PY2024 PROCESS EVALUATION OF STRATEGIC ENERGY MANAGEMENT PROGRAM

IESO Save on Energy 2021–2024 CDM Framework

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Prepared for: The Independent Electricity System Operator (IESO)

Prepared by: EcoMetric and DNV Energy Insights USA

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Acknowledgements

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Abbreviations

Acronym	Meaning
CBI	Capability Building Initiative
CDM	Conservation and Demand Management
CO2	Carbon dioxide
EBCx	Existing building commissioning
EEM	Expanded Energy Management
EER	Energy efficiency ratio
EM&V	Evaluation, Measurement, and verification
EPP	Energy Performance Program
GHG	Greenhouse gas emission
IEEP	Industrial Energy Efficiency Program
IESO	Independent Electricity System Operator
KF&R	Key finding and recommendation
kW	Kilowatt
kWh	Kilowatt-hour
LIP	Local Initiatives Program
LUEC	Levelized unit energy cost
MW	Megawatt
MWh	Megawatt-hour
NEB	Non-energy benefit
NRCan	Natural Resources Canada
NTG	Net-to-gross
PAC	Program administrator cost
PY	Program year
QA/QC	Quality assurance / quality control
RR	Realization rate
SEER	Seasonal energy efficiency ratio
SEM	Strategic energy management
TRM	Technical reference manual

EXECUTIVE SUMMARY

Strategic Energy Management (SEM) provides a scalable approach to achieving continuous energy improvement for Ontario's industrial, commercial and municipalities, universities, schools, and hospitals (MUSH) sectors. To assess its impact and guide future improvements, the Independent Electricity System Operator (IESO) retained EcoMetric and subcontractor DNV Energy Insights USA Inc. (DNV), collectively referred to as the EcoMetric team, to evaluate the SEM program in the 2021–2024 Conservation and Demand Management (CDM) Framework. This report outlines the methodologies, results, and recommendations from the evaluation of the SEM program for Program Year 2024 (PY2024).

E.1 PROGRAM DESCRIPTION

The SEM program supports commercial and industrial organizations in achieving sustained energy and carbon reductions by promoting a structured approach to energy management. Through training, expertise, and ongoing support, the program helps participants develop the internal capacity necessary to enhance energy performance and achieve environmental goals.

E.2 EVALUATION OBJECTIVES

The primary objectives of EcoMetric's process evaluation of the SEM Program are to:

- Monitor the effectiveness and completeness of key program components on an ongoing basis.
- Analyze program performance and provide recommendations for improvement.
- Assess customer motivations and experiences with the program.
- Identify opportunities to enhance program delivery procedures and protocols.

E.3 EVALUATION APPROACH

The PY2024 effort includes only a process evaluation for this program.

For the process evaluation, the EcoMetric team based its evaluation findings on a secondary data review of available program documentation and primary data from interviews and surveys with a wide range of program actors, including IESO staff, program delivery vendor staff, cohort coaches, and program participants.

As of early 2025, very few energy savings projects have been completed and incentivized through SEM. Table 1 below shows a summary of those projects. As such, the EcoMetric team will conduct the

first impact evaluation and cost effectiveness analysis for the SEM program as part of the PY2025 evaluation.

Table 1: PY2024 SEM Program Summary of Projects Implemented

Parameter	Quantity
Number of Organizations with Measures Implemented:	4
Total Reported Energy Savings:	16,383 MWh
Total Reported Peak Demand Savings:	1.87 MW
Total Performance Incentives:	$185,052
Total Enabling Incentives:	$62,000

E.4 SUMMARY OF RESULTS

This section summarizes the results of the PY2024 SEM Program process evaluation.

E.4.1 Savings Goals

The SEM program is progressing well, with staff expressing confidence in meeting energy-saving targets and participant enrollment goals. Although only a few participants have completed a full year in the program, early estimates suggest that savings are on track, and no issues have been reported with tracking SEM savings, mirroring the positive outlook from last year.

E.4.2 Motivation and Barriers

Participants in the SEM program reported a range of motivations, with educational benefits being the most influential. Of 36 total survey respondents, 75% cited one-on-one coaching and peer learning as key drivers, followed by improving energy (69%) and financial performance (67%). This marks a shift from the previous year where saving money was the top motivator, suggesting participants now better understand the program's focus on capacity-building rather than direct financial incentives. While non-energy benefits (NEBs) were mentioned less frequently, they were still notable enough to warrant inclusion in future training and outreach.

IESO staff and the delivery vendor echoed participants' emphasis on coaching and training, indicating that these elements should be highlighted in outreach materials to encourage enrollment. The most commonly reported barrier to deeper engagement was limited organizational staff availability to implement (62%, n = 18). Of the 29 total respondents to this question, financial constraints (48%), time limitations (48%), and a desire for greater incentives (34%) were also cited. Although staffing limitations were not raised by program staff or program delivery vendors, their emergence in participant feedback suggests this is an issue worth monitoring.

E.4.3 Engagement with Other IESO Programs

About half of the SEM survey respondents participated in additional IESO/Save on Energy programs after identifying opportunities during their energy assessments. Thirteen participants reported involvement in other programs, including Expanded Energy Management (EEM), Industrial Energy Efficiency Program (IEEP), Existing Building Commissioning (EBCx), Energy Performance Program (EPP), and BizEnergySaver (part of Local Initiatives Program, LIP). While tracking cross-program participation remains a challenge, program staff and delivery vendors recognize SEM's role in uncovering opportunities that lead to broader engagement. To support this, cross-promotion efforts could be enhanced, and a user-friendly program selection guide (like the Retrofit-EPP Comparison Guide) could help participants navigate options more easily.

Interest in the new EEM program, offered in partnership with NRCan, was neutral among participants, a shift from last year's stronger interest in the now-sunset EM program. Only 41% of survey respondents (n = 12) were aware of or participated in EEM, which offers funding for a dedicated energy manager. Promoting this resource could help deepen engagement. Of the 13 respondents who did not report participating in EEM, the primary barriers to EEM participation were financial constraints (54%) and a lack of time (46%), while a lack of support was rarely cited (8%). Highlighting that incentives for energy manager salaries are available may help address these concerns and increase participation.

E.4.4 Participant Satisfaction

Participants expressed high satisfaction with the SEM program, with over 80% (n = 28) rating it an 8 or higher on a 10-point scale and no scores below 6. This aligns with last year's findings and feedback from IESO staff and the delivery vendor, who reported no trends of dissatisfaction. The program continues to meet organizational needs and is seen as user-friendly.

To improve the program, 67% of respondents (n = 4) suggested increasing the task incentive amount. Recent changes to milestone incentives, making them available earlier, appear to have addressed prior concerns, as incentive processing was rarely flagged as an issue. Half of the participants recommended clearer descriptions of SEM commitments and more information sharing during cohort sessions. Interest in in-person coaching remains, though the delivery vendor noted geographic challenges.

E.4.5 Participant Energy Saving Knowledge

Nearly 90% (n = 28) of SEM participants reported being satisfied with the knowledge of energy savings they gained, with 25% (n = 8) giving the highest possible rating. This suggests that the cohort model is an effective method for delivering this knowledge. Among those less satisfied, many

recommended adding more online case studies, highlighting a potential area for future program development as more participants advance.

Additionally, the cohort coach noted that budgets are currently capped at the cohort level, which may limit flexibility. Shifting to a program-level budget cap could allow coaches to better tailor support based on participant experience, allocating more resources to newer cohorts and scaling back for more advanced ones.

E.4.6 Participant Engagement

Participants showed a strong preference for in-person cohort sessions and networking opportunities. Of 32 total respondents, 75% preferred attending cohort sessions in person, and 66% were interested in in-person networking events. In contrast, only 22% (n = 7) expressed interest in one-on-one, in-person coaching, and very few were interested in other types of in-person events or none at all.

While satisfaction with educational materials was generally positive, feedback revealed room for improvement. Participants rated the materials mostly between 7 and 9 out of 10, but some noted a lack of practical examples and limited use of materials during cohort sessions. These insights suggest that enhancing content with real-world examples and integrating it more actively into sessions could better meet participant needs.

E.4.7 Behavioural Changes

Participants reported making several energy-saving behavioral changes through the SEM program, with the most common being monitoring energy usage to optimize or reduce consumption. Other top actions included shutting down equipment when not in use and automating equipment based on occupancy or sensors.

While many participants credited external factors for prompting these changes, the SEM program still played a significant role. Out of 29 total respondents, 12 participants cited cohort coaching sessions, 11 pointed to cohort discussions, and 10 mentioned online energy management resources as influential. These findings highlight the program's effectiveness in encouraging behavioural change, even when not the sole driver.

E.4.8 Sustaining Savings

Most participants plan to sustain the savings garnered through the SEM program. Notably, 79% (n = 23) plan to maintain the Energy Champions team even after the program ends. Additionally, 20 participants plan to sustain savings by modifying standard operating procedures, while 18 participants indicated that they plan to continue broadcasting performance results. With the first

cohort nearing completion, the program delivery vendor is exploring the idea of launching an alumni or advanced cohort to support the sustainment of savings.

E.5 KEY FINDINGS AND RECOMMENDATIONS

Key Finding 1: Among the 29 survey respondents, 62% reported that the biggest barrier to deeper program engagement is limited organizational staff availability to implement, resulting in additional savings being left unimplemented. Additionally, only 41% (n = 12) knew about or reported participating in the EEM program (which includes the possibility to incentivize an energy manager's salary). Of the 13 respondents who did not report participating in EEM, the primary barriers to EEM participation were financial constraints (54%) and a lack of time (46%).

Key Recommendation 1: EcoMetric recommends that the IESO and the program delivery vendor further market the EEM program to SEM participants and encourage them to participate, which could help fund an EM salary and provide additional bandwidth for participants to have more in-depth engagement with the program.

Key Finding 2: Interviews with cohort coaches revealed a crucial limitation in the current training budget allocation structure. Funding is capped at the cohort level, regardless of the needs of each group. While some more-advanced cohorts may require less training, others, particularly those earlier in their development, may benefit from additional support. The current funding structure can prevent resources from being allocated where they're needed most.

Key Recommendation 2: Consider shifting from a per-cohort training cap to a program-level training cap. This would enable a more strategic and flexible allocation of funds, ensuring that each cohort has access to the appropriate level of support.

Key Finding 3: Participation in the SEM program can lead customers to engage with other IESO Save on Energy initiatives, an important objective of the SEM program. But further potential remains. Just under half of SEM participants stated that they have initiated participation in other initiatives, revealing both SEM's value as a gateway to broader energy efficiency efforts and the potential for greater influence. Program and vendor staff noted challenges in tracking this cross-program activity.

Key Recommendation 3: To maximize cross-program engagement, IESO should proactively develop and distribute clear, user-friendly materials outlining benefits, eligibility, and distinctions among its offerings and make such advocacy a core feature of coaching if it is not already. Tools like the Retrofit-EPP Comparison Guide can empower customers, trade allies, and vendors to navigate options and select the most suitable programs. Tracking downloads of such materials from the web and tracking cross-participation in program databases would allow creation of cross-pollination metrics for staff to use to measure success.

Key Finding 4: Participant feedback highlighted an opportunity to enhance the learning experience as nearly half of the respondents reported that access to additional online energy management (EM) resources and case studies would have increased their satisfaction with the knowledge they gained.

Key Recommendation 4: Continue expanding the library of online EM resources to support participant learning. Additionally, consider developing case studies based on successful program sites. These can help other participants gain more knowledge and serve as compelling marketing material.

1 INTRODUCTION

1.1 Program Description

The SEM program is designed to help commercial and industrial organizations improve their overall energy performance by implementing an integrated system of organizational practices, policies, and processes to achieve persistent energy savings. To support this goal, the SEM program equips participants with the knowledge, expertise, and training necessary for energy management, enabling them to achieve their carbon reduction and environmental objectives.

There are three main components that the SEM program offers participants to support their energy efficiency goals:

- **Cohort Learning**. The SEM program offers two-year cohorts designed to facilitate peer learning opportunities through webinars and other collaborative events focused on energy management and efficiency practices. The program also provides one-on-one coaching and online energy management resources to participants. There have been three cohorts out in the field so far for the SEM program. The IESO is developing industry-specific cohorts for the automotive, multi-site, hospital, school, and mining sectors.
- **Energy Savings Incentives**. Participants can also receive incentives of $0.02/kWh of electricity savings for implementing eligible measures across two performance years.
- **Performance Milestone Incentives**. Additional incentives, up to a value of $5,000, for energy management tools such as meters and testing kits, are available to participants who reach key program milestones.

1.2 Evaluation Objectives

The primary objectives of EcoMetric's process evaluation of the SEM Program are to:

- Monitor the effectiveness and completeness of key program components on an ongoing basis
- Analyze program performance and provide recommendations for improvement
- Assess customer motivations and experiences with the program

2 METHODOLOGY

This section of the report outlines the methodologies, approaches, and activities involved in the PY2024 process evaluation of SEM. Survey and interview instruments are included in the appendices.

2.1 Document and Database Review

The EcoMetric team reviewed program documents related to SEM, including the SEM program design, communications with participants, SEM implementation, and marketing and application materials. The program documentation review supplements the customer feedback received through survey tasks.

The EcoMetric team examined the Energy Manager Support Services as well as available training materials to assess communication and training events for the SEM program. The team also reviewed savings assumptions and tracking procedures.

2.2 Primary Data Collection

The EcoMetric team leveraged primary data collection activities to explore key research topics and gather perspectives from market actors, thereby completing the process evaluation. All primary data were collected through video calls, phone calls, or web surveys conducted by the EcoMetric team. Survey and interview instruments for all process evaluation data collection activities are included in the appendices.

2.2.1 IESO and Program Delivery Vendor Staff Interviews

The EcoMetric team conducted the following interviews:

Table 2: IESO Staff and Delivery Vendor Interview Summary

Interview Type	Participants	Focus Areas
IESO SEM Program Leads	Current SEM Program Lead; Prior SEM Program Lead	SEM design incentive structure, program activities, marketing, application process, tracking/reporting, QA/QC, participation challenges
Program Delivery Vendor Team	Managing Partner; Program Manager; Program Lead	Same as above

2.2.2 Participant Surveys

The EcoMetric team distributed a survey to 100 SEM cohort participants in March 2025, including 10 participants in a soft launch followed by 90 participants in a full launch. Four total email invitations

bounced. The IESO sent an initial outreach letter to potential respondents encouraging them to respond. Additionally, the program delivery vendor sent an email to all cohort members encouraging them to respond. Each potential respondent received an initial survey invitation, followed by three reminders to complete the survey, by the EcoMetric team. Responses were received from 29 program participants who fully completed the survey. Additionally, the web survey was partially completed by seven participants. All 10 cohorts were represented among the 36 total respondents.

- Cohort 1: Nine respondents
- Cohorts 2 and 3: Five respondents each
- Cohort 4: Three respondents
- Cohorts 5, 6, and 7: One respondent each
- Cohort 8: Five respondents
- Cohort 9: Two respondents
- Cohort 10: Four respondents

This breakdown confirms broad representation across all cohorts, with particularly strong participation from Cohort 1.

Partial responses are incorporated into the analysis and presentation of results, where relevant. Table 3 below shows a complete disposition summary.

Table 3: Participant Survey Disposition Summary

Disposition	Count
Total Number of Contacts	100
Full Survey Completion	29
Partial Survey Completion	7
Emails Bounced	4
No Response	60
Refused / Declined	0

Participant surveys gathered information on customer motivations for participating in the SEM program, barriers to additional program engagement, opportunities for future program growth, plans in place to sustain program savings, ease of participation in the cohorts, behavioral changes made, and participation in other IESO programs. Since the IESO did not conduct a customer satisfaction survey this year, the surveys also included a limited number of program satisfaction questions.

2.2.3 SEM Cohort Coaches Interviews

The EcoMetric team originally planned to conduct interviews with five SEM cohort coaches to provide context from the coaching perspective. Ultimately, the EcoMetric team conducted one SEM cohort coach interview. When speaking with the program delivery vendor team, it was recommended that we interview the senior manager of coaching services, who was previously a coach. If additional data was needed, the team would revisit reaching out to additional cohort coaches. However, the team gathered sufficient data from the cohort coach lead and decided that no other in-depth interviews were necessary.

The interview identified operational challenges, barriers, and bottlenecks, while also providing valuable insights into participant acceptance of behavioral treatments and their willingness to adopt new ideas. The EcoMetric team also asked about recommendations for further adoption, continuous improvement, and improved engagement.

3 PROCESS EVALUATION RESULTS

This section presents the results from the SEM program PY2024 comprehensive process evaluation. It focuses on program effectiveness, customer experience, and program improvement research objectives.

Following our interviews with the IESO SEM program team, the EcoMetric team developed these PY2024 research questions:

- How are SEM energy savings being tracked? Are the current energy savings goals and key metrics for the program being met?
- Are there any residual challenges relating to the transition from EM to SEM? We will inquire about:
    - Any issues with the program transition communications
    - Transition impact on participation
    - Complications, if any, around SEM tracking and data protocols/processes
    - Incentive and application processes if the new program begins to operate
- What are the customer motivations and barriers to participating in the SEM program?
- Where are the opportunities to improve the delivery of SEM? How can the IESO increase the participation of industrial customers in SEM?
- What plans do customers have in place to sustain the savings garnered through the program?
- How effective is the assembly of cohorts to enable the gain of energy savings knowledge?
- What, if any, behavioral changes have been made at participating organizations?
- Are customers participating in complementary IESO programs after potential improvements are identified during the energy management assessment?
- What are the implications of potentially bringing Energy Managers back into SEM in PY2025, with support from NRCan?
- Is the delivery vendor engaging participants adequately and making course corrections based on their feedback?

3.1 Savings Goals

Similar to last year's evaluation, IESO program staff reported no concerns about meeting energy-saving targets. The program is on track with participant enrollment, and staff are confident the savings will follow. Only IESO staff were asked about tracking savings, which are reviewed after participants complete one year. So far, only a few have reached that point, but early estimates suggest the program is on track. No issues with tracking SEM savings were reported. This positive outlook is consistent with last year.

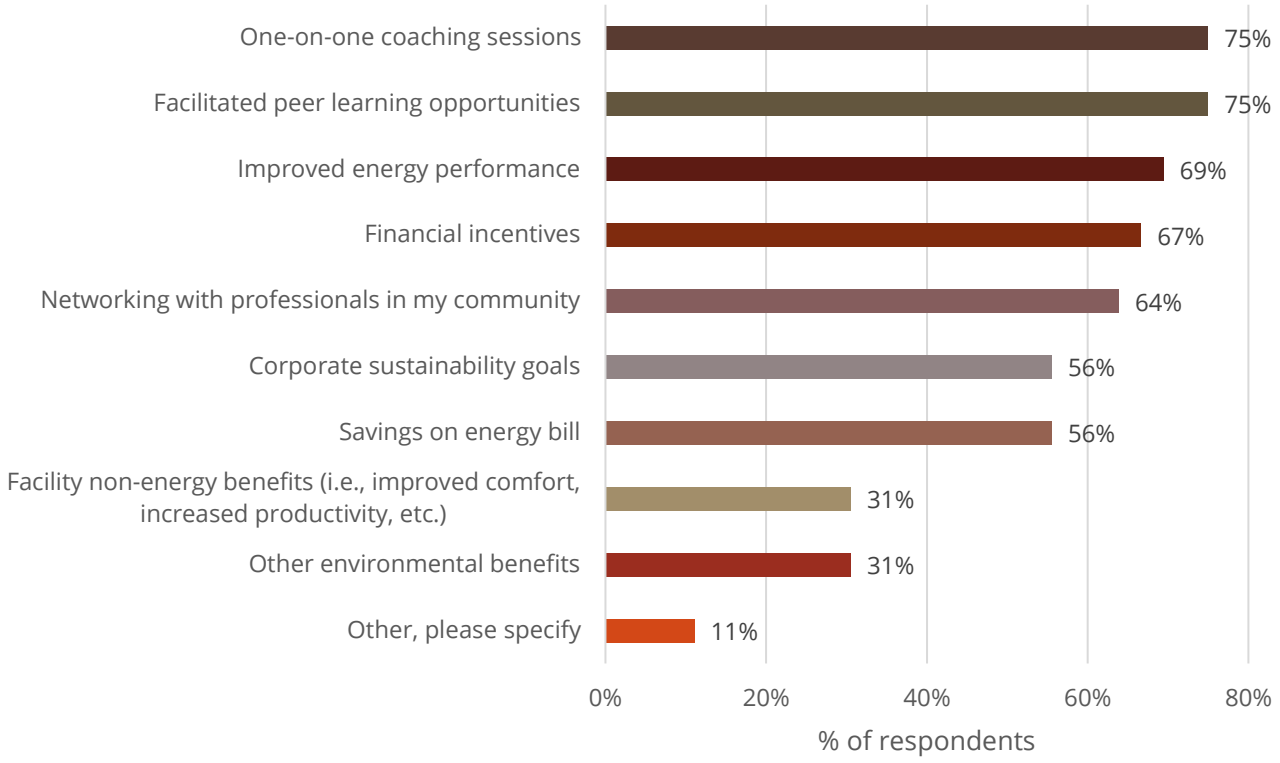
3.2 Motivations and Barriers

Participants reported having multiple motivations for participating in the SEM program. The most dominant drivers of participation were educational. Of 36 total survey respondents, 75% of participants were motivated by one-on-one coaching and peer learning opportunities, as Figure 1 shows. The more direct desire to improve energy and financial performance followed at 69% (n = 25) and 67% (n = 24) respectively. This reflects a modest shift from last year, when saving money was the primary driver. While this change is not statistically dramatic, it may reflect a greater understanding of the program's character—that it teaches participants how to make changes as opposed to simply paying them to take specific actions. Other motivations, such as non-energy benefits (NEBs), were cited about half as often. This is a meaningful percentage, sufficient to warrant ensuring that the program includes NEBs and environmental impact accounting. The following reasons were provided as "other" responses:

- "I wanted to understand how to develop and implement energy management programs strategically."
- "Formalizing our structure and approach to energy management."
- "Especially peer-to-peer networking and knowledge sharing with other energy managers."
- "Credibility with senior management."

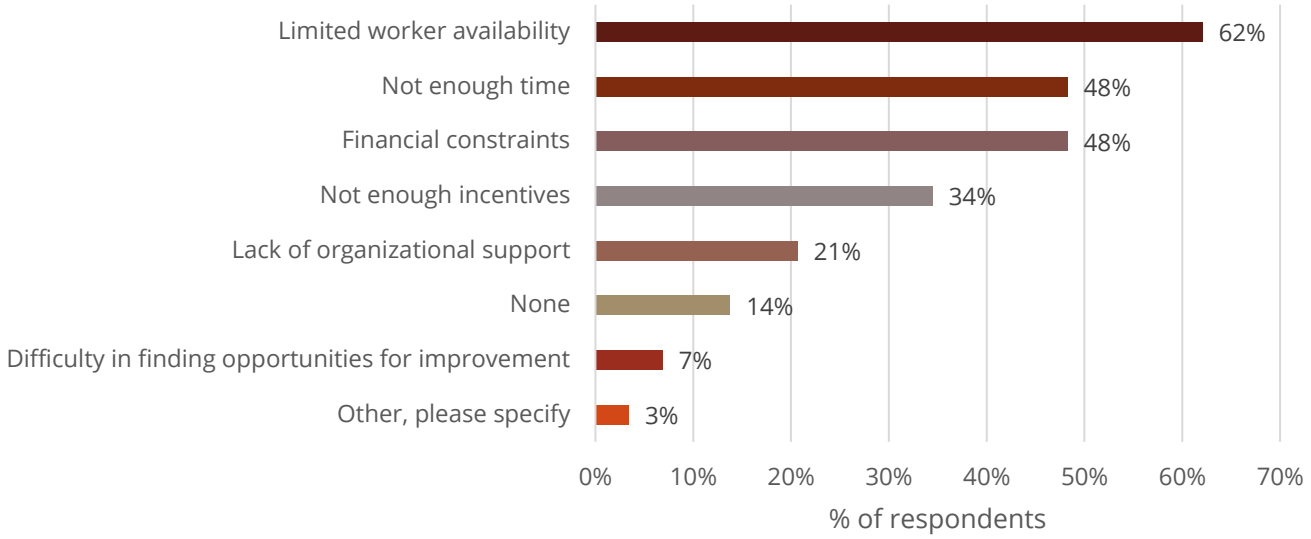
IESO staff and delivery vendor responses aligned with those of participants, as they also expected coaching and training engagement to rank highly. These elements could be emphasized in future outreach efforts, case studies, and on the program website to increase participation.

Figure 1: PY2024 Participant Motivations to Participate in SEM (n = 36, 1 respondent ≈ 2.8%)



Participants identified limited worker availability as the primary barrier to greater engagement in the SEM program, with 62% (n = 18) of respondents citing it as the main reason. This is not typically the dominant barrier for efficiency programs. Of 29 total respondents, 48% cited the more typical financial constraints and lack of time as key barriers, along with a desire for greater incentives (34%). Figure 2 shows the results. While limited staff availability was not flagged in interviews with program staff or the delivery vendor, a few participants raised this issue last year. It is, at the very least, an emerging issue that warrants monitoring and consideration in both outreach and delivery.

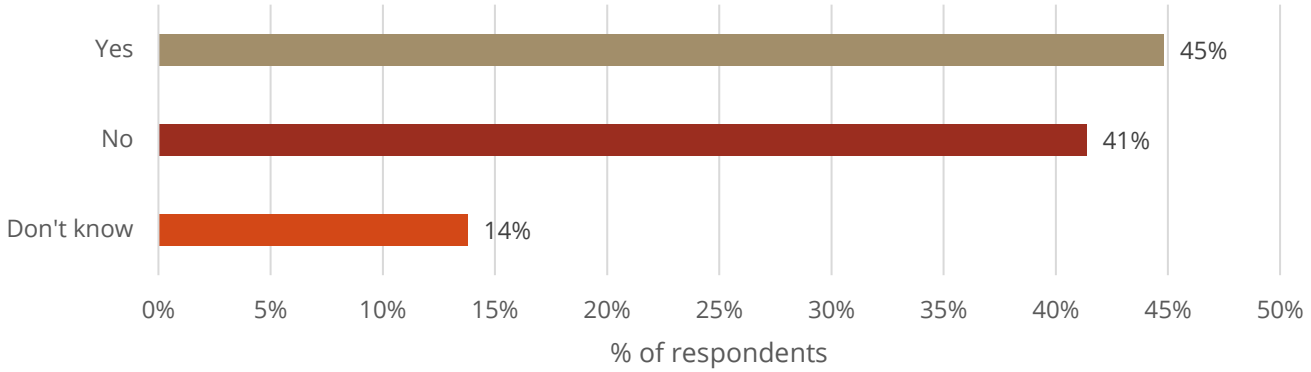
Figure 2: PY2024 Participant Barriers to Engaging with SEM (n = 29, 1 respondent ≈ 3.4%)



3.3 Engagement with Other IESO Programs

After potential improvements were identified during the energy assessment, roughly half of the SEM participants participated in other complementary IESO/Save on Energy programs. While SEM emphasizes non-capital measures, the program's training and other engagement is also drawing participants to other programs. Figure 3 shows that 13 participants reported involvement in other IESO/Save on Energy programs, while 12 did not. Among those 13, six participated in EEM, three in IEEP, three in EBCx, two in EPP, and two in BizEnergySaver. Program staff and the delivery vendor noted challenges in tracking cross-program participation but acknowledged that SEM can uncover opportunities that lead to involvement in other programs (such as EPP). To encourage broader participation, cross-promotion should be strengthened. For example, consider inviting guest speakers from other programs to attend coaching sessions and educate SEM participants on other available and relevant program offerings. Staff could also consider developing a user-friendly guide, similar to the Retrofit-EPP Comparison Guide, to help customers choose the most suitable programs.

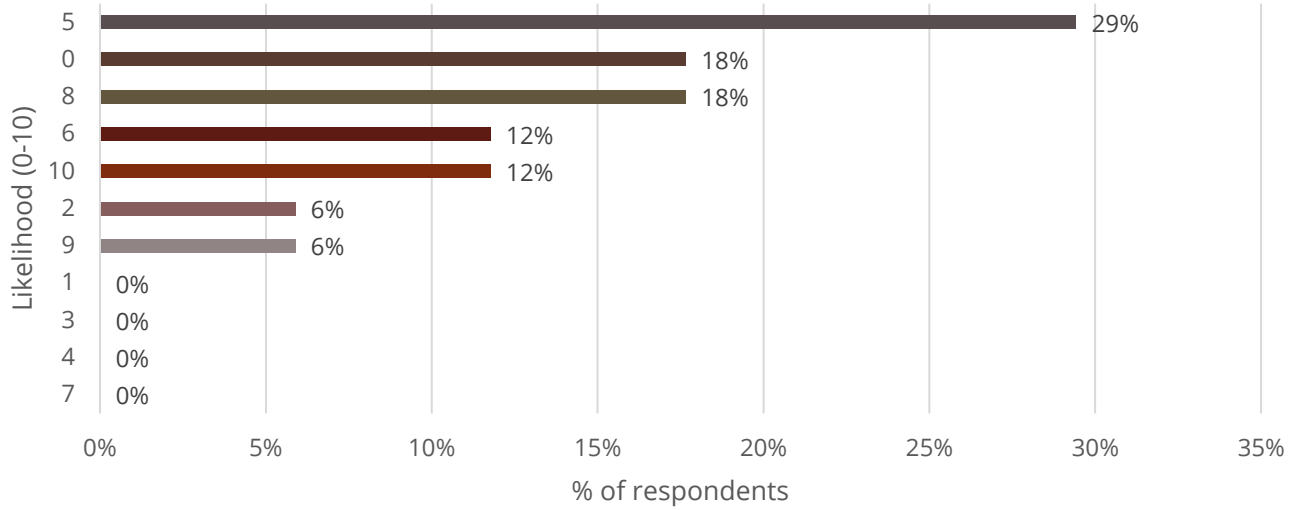
Figure 3: PY2024 Participation in Other Complementary IESO Programs (n = 29, 1 respondent ≈ 3.4%)



Participants are neutral (with a mean of 5.4) regarding participation in the new EEM program, in partnership with NRCan. This is shown in Figure 4, where 0 is completely unlikely to participate and 10 is completely likely to participate. This neutrality is a change from last year, when all participants aware of the sunset EM program indicated that they were either somewhat or very likely to participate if the program were reinstated.

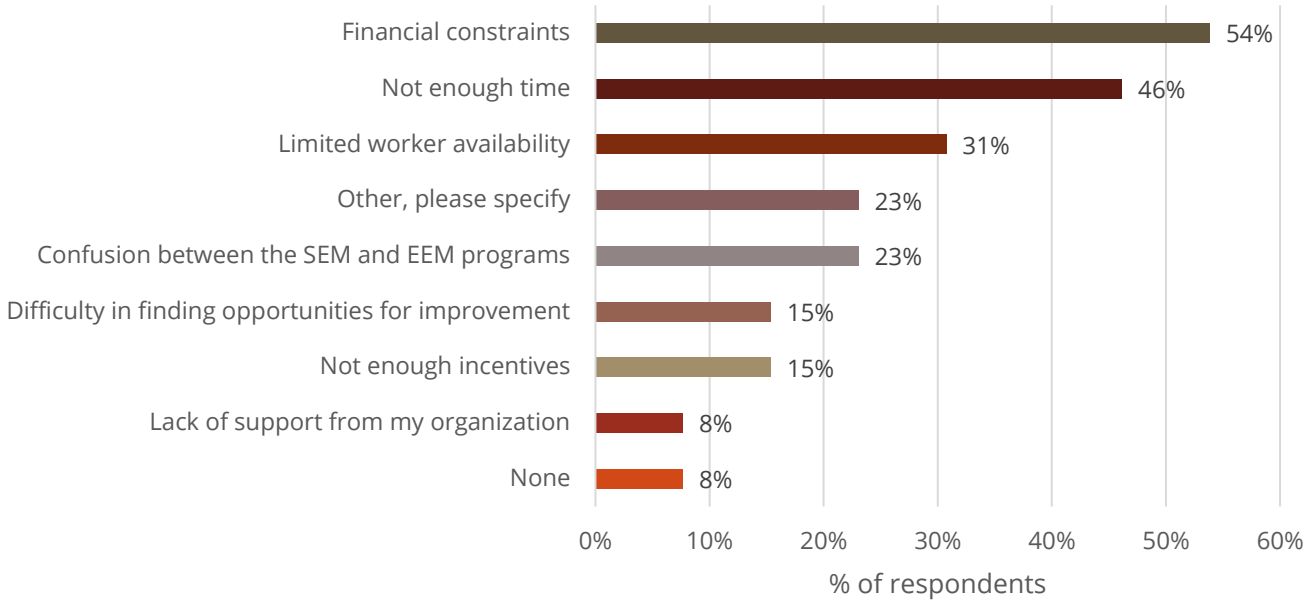
SEM program staff indicated that the original list of SEM participants classified as industrial will now be funded from NRCan. Since the EEM program with NRCan offers funding for a dedicated energy manager, program staff and vendors should promote this resource. Currently, only 41% (n = 12) of survey participants reported knowing about this program and participating in it. Subsidizing an energy manager could support deeper engagement and help organizations identify and implement energy-saving actions.

Figure 4: PY2024 Likelihood of Participating in EEM Program in Partnership with NRCan (n = 17, 1 respondent ≈ 5.9%)



Of 13 survey respondents, the top two concerns of SEM participants regarding participation in the new EEM program, in partnership with NRCan, are financial constraints at 54% and insufficient time at 46%. Lack of support does not appear to be a concern at only 8% (n = 1), as shown in Figure 5. Increasing participation in the EEM program (which includes the possibility to incentivize an energy manager's salary), could help fund an EM salary and provide additional bandwidth for participants to have more in-depth engagement with the program.

Figure 5: PY2024 Concerns of Participating in EEM Program in Partnership with NRCan (n = 13, 1 respondent ≈ 7.7%)



3.4 Participant Satisfaction

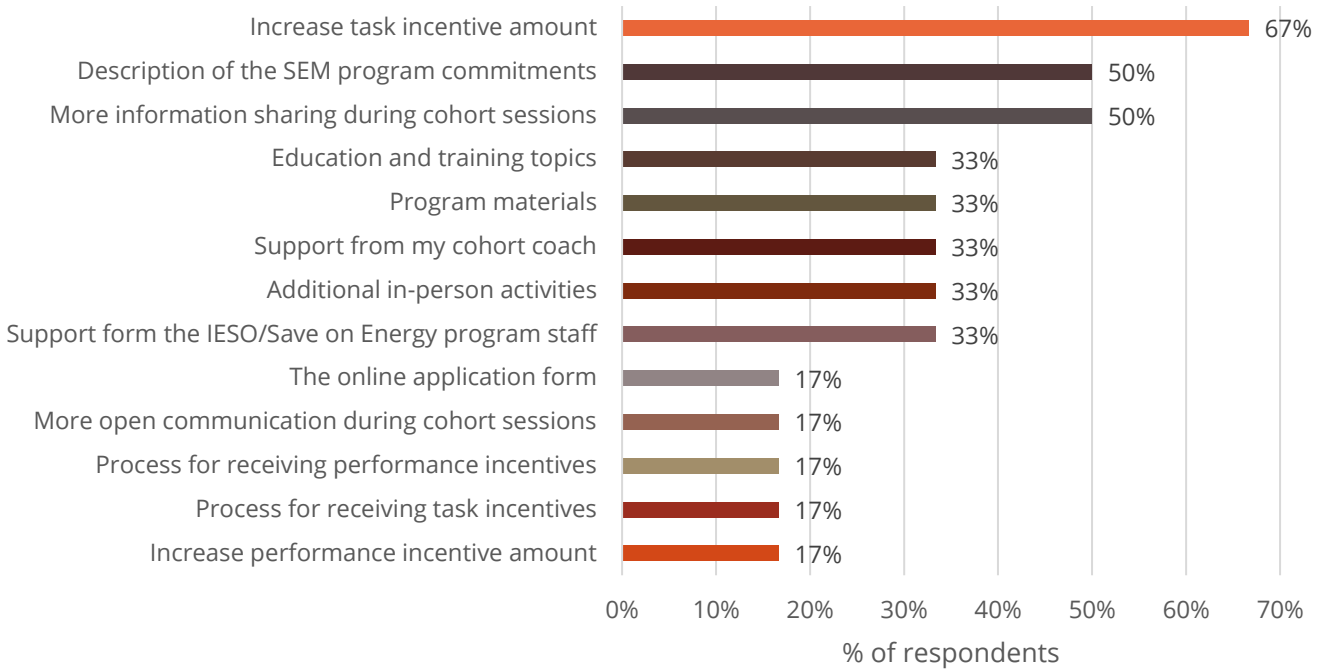
Participants indicated that they were satisfied with the SEM program overall. On a scale of 0–10, where 10 is the highest level of satisfaction, over 80% (n = 28) of respondents rated their overall impression of the program as an 8, 9, or 10, and none scored less than a 6. The average was 8. This finding is similar to last year's evaluation, where overall respondents noted that the program application was easy and that the program was meeting their organization's needs. It is also in line with discussions with the IESO program staff and the program delivery vendor, who did not report any finding trends regarding dissatisfied customers. This level of satisfaction is a notable and positive achievement for the program, demonstrating its ability to meet customer needs effectively.

Overall, increasing the task incentive amount would improve the SEM program, according to 67% (n = 4) of respondents. Since last year, milestone incentives have been adjusted to be paid earlier in the process, after fewer milestones are completed. This change appears to have eased concerns, as incentive processing was among the least cited areas needing improvement. Figure 6 shows that 50%

of participants (n = 3) suggested clearer descriptions of SEM commitments and more information sharing during cohort sessions.

As was the case last year, some participants expressed interest in in-person coaching. The delivery vendor noted geographic challenges.

Figure 6: PY2024 Improvement for the SEM Program (n = 6, 1 respondent ≈ 16.7%)



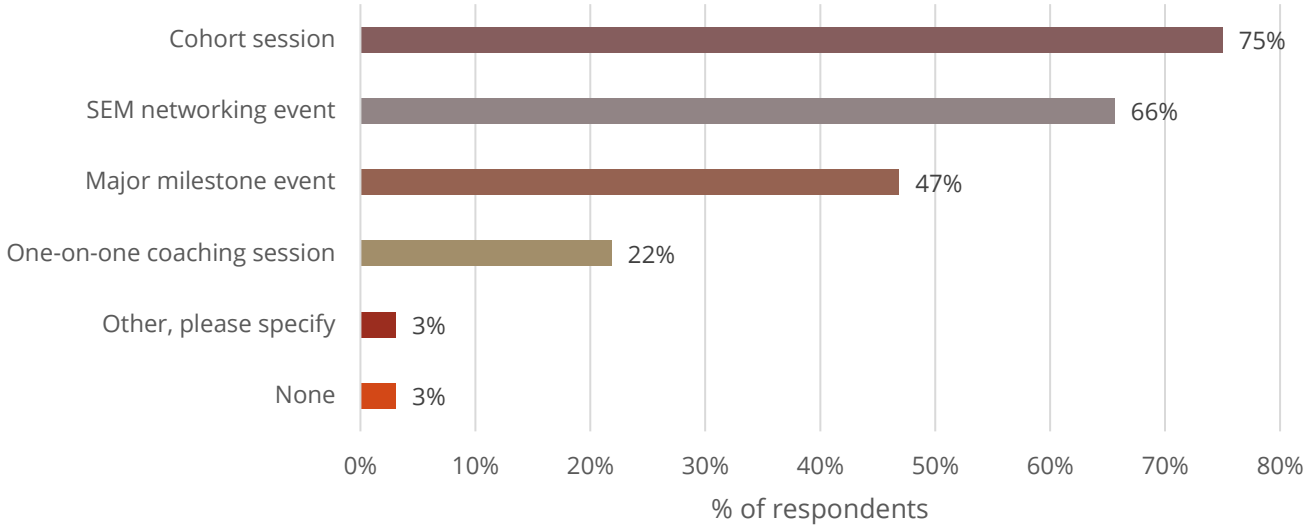
3.5 Participant Energy Savings Knowledge

Respondents reported being satisfied with the energy savings knowledge they gained through the SEM program, indicating that cohorts are an effective method for enabling the acquisition of this knowledge. Nearly 90% (n = 28) of respondents rated their satisfaction with the program as 7 or higher (on a 0–10 scale), with 25% (n = 8) giving a perfect score of 10. One respondent wanted more in-person cohort sessions and more open sharing from other participants. Among those less satisfied (ratings below 7), nearly half suggested that more online case studies would be helpful, signaling an opportunity for future marketing once more participants progress further. The cohort coach interview noted that budgets are capped per cohort rather than across the entire program. To give coaches more flexibility to adapt their efforts to needs and better support varying experience levels, consider shifting from a cohort-level to a program-level budget cap. This would allow more resources for newer cohorts while scaling back support for more advanced ones, for example.

3.6 Participant Engagement

Participants expressed a strong preference for attending cohort sessions in person. While requests for in-person coaching were modest, demand for in-person cohort sessions and networking was strong. Participants want to meet each other. When 32 total respondents were asked about their interest in attending various events, 75% indicated a preference for in-person cohort sessions. This was followed by 66% (n = 21) who were interested in attending SEM networking events in person. Figure 7 illustrates that of those same 32 respondents, 47% of participants were interested in attending major milestone events. In contrast, only 22% (n = 7) expressed interest in one-on-one coaching sessions in person, while 3% (n = 1) indicated interest in other events, and another 3% (n = 1) showed no interest in attending any in-person events.

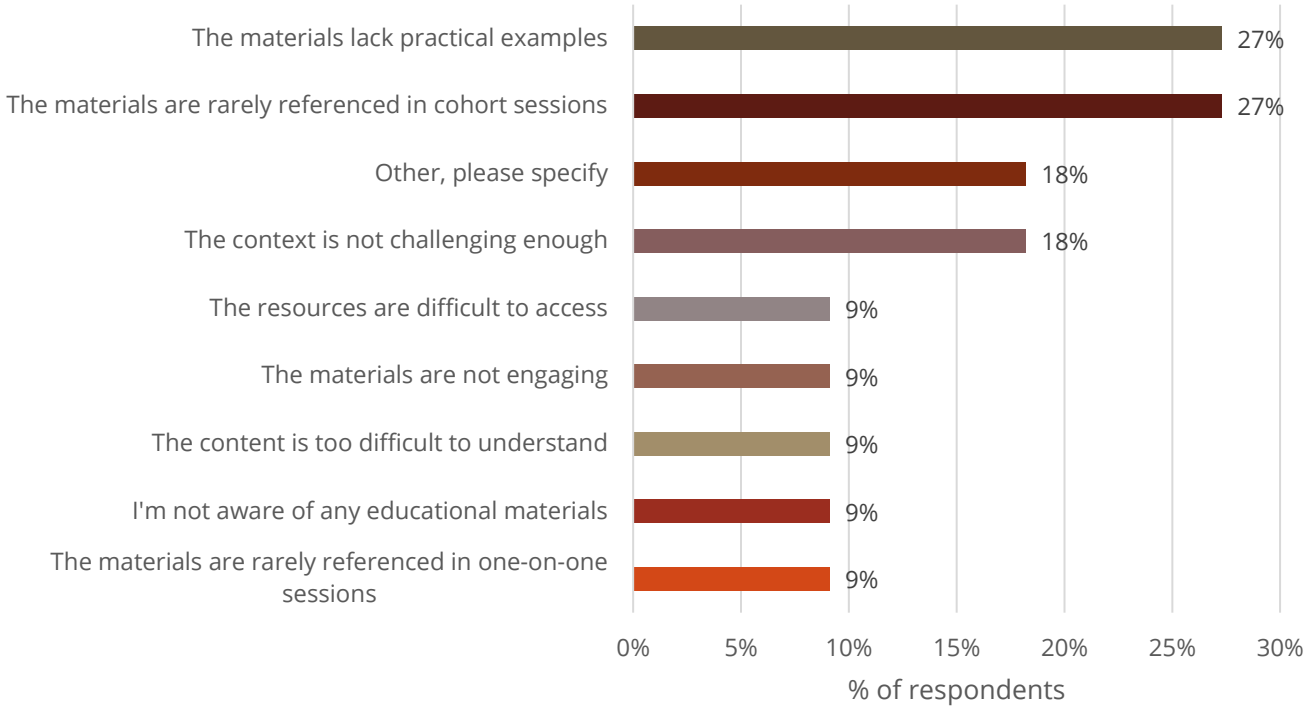
Figure 7: PY2024 Participant Interest in In-Person Events (n = 32, 1 respondent ≈ 3.1%)



SEM participants are not entirely satisfied with the educational materials provided. On a scale of 0–10, with 0 being extremely dissatisfied and 10 being extremely satisfied, 7 participants rated the materials as 7 out of 10, indicating the highest level of satisfaction. Seven participants rated the materials as an 8, and seven participants rated them as a 9, resulting in a tie at 22%.

Participants dissatisfied with materials indicated it is mainly because the materials lack practical examples and are rarely referenced in cohort sessions. These top two reasons were each selected by three participants, as shown in Figure 8. These findings provide a path for refinement (e.g., including practical examples) to better address the needs of future participants.

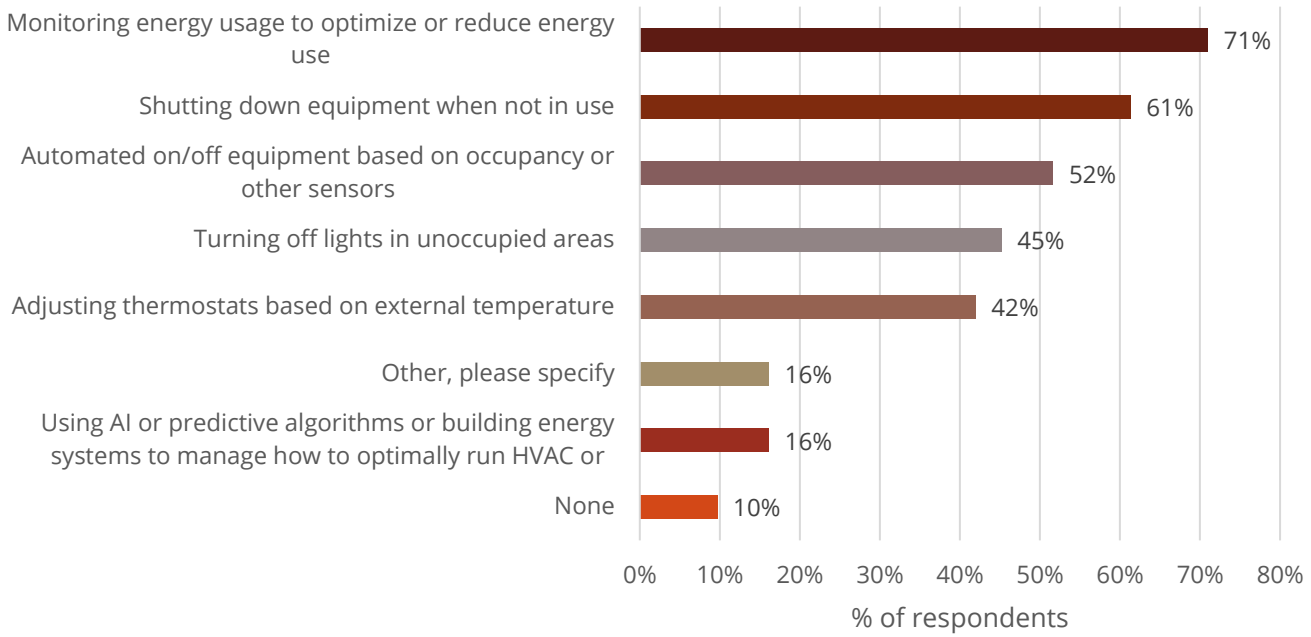
Figure 8: PY2024 Participants Dissatisfaction in Educational Materials (n = 11, 1 respondent ≈ 9%)



3.7 Behavioural Changes

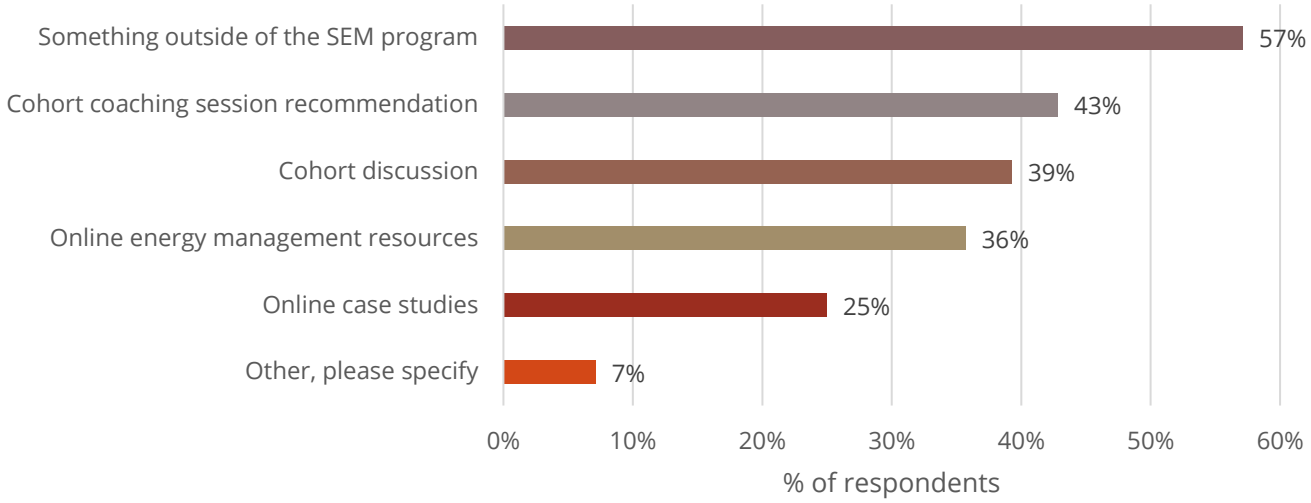
Inspiring behavioral change measures is a core objective of the SEM program. The top energy-saving behavioural change made by 22 participants was monitoring energy usage to optimize or reduce energy consumption. As shown in Figure 9, 19 participants shut down equipment when not in use, and 16 participants automated control of on/off equipment based on occupancy or other sensors. Those round out the top three behavioural changes participants made.

Figure 9: PY2024 Participant Energy Saving Behavioral Changes (n = 31, 1 respondent ≈ 3.2%)



When asked what specifically led to making these behavioral changes, 16 participants said it was something outside of the SEM program. This does not necessarily mean the program did not influence the change. A cohort coaching session recommendation led 12 participants to implement changes, cohort discussions led 11 participants to make changes, while online energy management resources led 10 participants to change their behaviors, as shown in Figure 10.

Figure 10: PY2024 What Led Participant to Make Energy Saving Behavioral Changes (n = 28, 1 respondent ≈ 3.6%)

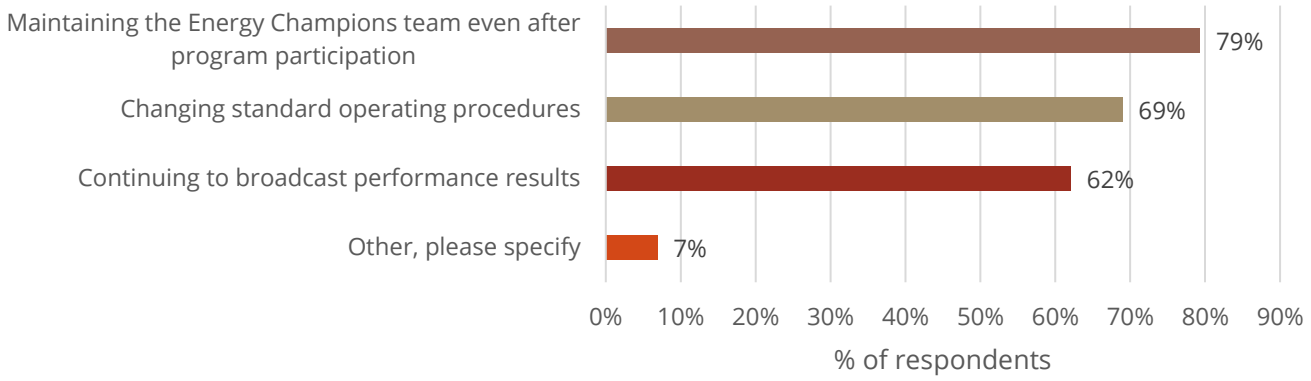


3.8 Sustaining Savings

Participants indicated they intend to sustain savings garnered through the SEM program. Figure 11 shows 79%, or 23 survey respondents, plan to maintain the Energy Champions team even after program participation. Twenty participants stated that they plan to sustain savings by modifying standard operating procedures, while 18 participants indicated that they plan to continue broadcasting performance results. Now that the first group is coming to term, the program delivery vendor is discussing an alumni concept advanced cohort.

While there are early signs that participants may continue SEM practices beyond the period of direct program support, these activities currently appear to align with planned alumni engagement and do not yet clearly qualify as spillover. Spillover, defined as energy savings occurring outside the influence of program incentives, may be taking place, but it is too early to confirm. We recommend revisiting this question in future evaluations, potentially through interviews with past participants to assess long-term behavioral changes and the application of SEM practices at other facilities or in non-incentivized settings. This remains a promising area for further research and evaluation planning.

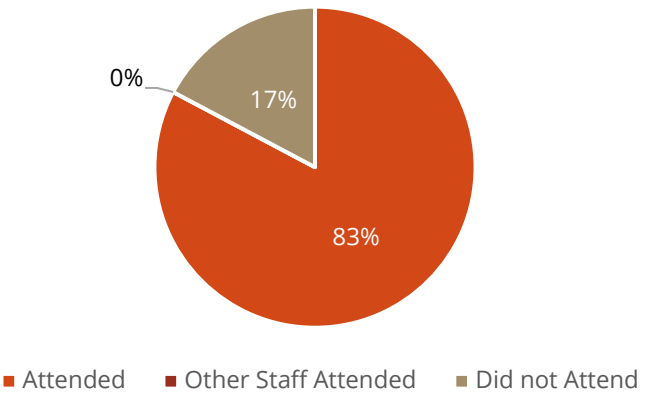
Figure 11: PY2024 Participant/Organization Plan to Sustain Savings (n = 29, 1 respondent ≈ 3.4%)



3.9 Save on Energy Trainings

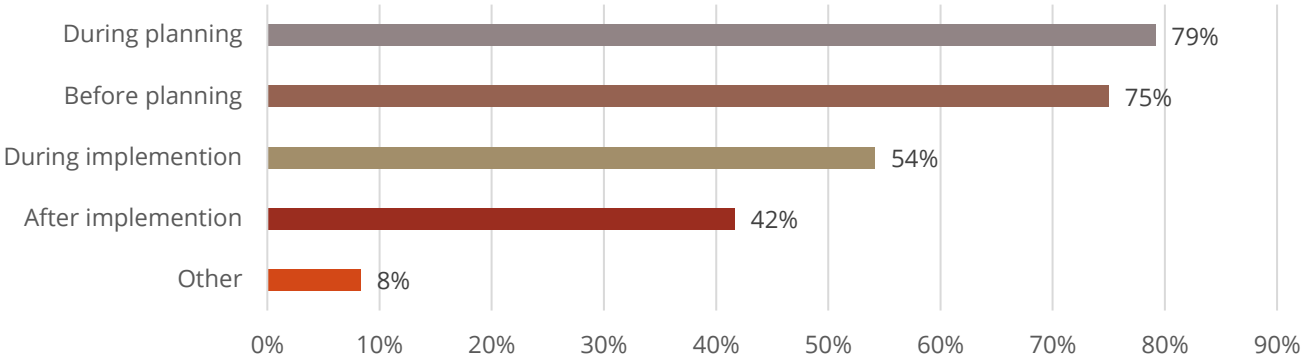
About 83% of respondents attended at least one training session from Save on Energy under Capability Building Initiatives (CBI).

Figure 12: SEM Respondent Attendance at CBI (n = 29, 1 respondent ≈ 3.4%)



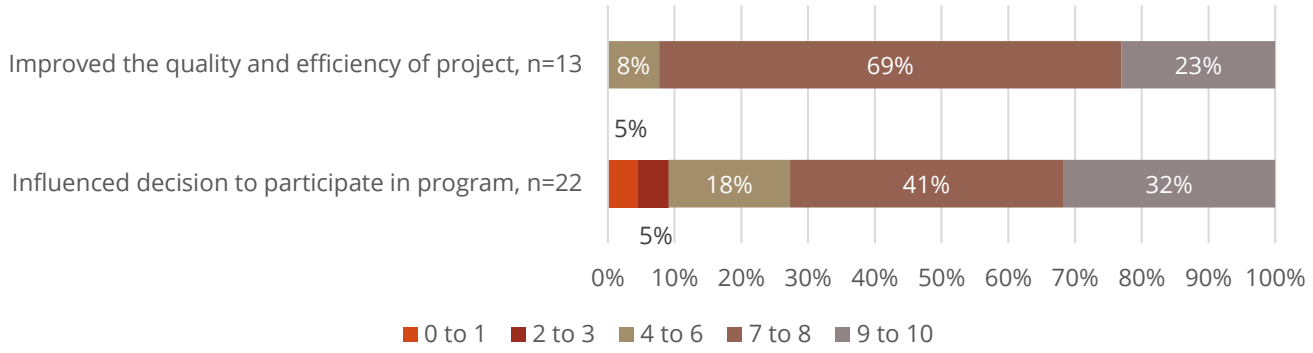
Three quarters of respondents who attended a CBI session did so before project planning. Nearly 80% of respondents also attended again during the planning process and more than half during implementation stages, showing continued engagement across multiple project phases.

Figure 13: Project Stage with CBI Attendance (n = 24, 1 respondent ≈ 4.2%)



More than 90% of respondents who attended a CBI said that it improved the quality and efficiency of an energy efficiency project, rating the influence over a 6 on a 0–10 scale. More than 70% of respondents who attended a CBI said that it influenced their decision to participate in SEM, rating the influence over a 6 on a 0–10 scale. This influence is "channeling" from one program to another and is evaluated using a methodology similar to the methodology used to detect and quantify spillover. Channeling does not impact net-to-gross or the savings attributable to either program.

Figure 14: Impact and Influence of CBI on Energy Efficiency Projects and Program Participation (1 respondent ≈ 7.7% for project bar; 1 respondent ≈ 4.5% for program bar)



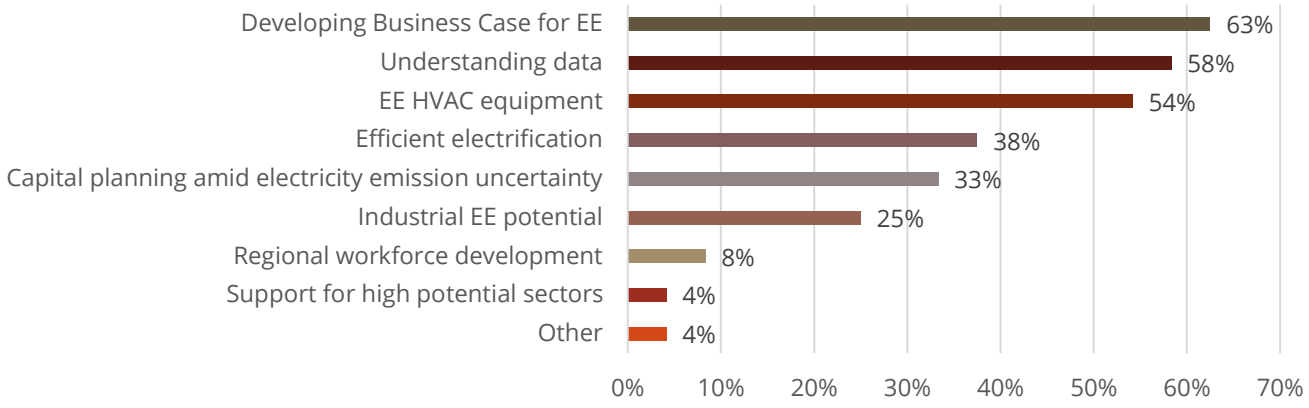
Key Impacts Reported by Respondents:

- Appreciated the opportunity to learn and fill in knowledge gaps
- Provided opportunities to share background knowledge with stakeholders
- Helped with understanding the importance of operational efficiency.
- Led to creation of a building tune-up procedure
- Introduced to existing building commissioning screening tool from NRCan
- Appreciated getting others' perspective and experience
- Provided motivation to accelerate LED lighting retrofit projects
- Education/Awareness, Useful Tools Development, Empowerment Coaching
- Received insights into how upper management wants to see projects presented
- Learned about additional energy efficiency measures and options.

Training Topics Covered:

Nine respondents attended CBIs addressing a single topic. The remaining respondents attended CBIs addressing two to eight different topics. The topics most frequently attended were “Developing business case for energy efficiency” and “Understanding data”. (Figure 15)

Figure 15: CBI Topics Attended by SEM Respondents (n = 24, 1 respondent ≈ 4.2%, multiple selections allowed; does not total 100%)



4 FINDINGS AND RECOMMENDATIONS

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

Finding 1: Among the 29 survey respondents, 62% reported that the biggest barrier to deeper program engagement is limited organizational staff availability to implement, resulting in additional savings being left unimplemented. Additionally, only 41% (n = 12) knew about or reported participating in the EEM program (which includes the possibility to incentivize an energy manager's salary). Of the 13 respondents who did not report participating in EEM, the primary barriers to EEM participation were financial constraints (54%) and a lack of time (46%).

Recommendation 1: EcoMetric recommends that the IESO and the program delivery vendor further market the EEM program to SEM participants and encourage them to participate, which could help fund an EM salary and provide additional bandwidth for participants to have more in-depth engagement with the program.

Finding 2: Interviews with cohort coaches revealed a crucial limitation in the current training budget allocation structure. Funding is capped at the cohort level, regardless of the needs of each group. While some more advanced cohorts may require less training, others, particularly those earlier in their development, may benefit from additional support. The current funding structure can prevent resources from being allocated where they're needed most.

Recommendation 2: Consider shifting from a per-cohort training cap to a program-level training cap. This would enable a more strategic and flexible allocation of funds, ensuring that each cohort has access to the appropriate level of support.

Finding 3: Participation in the SEM program can lead customers to engage with other IESO Save on Energy initiatives, an important objective of the SEM program. But further potential remains. Just under half of SEM participants stated that they have initiated participation in other initiatives, revealing both SEM's value as a gateway to broader energy efficiency efforts and the potential for greater influence. Program and vendor staff noted challenges in tracking this cross-program activity.

Recommendation 3: To maximize cross-program engagement, IESO should proactively develop and distribute clear, user-friendly materials outlining benefits, eligibility, and distinctions among its offerings and make advocacy a core feature of coaching if it is not already. Tools like the Retrofit-EPP Comparison Guide can empower customers, trade allies, and vendors to navigate options and select

the most suitable programs. Tracking downloads of such materials from the web and tracking cross-participation in program databases would allow creation of cross-pollination metrics for staff to use to measure success.

Finding 4: Participant feedback highlighted an opportunity to enhance the learning experience, as nearly half of the respondents reported that access to additional online energy management (EM) resources and case studies would have increased their satisfaction with the knowledge they gained.

Recommendation 4: Continue expanding the library of online EM resources to support participant learning. Additionally, consider developing case studies based on successful program sites. These can help other participants gain more knowledge and serve as compelling marketing materials.

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

Table 4: Key Findings and Recommendations with IESO Response

No.	KEY FINDINGS	2024 EM&V RECOMMENDATIONS	IMPACT	IESO RESPONSE
1	Among the 29 survey respondents, 62% reported that the biggest barrier to deeper program engagement is limited organizational staff availability to implement, resulting in additional savings being left unimplemented. Additionally, only 41% (n = 12) knew about or reported participating in the EEM program (which includes the possibility to incentivize an energy manager's salary). Of the 13 respondents who did not report participating in EEM, the primary barriers to EEM participation were financial constraints (54%) and a lack of time (46%).	EcoMetric recommends that the IESO and the program delivery vendor further market the EEM program to SEM participants and encourage them to participate, which could help fund an EM salary and provide additional bandwidth for participants to have more in-depth engagement with the program.	High	The IESO will drive awareness of the EEM program through targeted outreach and marketing to the SEM participants. The reinstatement of energy manager funding may support participants in building essential internal capacity, mitigate workforce constraints, and unlock further energy savings potential. The IESO will also explore additional support mechanisms or case studies that demonstrate the value of EEM participation, which could further encourage uptake.
2	Interviews with cohort coaches revealed a crucial limitation in the current training budget allocation structure. Funding is capped at the cohort level, regardless of the needs of each group. While some more-advanced cohorts may require less training, others, particularly those earlier in their development, may benefit from additional support. The current funding structure can prevent resources from being allocated where they are needed most.	Consider shifting from a per-cohort training cap to a program-level training cap. This would enable a more strategic and flexible allocation of funds, ensuring that each cohort has access to the appropriate level of support.	Medium	The IESO will examine the feasibility of shifting from a per-cohort training/coaching cap to a more flexible overall training/coaching cap, allowing the program to better align support with actual cohort needs.

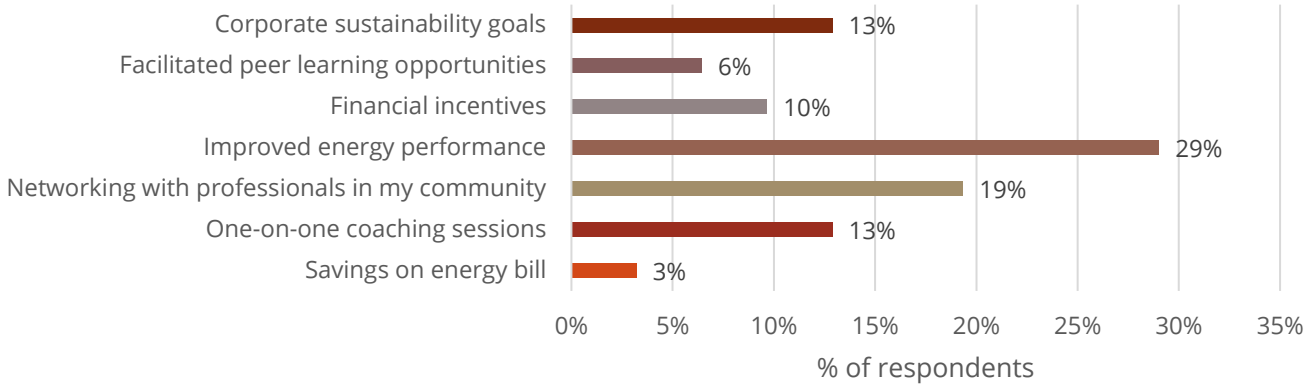
No.	KEY FINDINGS	2024 EM&V RECOMMENDATIONS	IMPACT	IESO RESPONSE
3	Participation in the SEM program can lead customers to engage with other IESO Save on Energy initiatives, an important objective of the SEM program. But further potential remains. Just under half of SEM participants stated that they have initiated participation in other initiatives, revealing both SEM's value as a gateway to broader energy efficiency efforts and the potential for greater influence. Program and vendor staff noted challenges in tracking this cross-program activity.	To maximize cross-program engagement, IESO should proactively develop and distribute clear, user-friendly materials outlining benefits, eligibility, and distinctions among its offerings and make such advocacy a core feature of coaching if it is not already. Tools like the 'Retrofit-EPP Comparison Guide' can empower customers, trade allies, and vendors to navigate options and select the most suitable programs. Tracking downloads of such materials from the web and tracking cross-participation in program databases would allow creation of cross-pollination metrics for staff to use to measure success.	High	The IESO is developing a Funding Finder Tool for the Save on Energy website, which will provide a more efficient and user-friendly way for participants to locate suitable programs compared to the existing guide.
4	Participant feedback highlighted an opportunity to enhance the learning experience, as nearly half of the respondents reported that access to additional online energy management (EM) resources and case studies would have increased their satisfaction with the knowledge they gained.	Continue expanding the library of online EM resources to support participant learning. Additionally, consider developing case studies based on successful program sites. These can help other participants gain more knowledge and serve as compelling marketing material.	Medium	The IESO will expand our online EM resources, such as pre-recorded online courses and case studies, help participants gain deeper expertise.

APPENDIX B ADDITIONAL PROCESS EVALUATION RESULTS

B.1 Motivations and Barriers

When asked about their primary motivation, 29% of participants indicated that they wanted to improve their energy performance. Networking with professionals in their community motivated 19% of participants. Tied at 13% were one-on-one coaching sessions and corporate sustainability goals. As shown in Figure 16, 10% of participants were motivated by financial incentives, and 6% said they were motivated by facilitated peer learning opportunities. Lastly, 3% of participants indicated that their primary motivation was saving on their energy bills.

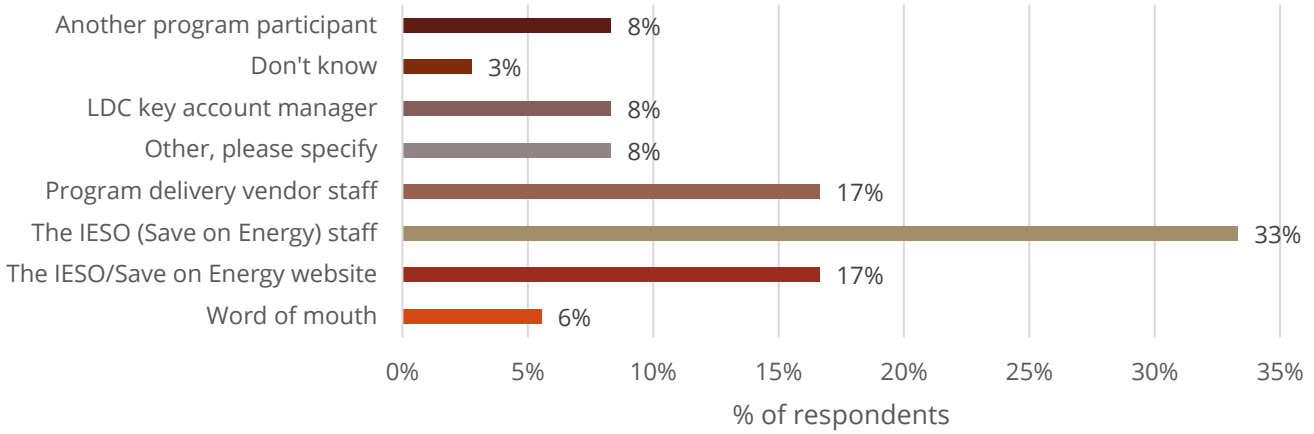
Figure 16: PY2024 Participant Primary Motivation to Participate in SEM (n = 31, 1 respondent ≈ 3.2%)



B.2 Participation

Participants reported that 33% first heard about the SEM program through the IESO (Save on Energy) staff. Tied for second place, 17% of respondents first learned about the program through the IESO (Save on Energy) website, and 17% through program delivery vendor staff, as shown in Figure 17. Additionally, 8% of participants first heard about the program from another program participant, 8% through an LDC key account manager, and 8% through other sources. Only 6% mentioned word of mouth, and 3% did not recall how they first heard about the program.

Figure 17: PY2024 Participants First Heard of the Program (n = 36, 1 respondent ≈ 2.8%)



B.3 Participant Satisfaction

When rating specific elements of the program on a scale of 0–10, with 0 being extremely dissatisfied and 10 being extremely satisfied, most participants indicated they were extremely satisfied with completing the SEM application process, as shown in Figure 19 and interactions with the SEM program staff (coaches, point of contact, others), as shown in Figure 20. Participants were satisfied primarily with receiving task incentives, as shown in Figure 21. Participants said they were slightly less satisfied with receiving performance incentives, as shown in Figure 22 and their cohort structure, as shown in Figure 23.

Figure 18: PY2024 Participant Satisfaction with Overall SEM Program (n = 34, 1 respondent ≈ 2.9%)

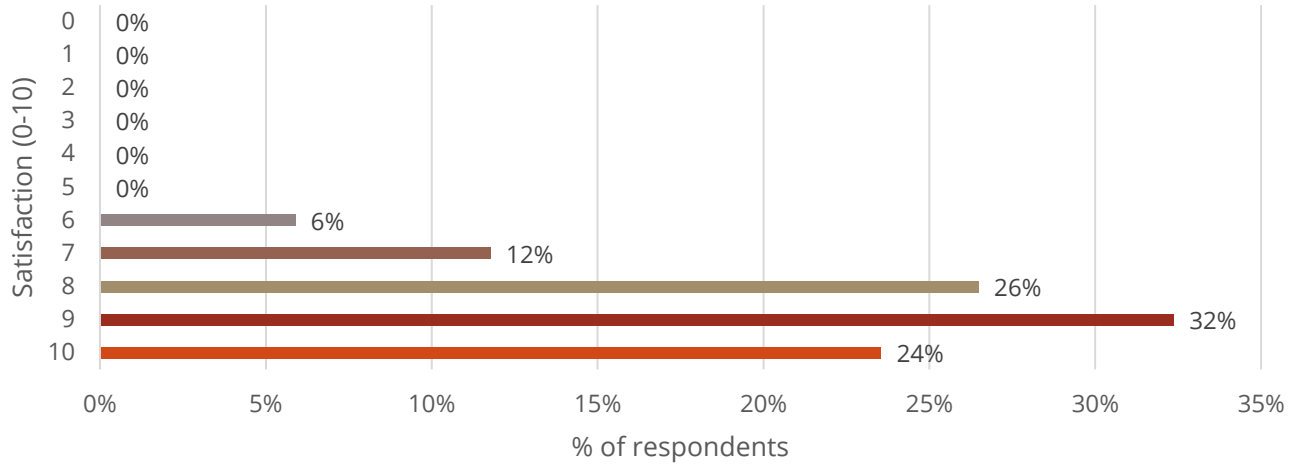


Figure 19: PY2024 Participant Satisfaction with SEM Application Process (n = 34, 1 respondent ≈ 2.9%)

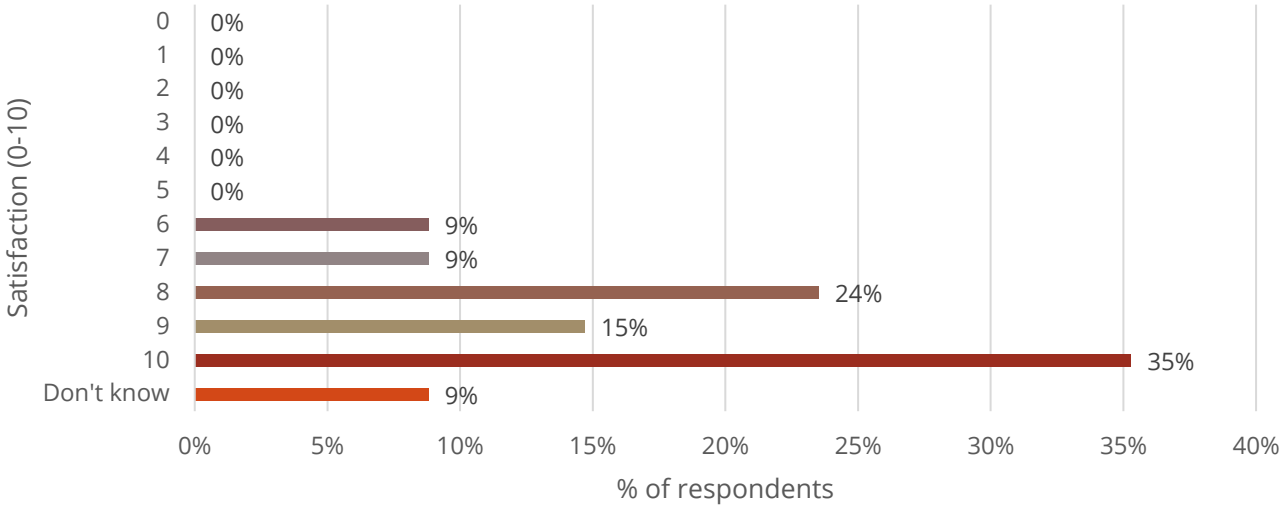


Figure 20: PY2024 Participant Satisfaction with Interactions with SEM Program Staff (n = 34, 1 respondent ≈ 2.9%)

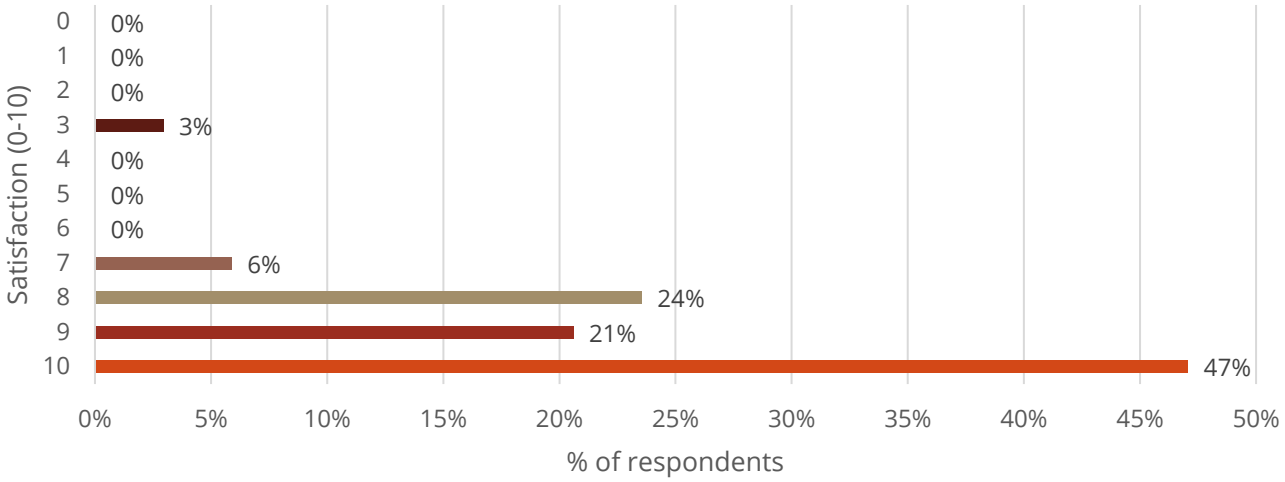


Figure 21: PY2024 Participant Satisfaction with Receiving Task Incentives (n = 34, 1 respondent ≈ 2.9%)

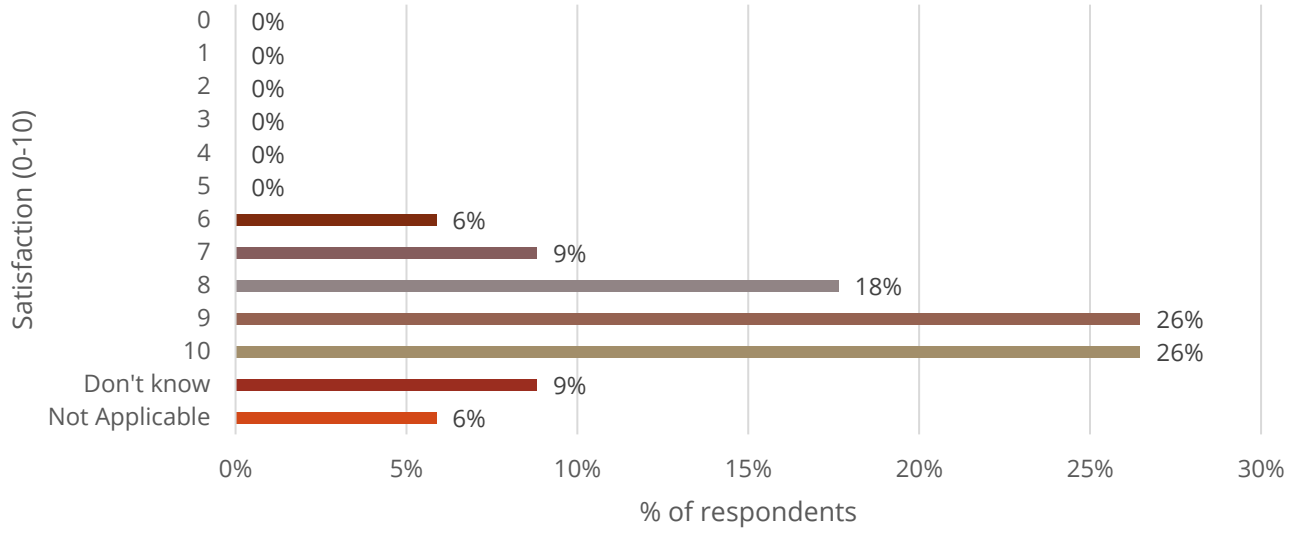


Figure 22: PY2024 Participant Satisfaction with Receiving Performance Incentives (n = 34, 1 respondent ≈ 2.9%)

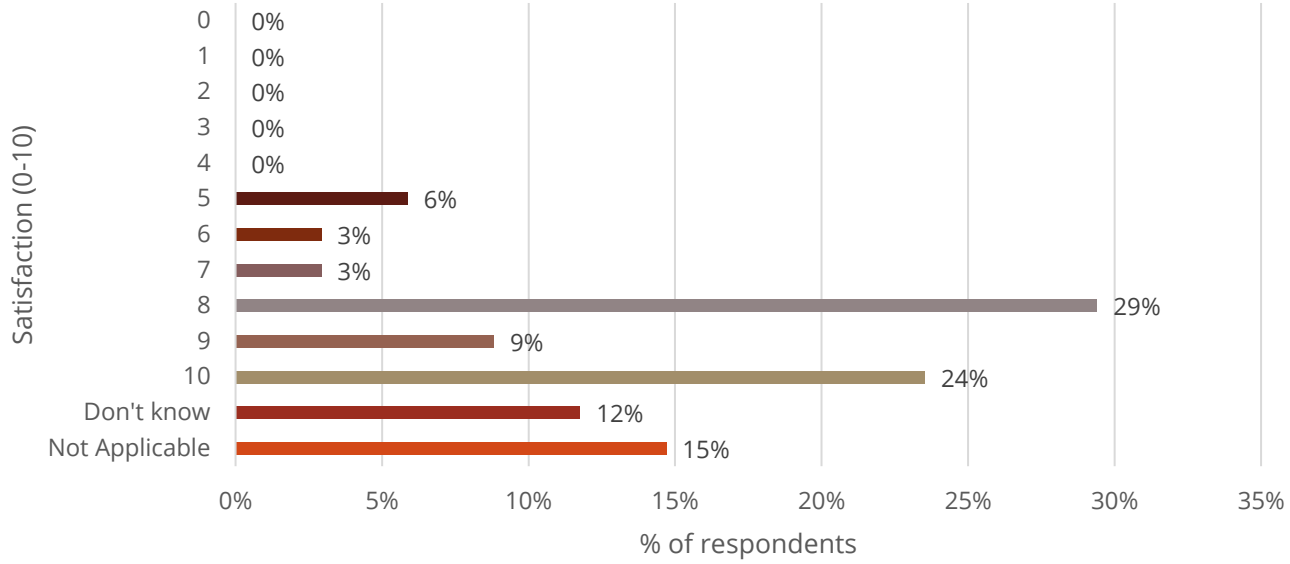
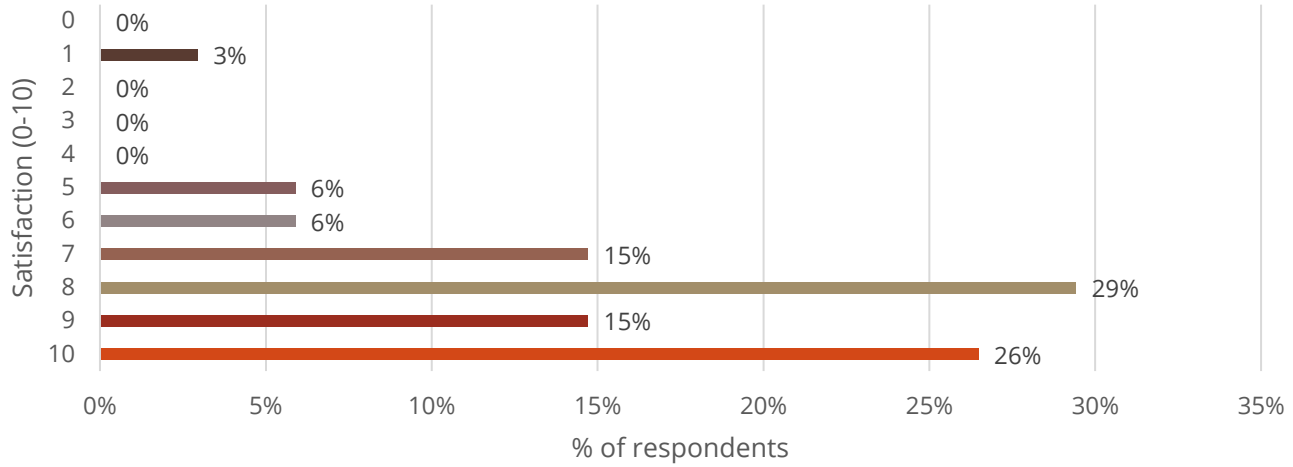


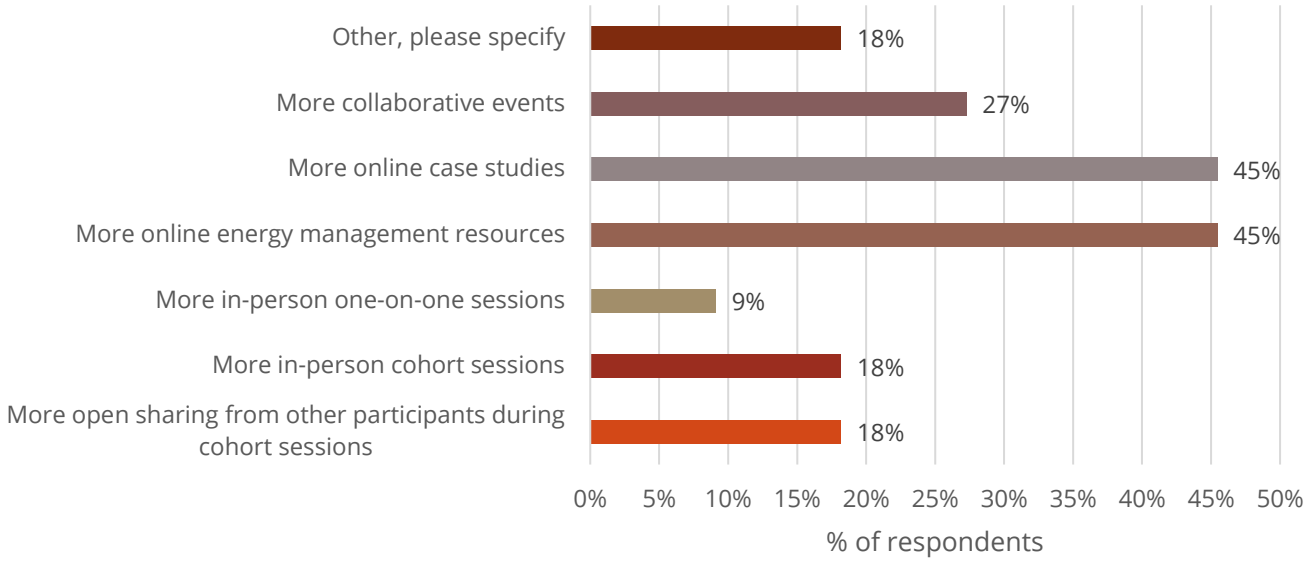
Figure 23: PY2024 Participant Satisfaction with Cohort Structure (n = 34, 1 respondent ≈ 2.9%)



B.4 Participant Energy Saving Knowledge

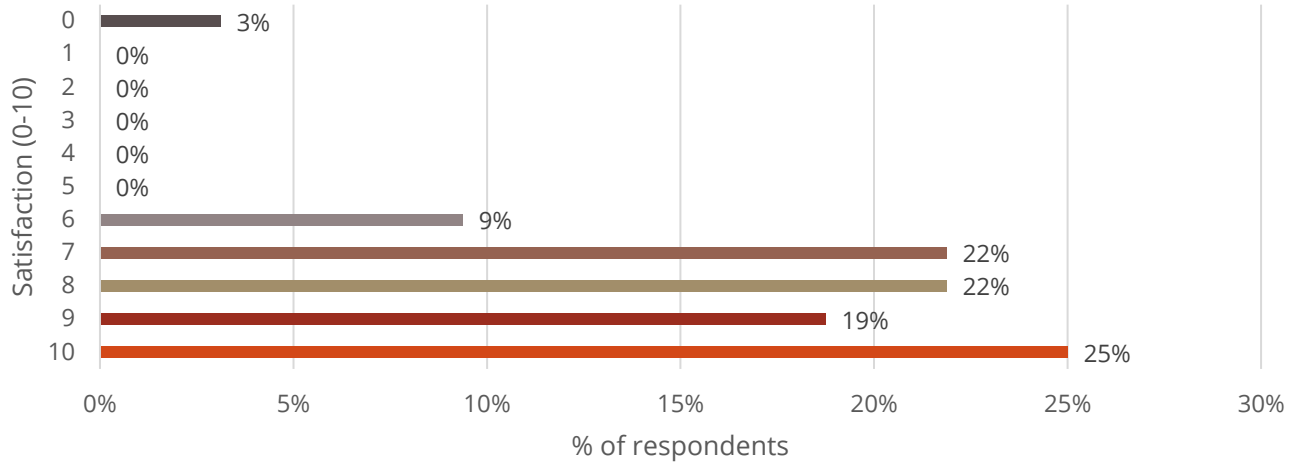
Participants indicated that more online energy management resources and case studies would have increased their satisfaction with the energy savings knowledge gained. Among the participants who rated their satisfaction as less than extremely satisfied, Figure 24 shows that five would have liked to see more online energy management resources, and another five desired more online case studies. Furthermore, three participants expressed a desire for more collaborative events. Two participants wanted more open sharing from others during cohort sessions, two others preferred more in-person cohort sessions, and two specified other improvements. Lastly, one participant requested more in-person, one-on-one sessions.

Figure 24: PY2024 Improvements to Increase Participant Satisfaction with Energy Saving Knowledge Gained (n = 11, 1 respondent ≈ 9.1%, multiple selections allowed; does not total 100%)



Respondents reported being satisfied with the energy savings knowledge they gained through the SEM program, indicating that cohorts are an effective method to enable the gain of this knowledge. Nearly 90% of respondents rated their satisfaction with the program at 7 or higher (on a 0–10 scale), as shown in Figure 25, with 25% giving a perfect 10. Among those less satisfied (ratings below 7), nearly half suggested that more online case studies would be helpful, signaling an opportunity for future marketing once more participants progress further. The cohort coach interview noted that budgets are capped per cohort rather than across the entire program. To give the coaches more flexibility to adapt effort to need and better support varying experience levels, consider shifting from a cohort-level to a program-level budget cap. This would allow more resources for newer cohorts while scaling back support for more advanced ones, for example.

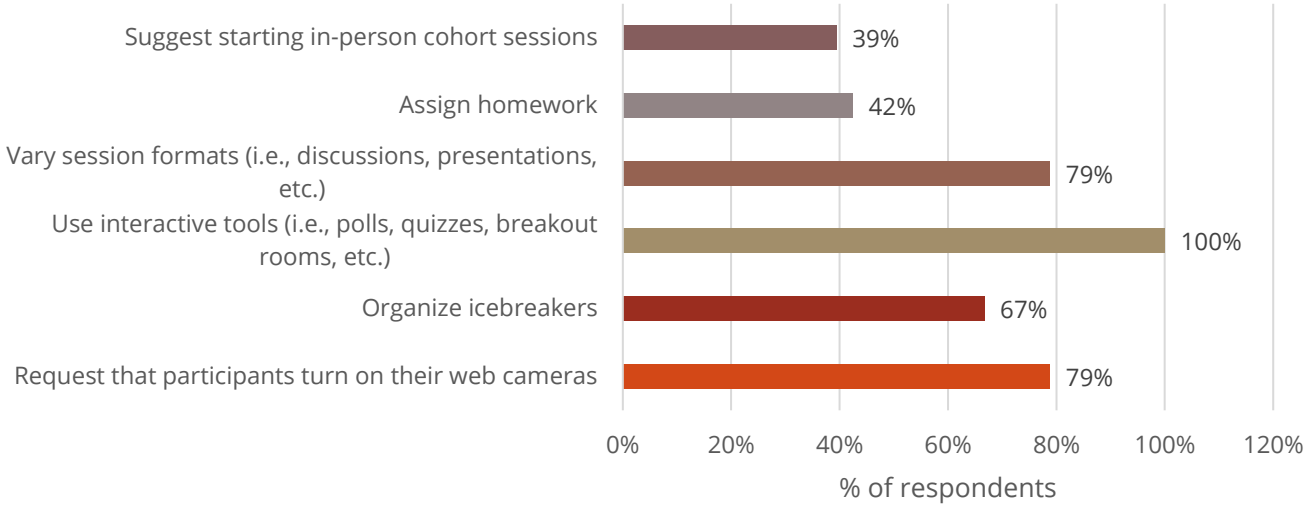
Figure 25: PY2024 Participant Satisfaction with Gained Energy Saving Knowledge (n = 32, 1 respondent ≈ 3.1%)



B.5 Participant Engagement

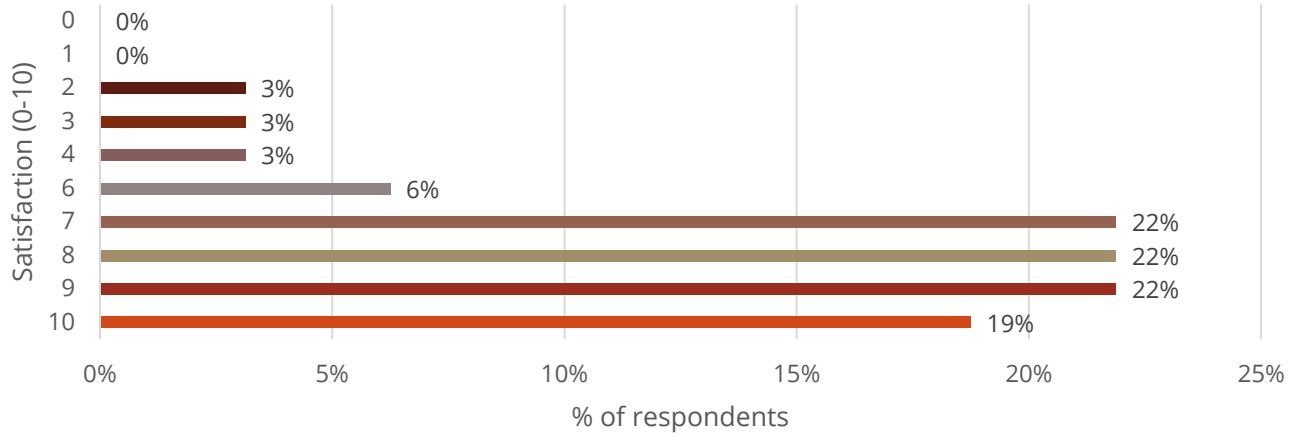
Cohorts utilize interactive tools, varying session formats, and request that participants turn on their web cameras to increase participation. Figure 26 shows that all 33 participants reported using interactive tools, while 26 participants indicated that session formats are being varied, and 26 participants stated that participants are requested to turn on their web cameras. Both the IESO and the program delivery vendor noted that continuous improvement is sought to more deeply engage program participants.

Figure 26: PY2024 Cohort Methods Used (n = 33, 1 respondent ≈ 3.0%, multiple selections allowed; does not total 100%)



SEM participants are not entirely satisfied with the educational materials provided. Of the 32 responses gathered, 7 participants rated materials as 7 out of 10, with 10 being most satisfied. Seven participants rated the materials as an 8, and seven participants rated them as a 9, resulting in a tie at 22% (see Figure 27).

Figure 27: PY2024 Participant Satisfaction of Educational Materials (n = 32, 1 respondent ≈ 3.1%)



More can be done to make participants feel comfortable sharing in cohort sessions. On a scale of 0–10, with 0 being extremely uncomfortable and 10 being extremely comfortable, only 28% of participants felt completely comfortable sharing in cohort sessions, as shown in Figure 28.

Figure 28: PY2024 Participant Comfort Level Sharing in Cohort Sessions (n = 32, 1 respondent ≈ 3.1%)

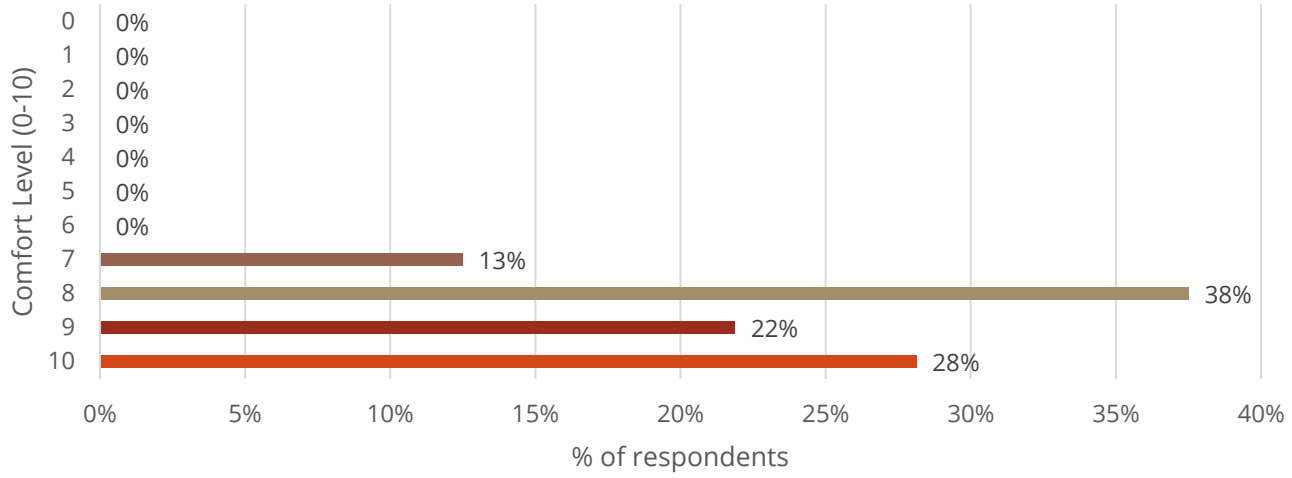
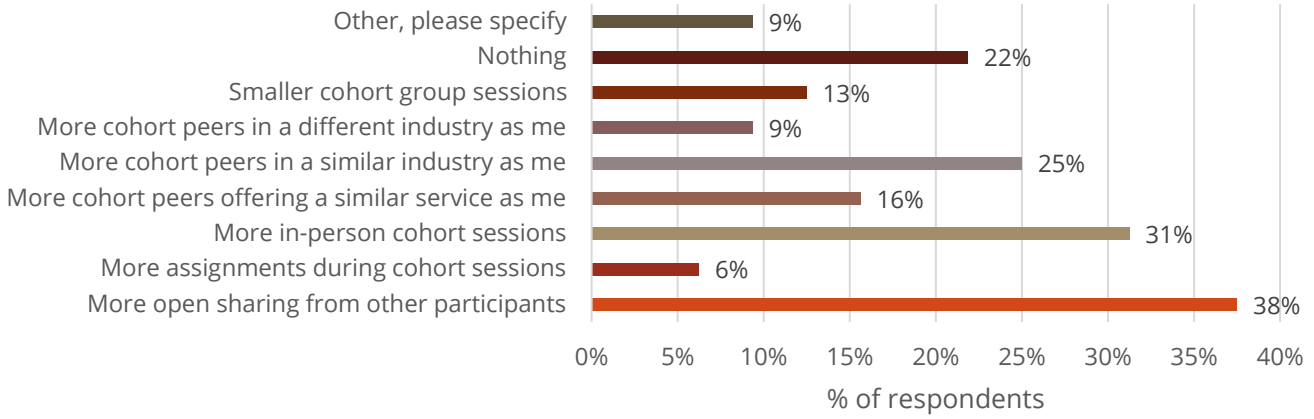


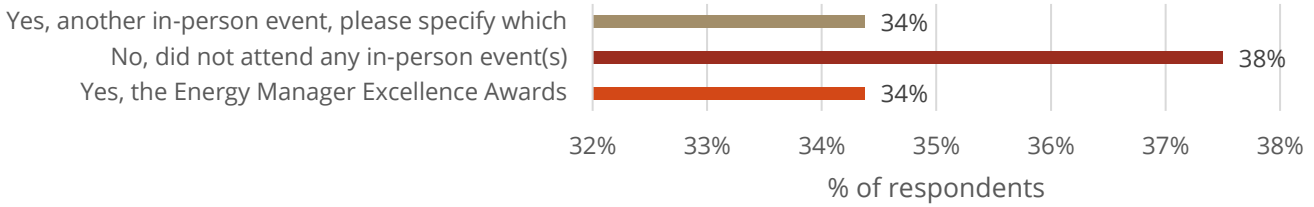
Figure 29 shows 38% of participants said they would feel increased comfort if there was more open sharing, and 31% of participants said more in-person cohort sessions, indicating participants are looking for a sense of connection.

Figure 29: PY2024 Participant Comfort Level Sharing in Cohort Sessions (n = 32, 1 respondent ≈ 3.1%, multiple selections allowed; does not total 100%)



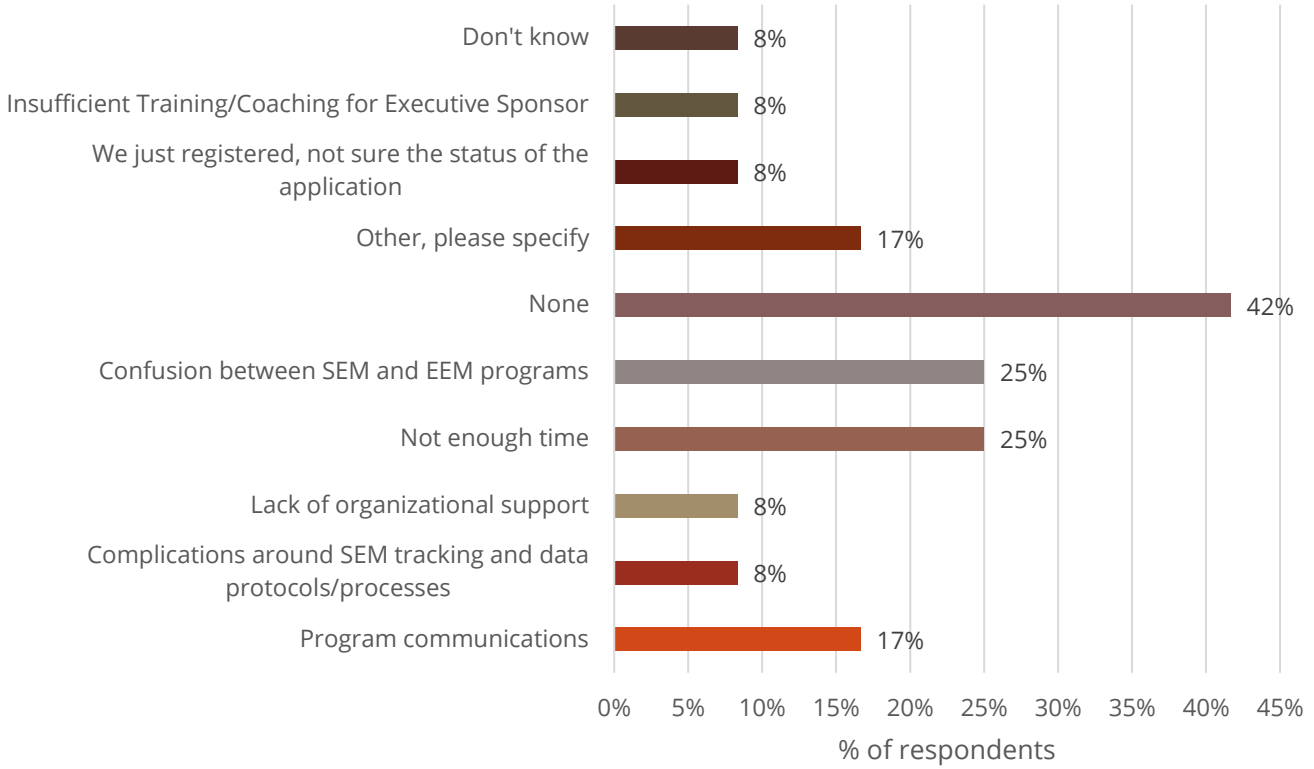
Participants indicated 34% attended the Energy Manager Excellence Awards, and 34% of respondents attended another in-person event. Figure 30 shows that 38% of respondents did not attend any in-person events.

Figure 30: PY2024 In-Person Attendance (n = 32, 1 respondent ≈ 3.1%, multiple selections allowed; does not total 100%)



42% of EEM program participants have not experienced any complications with the program, as shown in Figure 31. This was echoed during the cohort coach interview, stating the NRCan funding has been seamless for participants who transitioned into EEM. Cohort coaches have helped participants in both programs and can verify that stacking programs is working.

Figure 31: PY2024 EEM Participant Complications (n = 12, 1 respondent ≈ 8.3%, multiple selections allowed; does not total 100%)



B.6 Residual Challenges

Most participants ranked ease of tracking, recording, and sharing data with their cohort coach as a 7, 8, or 9, with 10 being the easiest or most efficient. The top response was from 8 participants, who ranked their ease as a 10. Seven participants reported an 8, while 6 ranked their ease as a 9. Additionally, 3 participants said 7, and 3 more participants said 5, indicating they were neutral. Lastly, Figure 32 shows 1 participant said 6, and 1 other participant ranked their ease at 2, indicating dissatisfaction.

Figure 32: PY2024 Participant Ease of Sharing Data with Cohort Coach (n = 29, 1 respondent ≈ 3.4%)