware of the PY2024 CBIs through prior experience with Save on Energy training (30%), reinforcing the critical role of past participation in driving continued engagement. The Save on Energy website (20%) was the next most common awareness source, highlighting the importance of maintaining a strong online presence.

Reliance on internal organizational networks declined. Only 13% of respondents reported hearing about the CBI from a manager, energy manager, or leader at work, a 14-percentage point decrease from PY2023.

All respondents identified email as the most effective way to learn about future training opportunities, making it the clear preferred communication channel.

#### E.4.3 MOTIVATION TO PARTICIPATE

Respondents reported a variety of motivations for participating in CBIs, with most reasons connected to their job responsibilities or to specific energy projects. The most frequently cited motivation was to support their job function (74%), followed by desire to better plan future energy projects (67%), professional advancement (57%), gaining a better understanding of planned or existing projects (56%), learning about existing energy use (51%), and networking with professionals (46%),

Compared to PY2023, PY2024 responses show a broader balance of job-related, project-related, and personal interest factors. Notably, 31% of respondents cited personal interest, reflecting a continued trend of CBIs appealing to both professional and personal learners.

These results suggest that while CBIs remain important for professional development and project support, they also attract participants with diverse and overlapping motivations — highlighting the value of flexible content that can meet varying participant needs.

#### E.4.4 PARTICIPANT SATISFACTION

Overall satisfaction remained strong in PY2024, with respondents giving the training an average score of 8.1 on a 0–10 scale. This represents a slight increase from PY2023, when the mean overall satisfaction was 7.9. The quality of instructors continued to be a highlight, receiving a mean rating of

8.3 and 47% of respondents selecting a 9 or 10. Other elements were also rated positively, with most respondents selecting scores between 7–10. These areas earned mean ratings between 7.8–7.3.

Compared to PY2023, mean satisfaction scores rose modestly across most categories, particularly in content relevance and perceived value for future application. Instructor quality and overall experience remained consistently strong across both years.

These results suggest that CBIs continue to meet or exceed participant expectations, with small but meaningful gains in overall satisfaction, especially in areas tied to learning outcomes and content relevance.

#### E.4.5 ATTENDANCE IN WEBINARS

About one-third of participants remained connected to their webinar for more than 75 minutes. Around one-quarter stayed connected for 55–65 minutes, closely matching the planned session length. Regardless of how many CBIs they attended, participants tended to engage consistently with webinar content.

Attendance patterns varied by topic. The differences suggest that topic relevance, delivery style, or participant expectations may influence attendance patterns. Monitoring these trends can help inform adjustments to webinar delivery and participant engagement strategies.

EcoMetric analysis did not reveal a clear relationship between satisfaction and early webinar departures. Participants reported strong satisfaction levels, suggesting that factors other than perceived content quality or instructor effectiveness may have contributed to shorter attendance durations.

#### E.4.6 CHANGE IN FAMILIARITY AND KNOWLEDGE

Results showed that 49% of respondents reported an increase in knowledge following their CBI while an equal share reported no change. Regarding general familiarity, 37% of respondents reported an increase while 46% saw no change.

The results suggest that CBIs are generally effective in improving participants' knowledge and awareness of key topics, though they also challenge prior assumptions participants may have held. The combination of increased knowledge and recalibrated self-assessment reflects a meaningful learning process.

Fifty-one percent of respondents motivated by project-related reasons and 50% of those motivated by job-related reasons reported no change in knowledge following the CBI. The difference in familiarity change was also minimal, with a 1% variation between the two groups.

The findings suggest a significant overlap between job-related and project-related motivations among participants, making it difficult to distinguish different learning outcomes based on motivation alone. This result reinforces the idea that CBIs tend to serve both professional development and project support needs simultaneously, with participants likely seeing their motivations as interconnected.

#### E.4.7 INFLUENCE ON ENERGY EFFICIENCY PROJECTS

Most respondents (75%) reported that they have applied what they learned from a CBI in their workplace. CBI participation had a measurable impact on project activity. Forty-four percent of respondents reported planning an energy efficiency project as a result of attending a CBI, while 22% indicated they were actively participating in a CDM project.

Respondents also rated the influence of their CBI experience on project decisions—whether within IESO programs or outside of them—as generally strong. Across all categories, the majority of respondents found CBIs to be at least somewhat influential in shaping project planning or implementation.

These findings suggest that CBIs are supporting real-world application of knowledge and contributing to the development and execution of energy efficiency projects both within and beyond IESO programs.

#### E.4.8 INFLUENCE AND BENEFITS OF PARTICIPATION

Most (76%) respondents who attended a CBI before or during planning a project reported that the initiative influenced their ultimate participation in the project. Almost all (94%) of those attending an initiative during or after implementation reported that the CBI improved the quality and efficiency of that or another project.

Overall, respondents reported that CBI attendance influenced 63% of the projects and benefited 48% of the quality and efficiency of implemented projects.

Most respondents (81%) reported attending a CBI during the project planning phase, and 74% attended during project implementation. Notably, 39% continued their engagement by attending CBIs after project implementation. Nearly one-third of respondents (32%) indicated they participated in CBIs across all phases, —from before planning through post-implementation. This pattern suggests that many participants view CBIs as a resource not just for project initiation but for ongoing support throughout the project lifecycle.

While participants engaged with a broad range of topics, the most common areas of interest centered on practical applications for making the case for energy efficiency and understanding building systems, critical topics for driving project planning and implementation.

## E.5 KEY FINDINGS AND RECOMMENDATIONS

The following key findings and recommendations were identified during the evaluation as having greatest importance. The comprehensive list of findings and recommendations is included in Section 5, while the IESO responses on the recommendations are included in Section Appendix A. .

**Key Finding 1:** CBI influences participation in IESO programs, known as channeling, at a rate of up to 63% of program savings. Channeling was measured by surveying the PY2024 EPP, LIP and SEM participants regarding the influence of CBIs they attended prior to their decision to participate in the program.

Most survey respondents reported that the initiative influenced their planning or implementation of energy efficiency projects with or without IESO incentives. CBI education also benefits the quality and efficiency energy efficiency projects at a rate of up to 48% of the CDM program savings.

This benefit was measured by surveying EPP, LIP and SEM participants who attended CBIs during and after project implementation. The surveys focused on the benefits of CBI attendance to project quality and efficiency.

**Key Recommendation 1:** Continue to cross-promote CDM programs and CBIs, aligning CBI content with CDM program needs to further increase awareness of the programs. Emphasize the benefits of continued education to further increase awareness of energy conservation, leading participants to implement projects.

**Key Finding 2:** CBI attendance increased significantly in PY2024, with 32% (364) participating in two to five initiatives of varying types (webinars, workshops, online coaching, in-person trainings) and 9% (99) participating in six to thirty or more initiatives.

Active time spent by participants in the one-hour webinars was statistically the same between participants taking one to five initiatives as those taking six or more initiatives. Participants taking multiple initiatives took them from multiple topic areas. Workshops were more effective than other delivery methods but harder to schedule and more difficult for participants to find time to complete.

**Key Recommendation 2:** Encourage attendance across groups and focus to accompany participants on their journey from understanding potential improvements to creating a business case for participating in a CDM project and improving the project quality and efficiency.

**Key Finding 3:** Nearly half (49%) of respondents reported an increase in knowledge about the topic that they were most interested in learning about while the same percentage (49%) reported no change in their knowledge following the CBI.

Over one-third (37%) of respondents reported an increase in general familiarity with the topic of their CBI while 46% reported no change following the initiative.

A decrease in general familiarity was reported by 17% of respondents, and 2% reported a decrease in specific knowledge following their CBI. This is known as the Dunning-Kruger effect, a cognitive bias where those with less familiarity or expertise overestimate their capabilities. It indicates that the respondents learned enough to recognize their limitations and correct the perception of their abilities following the initiative, thus opening a pathway to improved performance and willingness to learn.

**Key Recommendation 3:** Consider offering one to two questions on the final webinar screen to track satisfaction with what participants learned and what they want to learn next. Use the results for program enhancement and future program development.

**Key Finding 4:** Respondents most frequently became aware of their PY2024 CBI from prior CBI experience. All respondents said that they prefer to learn about future opportunities by email.

**Key Recommendation 4:** Expand email campaigns and provide additional marketing materials via email, alongside maintaining promotions on the Save on Energy website

# 1 INTRODUCTION

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The IESO retained EcoMetric to evaluate the 2021-2024 CDM Framework CBIs administered during PY2024 in Ontario. This report summarizes PY2024 achievements of the CBIs in CDM Framework.

EcoMetric researched 65 initiatives with 2,874 attendees divided among 32 webinars, 12 workshops, 5 coaching support, and 1 in-person training in the PY2024 evaluation. EcoMetric also evaluated three IESO CDM programs to evaluate the influence and benefit of CBI attendance.

Throughout this report, the terms “project,” “event,” and “initiative” are used interchangeably to refer to the webinars and coaching cohorts.

## 1.1 Program Description

The IESO’s CBIs provide educational and training resources to increase energy efficiency knowledge and drive conservation actions that result in electric savings from key end uses, sectors, and channels in Ontario. Figure 1 depicts a sample of the webinar presentations for key CBIs.

*Figure 1: Example Webinar Title Slides*



Source: Program materials provided to EcoMetric by IESO

This report relies on data and survey responses from participants who attended 65 CBI events (listed in Appendix B. ) or participated in EPP, LIP, or SEM during PY2024. CBI webinars and events are intended to:

- ▶ Provide building owners/operators and channel partners with the knowledge and resources to complete energy savings projects

- ▶ Drive participation in Save on Energy incentive programs

## 1.2 Evaluation Objectives

The primary focus is the degree to which the initiatives are enabling participation in the IESO's programs active in the 2021–2024 CDM framework, including EPP, LIP, and SEM. For PY2024 EcoMetric surveyed the three IESO CDM programs to detect influence and benefit of CBI attendance to estimate CBI's channeling effect. EcoMetric also conducted a process evaluation of CBI participants to gather participant feedback and improve processes.

The process evaluation and value for money components of this evaluation analyzed project and program participant and cost data and identify potential improvements to CBI delivery.

Specific evaluation objectives included:

- ▶ Assess the degree to which the CBIs are influencing participation in IESO CDM programs and implementation of energy efficiency projects outside of IESO's programs,
- ▶ Evaluate the effectiveness of CBI delivery
- ▶ Determine opportunities to grow influence and improve evaluability of the initiatives
- ▶ Quantify the influence of CBIs on energy efficiency projects implemented by participants as part of CDM programs or outside of the programs

Specific questions EcoMetric researched included:

- ▶ What percentage of participants are influenced by CBI to participate in other IESO programs?
- ▶ What percentage of participants report their incented projects benefited from CBI in improved efficiency and/or quality?
- ▶ What is the overall effectiveness and comprehensiveness of the initiatives?
- ▶ How does attendance vary between the CBIs, if at all?
- ▶ How can CBI content, delivery, processes, and evaluability be improved to further IESO business goals and ensure positive customer experiences?

## 2 METHODOLOGY

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EcoMetric designed the evaluation to gather direct feedback from CBI participants on key aspects of training design and delivery. The evaluation explored participant satisfaction, motivations for attendance, timing of participation relative to the implementation of projects, and perceived value of the initiatives. Participant surveys were administered to assess how effectively CBIs met participant needs, supported project planning and implementation, and aligned with IESO's goals for the initiatives.

The results informed this evaluation by highlighting participant experiences with content relevance, delivery quality, and practical application—providing critical insights into the strengths of the current approach and identifying opportunities for improvement.

This section discusses the methods EcoMetric used to study the impacts of the initiatives across the IESO's portfolio of programs, and the methods used to evaluate the design, delivery, and administration of the initiatives.

### 2.1 Process Evaluation

The CBI evaluation focuses on influence in terms of education and enablement. Along with observations of overall program flow and participant feedback, recommendations are based on survey responses and project/program comparisons.

The process evaluation included a review of program materials, analysis of participant and budget data, time attending webinars, and thematic analysis of survey outcomes that could inform program administration. EcoMetric used delivery vendor webinar attendance records to evaluate webinar participation and time in attendance. Participant survey data was used to research:

- ▶ Awareness of CBI and other Save on Energy programs
- ▶ Motivation to participate in CBI
- ▶ Time attending CBI webinars
- ▶ Satisfaction with CBI
- ▶ Change in familiarity and knowledge following CBI

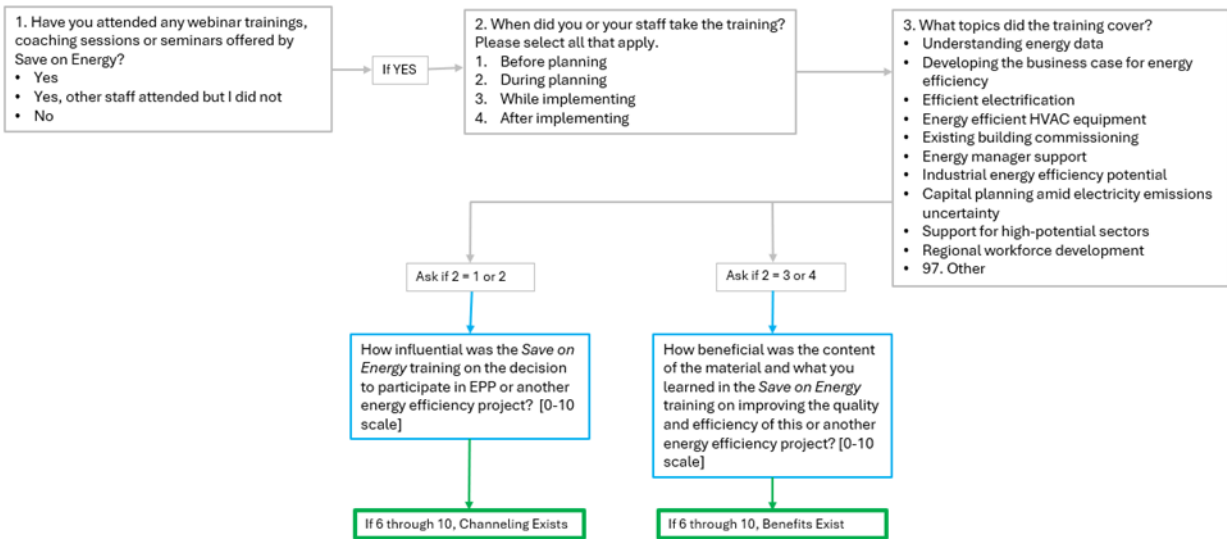
### 2.1.1 Influence and Benefits of Participation

EcoMetric evaluated the influence of the CBIs on participation in other Save on Energy programs by leveraging the participant surveys for the EPP, Commercial CoolSaver and BizEnergySaver from the LIP, and the SEM, the three commercial programs that EcoMetric evaluated in PY2024.

For this evaluation, channeling refers to the influence and benefits of information offered through a CBI to staff at companies have or are likely to participate in another IESO program.

EcoMetric added a short battery of questions to assess the influence and benefit of CBI attendance on the efficiency projects implemented through these programs following the algorithm presented in Figure 2.

Figure 2: CBI Influence and Benefit of CBI Attendance Survey Questions



To estimate the influence and benefits of CBI participation, EcoMetric calculated the percentage of savings substantially influenced by CBIs using the following formulae:

Table 1: CBI Influence and Benefit Calculations

Influence	Benefit
$R = \frac{\text{Verified savings for projects with } > 5 \text{ CBI influence}}{\text{Verified savings for all survey respondents}}$	$R = \frac{\text{Verified savings for projects with } > 5 \text{ CBI benefit}}{\text{Verified savings for all survey respondents}}$
Program kWh influenced = $R * \text{Program verified savings}$	Program kWh benefited = $R * \text{Program verified savings}$

# 3 RESULTS

This section summarizes findings related to CBI effectiveness, internal data management, and administration. This research included a review of participant motivation and goals for attending CBIs and the alignment of participation with the completion of energy efficiency and electrification projects within or outside of IESO’s CDM programs. It also examined opportunities to strengthen the influence of CBIs, improve their evaluability, and enhance the content, delivery methods, and processes. These insights aim to support IESO’s business objectives while maintaining a positive experience for participants.

The following section describes EcoMetric’s sampling approach and survey response rates, then provides a detailed explanation of each evaluation research topic.

## 3.1 Survey Sampling

In PY2024, EcoMetric conducted a post-participation survey for all CBIs using a census approach. Invitations were sent to all unique participants with valid and complete contact information after removing invalid addresses and bounced emails. Reminders were sent to respondents who started the surveys but did not complete.

Table 2: CBI Sample

Parameter	Quantity
Initial Total Sample	1,139
IESO Staff Removed	21
Survey Invites Sent	1,118
Email Bounces	63
Valid Recipients	1,055

Source: EcoMetric analysis

Across all initiatives, the survey achieved a 22% open rate and an 8% response rate, with a 6% overall completion rate (Table 3).

Table 3: Overall CBI Respondent Dispositions

Disposition	Quantity	Percent of Total
Survey Completes	61	6%
Partial Completes	7	<1%
Stopped at Landing Page	146	14%
Screened Out	21	2%
Unresponsive	820	78%
Valid Recipients	1,055	100%

Source: EcoMetric analysis

Table 4 shows sample sizes, dispositions, and completion rates by respondent group. The Energy Manager Support group had the highest completion rate at 10%, while Understanding Energy Data had the lowest at under 3%. Most groups had response rates between 5–10%.

Table 4: CBI Sample and Response Disposition by Group

<b>CBI Group</b>	<b>Total Initial Sample</b>	<b>IESO Staff Removed</b>	<b>Invites Sent</b>	<b>Screened Out</b>	<b>Partial Completes</b>	<b>Completes</b>	<b>Completion Rate</b>
<b>Developing the Business Case for Energy Efficiency (BCE)</b>	18	0	18	0	0	1	6%
<b>Capital Planning Amid Electricity Emissions Uncertainty (CPU)</b>	137	2	135	4	4	7	5%
<b>Existing Building Commissioning (EBCx)</b>	94	0	94	2	0	6	7%
<b>Efficient Electrification (EFE)</b>	195	0	195	4	0	14	8%
<b>Energy Manager Support (EMS)</b>	94	2	92	1	0	9	10%
<b>Support For High-Potential Sectors (HPS)</b>	62	11	51	1	0	2	4%
<b>Energy Efficient HVAC Equipment (HVAC)</b>	186	1	185	2	1	6	3%
<b>Industrial Energy Efficiency Potential (IEE)</b>	183	3	180	3	1	9	5%
<b>Regional Workforce Development (NON)</b>	47	1	46	0	0	4	9%
<b>Understanding Energy Data (UND)</b>	123	1	122	4	1	3	3%
<b>Total</b>	<b>1,139</b>	<b>21</b>	<b>1,118</b>	<b>21</b>	<b>7</b>	<b>61</b>	<b>6%</b>

Source: EcoMetric analysis

The overall PY2024 response rate of 6% was a decrease from the 21% recorded in PY2023. Unlike the prior year, no incentive was offered for survey participation in PY2024, which likely contributed to the lower response and completion rates.

Despite the reduced response, screen out rates remained low across all groups, and the open and completion rates aligned with typical industry benchmarks for voluntary post-event surveys. These results suggest that EcoMetric's outreach efforts successfully engaged a representative sample of CBI participants in PY2024.

### 3.2 Participant Profile

EcoMetric asked survey respondents to identify the roles they fill at work related to energy, providing seven predefined options and the ability to select "Other." Respondents could select multiple roles, reflecting the range of responsibilities they hold. In practice, selections ranged from one to six roles per respondent, highlighting the multi-faceted nature of many participants' involvement with energy efficiency initiatives.

To support the analysis, EcoMetric grouped respondents based on the role they selected that reflects the highest level of responsibility, following a hierarchical structure outlined in the bulleted list below. This approach allowed EcoMetric to categorize respondents according to their primary influence on energy decisions—ranging from those with direct authority over project funding and approvals to those who support or analyze projects and those whose interest is personal rather than professional.

- ▶ **Group 1** included individuals with the highest authority, such as those who sign contracts, approve funding, or recommend projects.
- ▶ **Group 2** captured those involved in project management or oversight, including hiring contractors or directly managing initiatives.
- ▶ **Group 3** included individuals who support, assist with, or analyze energy projects but do not hold decision-making authority.
- ▶ **Group 4** included respondents who engage with energy topics out of personal interest, not professional obligation.

This categorization framework helped EcoMetric understand the reach and relevance of CBIs across different organizational roles and influence levels. By analyzing responses within these groups, EcoMetric was able to better assess how CBIs are engaging key decision-makers versus technical support staff or interested individuals. This information will support future efforts to tailor outreach and training content to align with participants' roles and responsibilities.

EcoMetric grouped respondents by the identified role with the highest responsibility, as presented in Table 5.

*Table 5: Role in Energy Efficiency Projects for Work Organization*

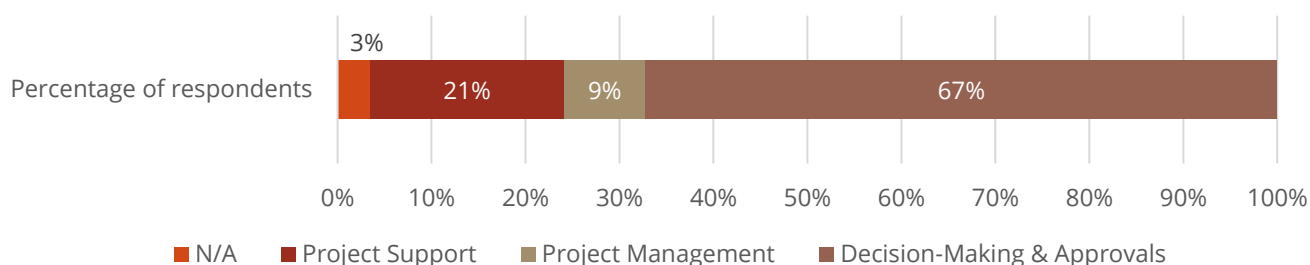
<b>Role in Energy Efficiency Projects for Work Organization</b>	<b>Group</b>
<b>Sign contracts or approve funding for energy-efficiency or conservation projects</b>	1
<b>Recommend or approve energy-efficiency or conservation projects</b>	1
<b>Develop or manage energy-efficiency or conservation projects</b>	2
<b>Hire, supervise, or work with contractor(s) on energy-efficiency or conservation projects</b>	2
<b>Support or assist with energy-efficiency or conservation projects</b>	3
<b>Analyze impacts of energy-efficiency or conservation projects</b>	3
<b>Personal interest not related to my job or profession</b>	4

The majority of respondents (67%) reported that their highest role regarding energy involves either signing contracts or approving funding for energy efficiency projects (21%) or recommending or approving such projects (46%). This finding underscores that a substantial portion of survey participants hold decision-making authority within their organizations, positioning them to directly influence energy efficiency investments and project implementation.

As seen in Figure 3, another 9% of respondents reported roles tied to project management or contractor oversight, reflecting active involvement in project execution rather than strategic approval. Additionally, 21% of respondents indicated roles focused on supporting or analyzing energy efficiency projects, suggesting the survey reached a broad range of organizational roles beyond executive decision-makers.

Notably, two respondents (3%) indicated that their engagement with energy efficiency is based on personal interest unrelated to their professional responsibilities. While this represents a small share of the total, it is a noteworthy shift from PY2023 when no respondents reported participation unrelated to their job. This suggests that CBIs may be expanding their reach, attracting not only professionals with job-related responsibilities but also individuals seeking knowledge for personal growth, future career development, or other non-professional interests.

Figure 3: Respondents' Role in Energy Efficiency Projects for Work Organization (per groups defined in Table 5), n = 58

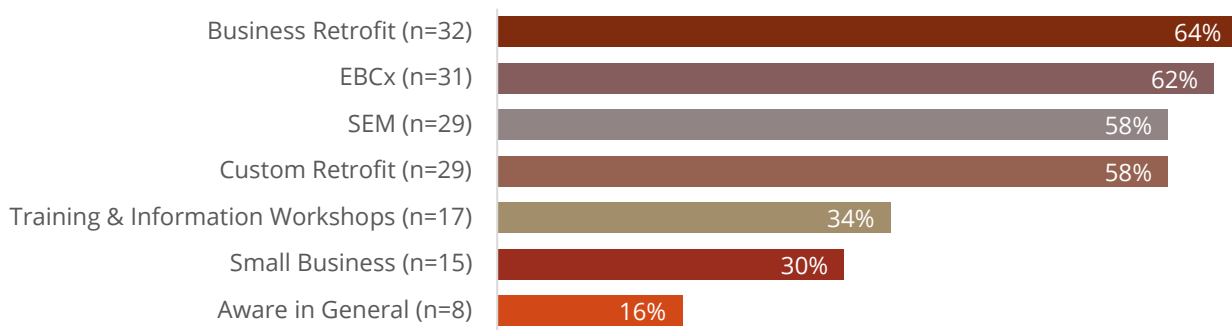


These findings suggest that the CBIs are effectively engaging individuals with the authority to make or influence energy decisions while also reaching those involved in project implementation and supporting roles. Understanding this role distribution can help the IESO and EcoMetric to tailor future initiatives to align with participant responsibilities and enhance program relevance across organizational levels.

Figure 4 below shows respondents' awareness levels of various Save on Energy programs. Most respondents (82%) indicated awareness that Save on Energy offers additional programs beyond the CBIs they attended. Among those aware, the most frequently recognized program was Business Retrofit (64%), followed closely by Existing Building Commissioning (EBCx, 62%), SEM (58%), and Custom Retrofit (58%). These findings suggest strong brand recognition among participants, particularly for retrofit and energy management offerings.

Awareness was lower for other initiatives—only 34% of respondents recognized Save on Energy's Training and Information Workshops and 30% were aware of the Small Business program. Compared to PY2023, several key awareness patterns have shifted. The proportion of respondents who learned about their CBI through the Save on Energy website increased to 49%, a 12-percentage point increase over PY2023, highlighting the growing importance of online engagement. Additionally, 26% of respondents learned about their CBI through attendance at a prior initiative—double the rate from PY2023, reinforcing the idea that CBIs are cultivating a returning participant base.

Figure 4: Respondent Awareness of Other Save on Energy Programs, n = 50

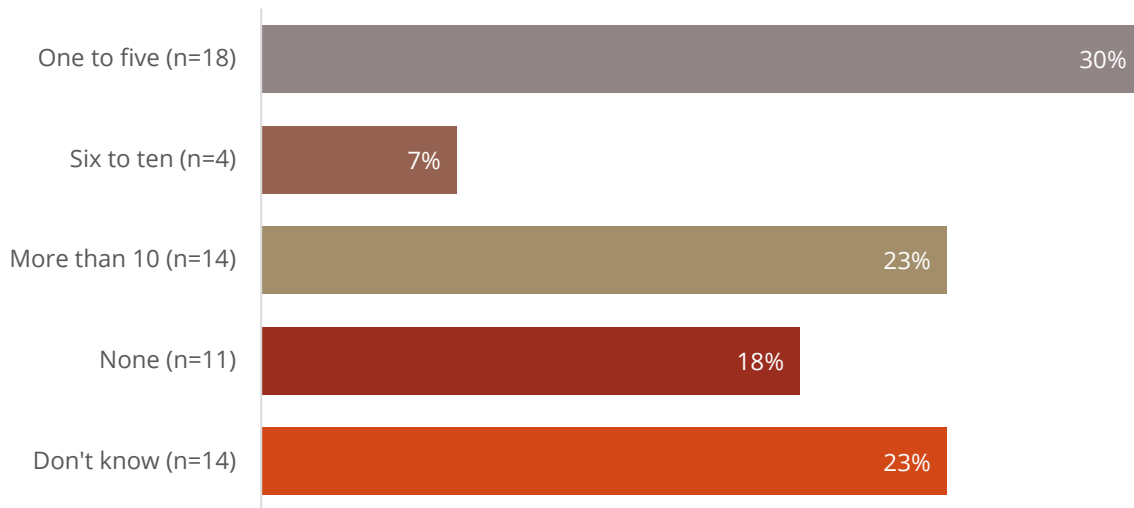


As shown in Figure 5, most respondents (59%) reported that their company has participated in at least one Save on Energy project that provided incentives for energy efficiency improvements. Among those who have participated, responses varied in the extent of their involvement. Thirty percent of respondents indicated that their organization had completed between one and five incentivized projects, while 7% reported completing six to ten projects. Notably, 23% of respondents stated that their organization had completed more than ten projects, demonstrating a high level of ongoing engagement with energy efficiency initiatives.

At the same time, 18% of respondents said their organization had not participated in any incentivized projects, and an additional 23% reported that they did not know whether their organization had been involved. These findings suggest there is still an opportunity to increase awareness and participation in Save on Energy incentive programs, particularly among organizations that have engaged with CBIs but may not yet have pursued direct project incentives.

This pattern of strong participation, combined with opportunities for deeper engagement, highlights the value of CBIs not only as educational tools but also as catalysts for action within Ontario's broader energy efficiency landscape.

Figure 5: Number of Incentive Projects in which Respondents' Companies Have Participated (n = 61)

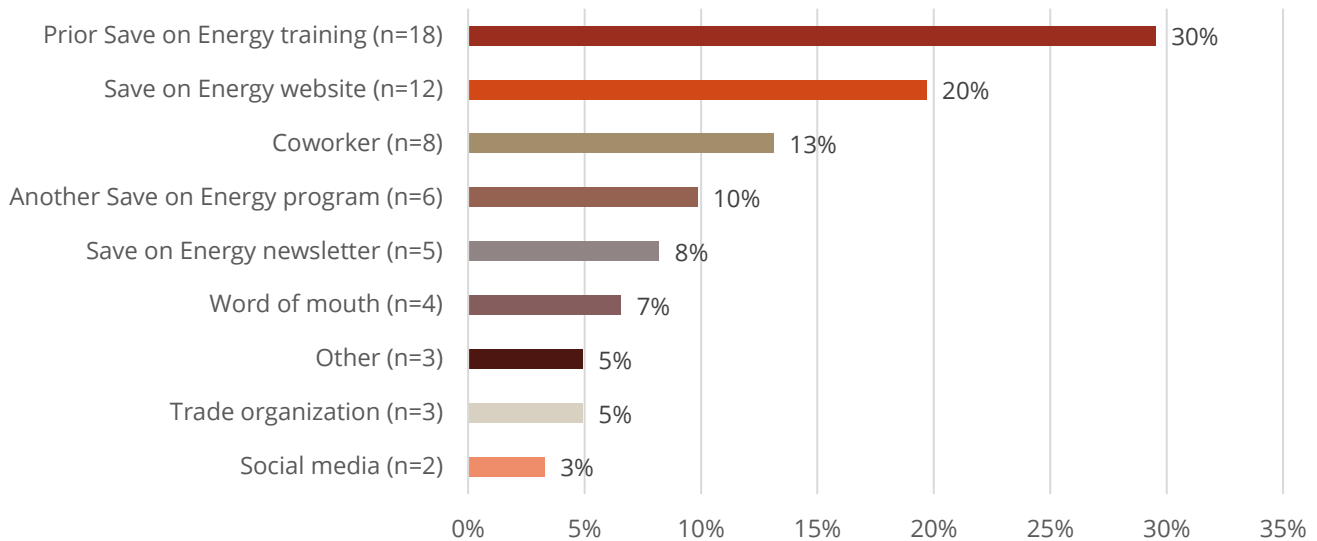


### 3.3 Participant Awareness

As shown in Figure 6, respondents most frequently reported that they became aware of the PY2024 CBIs through prior experience with Save on Energy training (30%), reinforcing the critical role of past participation in driving continued engagement. The Save on Energy website (20%) was the next most common awareness source, highlighting the importance of maintaining a strong online presence.

Other respondents cited information gained through other Save on Energy programs (10%), or the Save on Energy newsletter (8%). Fewer participants mentioned word of mouth (5%), professional organizations (3%), or social media (2%) as sources of awareness.

Figure 6: Source of Participant Introduction to CBI (n = 61)



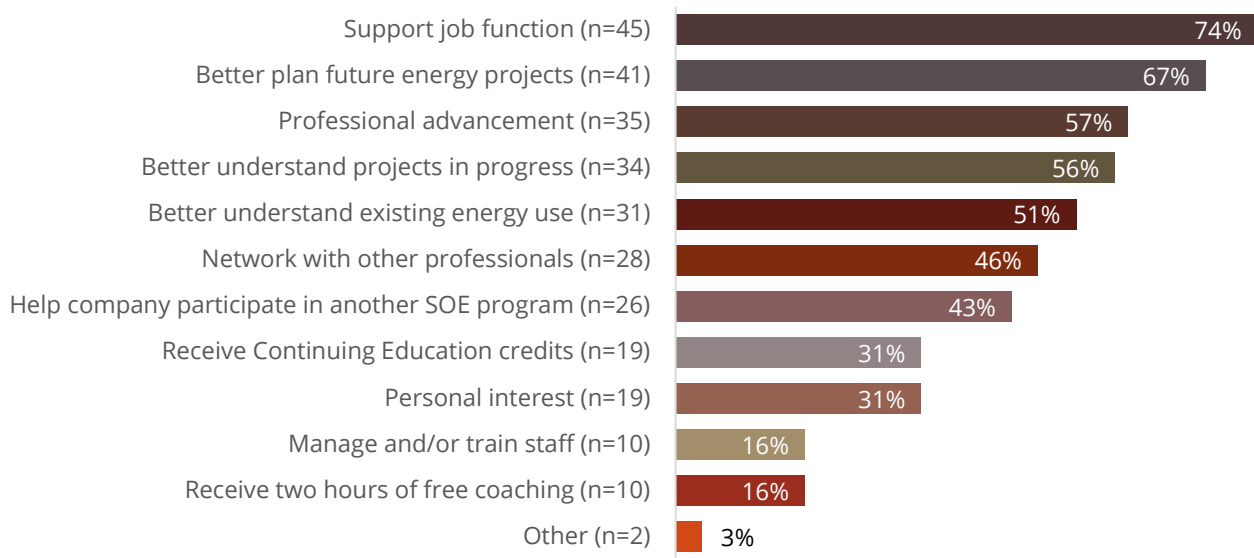
Reliance on internal organizational networks declined. Only 13% of respondents reported hearing about the CBI from a manager, energy manager, or leader at work, a 14-percentage point decrease from PY2023. This shift may reflect changing communication dynamics within organizations or an increased reliance on direct outreach from Save on Energy.

All respondents identified email as the most effective way to learn about future training opportunities, making it the clear preferred communication channel. However, given the volume of emails businesses receive, relying on email alone may limit visibility. To reinforce awareness, future outreach could consider using reminder strategies such as follow-up emails, calendar invitations, or pairing email notices with personal outreach. These approaches may help ensure training opportunities stand out amid competing messages.

### 3.4 Motivation to Participate

Respondents reported a variety of motivations for participating in CBIs, with most reasons connected to their job responsibilities or to specific energy projects. As shown in Figure 7, the most frequently cited motivation was to support their job function (74%), followed by desire to better plan future energy projects (67%), professional advancement (57%), gaining a better understanding of planned or existing projects (56%), learning about existing energy use (51%), and networking with professionals (46%),

Figure 7: CBI Participant Motivations (multiple selections allowed, totals do not equal 100%)



In PY2023, most respondents also identified job-related motivations, though motivations varied somewhat by initiative. Compared to last year, PY2024 responses show a broader balance of job-related, project-related, and personal interest factors. Notably, 31% of respondents cited personal interest, reflecting a continued trend of CBIs appealing to both professional and personal learners.

These results suggest that while CBIs remain important for professional development and project support, they also attract participants with diverse and overlapping motivations — highlighting the value of flexible content that can meet varying participant needs.

### 3.5 Participant Satisfaction

EcoMetric asked survey respondents to rate their satisfaction with key aspects of their CBI experience. Overall satisfaction remained strong in PY2024, with respondents giving the training an average score of 8.1 on a 0–10 scale. This represents a slight increase from PY2023, when the mean overall satisfaction was 7.9. The quality of instructors continued to be a highlight, receiving a mean rating of 8.3 and 47% of respondents selecting a 9 or 10.

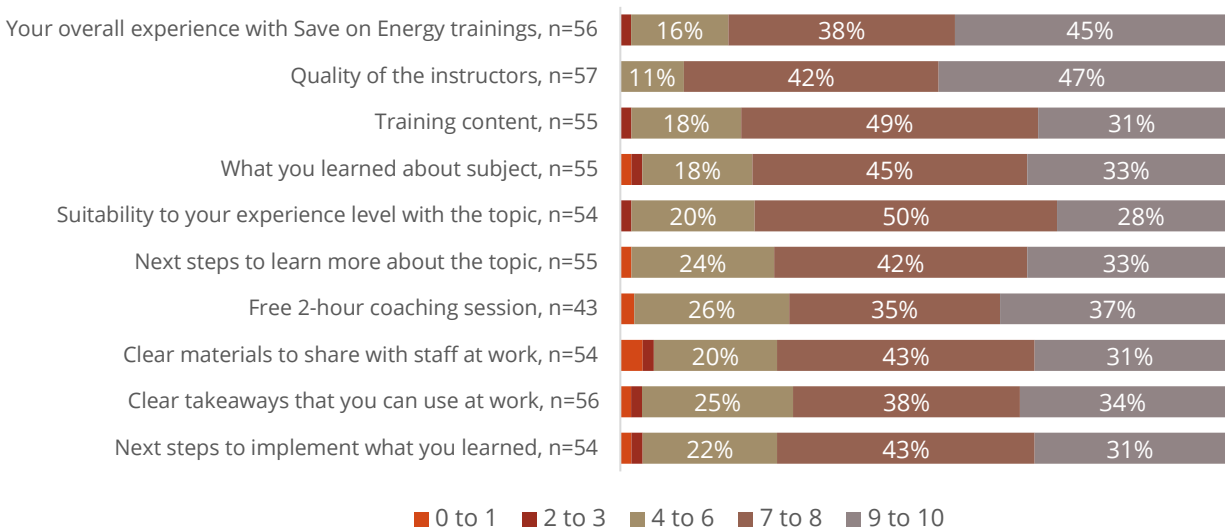
Other elements (including training content, what participants learned, and how well the material matched their experience level) were also rated positively, with most respondents selecting scores between 7–10. These areas earned mean ratings between 7.8–7.3.

Participants rated the clarity of materials, takeaways for work, and next steps to implement learning slightly lower than the overall experience and instructor quality, though still generally positive. The

two-hour coaching session received a wider range of ratings, with some respondents reporting lower satisfaction.

Figure 8 below shows a breakdown of satisfaction levels for various elements of CBI.

Figure 8: CBI Participant Satisfaction with Various CBI Elements (n = 539)



Compared to PY2023, mean satisfaction scores rose modestly across most categories, particularly in content relevance and perceived value for future application. Instructor quality and overall experience remained consistently strong across both years.

These results suggest that CBIs continue to meet or exceed participant expectations, with small but meaningful gains in overall satisfaction, especially in areas tied to learning outcomes and content relevance.

Respondents commented on their experience with the initiatives:

- ▶ “Keep up the good work! Many of these webinars are interesting, informative and helpful. I tend to prefer the very specific, more technically-focused webinars compared to the higher level overview style, I find them to be more applicable in my regular work and more easily actionable.”
- ▶ “Keep supporting energy professionals in Ontario through training and program overview, as it helps to build business cases for energy projects, and develop more energy efficient systems.”

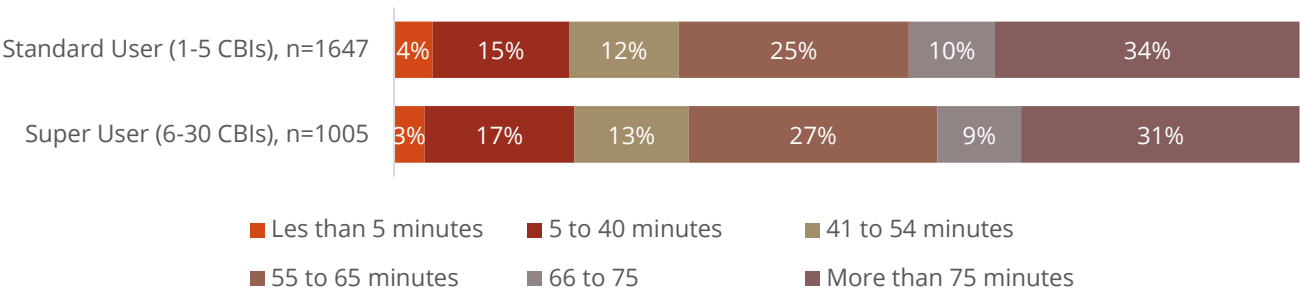
### 3.6 Attendance in Webinars

EcoMetric analyzed attendance records to assess the amount of time attendees remained connected and engaged in each webinar. CBI webinars were scheduled for one hour.

To explore whether webinar engagement differed by participation level, EcoMetric grouped attendees into two categories: those who attended one to five CBIs (standard users) and those who attended six to thirty or more CBIs (super users). The analysis showed that both groups spent a similar amount of time in the webinars, with no statistically significant difference between them.

As shown in Figure 9, about one-third of participants in both groups remained connected for more than 75 minutes. Around one-quarter of each group stayed connected for 55–65 minutes, closely matching the planned session length. Regardless of how many CBIs they attended, participants tended to engage consistently with webinar content.

Figure 9: Time Spent in Webinar by User Type (n = 2,652)



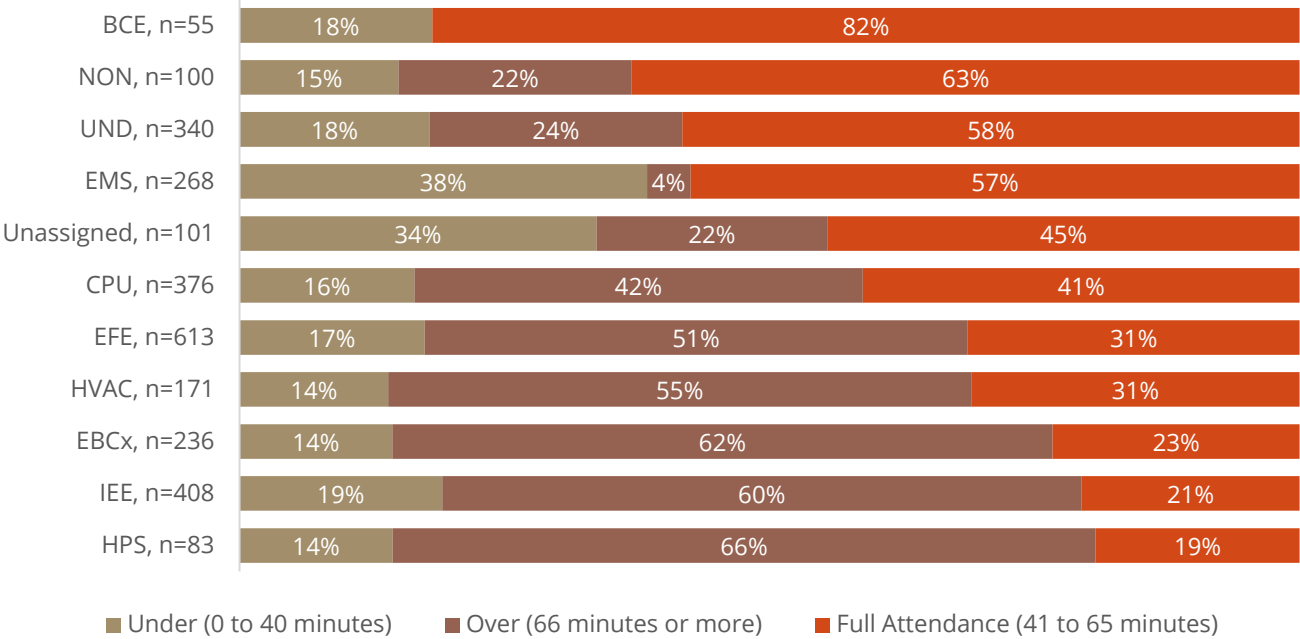
EcoMetric further analyzed webinar attendance by subject group, classifying participants into three categories based on the length of time they kept the webinar open. For this analysis EcoMetric considered attendees to have fully attended the 60-minute webinar if they remained connected for 41–65 minutes. Those connected for 1–40 minutes were considered to have under attended, while those connected for 66 minutes or more were classified as over attended as they may have left the webinar open well beyond its conclusion.

As shown in Figure 10, attendance patterns varied by topic. Participants in the “Developing the Business Case for Energy Efficiency” group demonstrated the highest engagement, with 82% meeting the full attendance threshold. “Regional Workforce Development” followed with 63% full attendance.

The “Energy Manager Support” group had the highest under attendance at 38%. “Support for High-Potential Sectors” group had the highest share of over attendance at 66%, with only 19% of attendees falling within the full attendance window.

These differences suggest that topic relevance, delivery style, or participant expectations may influence attendance patterns. Monitoring these trends can help inform adjustments to webinar delivery and participant engagement strategies.

Figure 10: Time Spent in Webinar by Group (n = 2,751)



EcoMetric reviewed satisfaction ratings to explore whether lower attendance times in certain webinars could be linked to participant perceptions of content, instructor quality, or topic relevance. EcoMetric focused this analysis on groups with the highest rates of under attendance (i.e. those where less than half of attendees kept the webinar open for the full 41–65 minutes.) These groups included IEE, EFE, CPU, HVAC, HPS, and EBCx.

EcoMetric examined satisfaction with three key elements: suitability of the webinar to the participant’s experience level, quality of the training content, and quality of the instructors. Across all groups, satisfaction ratings remained high and were generally consistent with overall survey findings.

This analysis did not reveal a clear relationship between satisfaction and early webinar departures. Participants in these groups reported strong satisfaction levels, suggesting that factors other than perceived content quality or instructor effectiveness may have contributed to shorter attendance durations.

### 3.7 Change in Familiarity and Knowledge

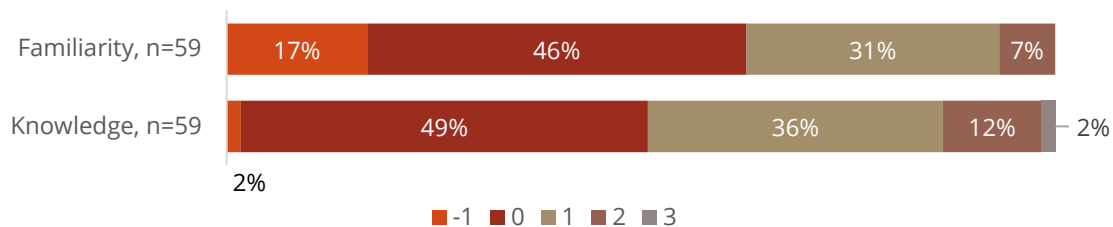
The core objective of CBIs is to educate participants on various energy-related topics. To evaluate learning outcomes, EcoMetric worked with the delivery vendor to compile a list of topics addressed by each CBI. Respondents were asked to select the topic they were most interested in when they registered, with the option to offer their own.

EcoMetric then asked respondents to rate both their specific knowledge of that topic and their general familiarity with the subject area, first reflecting on their knowledge before the training and again after completing the CBI. A five-point scale was used, ranging from “not at all knowledgeable” or “not at all familiar” (1) to “extremely knowledgeable” or “extremely familiar” (5).

Results (Figure 11) showed that 49% of respondents reported an increase in knowledge following their CBI while an equal share reported no change. Regarding general familiarity, 37% of respondents reported an increase while 46% saw no change.

A small portion of respondents reported a perceived decrease in knowledge or familiarity. This effect—common in learning environments—is explained by the Dunning-Kruger effect, where increased exposure to a topic may reveal knowledge gaps previously unrecognized by the learner. In this study, 2% of respondents reported a decrease in specific knowledge and 17% reported a decrease in general familiarity after participating in a CBI.

Figure 11: Change in Familiarity and Knowledge about Topic Following Participation (n = 118)

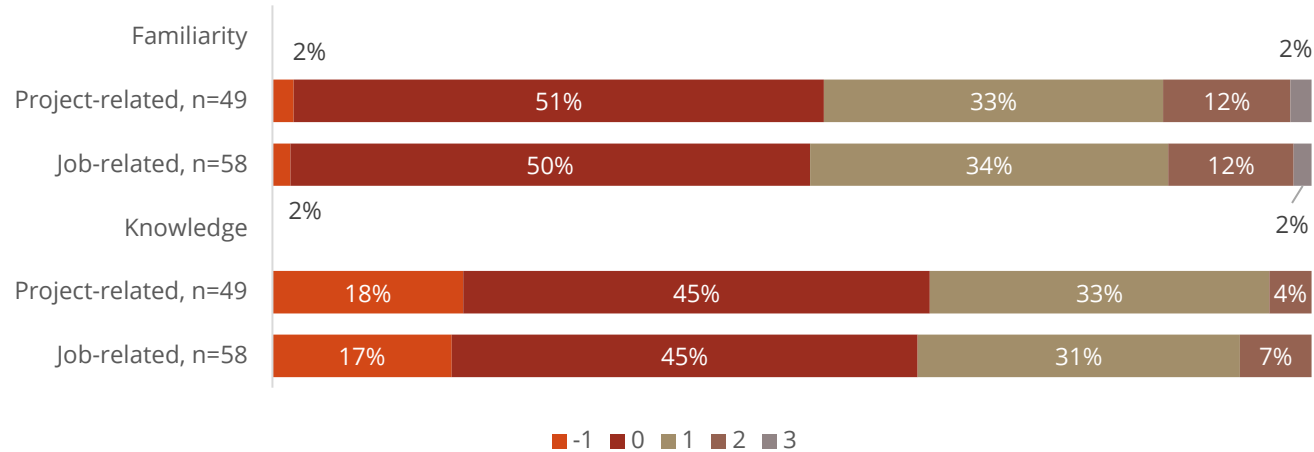


These results suggest that CBIs are generally effective in improving participants' knowledge and awareness of key topics, though they also challenge prior assumptions participants may have held. The combination of increased knowledge and recalibrated self-assessment reflects a meaningful learning process.

EcoMetric also examined changes in knowledge and familiarity based on participants' primary motivations for attending a CBI, specifically comparing those motivated by job-related reasons to those motivated by project-related reasons.

The analysis showed virtually no difference between the two groups. Fifty-one percent of respondents motivated by project-related reasons and 50% of those motivated by job-related reasons reported no change in knowledge following the CBI (Figure 12). The difference in familiarity change was also minimal, with a 1% variation between the two groups.

Figure 12: Change in Familiarity and Knowledge, by Motivation (n = 107)



These findings suggest a significant overlap between job-related and project-related motivations among participants, making it difficult to distinguish different learning outcomes based on motivation alone. This result reinforces the idea that CBIs tend to serve both professional development and project support needs simultaneously, with participants likely seeing their motivations as interconnected.

### 3.8 Influence on Energy Efficiency Projects

EcoMetric assessed the influence of CBI participation on energy efficiency project activity. While the CBI process survey was not designed to quantify specific project savings, it did ask respondents whether their participation led to involvement in demand-side management CDM projects or the application of learned concepts at work.

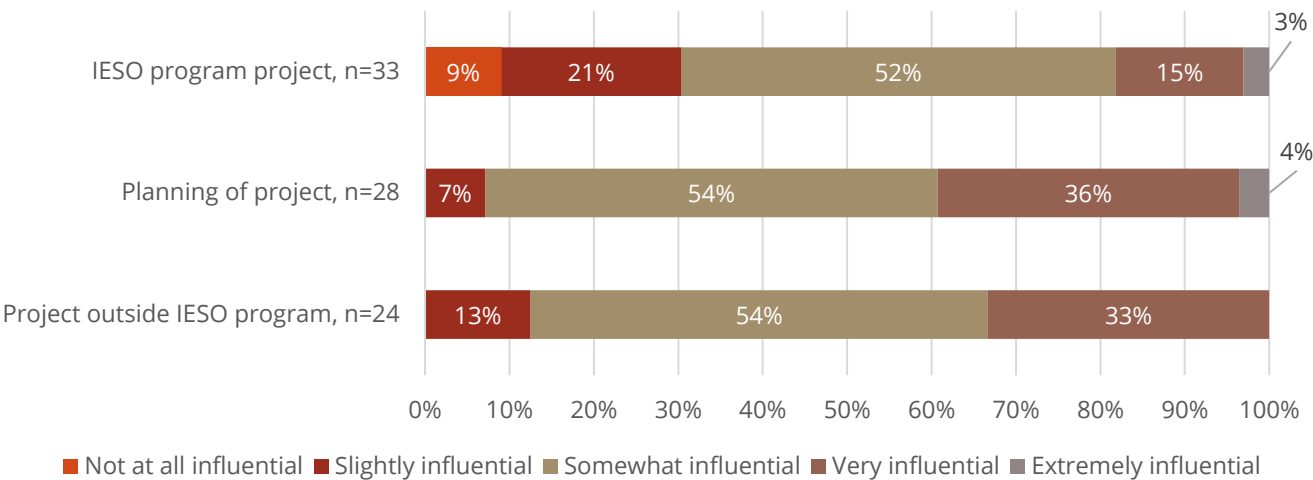
Most respondents (75%) reported that they have applied what they learned from a CBI in their workplace. This included a range of activities such as training staff, improving their understanding of energy use within their facilities, and sharing knowledge with colleagues.

Additionally, CBI participation had a measurable impact on project activity. Forty-four percent of respondents reported planning an energy efficiency project as a result of attending a CBI, while 22% indicated they were actively participating in a CDM project.

Respondents also rated the influence of their CBI experience on project decisions—whether within IESO programs or outside of them—as generally strong. Across all categories, the majority of respondents found CBIs to be at least somewhat influential in shaping project planning or implementation.

Figure 13 summarizes levels of influence that CBI had on various components of energy efficiency projects.

Figure 13: CBI Influence on Energy Efficiency Projects (n = 85)



These findings suggest that CBIs are supporting real-world application of knowledge and contributing to the development and execution of energy efficiency projects both within and beyond IESO programs.

Respondents commented on how they have used the information from their initiatives, including:

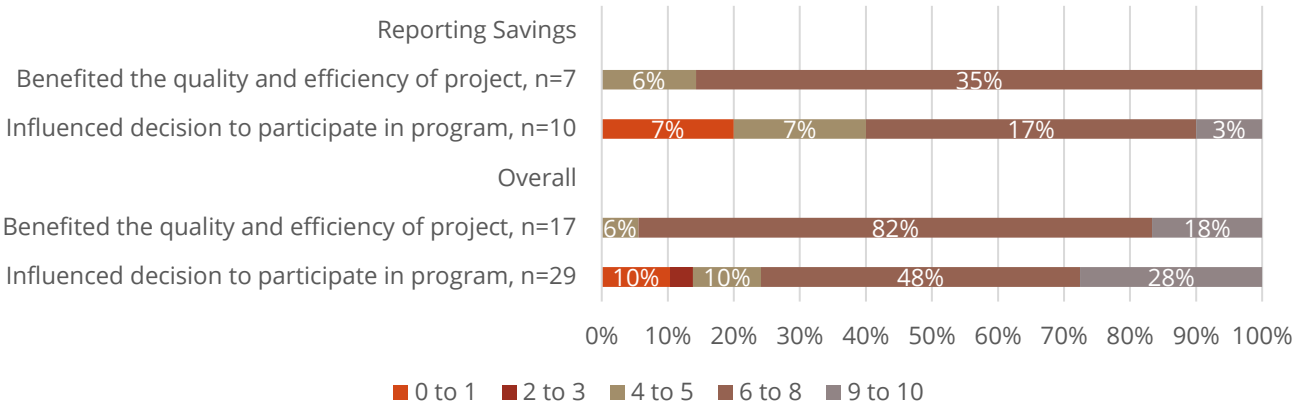
- ▶ “It has helped me better understand the sustainability projects my team works on.”
- ▶ “Training of internal staff and co-workers; updating HVAC guidelines for design and maintenance.”
- ▶ “Discussing future projects with our public works team, housing and economic development for future projects in my First Nation.”
- ▶ “I’ve been working through a portfolio of energy models of our community-facing municipal facilities, and I strive to make a better model for each new building and retrofit pathway that is developed.”

### 3.9 Influence and Benefits of Participation

CBI influence to participate was greater for EPP and SEM than for LIP. EPP and SEM are more complex programs requiring greater understanding of the projects. Most (91%) respondents reported either program influence or project benefits. One EPP and one SEM respondent reported that a CBI influenced them to participate in a CDM program and also benefitted their energy efficiency projects.

Most (76%) respondents who attended a CBI before or during planning a project reported that the initiative influenced their ultimate participation in the project. Almost all (94%) of those attending an initiative during or after implementation reported that the CBI improved the quality and efficiency of that or another project. (Figure 14)

Figure 14: CBI Influence on Participation (n = 36)



Overall respondents reported that CBI attendance influenced 63% of the projects and benefitted 48% of the quality and efficiency of implemented projects. One SEM project reported CBI influenced 74% of the savings achieved through the program. Table 6 summarizes EcoMetric's approach to estimating savings to be attributed to CBI due to influencing participation in CDM programs and improving the quality of energy efficiency projects.

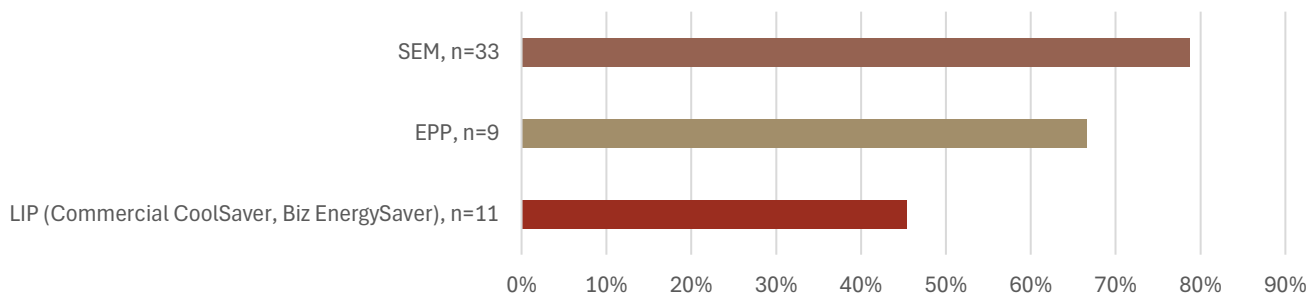
Table 6: Program Savings, Channeling, and Benefits

Program	Verified Savings – Survey Sample (kWh)	Verified Savings – Program (kWh)	% Savings Influenced – Channeling	Savings Influenced – Channeling (kWh)	% Savings Influenced – Projects Benefited	Savings Influenced – Projects Benefited (kWh)
<b>EPP</b>	8,246,274	15,200,947	20%	3,177,369	13%	2,071,878
<b>LIP (Commercial)</b>	4,378,875	30,605,473	8%	2,577,897	12%	3,615,782
<b>SEM*</b>	16,383,469	16,383,469	99%	16,252,069	75%	12,262,291
<b>Total</b>	<b>29,008,618</b>	<b>62,616,858</b>	<b>63%</b>	<b>39,496,221</b>	<b>48%</b>	<b>29,945,434</b>

\*SEM reported savings for four projects of 33 projects. There has not yet been an impact evaluation of SEM, so the savings are not verified. Only the reported savings were used to quantify channeling and project improvement.

EcoMetric found that most respondents reported attending a Capacity Building Initiative (CBI) in PY2024. As shown in Figure 15, attendance rates varied by program, with 79% of SEM respondents reporting participation, followed by 67% of EPP respondents. The lowest reported attendance was among LIP respondents, with 45% indicating they had attended a CBI.

Figure 15: Attendance by Program (n = 53)

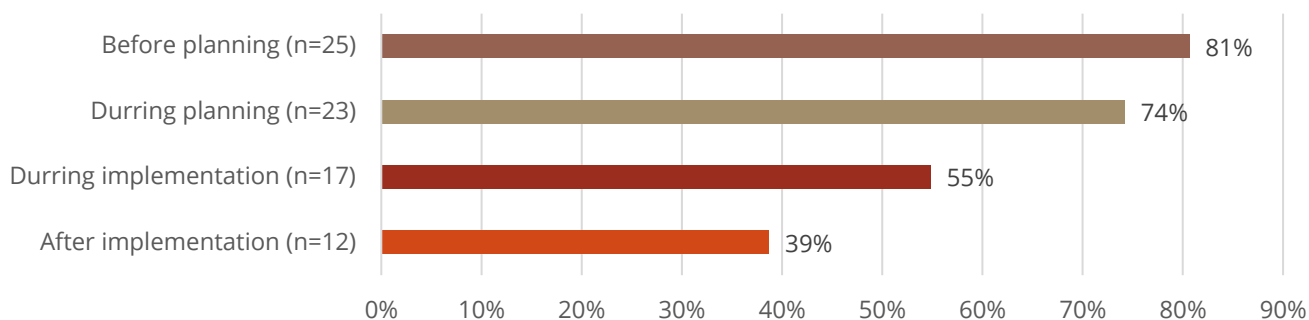


These findings suggest strong engagement with CBIs across programs, particularly among SEM participants, reinforcing the role of CBIs in supporting ongoing program involvement.

As shown in Figure 16, most respondents (81%) reported attending a CBI during the project planning phase, and 74% attended during project implementation. Notably, 39% continued their engagement by attending CBIs after project implementation.

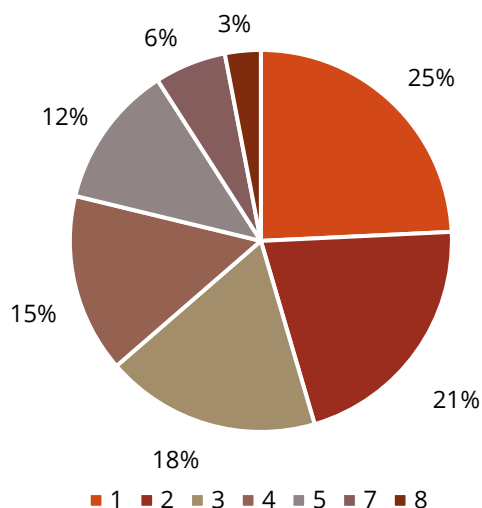
Additionally, nearly one-third of respondents (32%) indicated they participated in CBIs across all phases, from before planning through post-implementation. This pattern suggests that many participants view CBIs as a resource not just for project initiation but for ongoing support throughout the project lifecycle.

Figure 16: Attendance by Project Phase, n = 31



Respondents reported attending up to eight CBIs in PY2024. While 29% attended only a single initiative, the majority participated in multiple CBIs throughout the year (Figure 17). This pattern highlights the repeated engagement of participants and suggests that many found ongoing value in returning to additional sessions. The data reflects a strong level of sustained interest in the topics covered and the perceived benefit of continued participation in CBI offerings across program years with repeat participation increasing from PY2023.

Figure 17: Number of CBIs Attended for Participants, n = 31

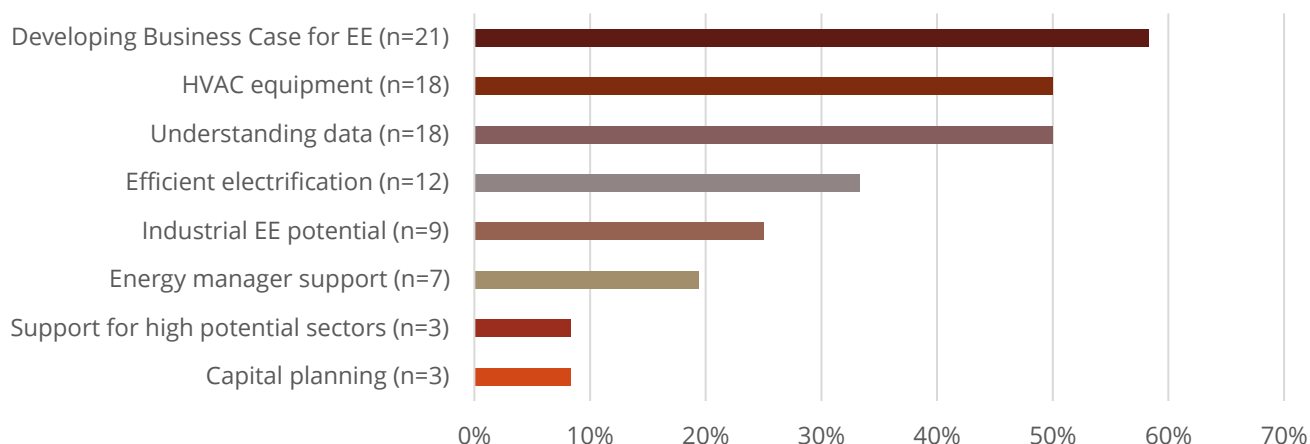


The CBIs offered in PY2024 addressed eight distinct topics. As shown in Figure 18, most respondents attended initiatives focused on “Developing the business case for energy efficiency” (63%), followed by “Energy-efficient HVAC equipment” (50%) and “Understanding energy data” (50%).

Other commonly attended topics included “Efficient electrification” (33%) and “Industrial energy efficiency potential” (27%). Attendance was lower for “Energy manager support” (20%), “Support for high-potential sectors” (7%), and “Capital planning amid electricity emissions uncertainty” (7%).

This indicates that while participants engaged with a broad range of topics, the most common areas of interest centered on practical applications for making the case for energy efficiency and understanding building systems, critical topics for driving project planning and implementation.

Figure 18: Attendance by Topic Group, n = 30



Respondents commented on the impact that the initiatives had on their CDM participation:

- ▶ “Simplified my understanding of the whole process.”
- ▶ “The info I got from the training showed me how upper management wants to see projects precented.”
- ▶ “This program helps to better understand the requirements and options for saving in energy.”
- ▶ “Networking is the greatest value as you continue to grow your baseline. Training helps prepare a clear understanding of what is occurring in real time and benefits to like businesses.”

## 4 VALUE OF MONEY ANALYSIS

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EcoMetric performed a value of money assessment, in-lieu of a traditional cost-to-benefit ratio calculation, as energy savings are not reported for the CBI program, and the costs of projects enabled by CBI are absorbed by other Save on Energy Programs. Project-level budget data was provided by the IESO, and for purposes of this analysis, it is assumed that spending is equal to budget.

Table 7 includes key metrics on budget/spending for CBI.

*Table 7: Key Value for Money Metrics*

Item	Metric	CBI
1	Overall spending PY24	\$3,636,048
2	Spending per attendee (2,874)	\$1,265
3	Spending per Initiative (65)	\$55,939
4	Spending per Group (10)	\$363,605

Total budget across CBI Initiatives during PY2023 was \$3,636,048. Table 8 shows the budget breakdown by topic group. The groups with highest budget spend were:

- ▶ “Northern Ontario Workforce” (“Regional workforce development”), \$704,964, 19%
- ▶ “Industrial energy efficiency potential initiatives”, \$512,128, 14%
- ▶ “Energy management support initiatives”, \$352,245, 10%

Table 8: PY2024 CBI Budget Breakdown

Item	Description	Spend
1	Understanding your energy data initiatives	\$196,060
2	Developing the business case for energy efficiency initiatives	\$12,830
3	Efficient Electrification initiatives	\$331,948
4	Energy Efficient HVAC Equipment initiatives	\$323,859
5	Existing Building Commissioning initiatives	\$55,818
6	Energy Management Support initiatives	\$352,245
7	Industrial Energy Efficiency Potential initiatives	\$512,128
8	Support for high-potential sectors initiatives	\$124,020
9	Capital Planning Amid Electricity Emissions Uncertainty	\$219,643
10	Northern Ontario Workforce	\$704,964
11	Project Management	\$614,160
12	Ad-hoc	\$188,375
13	Plan	\$0
<b>TOTAL</b>		<b>\$3,636,048</b>

Table 9 includes participation and program spending by Initiative group, alongside spending per attendee, for initiatives where participant data was available. Budget for the groups where participation data was tracked, totaling \$2,833,515, accounted for 78% of the total CBI budget during PY2024 (\$3,636,048).

Average spending per attendee in PY2024 was \$1,030. Cost per attendee ranged from \$233.27 (BCE, with 55 attendees) to \$7,049.64 (NON, with 100 participants). Average spend per attendee increases slightly (+4% to \$1,071) if only attendees who spent more than 5 minutes in the webinars are considered.

Table 9: Spending by Initiative

Initiative Group	Acronym	Attendees	Attendees in Webinar >5 Minutes	Spending	Spend per Attendee	Spend per Attendee in Webinar >5 Minutes
Developing the Business Case or Energy Efficiency Initiatives	BCE	55	54	\$12,830.00	\$233.27	\$237.59
Capital Planning Amid Electricity Emissions Uncertainty	CPU	376	372	\$219,643.00	\$584.16	\$590.44
Existing Building Commissioning Initiatives	EBCx	236	231	\$55,818.00	\$236.52	\$241.64
Efficient Electrification Initiatives	EFE	613	588	\$331,948.00	\$541.51	\$564.54
Energy Management Support Initiatives	EMS	268	228	\$352,245.00	\$1,314.35	\$1,544.93
Support For High-Potential Sectors Initiatives	HPS	83	80	\$124,020.00	\$1,494.22	\$1,550.25
Energy Efficient HVAC Equipment Initiatives	HVAC	171	168	\$323,859.00	\$1,893.91	\$1,927.73
Industrial Energy Efficiency Potential Initiatives	IEE	408	396	\$512,128.00	\$1,255.22	\$1,293.25
Northern Ontario Workforce	NON	100	99	\$704,964.00	\$7,049.64	\$7,120.85
Understanding Your Energy Data Initiatives	UND	340	333	\$196,060.00	\$576.65	\$588.77
Unassigned		101	97		0	0
<b>Total (Participant Data Available)</b>		<b>2,751</b>	<b>2,646</b>	<b>\$2,833,515</b>	<b>\$1,030</b>	<b>\$1,071</b>

## 5 FINDINGS AND RECOMMENDATIONS

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The following sections present all findings and recommendations for the PY2024 CBI evaluation. Key Findings and Recommendations are presented in the Executive Summary. The IESO responses to key recommendations are included in Appendix A.

**Finding 1:** CBI influences participation in IESO programs, known as channeling, at a rate of up to 63% of program savings. Channeling was measured by surveying the PY2024 EPP, LIP, and SEM participants regarding the influence of CBIs they attended prior to their decision to participate in the program.

Most survey respondents reported that the initiative influenced their planning or implementation of energy efficiency projects with or without IESO incentives. CBI education also benefits the quality and efficiency energy efficiency projects at a rate of up to 48% of the CDM program savings.

This benefit was measured by surveying EPP, LIP, and SEM participants who attended CBIs during and after project implementation. The surveys focused on the benefits of CBI attendance to project quality and efficiency.

**Recommendation 1:** Continue to cross-promote CDM programs and CBIs, aligning CBI content with CDM program needs to further increase awareness of the programs. Emphasize the benefits of continued education to further increase awareness of energy conservation, leading participants to implement projects.

**Finding 2:** CBI attendance increased significantly in PY2024, with 32% (364) participating in two to five initiatives of varying types (webinars, workshops, online coaching, in-person trainings) and 9% (99) participating in six thirty or more initiatives.

Active time spent by participants in the one-hour webinars was statistically the same between participants taking one to five initiatives as those taking six or more initiatives.

Participants taking multiple initiatives took them from multiple topic areas. Workshops were more effective than other delivery methods but harder to schedule and more difficult for participants to find time to complete.

**Recommendation 2:** Encourage attendance across groups and focus to accompany participants on their journey from understanding potential improvements to creating a business case for participating in a CDM project and improving the project quality and efficiency.

**Finding 3:** Active participant time in hour-long webinars varied widely by group, with 82% having the webinar open from 41–65 minutes for the “Developing a Business Case for Energy Efficiency” group (BCE) and 19% for the “High Potential Sectors” group (HPS).

Survey respondents attending webinars from the groups with lower attendance reported similar satisfaction as those with higher attendance. Moderate to high satisfaction was reported with suitability of the initiative to participants' level of experience, training content and quality of instructor.

**Recommendation 3:** Research reasons for early departure from webinars. Determine if those who leave early or leave the webinar open past the end (66 minutes to multiple days) later access the webinar through the Save on Energy website.

**Finding 4:** Nearly half (49%) of respondents reported an increase in knowledge about the topic that they were most interested in learning about while the same percentage (49%) reported no change in their knowledge following the CBI.

Over one third (37%) of respondents reported an increase in general familiarity with the topic of their CBI while 46% reported no change following the initiative.

A decrease in general familiarity was reported by 17% of respondents, and 2% reported a decrease in specific knowledge following their CBI. This is known as the Dunning-Kruger effect, a cognitive bias where those with less familiarity or expertise overestimate their capabilities. It indicates that the respondents learned enough to recognize their limitations and correct the perception of their abilities following the initiative, thus opening a pathway to improved performance and willingness to learn.

**Recommendation 4:** Consider offering one to two questions on the final webinar screen to track satisfaction with what participants learned and what they want to learn next. Use the results for program enhancement and future program development.

**Finding 5:** Respondents most frequently became aware of their PY2024 CBI from prior CBI experience. All respondents said that they prefer to learn about future opportunities by email.

**Recommendation 5:** Expand email campaigns and provide additional marketing materials via email alongside maintaining promotions on the Save on Energy website.

**Finding 6:** Respondents were equally motivated by job opportunities and improving the quality of projects to spend time on a CBI.

**Recommendation 6:** Highlight opportunities for career advancement and the personal value of delivering high quality energy efficiency projects in marketing materials.

# APPENDIX A. PY2024 EM&V FINDINGS AND RECOMMENDATIONS WITH IESO RESPONSES

Table 10: PY2024 EM&V Findings and Recommendations with IESO Responses

No.	Findings	2024 EM&V Recommendations	Impact	IESO Response
1.	CBI influences participation in IESO programs, known as channeling, at a rate of up to 63% of program savings. Channeling was measured by surveying the PY2024 EPP, LIP, and SEM participants regarding the influence of CBIs they attended prior to their decision to participate in the program. CBI education also benefits the quality and efficiency energy efficiency projects at a rate of up to 48% of the CDM program savings.	Continue to cross-promote CDM programs and CBIs, aligning CBI content with CDM program needs to further increase awareness of the programs. Emphasize the benefits of continued education to further increase awareness of energy conservation, leading participants to implement projects.	High	The IESO has implemented a process to collaborate with the various Demand Side Management (DSM) program teams on promoting Save on Energy (SOE) programs during CBI events.
2.	CBI attendance increased significantly in PY2024, with 32% (364) participating in two to five initiatives of varying types (webinars, workshops, online coaching, in-person trainings) and 9% (99) participating in six to thirty or more initiatives. Workshops were more effective than other delivery methods but harder to schedule and more difficult for participants to find time to complete.	Encourage attendance across groups and focus to accompany participants on their journey from understanding potential improvements to creating a business case for participating in a CDM project and improving the project quality and efficiency.	High	The IESO is working on a process with the IESO Marketing team to promote upcoming training events that highlight the benefits of continuous education to program participants and potential program participants. The IESO has implemented webinar series that encourage attendance to multiple events to help participants on their journey.
4.	Active participant time in hour-long webinars varied widely by group, with 82% having the webinar open from 41 to 65 minutes for the “Developing a Business Case for Energy Efficiency”	Research reasons for early departure from webinars. Determine if those who leave early or leave the webinar open past the end (66 minutes to multiple days) later access the	Low	The IESO would explore surveying attendees who drop off early, To better understand reasons for early departure from webinars. Also, as the events are free,

No.	Findings	2024 EM&V Recommendations	Impact	IESO Response
	group (BCE) and 19% for the “High Potential Sectors” group (HPS). Survey respondents attending webinars from the groups with lower attendance reported similar satisfaction as those with higher attendance.	webinar through the Save on Energy website.		the IESO understands that participants may register for webinars without fully understanding its scope. In order to minimize drop-offs, the IESO has updated event descriptions, adding more information to ensure participants are attending events that are the right fit for them.
5.	Nearly half (49%) of respondents reported an increase in knowledge about the topic that they were most interested in learning about. Over one third (37%) of respondents reported an increase in general familiarity with the topic of their CBI while 46% reported no change following the initiative.	Consider offering one to two questions on the final webinar screen to track satisfaction with what participants learned and what they want to learn next. Use the results for program enhancement and future program development.	Medium	The IESO’s Customer Satisfaction (CSAT) surveys given to participants after each CBI event will track satisfaction with what participants learned and what they want to learn next. CSAT findings regularly inform program evolution.
6.	Respondents most frequently became aware of their PY2024 CBI from prior CBI experience. All respondents said that they prefer to learn about future opportunities by email.	Expand email campaigns and provide additional marketing materials via email, alongside maintaining promotions on the Save on Energy website.	Medium	The IESO will expand on its current marketing strategies, by making improvements to the CBI email bulletin and marketing campaigns, to reach both existing participants, and. new participants.

## APPENDIX B. LIST OF PY2024 CBIS

The list of CBIs by group and tier is shown below (Table 11). EcoMetric received attendance records for 65 of the 103 CBIs.

Table 11: List of PY2024 CBIs

CBI	Group	Tier	Attendee List	Delivery Type
<b>Crafting a Winning Business Case for Energy Management Projects: Session #1</b>	BCE	Foundational	Yes	Webinar
<b>Crafting a Winning Business Case for Energy Management Projects: Session #2</b>	BCE	Foundational	Yes	Webinar
<b>Carbon Pricing in the Ontario Industrial Market</b>	CPU	Foundational	Yes	Webinar
<b>Energy and Emissions Regulations - Ontario and Canada</b>	CPU	Foundational	Yes	Webinar
<b>Incentive Programs - Energy Efficiency - Ontario and Canada</b>	CPU	Foundational	Yes	Webinar
<b>Setting-up a Greenhouse Gas Emissions Inventory: Scope 1-3 Emissions</b>	CPU	Foundational	Yes	Webinar
<b>Supply Mix Insights: Ontario's Energy Landscape</b>	CPU	Foundational	Yes	Webinar
<b>Understanding Electricity Rates in Ontario</b>	CPU	Foundational	Yes	Webinar
<b>EBCx Investigation Phase Essentials: Part 1</b>	EBCx	Foundational	Yes	Webinar
<b>EBCx Investigation Phase Essentials: Part 2</b>	EBCx	Foundational	Yes	Webinar
<b>Introduction to EBCx for Ontario Municipalities</b>	EBCx	Foundational	Yes	Webinar
<b>Understanding the Hand-off Phase and Persistence in EBCx Projects</b>	EBCx	Foundational	Yes	Webinar
<b>Efficient Electrification Series: Navigating the Efficient Electrification Toolkit</b>	EFE	Foundational	Yes	Webinar
<b>Energy Efficient and Cost-effective Heat Pump Operation</b>	EFE	Advanced	Yes	Webinar
<b>Financial Analysis using RETScreen® Expert</b>	EFE	Specialized	Yes	Workshop
<b>Modelling HVAC Systems using RETScreen Expert® – Part 2 of 2</b>	EFE	Specialized	Yes	Workshop
<b>Modelling HVAC Systems using RETScreen Expert® – Part1 of 2</b>	EFE	Specialized	Yes	Workshop
<b>RETScreen Net Zero Planning Tool</b>	EFE	Specialized	Yes	Webinar
<b>Understanding The Efficient Electrification Pathway</b>	EFE	Foundational	Yes	Webinar
<b>Energy Management Coaching Series: Session One</b>	EMS	Foundational	Yes	Coaching

<b>CBI</b>	<b>Group</b>	<b>Tier</b>	<b>Attendee List</b>	<b>Delivery Type</b>
<b>Energy Management Coaching Series: Session Two</b>	EMS	Unk	Yes	Coaching
<b>Energy Management Coaching Session #3: Planning</b>	EMS	Advanced	Yes	Coaching
<b>Energy Management Coaching Session 4: Hunting for Energy Waste</b>	EMS	Advanced	Yes	Coaching
<b>Energy Management Coaching Session 6: Engaging Employees</b>	EMS	Advanced	Yes	Webinar
<b>Fireside Chat with Drew Cullen of Brock University</b>	EMS	Foundational	Yes	Webinar
<b>Save on Energy Presents: Virtual Energy Manager Discussion Group</b>	EMS	Advanced	Yes	Coaching
<b>Battery Energy Storage System Safety for Greenhouses</b>	HPS	Specialized	Yes	Webinar
<b>Operating for Energy Efficiency - Mid Tier Workshop 1</b>	HPS	Specialized	Yes	Workshop
<b>Operating for Energy Efficiency - Mid Tier Workshop 2</b>	HPS	Specialized	Yes	Workshop
<b>Operating for Energy Efficiency - Mid Tier Workshop 3</b>	HPS	Specialized	Yes	Workshop
<b>Operating for Energy Efficiency - Mid Tier Workshop 4</b>	HPS	Specialized	Yes	Workshop
<b>Air Source Heat Pumps: Installation Best Practices for Homes</b>	HVAC	Specialized	Yes	In-Person
<b>Efficient HVAC System Operations for Multi-unit Residential Buildings</b>	HVAC	Specialized	Yes	Webinar
<b>Efficient HVAC System Operations Series for Small Industrial Buildings</b>	HVAC	Specialized	Yes	Webinar
<b>Efficient HVAC System Operations Series: Public Sector Buildings</b>	HVAC	Specialized	Yes	Webinar
<b>Emerging Efficient Technologies for Mining: Information Session</b>	IEE	Foundational	Yes	Webinar
<b>Energy Efficiency Opportunities in the Food and Beverage Sector</b>	IEE	Specialized	Yes	Webinar
<b>Energy Saving Opportunities in the Manufacturing Sector</b>	IEE	Specialized	Yes	Webinar
<b>Estimating Compressed Air Savings for Industrial Energy Managers</b>	IEE	Advanced	Yes	Webinar
<b>Estimating Project Savings: Industrial HVAC Efficiency</b>	IEE	Advanced	Yes	Webinar

<b>CBI</b>	<b>Group</b>	<b>Tier</b>	<b>Attendee List</b>	<b>Delivery Type</b>
<b>Estimating project savings: Industrial process cooling and refrigeration</b>	IEE	Advanced	Yes	Webinar
<b>M&amp;V for Industrial Projects: Using Option D</b>	IEE	Foundational	Yes	Webinar
<b>Understanding Industrial Demand Management Opportunities</b>	IEE	Specialized	Yes	Webinar
<b>Energy Project Management</b>	NON	Specialized	Yes	Workshop
<b>Role of the Community Energy Specialist</b>	NON	Foundational	Yes	Workshop
<b>Low-cost M&amp;V Options</b>	UND	Foundational	Yes	Webinar
<b>Municipal Series Webinar Five: Financial Analysis for Energy Projects</b>	UND	Foundational	Yes	Workshop
<b>Municipal Series Webinar Seven: Operating for Energy Efficiency Water-Wastewater</b>	UND	Foundational	Yes	Workshop
<b>Municipal Series Webinar Six: Measurement and Verification for Energy Projects with RETScreen</b>	UND	Foundational	Yes	Workshop
<b>Tips, Tricks and Workarounds - Getting your Energy Projects Done</b>	UND	Foundational	Yes	Webinar
<b>(No Title)</b>	Unknown	Unknown	Yes	Unknown
<b>(No Title)</b>	Unknown	Unknown	Yes	Unknown
<b>(No Title)</b>	Unknown	Unknown	Yes	Unknown
<b>Electrifying Building Heating with Heat Pumps in Residential Buildings</b>	Unknown	Unknown	Yes	Unknown
<b>Electrifying Commercial Building Heating with Heat Pumps</b>	Unknown	Unknown	Yes	Unknown
<b>Energy Saving Opportunities in the Mining Sector</b>	Unknown	Unknown	Yes	Unknown
<b>Exploring Power Purchase Agreements and Clean Energy Credits</b>	Unknown	Unknown	Yes	Unknown
<b>Going Deeper with Energy Star Portfolio Manager: Deriving Value from your Building Energy Data</b>	Unknown	Unknown	Yes	Unknown
<b>Grant Writing and Reporting</b>	Unknown	Unknown	Yes	Unknown
<b>Heat Pumps: Quantifying Energy and Emissions Outcomes</b>	Unknown	Unknown	Yes	Unknown
<b>Inflating Your Savings: Optimizing Blower Systems in Wastewater Treatment Plants</b>	Unknown	Unknown	Yes	Unknown
<b>Introduction to Indigenous Workforce Development Initiative</b>	Unknown	Unknown	Yes	Unknown
<b>Introduction to Save on Energy Regional Workforce Development Training</b>	Unknown	Unknown	Yes	Unknown
<b>RETScreen Feasibility Modelling</b>	Unknown	Unknown	Yes	Unknown

CBI	Group	Tier	Attendee List	Delivery Type
<b>Social Housing Series: Financial Planning for Energy Efficiency Projects</b>	Unknown	Unknown	Yes	Unknown
<b>Strategic Energy Management - Social Housing Series</b>	Unknown	Unknown	Yes	Unknown
<b>Building Engagement.xlsx</b>	Ad-hoc	Foundational	No	Engagement
<b>SUS SEM for School Board Portfolios – Phase 2: Strategic Energy Management</b>	Ad-hoc	Foundational	No	Workshop
<b>SUS SEM Phase 2_Webinar_Attendee Report_Dec 2024</b>	Ad-hoc	Foundational	No	Workshop
<b>Information Session – Power Purchase Agreements and Clean Energy Credits</b>	CPU	Foundational	No	Webinar
<b>Setting-up a greenhouse gas emissions inventory: Scope 1-3 Emissions</b>	CPU	Foundational	No	Webinar
<b>Supply Mix Insights: Ontario’s Energy Landscape</b>	CPU	Foundational	No	Webinar
<b>Energy Efficient and Cost-effective Heat pump Operation</b>	EFE	Specialized	No	Webinar
<b>Feasibility Analysis with RETScreen 1</b>	EFE	Specialized	No	Webinar
<b>Feasibility Analysis with RETScreen 2</b>	EFE	Specialized	No	Webinar
<b>Heat Pump Essentials for Commercial Buildings</b>	EFE	Foundational	No	Webinar
<b>Heat Pump Essentials for Public Sector</b>	EFE	Foundational	No	Webinar
<b>Heat Pump Essentials for Residential Applications</b>	EFE	Foundational	No	Webinar
<b>Energy Management Coaching Session 5: Monitoring &amp; Reporting Energy Data</b>	EMS	Advanced	No	Webinar
<b>Discover Energy Savings with the Virtual Energy Treasure Hunt</b>	HPS	Specialized	No	Workshop
<b>Financial planning for energy efficiency projects Tips and tricks for getting approvals</b>	HPS	Specialized	No	Workshop
<b>Introduction to energy management in social housing</b>	HPS	Specialized	No	Workshop
<b>Navigating the Energy-Efficiency Landscape and Leveraging Data for Strategic Decision-Making</b>	HPS	Specialized	No	Workshop
<b>Optimize and save: Harnessing the power of controls</b>	HPS	Specialized	No	Workshop
<b>Powering Efficiency: A Beginner’s Guide to Energy Management</b>	HPS	Specialized	No	Workshop
<b>Workshop Introduction to energy retrofits in social housing</b>	HPS	Specialized	No	Workshop
<b>ASHP Installer Training for Buildings – Intro</b>	HVAC	Foundational	No	Webinar

<b>CBI</b>	<b>Group</b>	<b>Tier</b>	<b>Attendee List</b>	<b>Delivery Type</b>
<b>In-person: Air Source Heat Pumps: Contractor Best Practices for Commercial Installations</b>	HVAC	Specialized	No	In-Person Training
<b>In-person: Air Source Heat Pumps: Contractor Best Practices for Residential Installations</b>	HVAC	Specialized	No	In-Person Training
<b>Introduction to Air Source Heat Pumps Installation Best Practices Series for Commercial Buildings</b>	HVAC	Specialized	No	Webinar
<b>Introduction to ASHP Residential Installation</b>	HVAC	Foundational	No	Webinar
<b>Energy Efficiency Opportunities in the Food and Beverage Sector</b>	IEE	Specialized	No	Webinar
<b>Lending Library Pilot</b>	IEE	All	No	Pilot
<b>Intro NON webinar 1</b>	NON	Foundational	No	Webinar
<b>Intro NON webinar 2</b>	NON	Foundational	No	Webinar
<b>Webinar #1: Introduction to the Regional Workforce Development Initiative: Community Energy Specialist stream</b>	NON	Foundational	No	Webinar
<b>Webinar #2: Introduction to the Regional Workforce Development Initiative: Community Energy Specialist stream</b>	NON	Foundational	No	Webinar
<b>ESPM webinar: EWRB and introduction to Portfolio Manager</b>	UND	Foundational	No	Webinar
<b>ESPM webinar: going deeper with Portfolio Manager</b>	UND	Foundational	No	Webinar
<b>M&amp;V for energy projects with RETScreen Municipal Series 5</b>	UND	Foundational	No	Workshop
<b>M&amp;V Webinar #3</b>	UND	Foundational	No	Webinar
<b>Municipal Series: Inflating your savings – Optimizing Blower Systems in WWTP 8</b>	UND	Advanced	No	Workshop
<b>Retrofit Projects and Alternative Financing</b>	Unknown	Foundational	No	Webinar