



RETHINKING ENERGY BILL PROTECTIONS IN BRITISH COLUMBIA

| Jurisdictional scan and best practices

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Executive summary

Energy poverty — a lack of affordable access to the energy services that contribute to quality of life — is a condition that occurs at the nexus of high energy costs, poor energy efficiency in homes, and lower income households. As of October 2019, there were approximately 272,200 households in British Columbia facing energy poverty.ⁱ In the new context of the COVID-19 pandemic, it is reasonable to assume that the incidence of energy poverty — and the gravity of its effects — are being further compounded by the job losses and increased residential energy consumption associated with the pandemic.ⁱⁱ

Households in British Columbia facing energy poverty are currently provided limited options for support and protection. Based on a review of programming across Canada and the United States, and interviews with program administrators in a number of key jurisdictions, this research considered model programs and best practices that could help inform British Columbia's approach to energy poverty going forward. This report considers measures that can help lower energy costs through both ongoing subsidy and emergency relief programs. We believe that both of these measures are essential to address energy poverty, and are especially needed during the current period of economic vulnerability and ongoing recovery from the COVID-19 pandemic.

This research has found that BC's current body of initiatives aimed at relieving energy poverty is inadequate when compared to other jurisdictions in North America. As such, it is imperative that the Provincial Government rethink its current suite of energy cost protections as part of its economic recovery strategy, and act to update the suite of energy support programs available to vulnerable households.



Our research underlined the need for a breadth of programming to reduce costs for customers facing energy poverty at various stages on both an ongoing and urgent basis. British Columbia currently has no ongoing bill support program, and the high rejection rate of BC Hydro’s Customer Crisis Fund — when viewed alongside the prevalence of energy poverty in the province — suggests that this pilot program is suffering from an insufficiently comprehensive eligibility mechanism. BC Hydro’s current tiered residential rate structure also penalizes electrification of space heating for many customers, further compounding the issue of high energy costs. Based on energy costs from April 2020, heating with natural gas in British Columbia costs on average one third of what it costs to heat with older electric heating technologies.ⁱⁱⁱ

Several other provinces, many US states, and the US federal government have established successful programs that provide assistance on a monthly basis to those that are unable to pay part of their electricity or heating bill. Considering the extensive electrification of space and water heating planned as part of the CleanBC climate plan, introducing an ongoing assistance program for electricity bills, together with the implementation of high-efficiency electric heating appliances, could also act as a means of advancing British Columbia’s electrification goals by encouraging fuel switching to electric heating.

We have identified a series of key recommendations for the improvement of British Columbia’s current approach to energy cost assistance. Those recommendations are summarized below and discussed in more detail in the report that follows.

In summary, we propose the implementation of a sliding-scale percentage rebate for income qualifying electricity accounts based on household income, with increased rebate amounts available for a number of customer classes including those heating with electricity. We also propose a redesign of the existing Customer Crisis Fund.



#	Recommendations
1	Redesign the existing Customer Crisis Fund, bringing it under the purview of the Provincial Government while introducing inclusive, transparent eligibility criteria
2	Introduce a comprehensive ongoing bill assistance program in British Columbia, with the following key characteristics: <ul style="list-style-type: none">a) Administered by the Provincial Government, utilizing multi-source fundingb) Applicable to electricity bills onlyc) Providing a sliding-scale percentage rebate based on household income in relation to the Low-Income Measured) Providing increased rebate amounts to certain categories of customers, e.g. those heating their homes primarily with electricity
3	Streamline and modernize program eligibility criteria, including automatic eligibility and combined applications with other social assistance programs
4	Consider implementing an arrears forgiveness program in parallel with the above programs in order to remove the burden of past unpaid bills, which act as a barrier to future payments
5	Introduce a comprehensive and justice-based disconnection policy with the eventual goal of eliminating non-payment disconnections for the most vulnerable households



Table of Contents

Executive summary	3
Introduction	7
Current context in British Columbia	10
Approach and methodology	13
Research summary	15
Recommendations	26
Closing thoughts	31
Appendix I: Program summary	32



Introduction

Energy poverty can be broadly defined as a lack of affordable access to the energy services that contribute to quality of life. Essential energy services include thermal comfort, lighting, water heating, cooking, and transportation. Although there is no standardized definition or condition for energy poverty, it occurs at the nexus of low incomes and high energy bills, where households must spend a disproportionate amount of their income on meeting basic energy needs. A common threshold used to define energy poverty is when an individual or household spends at least twice the median household expenditure on energy.^{iv} For the average British Columbian household this equates to spending more than 6% of one's gross income on energy.

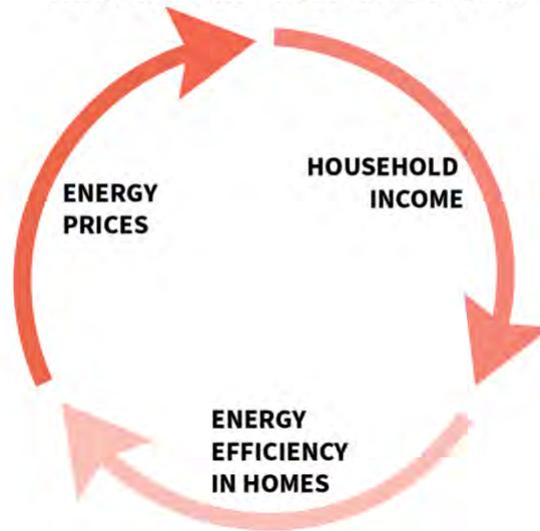
Based on these metrics, research indicates that at least one million low- and middle-income Canadian households experience energy poverty. However, individual circumstances vary widely, and a true definition should also take into account other socioeconomic factors and pressures experienced by vulnerable households. Importantly, households that experience disproportionately high energy costs are not always low-income, often as the result of poor energy efficiency in homes, or a lack of access to affordable heating fuels.

A lack of access to basic energy services can have profound impacts on human health and well-being. High energy costs exacerbate the social distress and impact of poverty in low-income communities, while inadequate heating systems lead to negative health and quality of life impacts stemming from lower air quality and mould. Households that experience energy poverty consistently report poorer overall health, both physical and mental.

Reducing the incidence of energy poverty requires that action be taken on all three of its major drivers: low household income, high energy prices, and poor energy efficiency in homes. However, this report will focus on policies that can reduce *energy prices* through a number of mechanisms, including emergency relief funds, rate subsidies, and rate reductions. These mechanisms are introduced below. A companion report will consider the role of energy efficiency in reducing energy poverty.



THREE DRIVERS OF ENERGY POVERTY



Programs designed to reduce or relieve energy bill costs broadly fall into two categories: one-time interventions for customers facing a temporary crisis, and ongoing support programs for customers facing chronic hardship paying their bills.

One-time protections:

Emergency relief funds

These programs are designed to provide one-time relief for energy customers that are experiencing a temporary financial crisis, often as a result of loss of employment, a health emergency, or family concerns. Programs for those that have lost employment as a result of the COVID-19 pandemic can be considered a special case of emergency relief measures. In many cases, these programs apply a credit toward utility accounts that have already entered arrears, or are at imminent risk of disconnection. However, program requirements are typically imposed by utilities and are not universally consistent. Emergency relief programs can experience some design issues, particularly around eligibility criteria, which at times can be too restrictive to cover the gamut of temporary financial emergencies, or around administrative requirements — especially when the onus is on the customer to document and prove their emergency circumstances.

Ongoing protections:

Rate subsidies

These mechanisms directly reduce energy costs for eligible consumers without altering the price structure of energy itself. This is accomplished either through a *fixed* or *variable credit* that is applied to energy bills, or provided directly to households. *Fixed credits* are typically established based on household income level and size, and are designed to offset a reasonable portion of monthly energy usage for essential services, like heating and cooking. *Variable credits* are based on a household's



previous energy consumption pattern, and refund a percentage of this consumption. Variable credits better take into account a household's energy use based on energy efficiency and size of the home, but are administratively more complex and can lead to issues around privacy and access to historical energy bills.

Rate reductions

These mechanisms involve a systemic restructuring of the way energy is priced for certain customers. In the context of reducing energy poverty, new or modified rate classes could be created in order to alleviate high energy costs for the most at-risk customers. The most obvious example of a unique rate class would be a low-income rate, or “lifeline rate” for qualifying households, which would apply a lower energy rate up to a certain reasonable consumption threshold, or reduce/eliminate fixed charges. Special rate classes could also be created for certain end-use cases, for example, a lower rate could apply to households that use electricity as their primary heating fuel, or to customers that have installed high-efficiency heat pumps.



Current context in British Columbia

Energy poverty in BC

British Columbia currently experiences a rate of energy poverty that is higher than the national average, with around 272,000, or 15%, of households meeting the criteria described above. Over 17,000 of these households have residents that identify as Indigenous.^v

British Columbia, like many other jurisdictions in North America, experiences a wide price differential between different types of heating fuels. Low-carbon electricity costs between three to four times as much as natural gas in BC, on a per unit of energy basis. Most urban centres — but relatively fewer rural areas — have access to natural gas. As a result of their predominant reliance on electricity, less-populated regions of the province bear a disproportionate energy poverty burden.

Most households that use electricity to heat their homes do so using low-efficiency baseboard radiators, as opposed to higher efficiency alternatives like heat pumps, which can dramatically reduce operating costs. Rural areas also tend to have a higher proportion of detached, single-family dwellings (SFDs) and larger homes overall, leading to higher energy demands. BC Hydro, a provincial Crown corporation and the province's dominant electric utility, utilizes a two-tiered residential rate. This encourages conservation, but also leads to even higher energy costs for customers living in older, inefficient homes that require a great deal of energy to keep warm.

One-time protections in British Columbia

In 2018, BC Hydro was directed to implement a one-time relief program for customers who found themselves unable to pay their electricity bill as a result of a temporary loss of employment, medical emergency, or another documentable crisis. The *Customer Crisis Fund* is a three-year pilot program, currently in its second year, that awards a grant of up to \$500 to qualifying households — or \$600 for electrically-heated homes.^{vi}

However, the *Customer Crisis Fund* pilot has not been without its controversies. Province-wide, BC Hydro rejected 64% of applications made to the *Customer Crisis Fund* during its first year. These rejections were due largely to customers not yet facing an imminent disconnection, or as a result of the utility determining that their financial circumstances did not warrant a grant.^{vii}

Consistent with this high rejection rate, in the first year of the program, BC Hydro only spent \$1.7 million of the \$4.5 million that it collected through a \$0.25/month rate rider on all residential customers' bills — this amounts to less than 40% of the program's planned budget. As a result of



this disconnect between restrictive eligibility criteria and actual need, many households that might otherwise have benefitted from available funding, as intended by the program, were left — quite literally — out in the cold.^{viii}

After receiving complaints from customers about the additional charge, the utility opted to cut the rate rider that funds the program to \$0.13/month rather than change the eligibility criteria for the program to be more accessible.^{ix} This unfortunate decision has left even fewer resources available to households that are unable to pay their electricity bills, and highlights the need for a sustainable and socially acceptable funding model for these types of programs.

Ongoing protections in British Columbia

Over the years, there has been considerable discussion in British Columbia around the options of rate protections, or a separate rate class, for low-income or energy-poor households. To date, the BC Government has not considered introducing a provincially administered energy subsidy, but has instead focused on energy rates, and electricity rates in particular.

The current BC Government committed in 2018 to work with BC Hydro to develop a “lifeline rate,” which would have offered a lower electricity rate to low-income households.^x However, this program was never implemented, and the provincial government instead focused on keeping overall electricity rates stable pending a major review of BC Hydro.

Many of the barriers facing the development of a low-income rate class in BC revolve around the jurisdiction of the provincial energy regulator, the BC Utilities Commission (BCUC). The BCUC’s mandate, as set out in the *Utilities Commission Act*, requires that rates be fair and non-discriminatory. Unfortunately, this determination is made almost entirely on an economic cost-of-service basis, and does not consider a multitude of other socioeconomic and environmental factors that would be more in line with a modern understanding of energy regulation.

The BCUC is currently very constrained in the scope of their approvals process, and has no explicit jurisdiction to approve changes that would improve social or environmental outcomes related to energy use. In fact, the BCUC specifically determined in 2017 that they did not have the authority to approve a low-income rate class.^{xi} To date, neither the BCUC nor the BC Government has been willing to press for changes to the *Utilities Commission Act*, resulting in a regulatory deadlock that hampers the development of innovative utility policies in general.

British Columbia, therefore, has no active program that discounts electricity bills on an ongoing basis, whether through an on-bill credit, rate subsidy, or separate rate structure. Thus, the needs of thousands of households experiencing energy poverty are currently going unaddressed.



Related policies and programs

Low-income energy efficiency programs in British Columbia

Utilities in BC also operate a program designed to provide free energy efficiency upgrades to low-income households, called the *Energy Conservation Assistance Program* (ECAP). The effectiveness of this, and other energy efficiency programs, will be discussed in more detail in a companion report. However, our research suggests that this program has not achieved significant savings for households, compared to overall increases in energy costs over the past decade. Less than 10% of customers eligible for ECAP have participated in the program since its inception in 2008, and average cost savings typically amount to less than \$100 per year.^{xii}

Disconnection protections in British Columbia

In response to the COVID-19 pandemic, BC Hydro has placed a temporary ban on disconnections for non-payment, “to support those financially impacted by COVID-19.”^{xiii} However, outside of a pandemic context, BC Hydro’s disconnection policy is far from favourable. Indeed, BC Hydro does not require notice to be given to customers prior to facing disconnection.^{xiv} Utility shut-off policies represent the essence of energy poverty, and are — as was put by the National Association for the Advancement of Colored People — a human rights issue. Without reliable access to safe heating sources, households become vulnerable to various health issues, and may have to resort to unsafe methods of home heating, leading to fires, and carbon monoxide poisonings.^{xv}



Approach and methodology

We studied a wide range of low-income energy assistance policies and programs throughout Canada and the United States in order to identify best practices with the potential for implementation in British Columbia to reduce the incidence of energy poverty. We identified a variety of energy price reduction mechanisms, including emergency relief funds, rate subsidies, and rate reductions, as they were employed in diverse contexts, to identify key recommendations for the improvement of British Columbia's current approach to energy cost assistance.

Jurisdictional scan

The research began with a desktop review to identify the breadth of programs and program types available across Canada and the US, which were chosen as the field of study because of their relative similarities to the British Columbia context. The research included online reviews of government and program administration websites, as well as of relevant public-facing reports and publications from utilities, governments, and private organisations.

Upon gathering information regarding the available programs, we identified a number of key programs of potential applicability to include in the outreach portion of our research.

Consultations

We then reached out via email to program administrators of the identified programs, requesting additional information via follow-up phone or email conversations.

The purpose of these more in-depth conversations was to gain information beyond what was available from the public-facing program websites or reports. Using what we understood about each program as a base, we developed a customized series of questions to probe for more information or clarification on particular matters — we then left room for unanticipated observations and insights to be captured.



Key metrics considered

In order to ensure that all programs were evaluated on a standardized basis, we worked in real time with a tabulated reporting system to ensure data in the following areas were consistently gathered:

- Benefit type (one-time, sliding-scale, percentage, etc.)
- Jurisdiction
- Budget and funding mechanism
- Administering body
- Assistance amount

During consultations with program administrators we focused on the following:

- Benefit design
- Eligibility design
- Budget and funding (if not publicly available)
- Public reception of program
- Lessons learned

Data gaps and assumptions

There is a large body of examples to draw on for energy cost assistance programs within Canada and the US. Programs can be federally, provincially, state, municipally, utility or privately administered. However, within the breadth of programs that exist, patterns emerge, as do a handful of key mechanisms. As such, while we were unable to review all programs in every jurisdiction, this report assumes that we were able to gain an accurate and representative sample.

Further, the information that was publicly available varied greatly between programs, and not all of our information requests proved successful. Hence, not all programs could be compared via the same metrics, so the research conducted was qualitative, supported by quantitative data.



Research summary

The tables below compare the programs we came across in our jurisdictional scan, which were specifically referenced in this report. Table 1 compares one-time protections, while Table 2 compares on-going protections. For a more exhaustive list of the programs we reviewed, reference Appendix I.

Legend:

Icon:	Meaning:
	Funding from government
	Funding from rate rider
	Funding from donations – Organisations
	Funding from donation – Individuals



Table 1: Notable one-time protection programs in North America

Program	Region(s)	Administration	Funding	Benefit Amount
CCF	British Columbia, CA	Utility		Max \$500 or \$600 CAD
EFB	New Brunswick, CA	Provincial Gov		Max \$550 CAD
HEAT Fund	Nova Scotia, CA	Salvation Army		Max \$400 CAD
LEAP	Ontario, CA	Provincial Gov		Max \$500 or \$600 CAD
LIHEAP	Federal, USA	State Gov		Varies between states
PIPPLIP	Colorado, USA	Utility		Full Arrears Forgiveness
HeatShare	CO, MN, ND, SD, WI (US)	Salvation Army		Average = \$400 USD



Table 2: Notable ongoing protection programs in North America

Program	Region(s)	Type of program	Demographic	Admin	Funding
NBHEAP	New Brunswick, CA	Seasonal	Low-Income	Provincial Gov	
EFS	New Brunswick, CA	Seasonal	Social Assistance Recipients*	Provincial Gov	
HARP	Nova Scotia, CA	Sliding-Scale	Low-Income	Provincial Gov	
OESP	Ontario, CA	Sliding-Scale	Low-Income*	Provincial Gov	
EAP – SBD	Colorado, USA	Percentage Rebate	Low-Income	Utility	
CARE	California, USA	Percentage Rebate	Low-Income	Utilities	
FERA	California, USA	Percentage Rebate	Moderate-Income	Utilities	
SUDP	Seattle, USA	Percentage Rebate	Low-Income	Utility	
EAP	Vermont, USA	Percentage Rebate	Low-Income	Utility	
PCAP	Pennsylvania	Percentage Rebate	Low-Income*	Utility & Private	
ILIHEAP– PIPP	Illinois, USA	PIPP	Low-Mod-Income	State Gov	
EAP – PIPP	Colorado, USA	PIPP	Low-Income	Utility	

* Indicates that a higher benefit is offered to those heating electrically, or that the benefit is only available to those heating electrically.



Key findings and discussion

One-time protections in North America

The one-time, or emergency, programs provide singular credits to help households facing short-term, extenuating circumstances affecting their ability to pay their bills, and are not meant to provide ongoing support. Circumstances commonly considered eligible include exceptionally high bills due to winter heating or summer cooling, loss of income, disconnection or disconnection notice, and needing arrears assistance. We determined through our jurisdictional scan that the primary area of variation between emergency bill assistance programs is eligibility criteria. Certain programs, as is the case with BC Hydro's *Customer Crisis Fund*, receive adequate funding and have a demonstrated demand, but may struggle to effectively meet customer's needs, due to unclear or restrictive eligibility criteria. BC Hydro's *Customer Crisis Fund* required until recently that households receive a disconnection notice before applying for such assistance,^{xvi xvii} while others have household income requirements, as is the case for Ontario's *Low-Income Energy Assistance Program* (LEAP).^{xviii}

In our view, programs such as New Brunswick's *Emergency Fuel Benefit* (EFB), which are far less rigid in the determination of eligibility criteria, take a more equitable and accessible approach to program design. New Brunswick's EFB lists "having to choose between paying heating bills or feeding one's family," and other similar circumstances, as eligible emergency situations for receiving the benefit. Indeed, for the purpose of determining household need, EFB removed the requirement that assets be depleted in order to qualify, so that present-day emergencies do not require one to sacrifice savings for the future.^{xix} If customers are able to access assistance before the complete depletion of their assets, future financial hardship — and thus future dependence on assistance programs — may be avoided.

Of all the one-time protection programs we've examined, the maximum benefit has been no less than \$400.^{xx} Both Ontario's LEAP and New Brunswick's EFB have maximum support levels similar to BC Hydro's *Customer Crisis Fund*. LEAP offers a maximum of \$500 to qualifying households or \$600 to those who heat electrically,^{xxi} while EFB, which does not differentiate between heating methods, offers a maximum of \$550.^{xxii} Thus, it appears that the current support levels of BC Hydro's *Customer Crisis Fund* are consistent with other successful programs.



Ongoing protections in North America

Lifeline rates

Ongoing support programs are implemented for situations where long-term barriers exist that limit a customer's ability to pay their energy bill on a continuing basis. There are a multitude of designs for ongoing programs, which vary in areas such as eligibility criteria, benefit type, and benefit amount. To date, the government has stated a preference for lifeline rates over a provincially administered program offering ongoing energy cost support. The BCUC's current regulation against discriminatory rates, however, negates the possibility of a lower rate for low-income customers.^{xxiii} The BCUC, and by extension the government, often recall this mandate as a limiting factor in their ability to address energy poverty issues.^{xxiv} However, our research found no examples of active lifeline rates for electricity anywhere in the US or Canada. Instead, various alternative ongoing support programs are put in place, which are compatible with the *Utilities Commissions Act* in British Columbia.

Seasonal programs

In some jurisdictions, where winter heating costs may consistently present as a barrier, there may be a program in place specifically for the winter months. New Brunswick and Nova Scotia both have programs designed to assist with winter heating: the *Electric Fuel Supplement (EFS)* and *Heating Assistance Rebate Program (HARP)* respectively. The *Electric Fuel Supplement* is a provincially funded program, which offers a monthly credit of \$150 to recipients of social assistance from November to April, while HARP is distributed annually based on a sliding scale of eligible incomes and is available for the months of October to March. The programs are distinct from one-time programs, such as the *Emergency Fuel Benefit*, as they offer support for recurring barriers, rather than for urgent and exceptional circumstances. The applicability of a seasonal assistance program, or adjustment, for BC would be highly regionally dependent. Northern and Interior regions of the province experience very cold winters, but coastal regions generally do not.

On-bill credits – sliding scale

Other jurisdictions, such as Ontario, have programs in place for customers who face ongoing difficulty paying their energy bills. As such, regardless of outside factors — such as higher winter heating costs — if a customer fits the income criteria, they may access the benefit. Ontario's *Electricity Support Program (OESP)*, is a provincially funded program that offers a fixed monthly credit on a sliding scale based on income, with a more generous scale (see figure 1) for those who heat with electricity or use a pre-approved medical device that requires electricity, such as a respirator or dialysis machine.



Table 3: Ontario Electricity Support Program energy intensive sliding scale

Household Income (After Tax)	Household Size (Number of people living in household)						
	1	2	3	4	5	6	7+
\$28,000 or less	\$68	\$68	\$75	\$83	\$90	\$113	\$113
\$28,001-\$39,000		\$60	\$68	\$75	\$83	\$90	\$113
\$39,001-\$48,000			\$52	\$60	\$68	\$75	\$83
\$48,001-\$52,000					\$52	\$60	\$68

Source: Ontario Electricity Board. <https://ontarioelectricitysupport.ca/FAQ>

Sliding-scale credits are generally preferred over *invariant credits* as the assistance levels are tailored toward estimated need based on income. As such, funding is being distributed more equitably between participating customers. However, most programs with *sliding-scale credits* based on income do not account for discrepancies in energy needs. For example, housing in rural and Indigenous communities may require more electricity to heat for reasons such as larger, older, or otherwise less energy-efficient homes. Thus, a household in a rural community with the same income as one in an urban community may have a higher energy burden, and require a different level of assistance.^{xxv} For that reason, programs based solely on income may not accurately allocate funding toward those most in need.

As a way to mitigate the limitations of the sliding-scale approach, the Ontario Electricity Support Program created two separate sliding scales, with a more generous one being available to households facing a higher energy burden due to factors other than income. The “energy intensive” sliding scale is available to Indigenous households, those who heat electrically, and those who make use of certain pre-approved medical devices.^{xxvi} However, while this approach accounts for more discrepancies in energy burdens than a simple sliding-scale approach, fixed credits inherently ignore the nuances of energy needs — especially as it relates to the urban-rural divide. Accordingly, a program with assistance levels based dually on energy demand and income would likely prove more equitable.

On-bill credits – percentage rebate

A more favourable alternative to sliding-scale based credits are programs that offer percentage rebates on household energy bills. California’s *CARE (California Alternative Rates for Energy)*



Program is an example of such a program. CARE is a state-wide program, funded through a rate rider charge, which offers 30-35% discounts (depending on the utility) on electricity bills to low-income customers if the utility serves over 100,000 customers, or a 20% discount if the utility serves fewer than 100,000 customers. Certain larger utilities, namely Southern California Edison, San Diego Gas and Electric Company, and Pacific Gas and Electric Company offer a sister program: the *Family Electric Rate Assistance program* (FERA). FERA offers an 18% discount for low-income families who do not meet the income criteria for CARE. The coupling of CARE and FERA essentially creates two tiers of support, similar to the OESP program, but with percentage-based rather than fixed credits.^{xxvii}

A similar program exists for customers of the investor-owned Colorado utility, Xcel Energy, with their *Step Bill Discount* (SBD). The SBD offers a 25% discount based on the last 12 months of usage to customers at, or above, 150% the Federal Poverty Guidelines (FPG), and a 20% discount for those between 100-150% FPG.^{xxviii}

When considering the level of discount for these programs, there is an inherent trade-off between the number of households served, and size of the benefit. For instance, Seattle Light's *Utility Discount Program* is able to offer a 50% discount on the Seattle Light Bill to customers at, or below, 70% the state median income.^{xxix} The eligibility criteria is much more narrow for this program compared to some others, however, the benefit is accordingly more generous.

Since assistance levels for percentage rebates are determined using one's historic usage, households that face higher energy needs will receive a correspondingly higher benefit. When programs operate on a tiered scale, resources are more likely to be equitably distributed based on the needs of customers. This is an especially important when considering rural, remote, and Indigenous communities which generally face higher energy demand due to energy inefficient housing.

However, unlike a fixed rebate – in which 100% of conservation cost savings to flow to customers – a percentage rebate does not itself incentivize energy conservation. Although limiting one's consumption of electricity would lead to a lowered bill, the percentage rebate received would remain the same. This could arguably hamper parallel efforts to improve the energy efficiency of the home or reduce consumption. In the context of designing a bill protection program, we believe that the equitable distribution of funds to those most in need outweighs the importance of maintaining a signal to conserve energy. However, energy conservation can and should still be encouraged through well-designed low-income energy efficiency programs, which would complement a bill assistance program.

On-bill credits – Percentage of Income Payment Plans

Rather than a fixed credit or percent discount, certain programs may provide a completely tailored credit. For instance, *Percentage of Income Payment Plans* (PIPP) are bill-assistance programs that



limit participating customers' utility bills from surpassing a decided-on percentage of household income (either net or gross depending on the program). PIPP is not the most common type of bill-assistance program, but has been successfully implemented in a few jurisdictions, including Colorado and Illinois.^{xxx} Illinois's PIPP has participating customers (who must have income 200% or less than the US Federal Poverty Guideline) pay 6% of their gross income toward their utility bills, with the remaining difference being covered by a monthly credit of up to \$100.^{xxxi} Although the “energy poverty line” may vary between jurisdictions, 6% of a household's income applied toward meeting energy costs is often suggested as the threshold for energy poverty in many regions, including British Columbia.

In theory, *Percentage of Income Payment Plans* are promising as they can directly reduce energy poverty by capping the energy burden of customers to the agreed upon threshold of energy poverty — 6% in this case. However, they are impractical as they involve very high administrative involvement. Since income and usage must both be verified for the benefit amount to be calculated, intense cooperation between the administrators, utility and Canada Revenue Agency, would be required to implement such a program in BC. Further, due to its design, the program inherently overlooks those who may meet qualitative definitions of energy poverty, but whose energy burden falls below 6%. Hence, fully customized credits are administratively less feasible, and practically less effective than certain alternatives.

Further findings – Complementary policies and programs

Arrearage forgiveness programs

Some effective programs, namely Green Mountain Power's *Energy Assistance Program*, as well as Xcel Energy's *Step Bill Discount* and *Percentage of Income Payment Plan*, are paired with an arrearage forgiveness program. Encompassing the three general types of arrearage assistance approaches, they are designed as followed:

- Green Mountain Power's Energy Assistance Program is coupled with full arrearage forgiveness.^{xxxii}
- Xcel Energy's Step Bill Discount offers up to \$200 towards arrears.
- Xcel Energy's PIPP offers a credit designed to eliminate arrears customers over 12 months for customers with arrears of \$500 or less; or over 24 months for customers with outstanding balances over \$500.^{xxxiii}

These programs allow participants the opportunity to escape energy poverty through a fresh start. We believe that arrearage forgiveness programs should be considered as an important component of an effective energy affordability framework.



Energy efficiency programs

Certain programs, such as the *Low-Income Home Energy Assistance Program*^{xxxiv} and FirstEnergy's *Universal Service Programs*^{xxxv} are paired with, or include, energy efficiency and retrofit efforts. Energy efficiency programs present specific financial advantages if paired with a percent-based rebate, since efficiency efforts can lower a customers' energy bill, and consequently the cost of bill support programs. Energy efficiency programs, and the role they play in the pursuit of broader climate justice — by reducing energy poverty and advancing climate goals — will be discussed further in a companion report.

Disconnection policies

Jurisdictions such as Ontario, Quebec, New Brunswick, and Nova Scotia, require notice between 5-14 days prior to disconnection, and impose bans on winter disconnections.^{xxxvi xxxvii} Further, the Ontario Energy Board further requires that in most cases customers facing disconnection be offered payment plans,^{xxxviii} and NS Power offers medical-based protections against disconnections.^{xxxix} In comparison, British Columbia is severely lacking. Having the proper protections against disconnections in place for vulnerable populations is paramount to the pursuit of energy security and broader energy justice in British Columbia.

As an organization on the front lines of energy justice, the NAACP Environmental and Climate Justice Program has highlighted the importance of humane disconnection policies when addressing systemic barriers around low-income households and racism. Specifically, in their report on reforming utility shut-off policies, the NAACP calls for the eventual elimination of non-payment disconnections, while suggesting comprehensive protections in the interim.^{xl} Consistent with the suggestions of the NAACP, and with the actions of other jurisdictions, it is imperative that British Columbia introduce a comprehensive and justice-based disconnection policy.

Program administration – Application and eligibility determination

Automatic eligibility and combined applications

Social assistance programs often have overlapping criteria. Many programs, such the *Low-Income Home Energy Assistance Program* in the United States, are set up such that recipients of social assistance (such as income assistance) become automatically eligible to participate. Precedent set by Nova Scotia's *Heating Assistance Rebate Program* and New Brunswick's *Access and Assessment Program* suggests that removing documentation redundancies through the amalgamation of social assistance applications leads to a greater number of households reached.^{xli xlii}



Low-Income Measure (LIM) versus Low-Income Cut-Off (LICO)

For the purposes of determining program eligibility, many programs, including those administered by the Ontario Energy Board, favour the use of Statistics Canada’s *Low-Income Measure* over the *Low-Income Cut-Off*.^{xliii}

Statistics Canada’s *Low-Income Cut-Off* is a threshold that estimates the income at which households spend 20% of their income greater than the average family does on necessities, such as food, housing, and clothing. Family and community size are adjusted for, to reflect the cost of living discrepancies between rural and urban communities.^{xliv}

Statistics Canada’s *Low-Income Measure* is 50% (for a one-person household) of the median adjusted household income. The median is determined using calculated “equivalent household incomes,” which are household incomes divided by their adjusted size (the square root of the number of household members). Based on the equivalent household incomes, the median income of the population is determined. The percentage of said median, which is considered low-income, is likewise adjusted based on household size, to reflect the reality that cost of living varies between a two and six-person household.^{xlv}

LICO cost of living inputs have remained unchanged since 1992,^{xlvi} whereas LIM is based on the annual median income and was last updated in 2018.^{xlvii} For that reason, and due to its stronger empirical foundation, LIM is favoured by advocates and policy experts alike.

An honour system

Both the Ontario Energy Board and the Nova Scotia *Heating Assistance Rebate Program* avoid unnecessary policing of program participants through the use of an honour system. A representative of the Nova Scotia HARP counselled that the requirement of extensive supporting documents for program applications damages relationships and creates distrust between the program administrators and participants, and imposes barriers to participation.^{xlviii} Since the aim of assistance programs should be to remove barriers, they recommend such actions should be limited and infrequent. Further, for certain eligibility criteria, as is the case for Indigenous-targeted programs, there is no appropriate, nor efficient way, to verify self-identification.^{xlix} As such, eligibility criteria for those programs are affirmed on an honour system with little to no verification of information.

Program administration – Funding

Although, the rate rider used to fund BC Hydro’s Customer Crisis Fund initially received some intense public opposition,¹ a study commissioned by BC Hydro in May 2020 found that 67% of



British Columbians supported the continued use of a rate rider to fund the program.^{li} Rate riders have also been effectively applied in other jurisdictions. Both CARE and OESP used rate riders as their primary source of program funding.^{lii} Through consultation with the Ontario Energy Board, we learned that public opposition was avoided by having the rate rider appear simply as a “regulatory charge” on customers’ bills. Although OESP had some success utilizing a rate rider funding mechanism in this way, funding switched to the provincial tax base as a part of the Fair Hydro Plan, which had a goal of reducing energy costs province wide.^{liii}

Like OESP, many programs we have come across utilize government resources, whether federal, state, or provincial as their main source of funding. For example, Illinois’s *Percentage of Income Payment Plan*, as well as Colorado’s *Step Bill Discount* are subsidiaries of the US federal program LIHEAP (*Low-Income Home Energy Assistance Program*), which provides funding for the creation of programs aimed at alleviating the burden of energy bills. However, LIHEAP appropriations fell by over 33% between 1985 and 1989, and have generally been declining since. As a result, certain LIHEAP subsidiary programs have had to reduce capacity, or shut down altogether.^{liv} While single source funding has been shown to be successful in many cases, diversified funding protects programs from unforeseen changes to budgets, as programs like LIHEAP have experienced.

Other programs, such as the Salvation Army’s *HEAT Fund* in Nova Scotia, supplement their government funding with donations from both customers and the utility.^{lv} And while each of these forms of funding — rate rider, government, private, and donation-based — has its advantages and has been proven successful in various contexts, a diversified funding approach spreads the risk and can result in a more sustainable program overall.



Recommendations

Based on our jurisdictional scan of one-time and ongoing energy bill assistance programs, we have found that BC's current body of programs designed to relieve energy poverty are inadequate when compared to other jurisdictions in North America. As such, we recommend a new approach to energy bill assistance programming in British Columbia, and propose the following measures.

1. Redesign the existing Customer Crisis Fund, bringing it under the purview of the Provincial Government, while introducing inclusive and transparent eligibility criteria

Based on our review, the only energy support program currently existing in British Columbia — BC Hydro's one-time *Customer Crisis Fund* — does not provide effective support to all those that need it. As such we recommend the following changes be made to the program.

Credit amount

Our consultations with programs in other jurisdictions suggest that the current maximum support levels for BC Hydro's *Customer Crisis Fund* of \$500-600 are appropriate.

Program eligibility and administration

During its first year, BC Hydro's *Customer Crisis Fund* used only 40% of its planned budget, and rejected 64% of applicants. Such figures are not necessarily indicative of overfunding, and certainly not of lack of need, as 15% of BC households are currently facing energy poverty. The inability of the CCF to reach those it aims to assist highlights faults in its eligibility criteria and application approval process. As such, we recommend the following:

- The program and its eligibility criteria should be designed and administered by the BC Government rather than the utility, as they have considerably more experience in social assistance programming and a much clearer mandate to deliver results on BC's poverty reduction strategy.
- Support should be offered on the basis of demonstrated need, rather than household income.
- The program should not require imminent disconnection or ongoing arrears, i.e. the ideal program should prevent such circumstances, rather than necessitate them.
- The program should not require households to completely deplete their assets to be considered eligible.
- The program should outline a comprehensive set of qualitative circumstances that would make one eligible for receiving the support.



- E.g. having to choose between feeding one's family and paying energy bills, as is the case with the New Brunswick *Emergency Fuel Benefit*
- The program should ensure all eligibility criteria are clear and public facing.

2. Introduce a comprehensive ongoing bill assistance program in British Columbia, with the following key characteristics:

a. Administered by the BC Government, utilizing multi-source funding

We recommend that the programs receive multi-source funding to ensure long-term financial sustainability. Many programs have had success through a donation-based funding mechanism, when coupled with government support. As such, we recommend the following funding mechanisms:

- Source the majority of the funding from the provincial tax base
- Consider making use of public and private donations, e.g. customer and utility donations
- If a rate rider is utilized, it may be preferable to combine this charge with the existing rider levied for the *Customer Crisis Fund*, in order to avoid introducing new bill items

b. Applicable to electricity bills only

Based on April 2020 rates, it costs approximately three times more to heat with low-efficiency electric appliances than with natural gas in British Columbia. Limiting the proposed ongoing bill assistance program to electricity usage only would help close the gap between natural gas and electricity costs, thus reducing the energy burden where natural gas is not an option. Of added benefit, since virtually all energy customers receive electricity bills, broad-based awareness of the program could encourage fuel switching to electricity over the long-term, supporting the province's electrification goals.

c. Providing a sliding-scale percentage rebate based on household income in relation to the Low-Income Measure

Although percentage rebate programs do not provide a signal to conserve energy, we believe that they offer a more equitable bill assistance solution than a fixed credit program, and that energy conservation can be encouraged through complimentary low-income energy efficiency programs. As such, we recommend the implementation of an ongoing percentage rebate program, functioning on a sliding scale based on household income in relation to the Low-Income Measure. The rebates should be based on the last 12 months of usage, or in the case of a new customer, a regional average.



Based on the average assistance levels from our jurisdictional scan, we propose the following levels as guidelines for the base assistance:

Table 4: Proposed sliding-scale percentage rebate amounts for BC

Household Income (after tax)	Persons per household						
	1	2	3	4	5	6	7+
60% LIM or less	40%	40%	40%	40%	40%	40%	40%
61% – 80% LIM		35%	35%	35%	35%	35%	35%
81% – 100% LIM		30%	30%	30%	30%	30%	30%
101% – 150% LIM					25%	25%	25%

The lower end of percentage rebates for low-income customers in our scan of programs was around 20-25%, as is the case with Green Mountain Power and Xcel Energy’s *Energy Assistance Programs*.^{lvi} More generous programs, such as Seattle’s *Utility Discount Program* and FirstEnergy’s *Universal Service Program*, offer between 40-61% discounts to electrically heated households.^{lvii} We found that the average assistance level for percentage rebate programs is approximately 37%. Programs such as California’s CARE and Ontario’s OESP offer discounts similar to that average, with CARE offering 30-35% for electrically heated households, and OESP offering an average rebate of around 35%.^{lviii}

Based on the precedent set by these successful programs, our recommended assistance levels, which centre around 35%, should be appropriate as a starting point for program design.

- d. Providing increased rebate amounts to certain categories of customers, e.g. those heating their homes primarily with electricity

We propose that the rebate increase to 60%, based on the average savings from OESP’s energy intensive sliding scale,^{lxix} for households who additionally meet one of the following criteria:

- Households using electricity as the primary fuel for space heating
- Indigenous households
- Households using pre-approved medical devices that require electricity

Considerations

Were the preceding program to be implemented, the following would need to be considered:

- Program administrators should collaborate with the CRA to enable income verification for program availability as part of a single online application portal



- Participants should have the option to have their income verified manually, in order to address privacy concerns that some may perceive with an online system
- The assistance received through the programs should not be considered income for tax purposes

3. Streamline and modernize program eligibility criteria — including automatic eligibility and combined applications with other social assistance programs.

a. Automatic eligibility for recipients of social assistance

To ensure that the proposed bill assistance programs achieve their common goal of supporting vulnerable populations facing energy poverty, we recommend that in addition to the proposed eligibility criteria, recipients of social assistance (such as income assistance) be automatically eligible to participate in the proposed programs.

b. Amalgamation of application process for programs with overlapping criteria

To encourage a high uptake, and to further remove barriers to access, we recommend that any existing income assistance program with overlapping criteria to the proposed ongoing bill assistance program include an opt-in option to the latter in their application process.

c. Low-Income Measure versus Low-Income Cut-Off

LIM is favoured over LICO by advocates and policy experts alike as a more up-to-date framework. As such, we recommend that it be employed for eligibility determination for the proposed bill assistance program.

d. An honour system

Avoid extensive and intrusive scrutiny of applicants by having the opt-in criteria — such as electric heating and Indigenous identity —operated on an honour system.

4. Consider implementing an arrears forgiveness program in parallel with the above programs to remove the burden of past unpaid bills, which act as a barrier to future payments.

It is important that through their participation in the proposed ongoing bill assistance program, customers receive a clean slate, and be given the opportunity to escape the hardships of energy poverty. Thus, we recommend coupling the proposed ongoing assistance plan with an arrearage forgiveness program based on one of the following designs:

- Participants receive full arrear forgiveness upon joining the proposed ongoing protections program



- Participants receive credits equal to a percentage of their arrears for each consecutive month of bill payment, reducing the outstanding balance to zero over 12-24 months
- Participants receive a one-time credit toward the payment of their arrears

5. Introduce a comprehensive and justice-based disconnection policy with the eventual goal of eliminating non-payment disconnections for the most vulnerable households.

Having the proper protections against disconnections in place for vulnerable populations is paramount to the pursuit of energy security and broader energy justice in British Columbia. As such, we recommend the implementation of a comprehensive and justice-based disconnection policy, with the eventual goal of eliminating non-payment disconnections altogether, through the enactment of the following practices:

- Require written (either physical or electronic), and/or in person notices at least 14 days prior to disconnection, and then again at least 48 hours prior
- Require notice following disconnection
- Restrict disconnections to weekdays between 8:00am and 2:00pm, to allow for the possibility of same-day reconnections
- Eliminate reconnection fees
- Eliminate the requirement of balance payment in full prior to reconnection, i.e. allow partial payment plans to prevent disconnections and support reconnections
- Facilitate contact with social assistance and bill assistance programs
- Establish protection programs from disconnections for vulnerable groups



Closing thoughts

Energy poverty, which impacts around 15% of the BC population, can have profound impacts on human health and well-being, and is especially dangerous and prevalent in vulnerable communities. But, even as British Columbia experiences a rate of energy poverty that is higher than the national average, the province currently has no active program to reduce electricity bills on an ongoing basis for households in need — whether through an on-bill credit, rate subsidy, or separate rate structure. As such, the needs of thousands of households experiencing energy poverty are left unaddressed.

This report explores best practices for policies and programs that could be implemented within British Columbia to reduce the incidence of energy poverty. We studied a variety of low-income energy assistance programs in jurisdictions throughout Canada and the United States. We completed a detailed analysis of a selection of energy price reduction mechanisms — including emergency relief funds, rate subsidies, and rate reductions, as they were employed in diverse contexts.

Based on this work, we have made a number of recommendations aimed at significantly improving British Columbia's performance as an energy poverty actor. Drawing on the best, most practical and most cost-effective programs throughout North America, we have recommended a series of initiatives that could make a real difference in the lives of British Columbians. These recommendations include the redesign of the existing *Customer Crisis Fund*, and the introduction of a comprehensive governmentally administered on-going bill assistance program, among others.

It is our hope that the recommendations presented in this report can act as a point of departure for the provincial government and the British Columbia Utilities Commission to reassess and redesign their current suite of energy cost protections in the province.

Combined with improved energy efficiency policies — the topic of a forthcoming report by Ecotrust Canada — these measures can go a long way toward improving British Columbia's standing as a progressive jurisdiction on the issue of energy poverty.



Appendix I: Program summary

Program	Jurisdiction	Type	Link to Source
NHN	(CA) Manitoba	One-time	https://www.hydro.mb.ca/community/neighbours_helping_neighbours/
EFB	(CA) New Brunswick	One-time	https://www2.snb.ca/content/snb/en/services/services_renderer.200993.Emergency_Fuel_Benefit.html
HEAT Fund	(CA) Nova Scotia	One-time	https://salvationarmy.ca/maritime/home/programs/heat/
LEAP	(CA) Ontario	One-time	https://www.oeb.ca/rates-and-your-bill/help-low-income-consumers/low-income-energy-assistance-program
CHPI / EEF	(CA) Ontario	One-time	http://www.mah.gov.on.ca/AssetFactory.aspx?did=15972
SIS	(CA) Sask	One-time	https://www.saskatchewan.ca/residents/family-and-social-support/financial-help/saskatchewan-income-support-sis
LIHEAP	(US) Federal	One-time	https://www.disasterassistance.gov/get-assistance/forms-of-assistance/4468
ECIP	(US) California	One-time	https://www.benefits.gov/benefit/1540
HeatShare	(US) CO, MN, ND, SD, WI	One-time	https://centralusa.salvationarmy.org/northern/heatshare-program/
PIPPLIP	(US) Colorado	One-time	https://liheapch.acf.hhs.gov/dereg/states/cosnapshot.htm
Hardship Fund	(US) Pennsylvania	One-time	http://www.puc.pa.gov/general/pdf/USP_Evaluation-FirstEnergy.pdf
NBHEAP	(CA) New Brunswick	Seasonal	https://www2.gnb.ca/content/gnb/en/departments/finance/promo/heap/program.html
EFS	(CA) New Brunswick	Seasonal	https://www2.gnb.ca/content/gnb/en/services/services_renderer.200719.Fuel_Supplement.html
HARP	(CA) Nova Scotia	Sliding-scale	https://beta.novascotia.ca/apply-heating-assistance-rebate-heating-assistance-rebate-program
OESP	(CA) Ontario	Sliding-scale	https://ontarioelectricitysupport.ca/



Heating Allowance	(CA) New Brunswick	Fixed credit	https://www.pcd-cpmph.ca/directories/financial-aid/financial-aid-provincial-assistance/
BHEAP	(US) Colorado	Fixed credit	https://liheapch.acf.hhs.gov/dereg/states/cosnapshot.htm
EAP	(US) Colorado	Percentage	https://liheapch.acf.hhs.gov/dereg/states/cosnapshot.htm
RRRP	(CA) Ontario	Percentage	https://www.oeb.ca/oeb/Documents/Decisions/Dec_Rate_Order_RRRP_WMSC_20141219.pdf
CARE	(US) California	Percentage	https://www.cpuc.ca.gov/lowincomerates/
FERA	(US) California	Percentage	https://www.cpuc.ca.gov/lowincomerates/
PIPP/LEAP	(US) Colorado	Percentage	https://www.colorado.gov/pacific/cdhs/how-do-i-apply
BHEAP	(US) Colorado	Percentage	https://liheapch.acf.hhs.gov/dereg/states/cosnapshot.htm
EAP	(US) Colorado	Percentage	https://liheapch.acf.hhs.gov/dereg/states/cosnapshot.htm
PIPP/LIHEAP	(US) Illinois	Percentage	https://www.illinoislegalaid.org/legal-information/setting-utilities-percentage-income-payment-plan
PIPP	(US) Ohio	Percentage	https://development.ohio.gov/is/is_pipp.htm
PIPPLIP	(US) Rhode Island	Percentage	http://www.ripuc.ri.gov/eventsactions/docket/3400_WorkingGroup(5.28.03).pdf
SUDP	(US) Seattle	Percentage	https://www.seattle.gov/humanservices/services-and-programs/affordability-and-livability/utility-discount-program
EAP	(US) Vermont	Percentage	https://dcf.vermont.gov/benefits/eap/gmp
PCAP	(US) Pennsylvania	Percentage	http://www.puc.pa.gov/general/pdf/USP_Evaluation-FirstEnergy.pdf
NOEC	(CA) Ontario	Tax credit	https://www.canada.ca/en/revenue-agency/services/child-family-benefits/provincial-territorial-programs/province-ontario.html
OEPTC	(CA) Ontario	Tax credit	https://www.canada.ca/en/revenue-agency/services/child-family-benefits/provincial-territorial-programs/province-ontario.html
LITC	(CA) Saskatchewan	Tax credit	https://www.saskatchewan.ca/residents/taxes-and-investments/tax-credits/low-income-tax-credit



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