



EmPower me[®]

ENERGY POVERTY IN ALBERTA

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One in five Albertan families struggle to pay their utility bills - that's over 312,000 households!

As a result, these families are forced to make compromises on life necessities such as health, food, safety, and comfort.

Perhaps surprisingly, not only low-income Albertans are struggling, in fact two-thirds would not fall into current low-income thresholds. They are home owners and renters, working-class Albertan families who are most vulnerable to increased energy prices and poor housing.

At Empower Me, we understand that not every household is the same. In partnership with Energy Efficiency Alberta, our Home Upgrades Program is the first of its kind in Alberta to help everyday Albertans struggling with their energy bills. The Empower Me Home Upgrades program helps renters and homeowners reduce their energy consumption by installing energy saving measures, as well as providing energy education and mentorship.

These families who cannot afford to take part in the rebate programs available are quite literally left in the cold in terms of support mechanisms to help them reduce their energy consumption and break out of the energy poverty cycle. Currently Empower Me is the only option for these groups.

While our work in Alberta is still heating up, we have already uncovered some heartbreaking situations. We have put this document together to shed light on energy poverty, and foster province-wide strategies for tackling this important problem.

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Background: Energy Poverty in Alberta

Households are considered to be energy poor when a disproportionate amount of their income is spent on home energy costs. Living in energy poverty leads to falling behind on bill payments, utility cut-offs, and tough decisions about whether to keep their families warm or purchase other basic needs.

Energy poverty impacts working-class and low-income families, all of whom struggle and face utility disconnection. Every year 20,000 Albertans are referred to the Utility Consumer Advocate for help after they are disconnected due to non-payment of energy bills.

Currently families who are in bill arrears in Alberta may receive one-time financial assistance to pay a portion of the bill, however, these funds are limited and not guaranteed. If bills continue to be in arrears, families face disconnection from their utilities in summer. During winter months, electric households may have a limiter device installed on their meter which only allows a furnace and a few lights to run. If they live in an apartment, they may have their electricity disconnected entirely. While natural gas cannot legally be disconnected in winter, consumers still face disconnection after April 15th every year if their bills are not paid.

Irrespective of the time of the year, when families default on their utility bills, outstanding charges still need to be paid to avoid disconnection and charges continue to accumulate even during the legally mandated non-disconnection periods. Unless their circumstances change dramatically, families in energy poverty are never able catch up with their energy debts, and face ongoing annual cycles of utility disconnection.



Alberta's Energy Poverty – a reality in the midst of energy abundance

22% of Albertan households live in energy poverty. That's 312,130 families that need direct assistance to keep warm this winter.

Energy poverty – or the experience of households struggling to meet their energy needs – is a growing and often unacknowledged problem in Alberta. Based on an analysis of the 2011 cycle of Survey of Household Spending (SHS), 22% of Alberta households (312,130) experience energy poverty (Rezaei, 2017) . Preliminary analysis with more recent data suggests that this number is, in fact, growing.

Impact of energy poverty for Albertan families

Households that experience energy poverty often make compromises in health, comfort and conveniences that other people take for granted. Many of those that experience energy poverty keep their homes at lower temperatures – compromising their thermal comfort and their health. Living in colder homes has documented health effects, particularly for children and infants. Studies demonstrate higher rates of respiratory problems for children, as well as lower weight gain and more susceptibility to illness for infants that live in energy poverty (Frank et al., 2006; Howden- Chapman et al., 2008, Liddell and Morris, 2010).

Adults in energy poverty typically report higher stress and worse mental health (Green and Gilbertson, 2004), which is unsurprising given the stress associated with higher bill burdens. Our partners at Aspen Family Services who work with low income households, report that those seeking financial relief for their bills typically have accumulated energy bills of \$250-\$1,000 often constituting more than 10% of their income. ENMAX reports that an average electricity and gas bill across all of their clients is between \$150-\$300 (this excludes water, waste, and recycling services billed on behalf of The City of Calgary).

In addition to these important health effects, households that struggle with paying their energy bills may experience disconnection from utility services – resulting in periods of time without access to essential energy services such as heating, hot water or refrigeration. The Utilities Consumer Advocate (UCA) reports 20,000 such disconnections a year in Alberta. Furthermore, households that experience disconnections are often subject to late fees, as well as reconnection fees, that further increase the burden of energy bills for them.

These compromises in health, comfort, and convenience, paired with the constant pressures of paying energy bills that they find unaffordable, makes energy poverty a pressing problem for Albertan households – one from which there is little relief.

¹Energy poverty, here, is defined as the experience of households that spend more than 6% of their net household income on their energy bills. The 6% threshold represents expenditures more than twice the median expenditures in Alberta and Canada.



Demographic characteristics of Albertans in energy poverty

Research investigating energy poverty in the Canadian provinces reveals the following key insights with regards to which types of households are more likely to live in energy poverty. The results indicate a truth far from the obvious:

Energy poverty and low incomes

While income and energy poverty do have significant areas of overlap, the majority of low-income households in Canada are not in energy poverty. Conversely, two-thirds of households that struggle with energy poverty are not low-income. This is due to the influence of building energy performance on energy poverty: lower-income people who live in smaller and more energy efficient houses may not be in energy poverty, while households with incomes significantly above poverty thresholds may experience energy poverty if they live in larger, less efficient homes. Table 1 below, demonstrates the relationship between income and energy poverty.

	Not in energy poverty	In energy poverty
Not low income	68.6%	13.4%
Low income	10.5%	7.5%

Table 1 - Percentage of Canadian population struggling with poverty and/or energy poverty (Rezai, 2017).

Renters and owners

Both Albertan renters and homeowners can be in energy poverty. Counter to common wisdom, renters as a group are less likely to experience energy poverty. This is primarily due to the fact that many renters have their utility bills included in their rent, as well as the fact that many renters live in smaller apartments which tend to need less energy to keep warm. However, renters whose rent does not include their energy bills are more likely than owners and other renters to experience energy poverty (see regression analysis results in Rezai, 2017, p. 54).

Albertan homeowners as a group, on the other hand, are more likely to be in energy poverty, primarily due to the fact that they tend to live in larger, often single-detached homes that require more energy to keep warm. As table 2, below shows, 20-30% of homeowners experience energy poverty, while 14% of renters fall into the same category.

Housing Tenure	Percent in each group experiencing energy poverty
Owned with mortgage	20%
Owned without mortgage	30%
Rented	14%
Occupied rent free	36%

Table 2 - Housing tenure and energy poverty (adapted from Rezai, 2017, p. 53)

Rural and urban households

Most households experiencing energy poverty live in urban centres, simply because over 80% of the Canadian population lives in urban centres (Statistics Canada, 2018). However, rural households tend to be more likely to experience energy poverty than their urban counterparts (see regression analysis results in Rezaei, 2017, p. 54). Access to networks of energy infrastructure, both in absolute terms (e.g. having access to natural gas transmission pipelines) and in relative cost terms (e.g. higher costs of transmission to less densely populated areas) is thought to be responsible for this pattern in energy poverty.

Housing types

Housing type and quality is a huge predictor of energy poverty experience. Households that live in single detached homes and those whose dwellings need major repairs face significantly higher chances of living in energy poverty (see regression analysis results in Rezaei, 2017, p. 54). This fact, again, points to the significance of housing energy performance in managing the experience of energy poverty.

Household Types

Energy poverty is prevalent across all household types such that single parents, couples with children, households with young children, and seniors all face statistically similar likelihoods of experiencing energy poverty. Households with members with disabilities, however, face higher likelihoods of experiencing energy poverty (see regression analysis results in Rezaei, 2017, p. 54).

Collectively, these data insights reveal the importance of designing assistance programs that include:

- Both renters and homeowners
- Those in urban areas and rural communities
- Working-class households whose incomes are above the poverty line
- All household types, with special attention to the inclusion of households with members with disabilities

Furthermore, such programs should prioritize:

- Single-detached homes
- Homes that are in a poor state of repair

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Introducing the Empower Me Home Upgrades Program: a ground-up solution to energy poverty in Alberta

Empower Me is proud to present Alberta's first ever program designed to address energy poverty. In partnership with Energy Efficiency Alberta, Empower Me Alberta's Home Upgrades Program helps people who struggle to pay their energy bills by providing fully subsidized home upgrades that reduce energy consumption and improve the safety and comfort of their home. The program is designed to develop an understanding of the energy issues inside Albertan homes with the goal of scaling province-wide.

The program provides different levels of support, products, and installations depending on the home, the energy bills, and how tough it is for the household to pay them. All participants receive a free energy saving kit valued around \$90 with essential items that helps them improve their home's energy efficiency. Some participants receive more in-depth upgrades related to heating, lighting or insulation if their energy consumption is very high and it is difficult for them to pay their bills.

What makes our program different:

- 1** We target people struggling with energy poverty as opposed to those considered low income (two-thirds of people struggling with energy poverty are not low income).
- 2** Our program is diagnostic, not prescriptive - we target the greatest energy savings as opposed to a required list of upgrades that don't take into account the differences of individual homes.
- 3** Nobody is rejected from our program - if applicants don't qualify on consumption or income they are funneled to our Energy Conservation Education Program to receive a kit of energy saving products and long-term energy efficiency support and education.
- 4** We ensure everyone can take advantage - our Energy Mentors support and target multilingual and multicultural communities.

Learn More: www.empowermeprogram.com/home-upgrades/

Program Snapshot: what we've uncovered in Alberta to date

Energy poverty is surprisingly wide-spread in Canada, here's a snapshot of pre-qualified applicants for the Alberta Home Upgrades Program.

Urban and rural, province-wide



Identify as



25%
Newcomers



25%
Seniors



58%
Low Income

Note: These groups are not mutually exclusive

Majority are homeowners




76%
own their
houses

Multicultural



7 different languages

Large households

26% 
are couples and singles

74% 
are families with 3 or more

Majority live in houses

84%
live in detached homes







Empower Me is owned and operated by Kambo Energy Group, a social enterprise that delivers turn-key energy solutions for commercial buildings and residential communities. With the mission to use business as a tool to do good, Kambo Energy Group builds holistic energy efficiency programs with a focus on the end user realizing real and measurable energy savings. Empower Me, Kambo Energy Solutions, and Community Power operate as divisions of Kambo Energy Group.

What is a social enterprise?

Social enterprises are purpose-driven organizations that apply an entrepreneurial model to maximize impact for social issues, creating positive community change.

A social enterprise has a dual mission:

- To achieve social, cultural, community economic and/or environmental outcomes
- To earn a profit to remain financially sustainable, long term

As a social enterprise Empower Me strives to deliver:

- Improved long-term social, environmental and economic outcomes for underserved communities
- Increased innovation in community and public service
- Creation of jobs and training opportunities, especially for diverse communities
- Opportunity for communities to develop their own solutions, leading to resilient local economies
- Greater engagement between the business and community sectors



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