Energy Cafés:

A grass-roots innovation to address energy poverty in Edmonton March 2020







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Highlights

<u>Ļ</u>	42	Energy Cafés
	1,019	Participants
<u></u>	1,500	LED bulbs distributed
<u></u>	2,000	Faucet aerators distributed
	650	Reusable produce bags
• • •	1,945	Annual energy savings (GJ)
	6,810	Annual water savings (m³)
	40,580	Annual utility bill savings (\$)
CO ₂	140	Annual GHG savings (t CO₂e)

1 Introduction

1.1 Context

In October 2015, All One Sky Foundation published <u>Energy Poverty — An Agenda for Alberta</u>. This was a turning point in raising awareness of the neglected problem of energy poverty in Alberta. Energy poverty refers to the inability of a household to maintain 'adequate' energy services at reasonable cost. By adequate, we mean a level of energy consumption in the home necessary to safeguard health and wellbeing. There is a substantial body of evidence documenting a strong association between cold and damp homes, energy poverty, and the health and wellbeing of individuals. The evidence relates to both physical and mental illness and disease, increased mortality risk, as well as increased risk-taking behaviours, lower educational attainment and social isolation. The young, elderly, disabled and long-term sick are especially vulnerable to these effects.

Energy poverty also has an important environmental aspect. Actions to alleviate energy poverty can contribute to wider efforts to combat climate change. Improving the energy efficiency of the housing stock—a mainstay of energy poverty strategies—is a necessary component of any cost-effective strategy to reduce greenhouse gas (GHG) emissions. Indeed, energy poverty should be viewed as a cross-cutting policy issue, with implications for general poverty alleviation, health and social wellbeing, housing and climate change strategies.

The extent of energy poverty in a population is most often measured as the number of households spending more than an 'acceptable' fraction of their income on home energy costs. For example, many jurisdictions consider a household energy poor if annual spending on all home energy services (i.e., space heating, space cooling, appliances, water heating and lighting) as a fraction of disposable income exceeds 10%. Based on this definition, our research indicates energy poverty is a persistent problem in Alberta, with energy-poor families peaking at 310,000 in 2014, and not dropping below 210,000 over the last 6 years, despite falling electricity prices over this period.¹ In 2016 the poorest 20% of families in Alberta spent 15% of their disposable income on home energy costs — 8 times the burden of the richest 20% of households. With electricity prices projected to increase significantly in the medium-term, the number of energy-poor households in Alberta will likely increase substantially. A 20% increase in home energy bills, for example, would increase the number of energy-poor households in Alberta by 3.6% (conversely, measures that reduced home energy bills by 20% would decrease the number of energy-poor households in the province by 3.2%).²

¹ This is a conservative estimate. Other organizations define an acceptable fraction as twice that of the median household nationally (which is about 6%) or provincially (which is about 7%). The lower fraction results in higher numbers of energy poor households.

² Based on 2016 data.

Recognizing the need to act now to reduce rising energy burdens on vulnerable households in Alberta, and to support efforts to stabilize and reduce GHG emissions, All One Sky Foundation and the Canadian Poverty Institute hosted an Energy Poverty Workshop in Edmonton in November 2017, which was attended by approximately 40 representatives from environmental, public health and social service agencies, the government, and the anti-poverty and utilities sectors. Output from the workshop served as the basis for developing a holistic strategy to address energy poverty in Alberta—An Energy Poverty Strategy for Alberta. The strategy set out a vision for the future, along with desired outcomes. In support of the vision, strategic objectives were defined which, if effectively delivered, would see the vision achieved. The objectives target the main causes of the problem: low income, energy inefficient homes and high energy charges. They also stress the need for a partnership approach, involving all organizations in Alberta with the potential to influence energy poverty outcomes. These objectives provide the impetus for this project—along with the fact that tackling energy poverty through government programs alone has proven ineffective in other jurisdictions, due largely to the difficulty of engaging the energy-poor. In addition to generic barriers that limit the participation of households in low-income energy efficiency and conservation programs (e.g., the affordability of up-front costs, access to credit, split incentives between landlords and tenants, etc.) there are several unique factors that limit the access of energy-poor households to programs, including language and cultural barriers, literacy, awareness, access to media, illness and disability.

1.2 Objectives

To complement government programs to address energy poverty in the UK, civil society groups emerged with a range of grassroot innovations. Energy Cafés are one such community-led initiative, providing energy advice and education to people in a local café or shop setting. A recent review of a dozen Energy Cafés in the UK found they deliver good value for money – costing much less than a home visit service yet providing benefits of a similar magnitude in terms of energy poverty alleviation (participants rated them at 9.5 on a 10-point scale).³ A key benefit of Energy Cafés is their potential to act as a triage service —whereby the needs of participants are first assessed, with the potential to refer them to other forms of support offered by the province and other agencies, depending on need. Linking providers of support for vulnerable households was identified as a key need at the Energy Poverty Workshop in Edmonton.

The objective of this project was to design, organize and pilot a series of Energy Cafés in Edmonton over the period August -December 2019. Each Café is a short-term initiative of 2-4 hours, run by trained staff in a 'pop-up shop' format, where participants are provided personalized, one-to-one advice and education sessions in a relaxed, stigma-free setting of a café environment accompanied by

³ See Martiskainen, M., et al., 2018: Community energy initiatives to alleviate fuel poverty: the material politics of energy cafés. The International Journal of Justice and Sustainability, 23 (1), p 20-35; and Martiskainen, M. and Speciale, G., 2016: The fuel bill drop: an investigation into community action of fuel poverty. Final report to the Cheshire Lehman Fund, Centre on Innovation and Energy Demand, University of Sussex, Brighton, UK.

refreshments. Cafés are designed to increase the energy literacy of participants by providing advice relating to:

- Energy market engagement (e.g., understanding energy bills, finding the best deal to meet home energy needs).
- Energy efficiency and energy saving behaviours in the home, including the installation of 'light' measures (specifically, LED bulbs, bathroom faucet aerators and kitchen faucet aerators).

Information on available emergency financial support, help lines and other priority services was also provided to participants as needed.

As a pilot, the project was subject to a retrospective evaluation, including a survey of Café participants.

2 Approach

2.1 Activities

The project took place in three phases, as shown in Table 1. We partnered with the United Way of the Alberta Capital Region in its role as the coordinator of the Emergency Fund Round Table for the Edmonton Metropolitan Region. For two years, the Emergency Fund has committed over \$112,000 to assist families facing utility arrears or disconnection. The United Way hosted our training session for Café staff, connected us with other potential partners in the Edmonton region, and helped with storage for the light energy saving measures. The City of Edmonton and the Utilities Consumer Advocate also provided information for use at the Cafés and participated in the training session.

In the early stages of the project we presented the Café concept to the Emergency Fund Round Table, including, EPCOR, Direct Energy, Alta Gas, Alberta Works, the Utilities Consumer Advocate, Bissell Centre, End Poverty Edmonton, e4c, Fort Saskatchewan, Strathcona County, Parkland County, Leduc County and City of Leduc, St. Albert and the City of Edmonton; feedback from this group informed the design of the Cafés.

Table 1: Project phases and activities

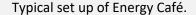
Project phases	Timeframe	Activities
Phase1: Develop energy cafés	July-September 2019	Confirm project partner organizations Research, design, consult on, and prepare materials (quizzes, dialogue guides, visual guides, recording templates, calculators, boards) for Cafés. Develop outreach and publicity materials; consult with partners to leverage networks Purchase energy saving 'light' measures Hire coordinator and Café staff on a sessional fee basis Provide training for Café staff Plan staffing and logistics for delivery of the Cafés (also ongoing through phase 2) Research, select and book locations for Cafés (also ongoing through phase 2)
Phase 2: Deliver energy cafés	September- December 2019	Deliver Cafés across Edmonton Provide ongoing publicity through social media, and with support from partners through their contact networks Iteratively modify the Cafés based on learnings from implementation Take 'case notes' capturing key messages from participant engagement Document numbers of participants and energy saving measures distributed
Phase 3: Program evaluation	December 2019 – January 2020	Design ex-post participant survey Conduct phone interviews with sample of participants Interview staff involved with delivery of Cafés, including feedback received by staff from partner organizations Analysis of collated qualitative and quantitative information and formulate summary conclusions and recommendations

2.2 Staffing and organization

At the outset of the project a Coordinator was hired to organize, schedule, and set up the Cafés across the Edmonton area. Three additional staff were hired to deliver the Cafés. All staff were hired on sessional contracts and paid by the hour.

The Coordinator oversaw the staffing and delivery of the Cafés. An online sign-up sheet was used to ensure two individuals were available to host each Café. Set-up and take-down took approximately 20 minutes each. LED light bulbs and faucet aerators were provided to participants at each Café, along with installation instructions. The Coordinator was responsible for ensuring each Café was adequately supplied with these energy saving measures. It was also the responsibility of the Coordinator to ensure snacks, such as fruit and vegetable trays, granola bars, and pastries were available for participants to enjoy during their conversations with staff regarding utility bills and opportunities for energy savings.







Energy saving measures and materials available to participants.

Since the aim of the project was to address energy poverty, we focused on conducting Cafés in areas with higher rates of poverty, as well as by reaching out to organizations that work with vulnerable members of the community. Cafés were set up with social service agencies and non-profit organizations, as well as through Edmonton Public Libraries (EPL) striking the best balance between (a) diverse and lower income neighbourhoods, (b) locations likely to attract high numbers of participants and (c) cost. Cafés were set up through previous connections with these organizations, as well as by reaching out to other potentially interested partners throughout Edmonton. Most Café scheduling was conducted via email, over the phone, or in person with staff from organizations. However, two Cafés were scheduled through application processes to participate in specific events, and one organization wanted a formalized collaborative agreement to document the partnership. Most partners decided when Cafés should be scheduled and where they should be set up within the allotted space.

2.3 Locations and participation

Between September and December 2019, a total of 42 Cafés were conducted within the Edmonton area; 23 Energy Cafés were conducted at social service agencies and non-profit organizations, while 19 were conducted at Edmonton Public Libraries (EPL) (see Table 2). Cafés were set up for varying lengths of time, but ranged from 2-6 hours, with most averaging approximately 2.5 hours. In total, 1,019 people were engaged and 1,500 9W LED light bulbs, 1,000 1.5 GPM bathroom faucet aerators and 500 1.5 GPM kitchen faucet aerators were distributed to participants.

Table 2: Location of Energy Cafés and the number of participants at each

2	Homeless Connect		
		Homeward Trust, Edmonton Convention Centre	69
	Drop in	Dickinsfield, Amity House	20
3	Utilities Consumer Advocate Fair	Food Bank Annex	30
4	Drop in	Jasper Place, Wellness Centre	23
5	SuperClinics (Bissell Centre)	Candora Society	16
6	Drop in	Edmonton North East Hub (C5)	38
7	Drop in	Edmonton North East Hub (C5)	19
8	Drop in	Mosaic Centre	41
9	Drop in	Food4Good; Glenwood Community Centre	29
10	Drop in	Mosaic Centre	31
11	SuperClinics (Bissell Centre)	Clareview Community Recreation Centre	19
12	Drop in	Edmonton Food Bank	33
13	Drop in	Castle Downs EPL	21
14	Drop in	Edmonton North East Hub (C5)	39
15	Drop in	Strathcona EPL	14
16	Drop in	Clareview EPL	31
17	Drop in	Edmonton Food Bank	35
18	Drop in	Edmonton North East Hub (C5)	30
19	Lunch and Learn	Norwood Child & Family Resource Centre	30
20	Drop in	Londonderry EPL	5
21	Drop in	McConachie EPL	6
22	Drop in	Strathcona EPL	9
23	Drop in	Clareview EPL	15
24	Drop in	E4C	68

25	Drop in	Castle Downs EPL	11
26	Drop in	Edmonton North East Hub (C5)	18
27	Drop in	Clareview EPL	20
28	Drop in	Idylwylde - Boonie Doon EPL	7
29	Drop in	Food Bank Annex	56
30	Drop in	Idylwylde - Boonie Doon EPL	18
31	Drop in	The Neighbour Centre	21
32	Community Family Group	West End Outreach / Jasper Place Wellness Centre	23
33	Drop in	Londonderry EPL	11
34	Drop in	McConachie EPL	4
35	Drop in	Strathcona EPL	13
36	Drop in	Idylwylde - Boonie Doon EPL	8
37	Drop in	Clareview EPL	26
38	Drop in	Edmonton Food Bank	20
39	Drop in	Londonderry EPL	19
40	Drop in	Castle Downs EPL	3
41	Drop in	Food Bank Annex	42
42	Drop in	Idylwylde - Bonnie Doon EPL	28



Many newcomers to Canada, as well as women with young children, talked to us about energy saving tips at Edmonton's North East Hub (C5) in October 2019.



At an Energy Café at the Mosaic Centre in October 2019, many participants had a group discussion about energy saving tips, how to use energy saving devices and other resources.

As mentioned above, Café locations were worked out with partners to strike the best balance between areas with higher rates of poverty, locations likely to attract high numbers of participants, and cost. Except for Cafés held in McConachie and Clareview, we were largely successful in hosting Cafés in neighbourhoods with above average rates of poverty across Edmonton (see Figure 1). These neighbourhoods also had higher than average proportions of the population residing in rental accommodation.

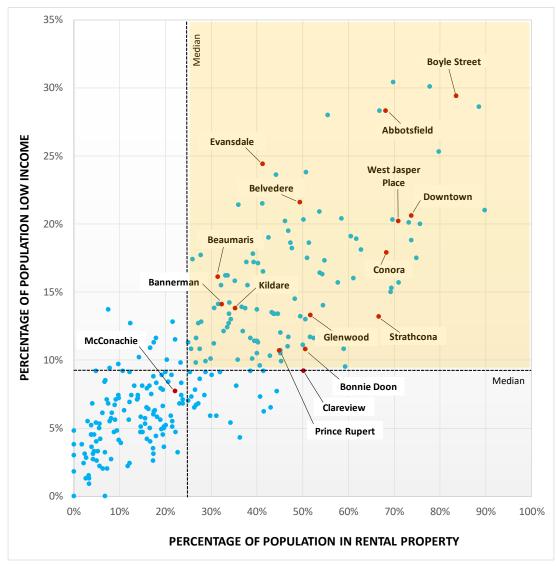


Figure 1: Location of energy cafés in relation to prevalence of poverty and rental tenure in neighbourhoods

Note: red dots indicate neighbourhoods where energy cafés were held

2.4 Supporting materials

At each Café, staff provided participants with advice and information on how to save money on utility bills, how to access emergency funding and assistance, how to read and understand utility bills and how to compare the cost of different energy suppliers. To support staff when engaging participants on these topics, several resources were created and made available at the Cafés, including:

- For a typical low-income <u>apartment</u>, figures showing the main sources of energy use and the distribution between electricity and natural gas, and components of a typical electricity and natural gas bill and the distribution between fixed and variable costs (costs participants could lower through energy saving measures and behaviours) (see Appendix A).
- For a typical low-income house, figures showing the main sources of energy use and the distribution between electricity and natural gas, and components of a typical electricity and natural gas bill and the distribution between fixed and variable costs (costs participants could lower through energy saving measures and behaviours) (see Appendix B).
- For a typical low-income <u>apartment</u>, a foldout brochure with 26 low-cost energy saving tips for lighting, the bathroom, space and water heating, home electronics, laundry and the kitchen, estimates of annual bill savings (reductions in total variable costs) (see Appendix C).
- For a typical low-income house, a foldout brochure with 26 low-cost energy saving tips for lighting, the bathroom, space and water heating, home electronics, laundry and the kitchen, estimates of annual bill savings (reductions in total variable costs) (see Appendix D).
- An example of a typical energy (combined electricity and natural gas) bill (see Appendix E).
- A list of contact details and links to additional resources, including emergency financial assistance, the Utility Consumers Advocate's cost comparison tool (see Appendix F).

Average energy use in a low-income home is based on data from Natural Resources Canada's Comprehensive Energy Use Database, adjusted for consumption levels typical of the poorest 20% of households in Alberta. Energy bills typical of a low-income home are derived from the average unit charges of multiple energy providers in the Edmonton area, sourced from the Utility Consumers Advocate's cost comparison tool, and consumption levels typical of the poorest 20% of households in Alberta. The dollar values of energy savings in the foldout tip sheets are derived by tracing estimated energy savings by measure (in kWh or GJ) through the estimated typical home utility bills, capturing the full reduction in variable costs. Estimated energy savings in physical units represent the difference in consumption between an assumed baseline technology (e.g., 60W incandescent bulb) or behaviour (e.g., a bath) and our suggested technology (e.g., 9W LED bulb) or behaviour (a shower).

In addition to the above listed resources, reusable produce bags were available to staff to package the light energy saving measures (LED light bulbs and bathroom and kitchen faucet aerators, as requested),

installation instructions, and foldout energy saving tip sheets for participants. These packages were typically presented to participants at the conclusion of discussions with Café staff.





At the Mosaic Centre in October 2019 we had a conversation with an Indigenous woman about energy bills and specific resources that could assist her and her five children. She was appreciative of the energy saving tip sheets and resources we provided her. We talked for half an hour about difficulties of managing expenses and bills, as well as some specific challenges for her such as discrimination. Other participants highlighted challenges they face that exacerbate their struggles with energy poverty.

At the Londonderry EPL in December 2019 we talked to a diverse group of participants ranging from those struggling with energy bills to those who were already practicing energy saving tips, such as switching to LED bulbs, or using energy efficiency settings on appliances.

3 Outcomes

3.1 Observations of participant experience

We talked to many diverse participants throughout the Edmonton area over the course of the pilot; people focused on different concerns and needs and asked a variety of questions. We talked to families with young children, people struggling immensely with energy bills, and numerous seniors. Many participants with young children and teenagers discussed the challenge of encouraging their kids to practice energy saving behaviour to help them save money. They felt that energy saving education for youth is necessary to realize significant energy savings in the home. Some participants also talked about their concerns with energy efficiency and solar technology funding, expressing that some of this funding requires citizens to provide upfront costs, which will get reimbursed in the future; participants said that this is not feasible for those living in poverty, as they do not have spare money to pay for upfront costs.

Many participants also discussed their concerns in the winter months; utilities are often more expensive in the winter, and participants are unable to heat their home adequately to live comfortably.

Two stories, below, typify the kinds of conversations we had at the Cafés:

In December 2019, there was a group of three ladies (two seniors in their 80's or 90's and one that appeared to be in her 40's) who came to the Bonnie Doon library and talked with us about their utility bills and asked many questions about utility providers, resources, and energy saving devices. These ladies received LED bulbs, bathroom faucet aerators, energy saving tip sheets, and the sheet with additional resources. They were all very appreciative and two of them posed for a picture (on right). One of the senior women



lives in a house and has a small, fixed income. She pays for electricity, water, and gas. She said that utility bills are on the rise and she thinks this is unfair for seniors. She is very concerned about policies that discriminate against seniors or that are difficult for seniors (such as forcing seniors to go online to cancel their accounts). She already implements some of the energy-saving tips we talked about but did not know about some of the other tips. She said that the tips were very helpful, and she appreciated the information. She said, for example, that she would try washing her clothes in cold water. She hadn't been doing that because the drains get clogged, but we explained that this shouldn't happen if she uses laundry detergent that is designed for cold water washing. We told her about the UCA cost comparison tool and the emergency fund if she, or anyone she knew, ever fell behind on their utility bills. The other senior lady also lives in a house and pays electricity, water, and gas. She agreed that utility bills are on the rise. The woman who appeared to be in her 40's also lives in a house and pays all utilities. She expressed frustration with the fixed distribution charges; we explained what they are for and told her that she could phone the UCA if she ever had any specific questions about her utility bills (we gave her a resource sheet with this information). She asked many questions about utility providers, appliances, and things she could do in her house to reduce energy consumption (solar panels, insulation, hot water tanks, etc.). She was already doing many behaviours at home to conserve energy (e.g., washing clothes by hand, hang drying clothes, and unplugging electronic devices), but appreciated the other tips that she had not yet thought of. We gave her all the information we had – including a City of Edmonton "Change Homes for Climate" book. We also referred her to the City of Edmonton "Change Homes for Climate" website. She asked about energy providers, so we recommended checking out the UCA cost comparison tool. These women were all very appreciative of the suggestions, resources and energy saving devices.

At Homeless Connect in October 2019, a person told us that they were struggling with retaining heat in their home and found it very cold most of the time. They live in a one-bedroom apartment and struggle to heat their unit. Their landlord suggested leaving the gas stove on to heat their place; however, this person has cats and said they were a hoarder and so had a lot of stuff around their stove. We urged them not to use their stove for heat as it could be a fire hazard. We also provided them with an energy saving tip sheet to explain how much money a stove



can cost when using it often and gave them information about home audits kits accessible through the Edmonton Public Library; we shared that anyone can get a home energy audit kit from the libraries to see where heat from their apartment might be escaping. They were appreciative of the tips, as they did not realize that using a stove as a heat source might be very expensive. The home energy audit kit was also a surprise to them, and they were excited to borrow one to use in their home.

3.2 Estimated savings

Over the course of the project 1,500 9W LED light bulbs, 1,000 1.5 GPM bathroom faucet aerators and 500 1.5 GPM kitchen faucet aerators were distributed to participants. Estimated annual electricity, natural gas, water and total utility bill savings attributable to the assumed installation of these measures are presented in Table 3. Installation assumptions are based on the participant survey (see Section 4.2); 85% of LED bulbs, 50% of bathroom faucet aerators and 50% of kitchen faucet aerators had been installed at the time of the survey.

Annual energy savings from distributed and installed measures are estimated at about 1,945 GJ (of which about 16% are electricity savings and 84% are natural gas savings). The installed aerators are estimated to save about 6,810 m³ of water annually. Total annual utility bill savings amount to about \$40,585, of which about 50%, 28% and 22% relate to water, electricity and natural gas savings, respectively. Annual GHG savings are estimated at about 140 t CO_2e . This equates to annual savings of about \$970 and 3.4 t CO_2e per Café.

It should be noted that the saving estimates provided in Table 3 relate solely to the light measures distributed at the Cafés and subsequently assumed to be installed; **they do not include savings from the**

behaviours listed in the tip sheets, which the participant survey suggests are being mainstreamed into daily life.

Table 3: Estimated savings from LED bulbs and facet aerators distributed at Cafés

	Replace incandescent bulb with LED	Install low-flow bathroom sink aerator	Install low-flow kitchen sink aerator	All measures
WATER:				
Cubic metres (m3 per year)		3,812.2	2,995.3	6,807.5
Bill savings (\$ per year)		\$11,419	\$8,972	\$20,391
ELECTRICITY:				
Kilowatt hours (kWh per year)	71,202	9,817	7,713	88,732
Bill savings (\$ per year)	\$8,996	\$1,240	\$974	\$11,210
Carbon savings (t CO2e per year)	45.6	6.3	4.9	56.8
NATURAL GAS:				
Gigajoules (GJ per year)		910	715	1,624
Bill savings (\$ per year)		\$5,030	\$3,952	\$8,982
Carbon savings (t CO2e per year)		47.3	37.2	84.5
TOTALS:				
Bill savings (\$ per year)	\$8,996	\$17,689	\$13,899	\$40,584
Carbon savings (t CO2e per year)	45.6	53.6	42.1	141.2
Bill savings (\$ per year per Café)	\$214	\$421	\$331	\$966
Carbon savings (t CO2e per year per Café)	1.1	1.3	1.0	3.4

4 Evaluation

For the evaluation of the project, we employed the same approach used to retrospectively assess the outcomes of Energy Cafés in the UK. The evaluation is based on two data sets: (1) qualitative data collected via interviews with the Café staff; and (2) quantitative data collected via a survey of participants. The former is focused more on "process", while the latter is focused more on "outcomes".

4.1 Process: staff interviews

Following delivery of all Cafés, a debrief meeting was held with the Coordinator and Café staff in Edmonton. The purpose of the meeting was to elicit feedback to inform potential future changes or improvements to the project's operations. Key messages from the meeting are listed below:

- The venue influenced the nature of the engagement with participants. At places like the Food Bank, staff were faced with a queue of people. Consequently, conversations were brief and more focused on handing out tip sheets, energy saving measures and installation instructions. At other venues, like the Mosaic Centre and libraries, there was not so much traffic and people were willing and able to sit down for longer discussions—e.g., +15 minutes. Though, the length of engagement at libraries depended on the time of day; in the late afternoon people were in a rush to drop off their books and get home, and therefore did not engage in long conversations. Furthermore, depending on how busy the library was, some people did not want to talk for too long, so as not to disturb the quiet.
- In terms of the timing of Cafés, weekends and evening worked best. Also, to improve the number of participants, it was better to hold Cafés to coincide with other events taking place at the venue.
- Cafés worked best when staffed by two people; one to provide information and advice, and one
 to walk around the venue and 'recruit' participants. For this pilot, in which 42 Cafés were
 delivered, a pool of four staff (including the Coordinator, who also delivered Cafés) was judged
 to be efficient.
- Given the duration of the project, nearly all Cafés took place in the City of Edmonton; organizations outside the City needed longer lead times than was feasible—sometimes up to two months notice was required.
- Over 90% of participants were passers-by. About one-third of participants were seniors. There
 were also a lot of single mothers with children. Very few young people engaged with Café staff;
 this is problematic as many parents commented on the challenge of persuading their children to
 conserve energy at home. In general, numbers of participants could easily be increased with
 increased advanced publicity of Cafés.
- Staff felt that the Cafés validated the concerns of participants; it made them feel they are not alone / isolated when struggling to keep up with their utility bills or feeling anxious in doing so. Participants felt a sense of relief after talking with staff.
- Overall staff felt the energy saving tips sheet was the most beneficial resource for participants.
 This is reflected in the survey results presented below. Moreover, when conducting the survey, staff found that participants remembered the specific tips discussed at the Cafés.
- For participants really struggling to keep up with their utility bills and credit commitments, the additional resources sheet with information on accessing emergency financial assistance, was very valuable. Indeed, some people did not know of the Emergency Fund and were very grateful to be made aware of it. However, more support should be offered than simply handing out the sheet and identifying the number(s) to call. It would have been better to have the time at the Cafés to walk participants through the process of applying for emergency assistance. Alternatively, participants could be given the option of receiving a call back at a convenient time to walk them through the application process.

- For some participants, including those facing real hardship, the problems faced are too large to be addressed by energy saving advice and light measures provided by staff at the Cafés. By way of example, some participants talked about doors that do not close, or not having doors or windows at all, having no thermostat, or needing to use the oven for heat. These issues relate to the general quality of the home and in many cases will require significant capital investment to rectify. There is a need for a program similar to the City of Edmonton's former home repair (HOPE) program for low-income households; Café participants could be referred to such a program, depending on need.
- Several partner organizations wanted workshops as opposed to the Cafés, with (say) 20 minutes
 for presentations and (say) 20 minutes for Q&A. Workshops would allow for the provision of
 more detailed advice, as well as demonstrations of how to install a greater range of energy
 saving measures. The workshop approach, however, would be less tailored to the circumstances
 and needs of individuals—a key benefit of the Cafés.

4.2 Outcomes: participant survey

A questionnaire (Appendix G) was developed to elicit feedback from participants about their experience at the Cafés, as well as general information about their situation.

During the Cafés, participants were given the option to provide us with their phone numbers if they were willing to participate in a survey for an opportunity to be entered into a draw to win one of three gift cards from Canadian Tire. After all Cafés were complete, the staff phoned these participants to ask if they would still be willing to complete the survey over the phone. The interviews took place over the first two weeks of January 2020. A total of 30 participants completed surveys:

Total participants phoned	115
Individuals who participated in survey	30
People who didn't answer phone / wrong or disconnected number	76
People who refused to participate in the questionnaire	9

4.2.1 Survey results

Most survey participants live in houses (about 53%), with about 40% residing in apartments (see Figure 2). Nearly two-thirds of participants live in rental accommodation (see Figure 3).

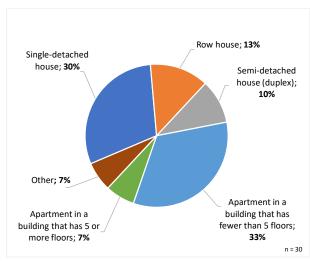
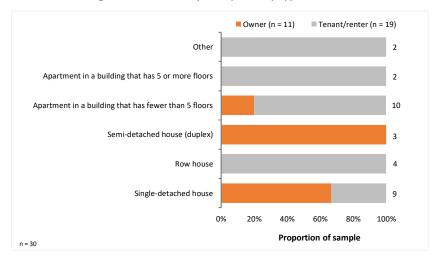


Figure 2: Type of home lived in by participants

Figure 3: Tenure of participants by type of home



Regarding levels of thermal comfort in the home, only half of participants said they can keep their home at a comfortable temperature on a typical winter day; 20% of participants rarely, if ever, are able to heat their home to an acceptable level in winter (see Figure 4). Of those who said that their home is not always warm enough on a typical winter day, about two-thirds said it is cold even when the heating is on, suggesting the home envelope is energy inefficient (see Figure 5). About 20% said their home is not always warm because they are economizing on energy use.

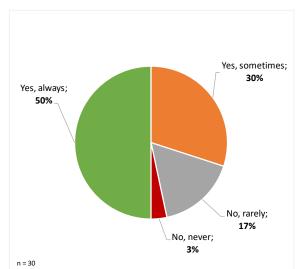
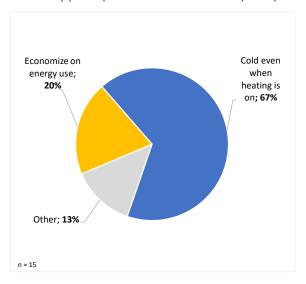


Figure 4: Ability of participants to keep their home at a comfortable temperature on a typical winter day





Nearly all participants (90%) pay their own electricity bills (see Figure 6), with just over half paying their own water and natural gas bills. For slightly less than half of participants water and natural gas bills are paid by their landlord or property manager and included in the rent. Just over half of participants pay all three utility bills (water, electricity and natural gas) and one-third pay at least one utility bill (electricity) (see Figure 7). About 10% do not directly pay any utility bills (the bills are included in their rent or paid for by third party).

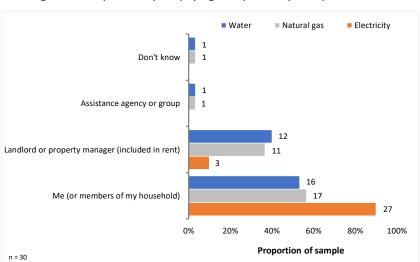
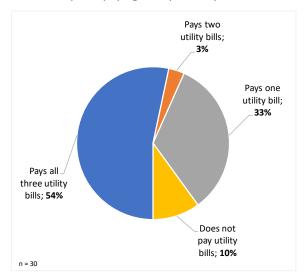


Figure 6: Responsibility for paying utility bills in participant's home

Figure 7: Participants paying multiple utility bills for their home



Only about 20% of participants are keeping up with all utility bills and other credit commitments without any difficulties (see Figure 8). Nearly 40% of participants find keeping up with their utility bills, at best, a constant struggle. About 15% occasionally fall behind with some bills. One participant commented that they occasionally get behind, but once you do it is a constant struggle to get on top of it again.

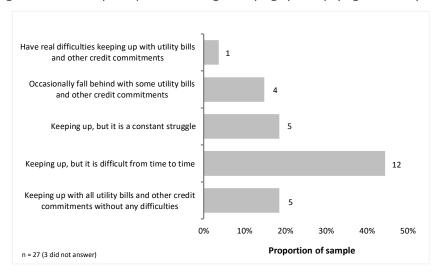


Figure 8: How well participants are doing in keeping up with paying their utility bills

When faced with paying utility bills, just under 80% of participants said it makes them slightly (45%) or very anxious (33%). Higher levels of anxiety are reported by participants responsible for paying their own natural gas bills, in contrast to electricity and water bills, though the differences are small.

As expected, levels of anxiety increase if participants find it more difficult to keep up with paying their utility bills (see Figure 10).

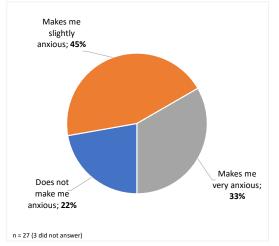
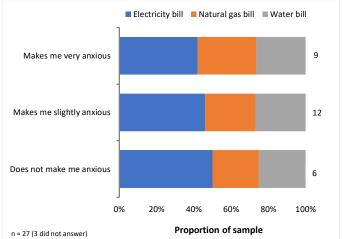


Figure 9: Level of stress participants experience when it comes to paying their utility bills



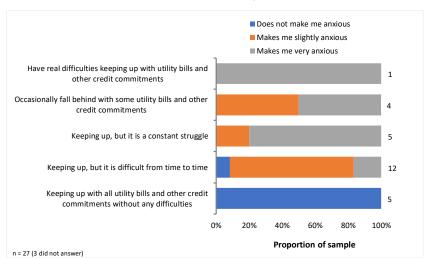


Figure 10: Association between how well participants are doing in keeping up with paying their utility bills and levels of anxiety

Just over 90% of participants found the range of information provided to them at the Cafés at least somewhat helpful, with over half finding it very helpful (see Figure 11). One participant commented that now he understands what he can control on his electricity bill, the energy saving tip sheet will be very useful. The two participants who did not find the information provided them at the Cafés helpful were really struggling with their utility bills and needed more detailed advice and help with sourcing financial assistance than could be provided via the Cafés.

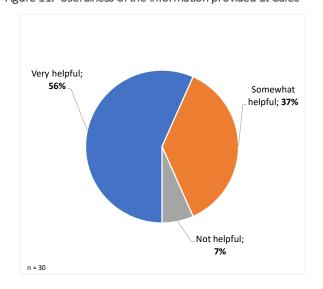


Figure 11: Usefulness of the information provided at Cafés

In terms of the information provided at the Cafés, the energy saving tip sheets were identified as being the most useful resource by two-thirds of participants (Figure 12). Help with understanding energy bills and options for emergency financial assistance with bills were the next two most useful resources.

Regarding the energy saving tips, participants were asked which ones, if any, they had adopted to date. Responses varied; however, many participants have replaced their regular incandescent light bulbs with LED bulbs, and now unplug their electronic devices at night or before leaving their house. Several participants also remembered learning that their dryer uses the most electricity out of all their appliances, so many participants now hang dry their laundry, or put a towel in with their clothes to reduce drying times.

Participants were asked to rate the influence of their Café experience on energy use in their home. Half of participants said the Cafés had somewhat influenced their energy consumption at home, with about 30% saying the Cafés had been very influential (see Figure 13). One participant responded that "these tips do me a lot of good".

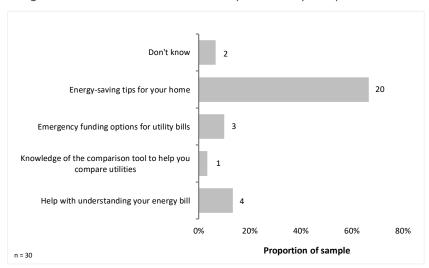


Figure 12: The most useful information provided to participants at Cafés

Interestingly, participants who got slightly anxious when faced with utility bills all found the Cafés to be somewhat to very influential regarding their home energy consumption; whereas, some participants who got very anxious when faced with utility bills said the Cafés had little or no influence on home energy consumption (see Figure 14). Looking at the responses of these participants to other questions, we can conclude that the Cafés work best for individuals facing moderate challenges when paying utility bills, but individuals facing severe challenges require more detailed advice and, importantly, follow-up support than can be provided via the relatively short engagements at the Cafés.

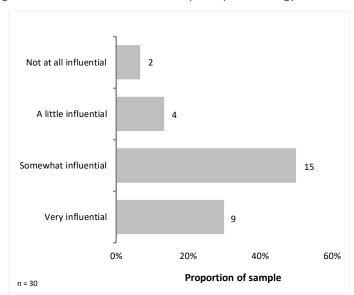
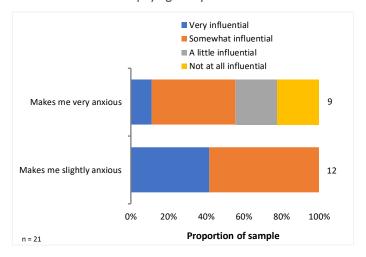


Figure 13: Influence of the Cafés on participant's energy use at home

Figure 14: Usefulness of the information provided to participants in relation to the level of anxiety they experience paying utility bills



Participants were also asked about how we could improve future Cafés—specifically, do you have any suggestions regarding how we could make them more helpful? Most participants felt that the Cafés were quite effective as they were run and did not have extra feedback. Some participants found that the Cafés were interesting and helped to change their outlook on using LED bulbs and energy saving behaviours. They also appreciated learning more about the importance of these tips for environmental reasons (such as reducing the use of water and power). One participant felt that the Cafés were "pretty informative"; another participant stated that the Cafés "opened my eyes to lots of ways to get more energy in abundance without paying more."

However, we did receive suggestions for improving future Cafés. Some participants wanted the Cafés to be advertised better, so that the public is more aware of the services being provided and what resources and energy saving measures are included at the Cafés. Other participants felt that conversations with staff were too short—e.g., use of the aerators or tip sheets required more explanation than was sometimes provided. Some participants also wanted more opportunities to ask questions. Given this feedback, we think presentations (e.g., lunch and learns) or workshops might be a more effective approach to provide people with greater detail regarding energy saving tips. A booth could be set up for individual participants to talk to presenters afterwards to address their specific concerns and needs, as well as receive energy saving measures that were talked about during the workshops. Similarly, presentations and workshops could be used in tandem with the Cafés, with participants at the Cafés invited to attend the former if they want to learn more.

5 Conclusions and recommendations

Tackling energy poverty through traditional government programs alone has proven ineffective in other jurisdictions, due to the difficulty of reaching the energy-poor. Grassroots, community-led innovations, like Energy Cafés, are also needed to increase energy literacy, demystify energy bills and energy efficiency, and to act as a triage service.

This project successfully piloted a program of Energy Cafés in Edmonton between September and December 2019. Over this period, 42 Cafés were delivered, engaging over 1,000 individuals. As a result of light energy saving measures distributed to Café participants and subsequently installed, about 1,945 GJ of natural gas and electricity and 6,810 m³ of water will be saved annually. The value of these savings is about \$40,585 per year. Associated GHG savings are estimated at about 140 t CO2e per year. These estimates understate the annual savings attributable to the Cafés as they do not include savings from the 20 plus additional energy saving behaviours participants were informed of.

In a follow-up survey, about 90% of participants found the range of information provided them at the Cafés "somewhat helpful", with over half finding it "very helpful". Furthermore, half of participants said the Cafés had "somewhat influenced" their energy consumption at home, with about 30% saying the Cafés had been "very influential".

Despite the positive results of the pilot, several improvements were identified during the project's evaluation:

• The use of workshops and presentations (e.g., lunch and learns) to be able to provide people with more in depth advice regarding energy saving tips and the installation of energy saving measures (with demonstrations). A booth (like the Cafés) could be set up for individual participants to talk to presenters afterwards to address their specific concerns and needs, as well as receive the energy saving measures that were discussed during the workshop.

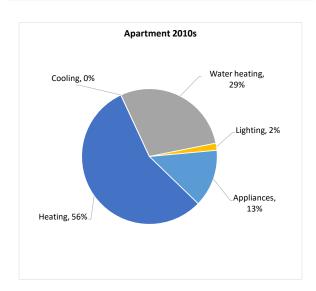
- The need to educate youth on the implications of their energy consumption at home and what they can do about it. Many participants talked about the difficulty of persuading their children—who are significant energy consumers—to adopt energy saving behaviours at home. Consideration should be given to delivering Cafés tailored to youth in junior high and senior high schools or providing presentations and booths (as outlined above).
- There is a need to provide more triage support at the Cafés, especially for individuals facing problems much deeper than struggling with their utility bills. The Cafés work very well for individuals facing moderate challenges when paying utility bills, but individuals facing severe challenges beyond those related to energy poverty require more detailed advice and follow-up support than can be provided at the Cafés. This includes the need for programs that help low-income and disadvantaged Edmontonians make repairs to their homes, which can also lower utility bills. It also includes support to walk people through the application process for emergency financial assistance for utilities.
- Given the successes of the program, consideration should be given to running Cafés in other
 urban centres in the province, and making them a permanent fixture in Edmonton, but mixed
 with workshops/presentations, depending on the needs of our partner organizations. In
 Edmonton, they provide an excellent entry point / mechanism for referring people to program
 offerings, when available.

6 Appendix A: Apartment: energy use and utility bills

Figure 15: Apartment: typical energy use in the home (2010s)

(a) Total energy consumption by end-use

(b) Total energy consumption by main fuel



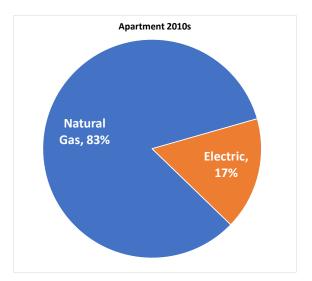
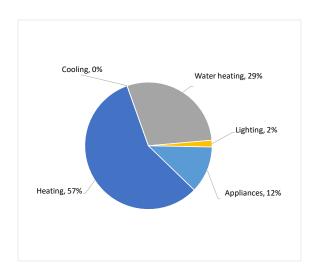
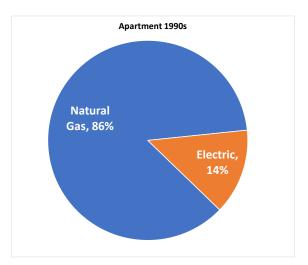


Figure 16: Apartment: typical energy use in the home (1990s)

(a) Total energy consumption by end-use

(b) Total energy consumption by main fuel

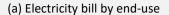




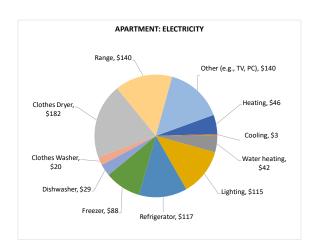
APARTMENT: ELECTRICITY \$1,000 Local Access Fee, \$19 \$900 Riders, \$37 \$800 Variable transmission, \$157 \$700 \$600 Fixed distribution, \$266 \$500 \$400 Variable distribution, \$71 \$300 \$200 Commodity charge, \$270 \$100 Admin fee, \$100 \$0

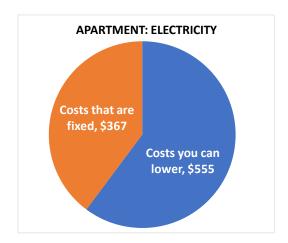
Figure 17: Apartment: components of typical annual electricity bill for low-income household

Figure 18: Apartment: breakdown of typical annual electricity bill for low-income household



(b) Electricity bill by fixed and variable charges





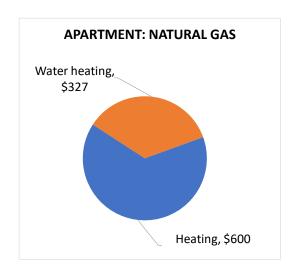
APARTMENT: NATURAL GAS \$1,000 Municipal Franchise Fee, \$150 \$900 Variable riders, \$59 \$800 \$700 Fixed riders, \$15 \$600 Fixed distribution, \$339 \$500 \$400 Variable distribution, \$51 \$300 Commodity charge, \$221 \$200 \$100 Admin fee, \$90 \$0

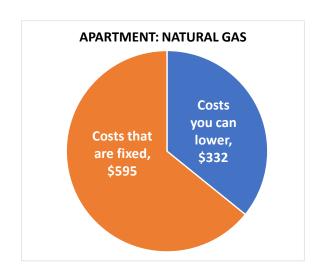
Figure 19: Apartment: components of typical annual natural gas bill for low-income household

Figure 20: Apartment: breakdown of typical annual natural gas bill for low-income household

(a) Natural gas bill by end-use

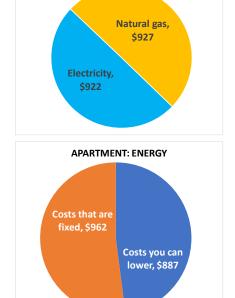
(b) Natural gas bill by fixed and variable charges





Clothes Dryer, \$182
Clothes Washer, \$20
Dishwasher, \$29
Freezer, \$88
Refrigerator, \$117
Lighting, \$115
Water heating, \$369
Cooling, \$3

Figure 21: Apartment: breakdown of typical annual energy bill for low-income household

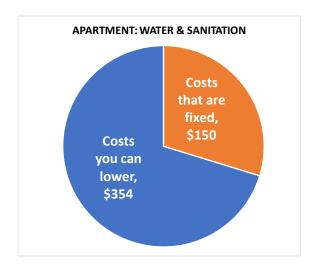


APARTMENT: ENERGY

Figure 22: Apartment: breakdown of typical annual utility bills by fixed and variable costs

(a) Water and sanitation bill

(b) Water, sanitation and energy



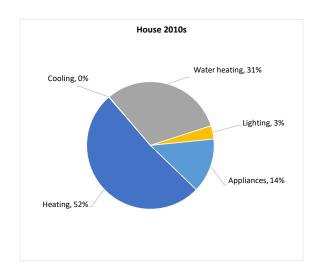


7 Appendix B: House: energy use and utility bills

Figure 23: House: typical energy use in the home (2010s)

(a) Total energy consumption by end-use

(b) Total energy consumption by main fuel



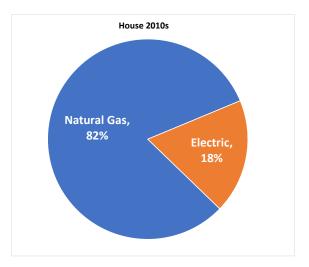
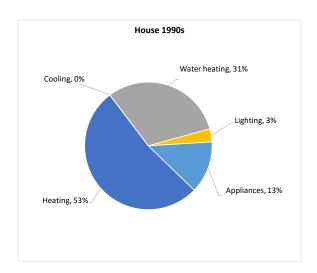
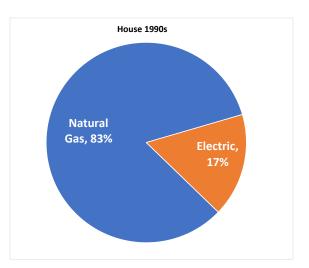


Figure 24: House: typical energy use in the home (1990s)

(a) Total energy consumption by end-use

(b) Total energy consumption by main fuel





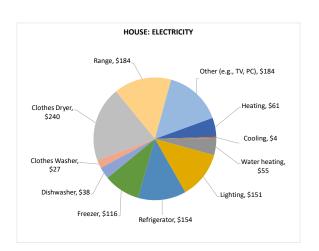
HOUSE: ELECTRICITY \$1,400 Local Access Fee, \$30 \$1,200 Riders, \$57 \$1,000 Variable transmission, \$240 \$800 Fixed distribution, \$266 \$600 Variable distribution, \$109 \$400 Commodity charge, \$413 \$200 Admin fee, \$100 \$0

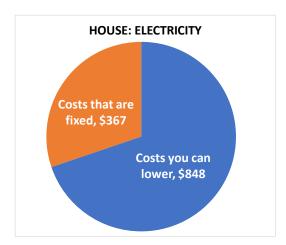
Figure 25: House: components of typical annual electricity bill for low-income household

Figure 26: House: breakdown of typical annual electricity bill for low-income household

(a) Electricity bill by end-use

(b) Electricity bill by fixed and variable charges





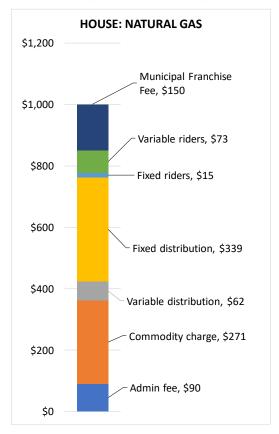
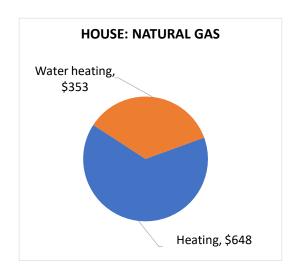


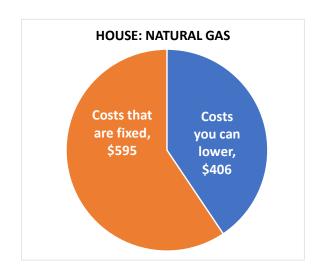
Figure 27: House: components of typical annual natural gas bill for low-income household

Figure 28: House: breakdown of typical annual natural gas bill for low-income household

(a) Natural gas bill by end-use

(b) Natural gas bill by fixed and variable charges





HOUSE: ENERGY

Range, \$184

Clothes Dryer, \$240

Other (e.g., TV, PC), \$184

Clothes Washer, \$38

Heating, \$661

Freezer, \$116

Refrigerator, \$154

Water heating, \$382

Figure 29: House: breakdown of typical annual energy bill for low-income household

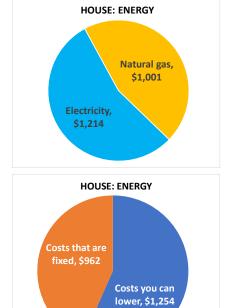
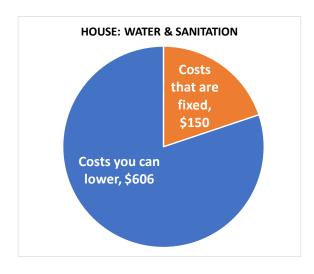
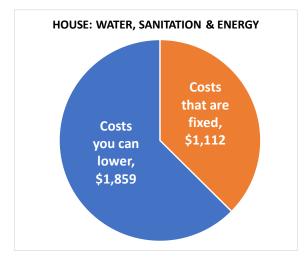


Figure 30: House: breakdown of typical annual utility bills by fixed and variable costs

(a) Water and sanitation bill

(b) Water, sanitation and energy





8 Appendix C: Apartment: energy saving tip sheet

Energy Saving Tips for Apartments



www.allonesky.ca

LIGHTING

USE NATURAL LIGHT. WHERE POSSIBLE

A single south facing window can illuminate up to 100 times its area. Turn off two 60 W bulbs for 4 hours per day.

Annual savings \$22

TURN OFF UNNECESSARY LIGHTS

Switch off one 100 W incandescent bulb for an extra 2 hours per day.

Annual savings \$9

Switch off two 100 W incandescent bulbs for an extra 2 hours per day.

Annual savings \$18

USF TASK LIGHTING

Use table lights and track lighting instead of ceiling lighting in kitchen, hobby and work areas where possible.

Annual savings \$7

REPLACE OLD BULBS WITH LEDs

If possible, replace old incandescent bulbs with LEDs, replace one 60 W incandescent bulb with 9 W LED.

Annual savings \$7

If possible, replace four 60 W incandescent bulbs with 9 W LEDs.

Annual savings \$28

SHOWER, NOT BATH

BATHROOM

Everyone in your household replaced one to two baths with a shower.

Annual savings \$15

INSTALL A LOW-FLOW SHOWERHEAD

Install a low-flow showerhead.

Annual savings \$54

TAKE SHORTER SHOWERS

Shorten your shower time by a minute.

Annual savings \$8

If household shortened their showers by a minute.

Annual savings \$15

INSTALL A LOW-FLOW AFRATOR SINK TAP Intall a low-flow bathroom sink aerator.

Annual savings \$33

TURN OFF WATER

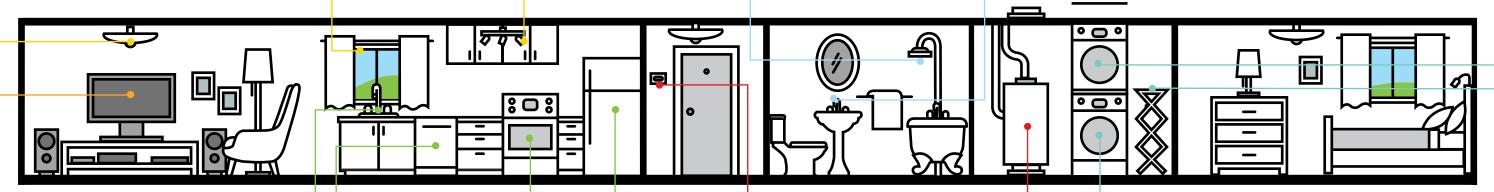
Turn off water when shaving, washing hands, brushing teeth.

Annual savings \$12

FIX LEAKY FAUCETS

Fix leak in hot water faucet (a tap dripping once every 10 seconds wastes 2000 litres per year enough to fill 80 baths.)

Annual savings \$12



HOME ELECTRONICS

UNPLUG UNUSED DEVICES Standby power can account for 10% of an average home's electricity use Annual savings \$35

KITCHEN

 INSTALL A LOW-FLOW AERATOR ON KITCHEN TAP

Install a low-flow aerator on the kitchen tap Annual savings \$52

SKIP THE DISWASHER'S DRYING CYCLE If you have a dishwasher, turn off the heat drying cycle on your dishwasher Annual savings \$14

COOK FOOD USING OTHER MEANS THAN OVEN

A microwave takes 15 minutes to do the same job as it takes an oven one hour. If you have a microwave use it three times per week.

Annual savings \$12

BE EFFICIENT WITH REFRIGERATION

Keep your fridge/freezer at their ideal temperatures; this is 2° - 3° C for a fridge and - 18° C for a freezer **Annual savings \$31**

HEATING

MANAGE YOUR THERMOSTAT

Lower your thermostat by 4° - 5° C while you're sleeping at night (8 hours per day)

Annual savings \$16

Lower your thermostat by 4° - 5° C when no one is at home (8 hours per day)

Annual savings \$16

MANAGE THE TEMPERATURE OF YOUR HOT WATER TANK

If you can, turn the thermostat of your hot water tank down 10° F (about 5.6° C)

Annual savings \$12

LAUNDRY

RUN FULL LOADS IN WASHING MACHINE

Save one load of washing per week

Annual savings \$12

WASH IN COLD WATER

Use cold water for half your laundry needs Annual savings \$20

HANG DRY LAUNDRY

Hang dry one in 4 laundry loads

Annual savings \$35

Hang dry half your laundry loads

Annual savings \$71

TOSS A TOWEL IN THE DRYER

Adding a towel to a drying load can significantly reduce drying times; add a towel to 3 loads per week

Annual savings \$14

9 Appendix D: House: energy saving tip sheet

Energy Saving Tips for Houses



www.allonesky.ca

BATHROOM

SHOWER. NOT BATH Everyone in your household replaced 1 to 2 baths with a shower.

Annual savings \$24

INSTALL A LOW-FLOW SHOWERHEAD Install a low-flow shower head. Annual savings \$88

FIX LEAKY FAUCETS Fix leak in hot water faucet (a tap dripping once every 10 seconds wastes 2000 litres per year enough to fill 80 baths.)

Annual savings \$12

INSTALL A LOW-FLOW AERATOR SINK TAP Install a low-flow bathroom sink aerator.

Annual savings \$54

TURN OFF WATER Turn off water when shaving, washing hands, brushing teeth.

Annual savings \$20

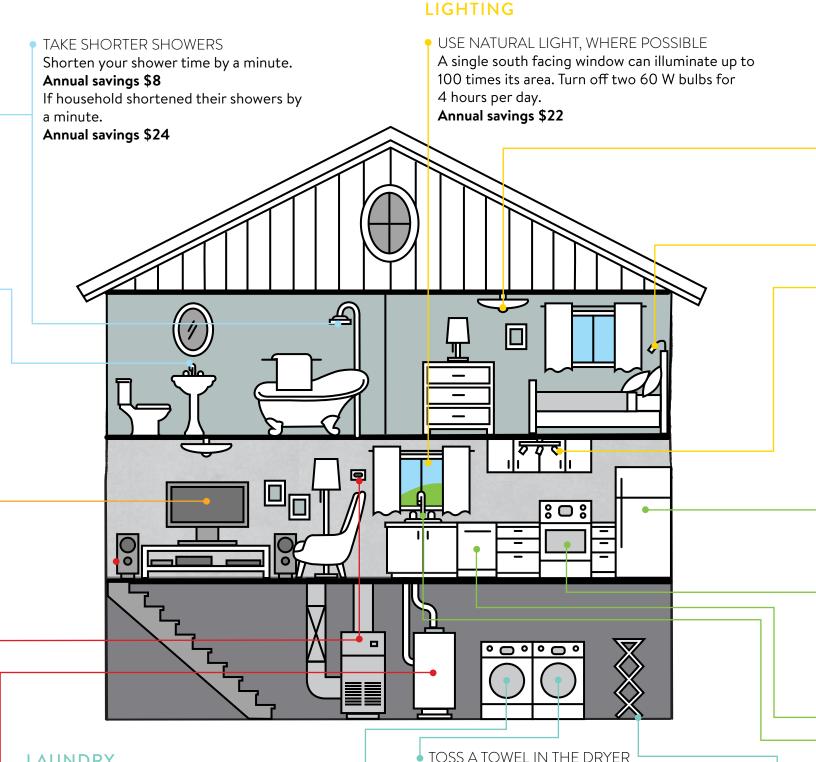
HOME ELECTRONICS

UNPLUG UNUSED DEVICES Standby power can account for 10% of an average home's electricity use Annual savings \$53

HEATING

- MANAGE YOUR THERMOSTAT Lower your thermostat by 4° - 5° C while you're sleeping at night (8 hours per day) **Annual savings \$16** Lower your thermostat by 4° - 5° C when no one is at home (8 hours per day) **Annual savings \$16**
- MANAGE THE TEMPERATURE OF YOUR HOT WATER TANK If you can, turn the thermostat of your hot water tank down 10° F (about 5.6° C)

Annual savings \$13



LAUNDRY

RUN FULL LOADS IN WASHING MACHINE Save one load of washing per week Annual savings \$20

WASH IN COLD WATER Use cold water for half your laundry loads Annual savings \$22

TOSS A TOWEL IN THE DRYER

Adding a towel to a drying load can significantly reduce drying times; add a towel to 3 loads per week **Annual savings \$14**

HANG DRY LAUNDRY Hang dry one in 4 laundry loads Annual savings \$44

Hang dry half your laundry loads Annual savings \$89

TURN OFF UNNECESSARY LIGHTS Switch off one 100 W incandescent bulb for an extra 2 hours per day. Annual savings \$9 Switch off two 100 W incandescent bulbs for an extra 2 hours per day. Annual savings \$18

USF TASK LIGHTING

Use table lights and track lighting instead of ceiling lighting in kitchen, hobby and work areas where possible. **Annual savings \$7**

REPLACE OLD BULBS WITH LEDs If possible, replace old incandescent bulbs with LEDs, replace one 60 W incandescent bulb with 9 W LED.

Annual savings \$7 If possible, replace four 60 W incandescent bulbs with 9 W LED. Annual savings \$28

KITCHEN

BE EFFICIENT WITH REFRIGERATION Keep your fridge/freezer at their ideal temperatures; this is 2° - 3° C for a fridge and - 18° C for a freezer Annual savings \$31

COOK FOOD USING OTHER MEANS THAN OVEN

A microwave takes 15 minutes to do the same job as it takes an oven one hour. If you have a microwave use it three times per week.

Annual savings \$12

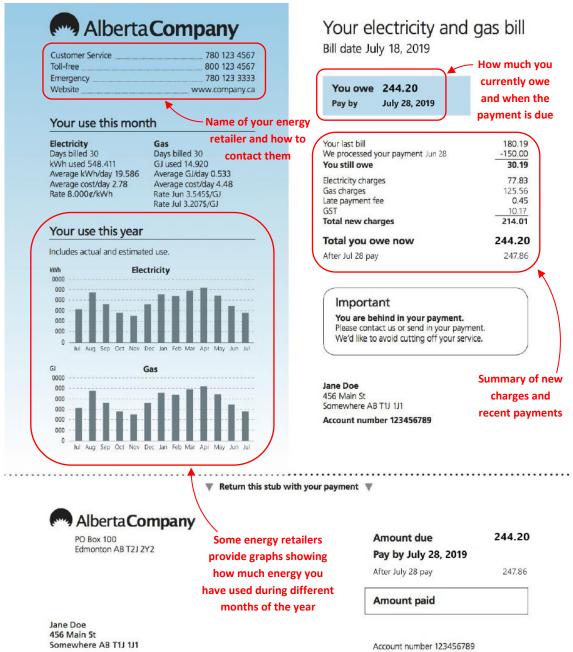
SKIP THE DISWASHER'S DRYING CYCLE If you have a dishwasher, turn off the heat drying cycle on your dishwasher

Annual savings \$14

■ INSTALL A LOW-FLOW **AERATOR ON KITCHEN TAP** Install a low-flow aerator on the kitchen tap **Annual savings \$85**

10 Appendix E: Sample energy bill

Energy bills from different companies may look a little different, but they will provide similar information



Meter readings at the beginning and end of the current billing period, and how much energy you used during that period



Electricity site ID 00200062067 46
Meter number 544875
Gas site ID 003011443851
Meter number 700320-291761

Meter readings

Electricity		Gas	
Jun 5 actual	18905.920	Jun 5 actual	311.000
Jul 4 actual	19453.000	Jul 4 actual	326.000
KWh used	548.411	GJ used	14.920
Multiplier	1	Conversion fact	tor 0.99467

If your reading was estimated, your bill will be adjusted when we get your next actual reading.

Helpful information

Distribution services inquiries

Electricity: Alberta Company 780-123-4567 Gas: Alberta Company 780-123-4567

Meter readings

Electricity: Alberta Company 780-123-4567 Gas: Alberta Company 780-123-4567

Moving

Please let us know three business days before you move. This gives us time to close your account. Call Customer Service at 780-123-4567. If you don't call to cancel, you continue to pay for service.

retailer, comprising a charge for the energy used plus an admin fee for billing and customer care

 The energy charge varies with your use, so does some of the delivery charges; we can help you reduce these costs

77.83

2

Charges to huw electricity from (retailer name)

Electricity use (548.411 kWh x 8.000g/kWh) Administration fee Total	43.87 6.88 50.75
Charges to deliver electricity from (distribut	or name)
Transmission charge	7.31
Distribution charge	13.33
Local access fee	5.85
Balancing Pool rider	-1.13
Rider A	1.72
Total	27.08

Total electricity charges

Gas charges Jun 5 to Jul 4

Charges to buy gas from (retailer name)	`	1
Gas use Jun 5 to Jun 30 (11.730 GJ x \$3.545/GJ)	41.58	<i>/</i> `
Gas use Jul 1 to Jul 4 (3.190 GJ x \$3.207/GJ)	10.23	l(1
Administration fee	14.09	\ -
Total	65.90	

Charges to deliver gas from (distributor name) Transmission charge 16.23 Distribution charge 28.50 Municipal franchise fee 10.80 Rider B 4.13 Total 59.66

Total gas charges 125.56

Cost of energy being delivered to your home by the distributor, to cover the costs of installing, operating and maintaining the electricity grid and the network of pipelines and facilities that transport natural gas

How to pay

The easiest way to pay is automatic withdrawal, which means you're never late. You can also pay by phone, internet, bank, or cheque mailed to PO Box 100, Edmonton AB T2J 2Y2.

Paying your bill on time

Please make sure your payment gets to us before the due date. We charge 1.5% interest monthly (19.56% per year), compounded monthly on late payments. Some banks take up to four business days to get payments to us.

NSF cheques

We charge a fee if cheques don't clear.

Terms and conditions

The AUC approves the terms and conditions of this bill. You can get more information by calling Customer Service.

Rate riders are charges or credits for the difference between projected costs and actual costs for delivering energy; access or franchise fees are costs the distributor pays to your municipality for using its land for power lines or pipelines



11 Appendix F: Additional resources for participants







Emergency funding for utility bills

- · Direct Energy Emergency Fund
 - o https://www.directenergy.ca/alberta/emergencyfund

Energy Café Resources

o Call 211

Other energy information

- EmpowerME
 - o https://www.empowermeprogram.com/home-ab/
- Utilities Consumer Advocate (UCA)
 - o 310-4-UCA (310-4822)
 - o Outside Alberta, dial 780-644-5130
 - o https://ucahelps.alberta.ca/
 - o Information on distributors and retailers
 - o Information on regulated vs. competitive retailers
 - o Have a cost comparison tool to see what the lowest cost and best rate is for competitive retailers: https://ucahelps.alberta.ca/retailers.aspx
 - o They also provide support for water utilities

Edmonton Public Library (EPL)

• EPL has **home energy audit kits** that any library cardholder can rent/borrow - this kit can show you how energy efficient your home is (for example if your windows are poorly sealed) Comes with information on how to use the audit kit.

City of Edmonton - http://ace.edmonton.ca/energuide/

- o Change Homes for Climate
- o Change Habits for Climate
- o City of Edmonton also has rebates for solar and energy efficiency evaluations and upgrades. See website for details. You can also see the solar potential of your home.

Sponsored by



12 Appendix G: Participant survey

EnergyCafe

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Outcome·Evaluation-Interview·Questions ->

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A.-TELEPHONE-INTRODUCTION¶

¶

[IF-NAME·OF-PERSON·IS-KNOWN]·Hello,·my·name·is-[NAME].·May·I·speak·with·[NAME].·I'm·calling·from
All-One·Sky·Foundation,·the·charity·that·ran·the·Energy·Cafes·they·attended·at·[VENUE]·on·[DATE].·Weare-speaking-with-people-who-participated·in·the·Cafés·to·learn·about·their-experience-and-satisfactionwith-the-program.¶

A.1¤

 $[IF-NAME\cdot OF-PERSON\cdot IS-UNKNOWN]\cdot Hello, impiname is \cdot [NAME]\cdot May \cdot Ir-speak \cdot with \cdot the \cdot person \cdot who attended \cdot the \cdot Energy\cdot Café \cdot at \cdot [VENUE]\cdot on \cdot [DATE]? \cdot I'm \cdot calling \cdot from \cdot All \cdot One \cdot Sky \cdot Foundation, \cdot the \cdot charity \cdot that \cdot ran \cdot the \cdot Café \cdot We \cdot are \cdot speaking \cdot with \cdot people \cdot who \cdot participated \cdot in \cdot the \cdot Café \cdot to \cdot learn \cdot about \cdot the ire experience \cdot and \cdot satisfaction \cdot with \cdot the \cdot program. <math>\blacksquare$

¶

Response-to-A.1:¶

¶

- → Yes.·[GO·TO·A.2]¶
- $\bullet \to \mathsf{No}, \mathsf{`person\cdot can\cdot to\cdot come\cdot to\cdot phone\cdot [ASK\cdot FOR\cdot PERSON\cdot WHO\cdot IS\cdot AND\cdot START\cdot AGAIN]}\P$
- $\bullet \to \mathsf{No}, \\ \mathsf{person} \cdot \mathsf{cannot} \cdot \mathsf{come} \cdot \mathsf{to} \cdot \mathsf{phone} \cdot \mathsf{or} \cdot \mathsf{now} \cdot \mathsf{is} \cdot \mathsf{not} \cdot \mathsf{a} \cdot \mathsf{good} \cdot \mathsf{time} \cdot [\mathsf{GET} \cdot \mathsf{NAME} \cdot \mathsf{AND} \cdot \mathsf{SCHEDULE} \cdot \mathsf{CALL} \cdot \mathsf{BACK}] \P$
- $\bullet \ \, \to \mathsf{Prefer} \cdot \mathsf{not} \cdot \mathsf{to} \cdot \mathsf{answer} \cdot \mathsf{or} \cdot \mathsf{similar} \cdot [\mathsf{THANK} \cdot \mathsf{AND} \cdot \mathsf{TERMINATE}] \P$

1

 $I'd\text{-like-to-ask-your-feedback-is-very-important-to-us-and-will-help-inform-future-programs-to-support-others-reduce-utility-bills.-l-only-need-about-10-minutes-of-your-time.-For-your-time-we-will-enter-you-in-a-draw-to-win-one-of-three-$100-gift-cards-for-Canadian-Tire. <math>\P$

A.2¤

If-you-do-not-want-to-answer-a-question,-please-say-so.-Everything-you-say-will-remain-confidential.¤

1

 $\textit{If-response-to-A.2:} \P$

¶

- $\rightarrow \text{Yes.} \cdot [\text{GO-TO-B.1}] \P$
- $\bullet \ \ \, \to \ \, \text{No, `not·a·good·time·} \\ [\text{GET-NAME-AND-SCHEDULE-CALL-BACK}] \\ \P$
- $\bullet \ \ \, \to \ \, \text{No,-do-not-wish-to-answer-questions-} \\ [\text{$\mathsf{THANK-AND-TERMINATE}}] \P$

¶

ALL-ONE-SKY-FOUNDATION¶

PO·Box·19012·|·809·49·Avenue·SW·|·Calgary·Alberta·T2S·1A0¶ www.allonesky.ca¶ **B. CONTEXT QUESTIONS**



Outcome Evaluation-Interview Questions

B.1	What type of hom	ne do you live in? [read list, tic	k circle that applies]		
0	Single-detached h	ouse			
0	Row house				
0	Semi-detached ho	ouse (duplex)			
0	Apartment in a du	plex			
0	Apartment in a bu	ilding that has fewer than 5 fl	oors		
0	Apartment in a bu	ilding that has 5 or more floor	rs .		
0	Mobile home				
0	Do not know				
0	Refused				
⊕ B.2	Do you own or re	nt your home? tick circle that	applies]		
0	Owner				
0	Tenant / renter				
0	Something else [S	PECIFY]			
0	Refused				
В.3		r day, are you able to keep yo in your household warm enou			
	Yes - always	Yes - sometimes	No – rarely	No – never	

If response to B.3:

- Yes always. [GO TO B.5]
- All other responses. [GO TO B.4]

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Don't know

Outcome Evaluation-Interview Questions

Economise on energy use

You said that your home is not always warm enough. Would you say this is because you are concerned about your utility bills and trying to economize on heating, or because the home is cold even when the is heating on? [tick circle that applies]

Cold even when heating is on

Other

0	0	0	0
B.5 Who pays the utility bills for your home	? [read list, tick circ	le that applies]	
	Electricity	Natural gas	Water
Me (or members of my household)	0	0	0
Landlord or property manager (incl. in rent)	0	0	0
Assistance agency or group	0	0	0
Don't know	0	0	0
Refused	0	0	0

If response to B.5:

- Me (or members of my household) for electricity, natural gas, or water [GO TO B.6]
- All other responses [GO TO C.1]
- B.6 Which one of the statements best describes how well you are keeping up with your utility bills? [read list, tick circle that applies]
- O Keeping up with all utility bills and other credit commitments without any difficulties
- O Keeping up, but it is difficult from time to time
- O Keeping up, but it is a constant struggle
- Occasionally fall behind with some utility bills and other credit commitments
- O Have real difficulties keeping up with utility bills and other credit commitments
- O Refused

If response to B.6:

- Keeping up with all utility bills without any difficulties. [GO TO C.1]
- All other responses [GO TO B.7]

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Outcome Evaluation-Interview Questions

B.7 Keeping up with bills can be stressful. Does paying your utility and other bills make you slightly or very anxious, or not at all anxious [tick circle that applies]

Does not make me anxious	Makes me slightly anxious	Makes me very anxious
0	0	0

C. OUTCOME QUESTIONS

Now I would like to ask you some questions about your experience at the Energy Café and the free energy saving devices you were given. To start, I'd like to confirm which energy saving devices you took home [tick all circles that apply]

LED bulb	Bathroom faucet aerator	Kitchen faucet aerator	Aerator, but not sure which type	Don't know
0	0	0	0	0

C.2 Are any of the devices you took home currently installed? [for devices taken home, tick circles that apply]

	LED bulb	Bathroom aerator	Kitchen aerator
Yes	0	0	0
No	0	0	0
Don't know	0	0	0
Refused	0	0	0

If interviewee says "no" or "not yet" and offers a reason, please record response:

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Outcome Evaluation-Interview Questions

0	Very helpful
0	Somewhat helpful
0	Not helpful
0	Don't know
0	Refused
If respo	onse to C.3:
•	"very helpful" or "somewhat helpful". [GO TO C.4]
•	All other responses [GO TO C.5]
C.4	What information provided at the Café did you find most useful: [read list, tick circle that applies]
0	Help with understanding your energy bill
0	Knowledge of the comparison tool to help you compare utilities
0	Emergency funding options for utility bills
0	Energy-saving tips for your home
0	Don't know
0	Refused
0	Other, please explain:
C.5	Of all the energy-saving tips you remember, can you tell me which ones you have taken in your home? [record up to three responses, tick circle that applies]
1	
2	
3	
0	None
0	Don't know
0	Refused

C.3 Did you feel the information provided to you at the Café was: [read list, tick circle that applies]

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40 EnergyCafe

Outcome Evaluation-Interview Questions

6	On a scale from 1 to 4, where 1 is "not at all influential" and 4 is "very influential", how would you rate the influence of the Café on energy use in your home? [read list, tick circle that applies]
0	Very influential
0	Somewhat influential
0	A little influential
0	Not at all influential
0	Don't know
0	Refused
7	To help us improve future Cafés, do you have any suggestions on how we could make them more helpful? [record suggestions, tick circles that apply]
0	None
0	Don't know
0	Refused

Those are all the questions we had for you today. Thank you for your time. We will enter you in a draw to win one of three \$[ADD] gift cards for Canadian Tire. Winners will be contacted on [DATE]. Is this the best number to reach you?

ALL ONE SKY FOUNDATION



ALL ONE SKY FOUNDATION is a not-for-profit, charitable organization established in 2010 to help vulnerable populations at the crossroads of energy and climate change. We do this through education, research and community-led programs, focusing our efforts on adaptation to climate change and energy poverty. Our vision is a society in which ALL people can afford the energy they require to live in warm, comfortable homes, in communities that are able to respond and adapt to a changing climate.

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