

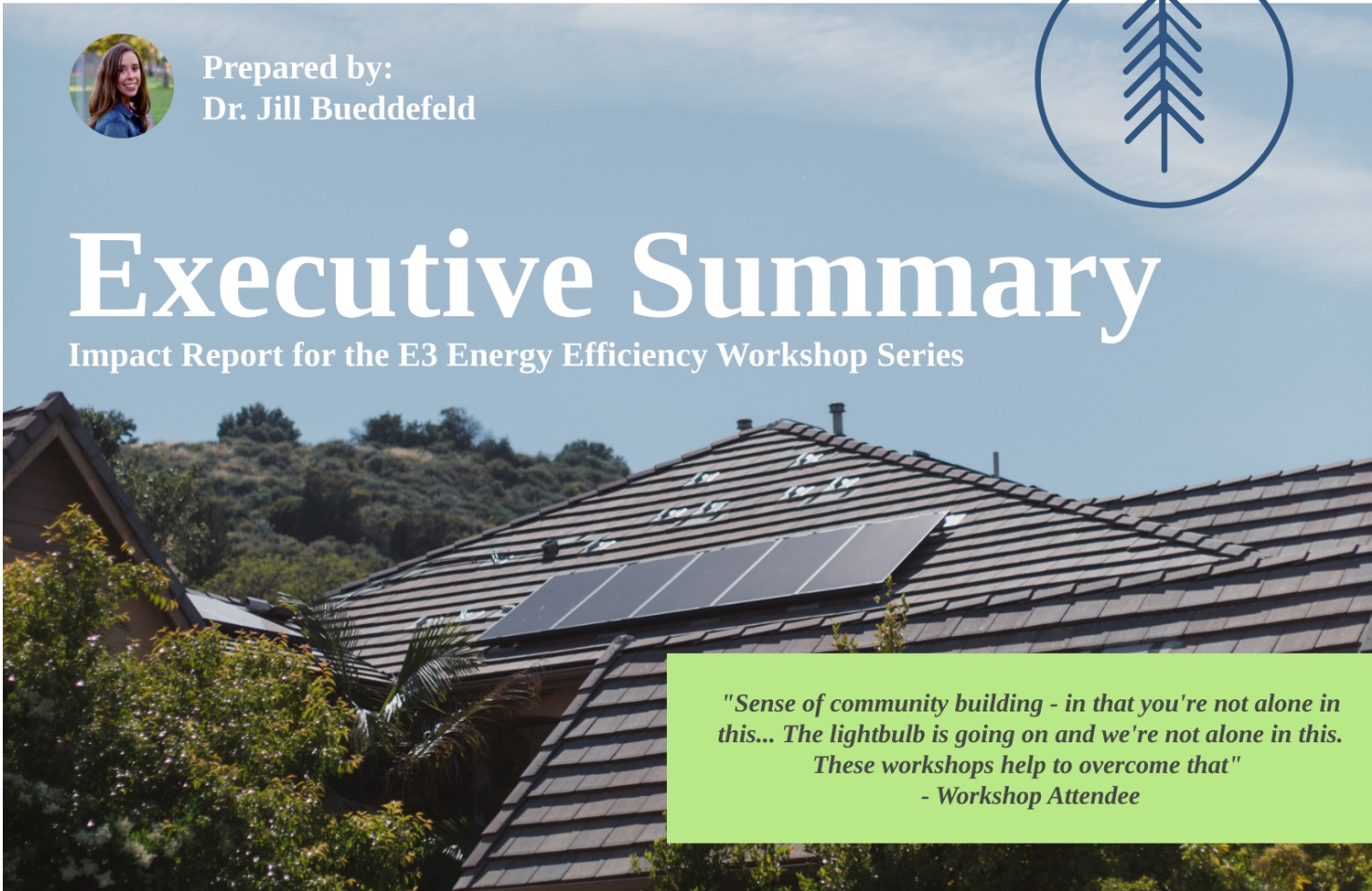


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Executive Summary

Impact Report for the E3 Energy Efficiency Workshop Series



"Sense of community building - in that you're not alone in this... The lightbulb is going on and we're not alone in this. These workshops help to overcome that"
- Workshop Attendee



Hosted by the Biosphere Institute of the Bow Valley, the Energy Efficiency Education (E3) Workshop Series invited residents from the town of Canmore, Alberta to attend a series of in person workshops on residential energy efficiency solutions. The purpose of the workshop series was to increase knowledge about residential energy options, and to lead to participants taking specific action to improve their homes' energy efficiency.

Workshop 1: Residential Renewable Energy Solutions
(February 20, 2020)

Workshop 2: Efficient Heating and Cooling for your Home
(March 5, 2020)

Workshop 3: Energy Efficient Financial Solutions
(March 26 - online webinar)

The workshops were hosted at the Canmore Civic Centre until the start of the Covid-19 pandemic. The last workshop was converted to an online webinar.

01 Research Design



This research consisted of a **mixed-methods pre-post research design**, which is used when participant numbers are uncertain and the use of surveys alone may not be sufficiently informative. Participants were invited to complete an **online survey** immediately before the workshop and then sent a follow-up survey 2-3 months later, which they completed online.

A sub-sample of participants were invited to also complete a brainstorming activity, called a **personal meaning map**, immediately before and after the in-person workshop in order to gain a more complete understanding of what was learned from the series.

*The final workshop was hosted online as a webinar due to COVID-19. Hence, the study design was adapted to invite participants in the final workshop to complete the survey online only.

02 Workshop Participation



Pre-Workshop

Survey: N = 49 participants

Meaning Map: N = 21 participants

Post-Workshop:

Survey: N = 36 participants

Meaning Map: N = 15 participants

Workshop Attendance:

Workshop 1: 45 people

Online Views: 34

Workshop 2: 38 people

Online Views: 45

Online Workshop: 18 people

Online Views: 75

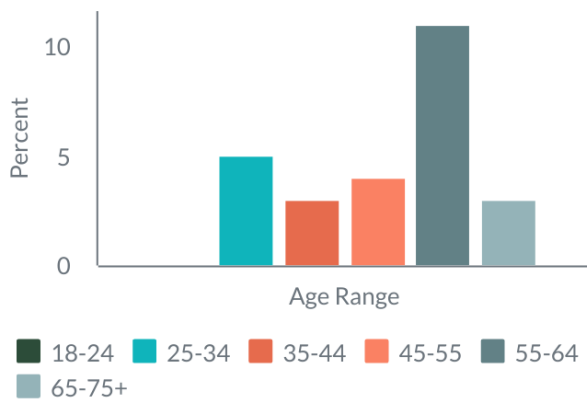




Participant Demographics

The average age range of pre-workshop survey participants was 55-64, which varied from the follow-up survey participants, where the average age range was 25-34. Low response rates for this question may have skewed the age range.

Average Age (Pre-Workshop)



Only the age range demographic variables were notably different between the pre- and post-workshop survey responses. Since survey respondents had to attend a workshop in order to complete the follow-up survey, the data is still representative of the total population of workshop attendees.



The majority of all participants were highly educated, with 35% having obtained a Bachelor's degree and an additional 33% having obtained a Master's degree as well.

Participants were primarily working as paid employees (51%) or were self-employed (25%). The average reported household income was \$97,068 - \$150,472.

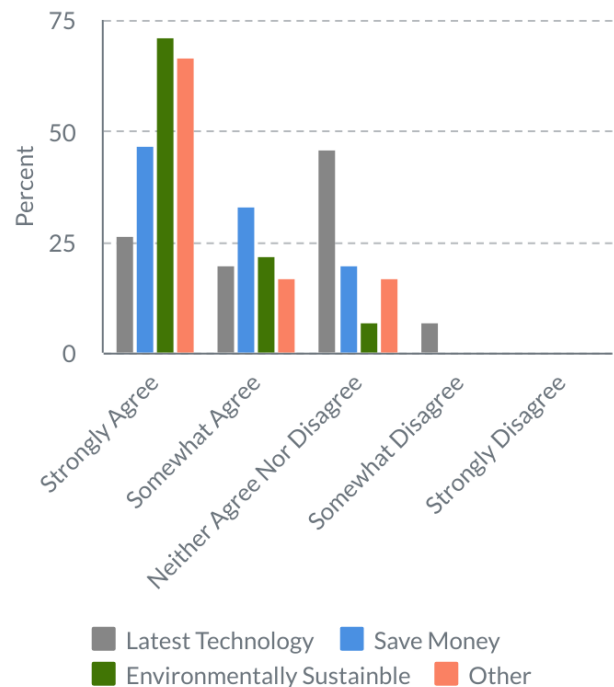


Motivation to Learn



Participants were asked "why are you interested in learning more about energy efficiency?"

Motivations



The majority of respondents indicated that they were interested in learning more about residential energy efficiency in order to become more environmentally sustainable.



#3

Financial Solutions

Prior Actions



To measure the impact of behaviour change, prior to the workshop participants were asked if they have already completed an energy audit, identified financial solutions for their energy efficiency projects, or qualified / used a rebate for an energy efficiency project.

The vast majority of respondents had not conducted an energy audit, nor had they identified financial solutions or made use of rebates.

Unlike the other workshops, here participants had very low levels of prior experience with the topics. This suggests that pre-workshop knowledge might also be low.

In other words: this particular topic had the potential to offer a significant learning opportunity to participants.



86%

Had **NOT** completed an energy audit.



77%

Had **NOT** identified financing solutions for their energy efficiency project.



93%

Had **NOT** used or qualified for an energy efficiency rebate.

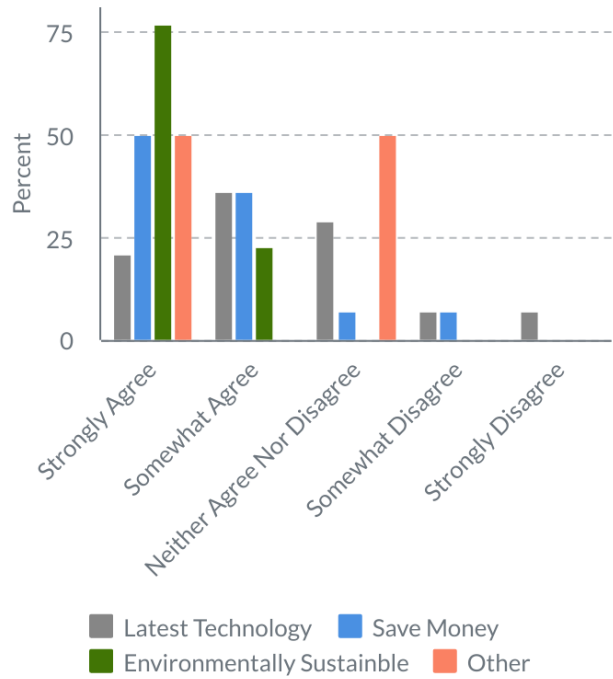
Interest and Motivations



When asked how interested they were in energy audits, financing options, rebates, and programs offered from Energy Efficiency Alberta the average response was **'very interested'** for all topics. **Financing options were identified as the most of interest.**

Q: Why are you interested in learning more about residential energy financing?

Motivations



Participants in the Financing Workshop were **predominantly motivated by the idea of becoming more environmentally sustainable.**

Knowledge




The majority of respondents stated that they were either **'not at all knowledgeable'** or **'somewhat knowledgeable'** about energy audits, financing options, and rebates.

There was more knowledge identified for the topic about programs offered from Energy Efficiency Alberta.



Knowledge Change: Financial Solutions

Participants were asked specific knowledge based details that related to the main objectives of the workshop. **The average responses are presented below.** Responses with a  indicate that the difference between the responses before and after the workshop are statistically significant.



Barriers: Financial Solutions



All of the barriers identified in the pre-workshop survey were addressed through the workshop. In other words, the workshop was effective at teaching participants how to begin, knowing what actions are effective and make a difference and making them feel more confident that their actions would be supported by friends and family. **However, 50% of participants stated that COVID-19 had prevented them from taking action.**

Barriers

Before

- ✗ I don't know where to begin (27%)
- ✗ I don't know what actions would be effective (19%)
- ✗ The necessary actions cost too much money (23%)
- ✗ I'm unsure if my actions will make a difference (8%)
- ✗ The necessary actions are too inconvenient or difficult (12%)
- ✓ The necessary actions would make my life less comfortable (0%)
- ✓ My friends or family won't support my actions (0%)
- ✓ My business partners won't support my actions (0%)
- ✗ Other (12%)
Other restrictions related to renting or financial insecurity due to COVID-19.

After

- ✓ I don't know where to begin (0%)
- ✓ I don't know what actions would be effective (0%)
- ✓ The necessary actions cost too much money (0%)
- ✓ I'm unsure if my actions will make a difference (0%)
- ✓ The necessary actions are too inconvenient or difficult (0%)
- ✓ The necessary actions would make my life less comfortable (0%)
- ✓ My friends or family won't support my actions (0%)
- ✓ My business partners won't support my actions (0%)
- ✗ Other (50%)
Other restrictions related to financial insecurity due to COVID-19.

COVID-19 IMPACT

The follow-up survey took place shortly after quarantine measures were instated. 50% of respondents indicated that COVID-19 had prevented them from taking action in relation to this workshop.

How did you hear about the workshops?





What would be the other most valuable experiences we could facilitate?



In general all of the open-ended feedback comments were positive, with only one comment that suggested the level of knowledge was not advanced enough.

When asked what other experiences would be valuable participants recommended the following:

- More workshops
- Hard copy summaries of all the companies and their main points
- 2.0 series of workshops that build on further knowledge
- Produce short, high-quality videos to reach more people



Is there anything else you'd like to share with us?



The comments from all of the open-ended feedback sections of all surveys **were overwhelmingly positive**. One respondent said:

"I appreciate the work of the Biosphere. Bringing in knowledgeable and professional presentations creates opportunities for discussion, pro and con, regarding the topics. Bringing alternative points of view will help create informed decisions."

"Thanks for the great work. The experts you brought in were very good"