

Equity in Energy

Rethinking the Definition of Energy Poverty



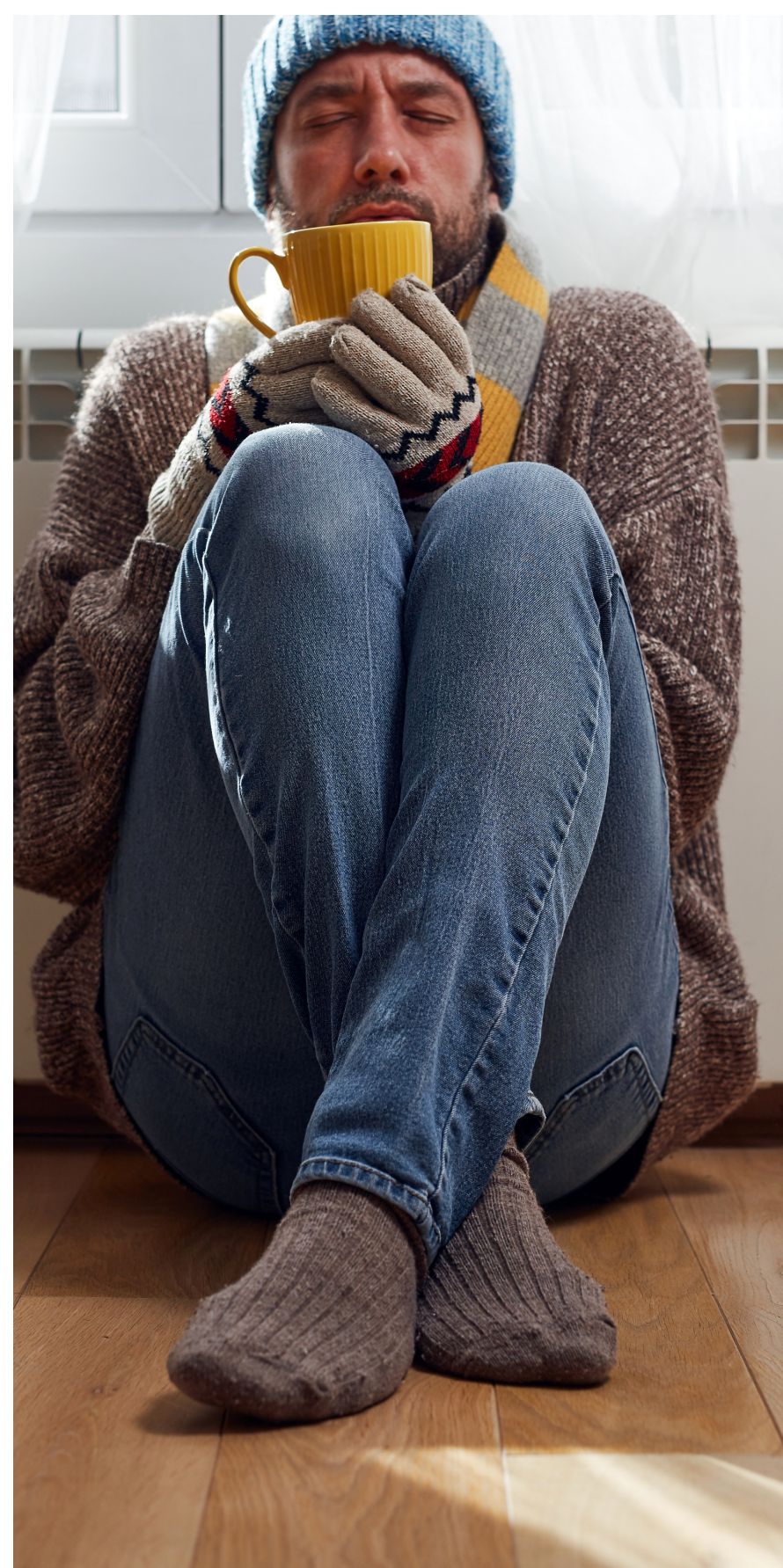
With living expenses continuously rising, energy poverty is becoming increasingly problematic across Canada. Energy poverty significantly affects people's quality of life, forcing them to make difficult choices between maintaining comfortable indoor temperatures and meeting other essential needs, such as home repairs, groceries and health-care expenses.

Traditional definitions of energy poverty focus only on economic factors. However, **energy poverty is also defined by social factors** like income, housing status, and location. By expanding the definition of energy poverty to include these social factors, we can understand and deal with the problem more effectively.

What is energy poverty?

Energy poverty in Canada is commonly defined as households that **spend about six per cent or more of their after-tax income on home energy services**. Households over this six per cent threshold are more likely to experience higher home energy costs, negatively affecting their quality of life. **At least one in five Canadian households is affected by energy poverty**. This issue is particularly acute in Atlantic Canada, which faces the highest rates of energy poverty, as shown below in **Figure 1**.

Canada's household energy consumption is **among the highest globally**. One contributing factor is the inefficiency of many homes, leading to excessive energy usage. This inefficiency stems from infrastructure issues like poor insulation, resulting in energy loss throughout the house.



“Energy poverty needs to be prioritized if the transition is to be fair and just.”

- Efficiency Canada, 2022

Why do we need to redefine energy poverty?

Energy poverty is when families can't afford enough energy to meet their needs. It is not just based on how much they spend or use. When money is tight, families often use less energy, so spending might not show how much they need. This is sometimes referred to as “heat or eat” where some families need to make the difficult choice between paying energy bills or putting food on the table.

Redefining energy poverty to include social factors is essential for a more complete understanding of this complex issue. Energy poverty does not just stem from a lack of access to energy. It's also intertwined with social dynamics such as income levels, where you live, if you are a renter or homeowner, if you are retired, on a fixed income, etc. By broadening the definition to encompass social factors, we acknowledge that energy poverty is not only an infrastructure problem but also a symptom of societal inequities. This approach allows for better solutions that address the root causes of energy poverty.

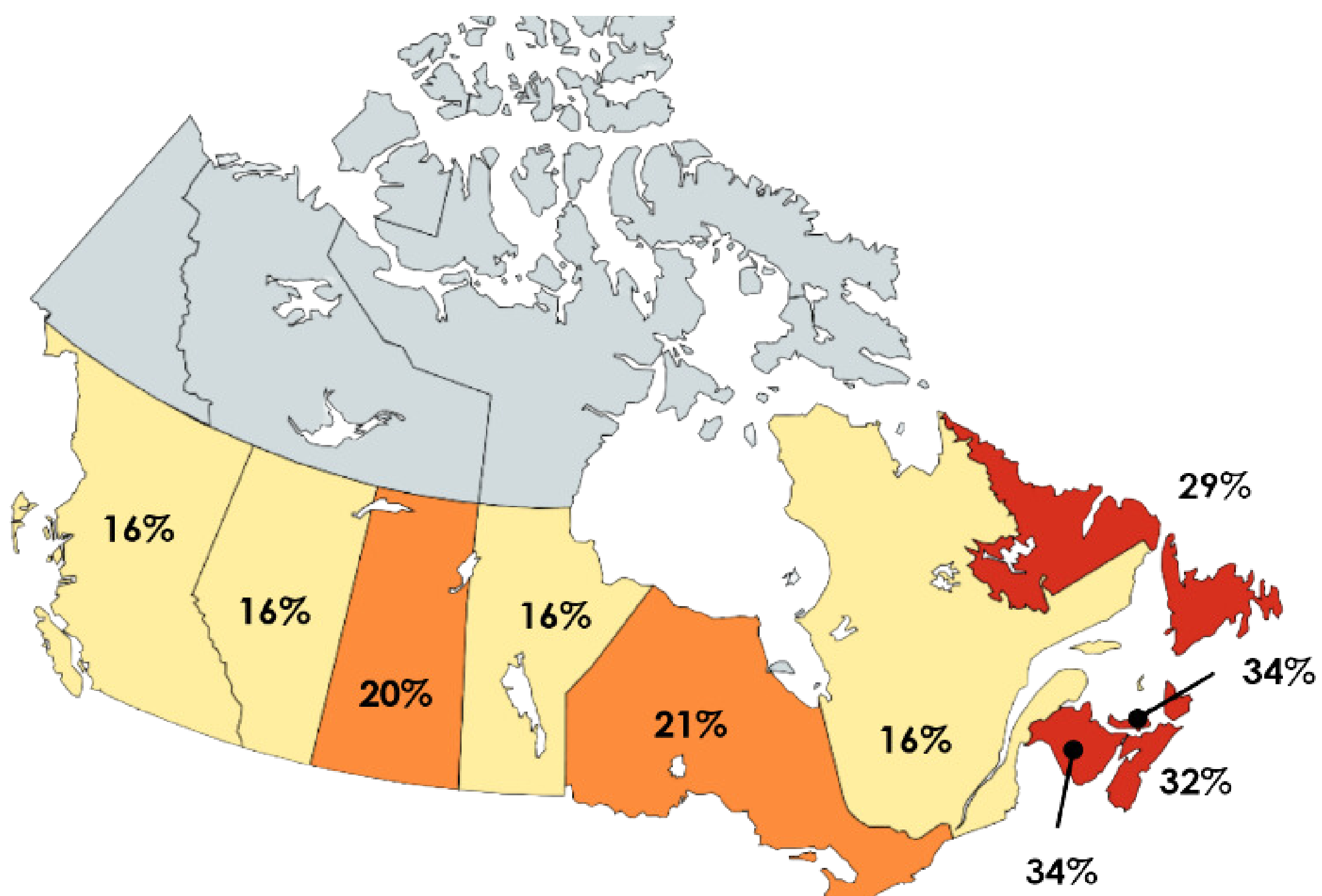


Figure 1: Percentage of households experiencing energy poverty by province. Adapted from Riva et al., 2021, data from the 2017 Survey of Household Spending.

“A just transition is highly risky for households facing energy poverty who enter into the energy transition at a disadvantage”

- Middlemiss, 2022

The Social Aspects of Energy Poverty

The age and condition of the house play a role in energy costs



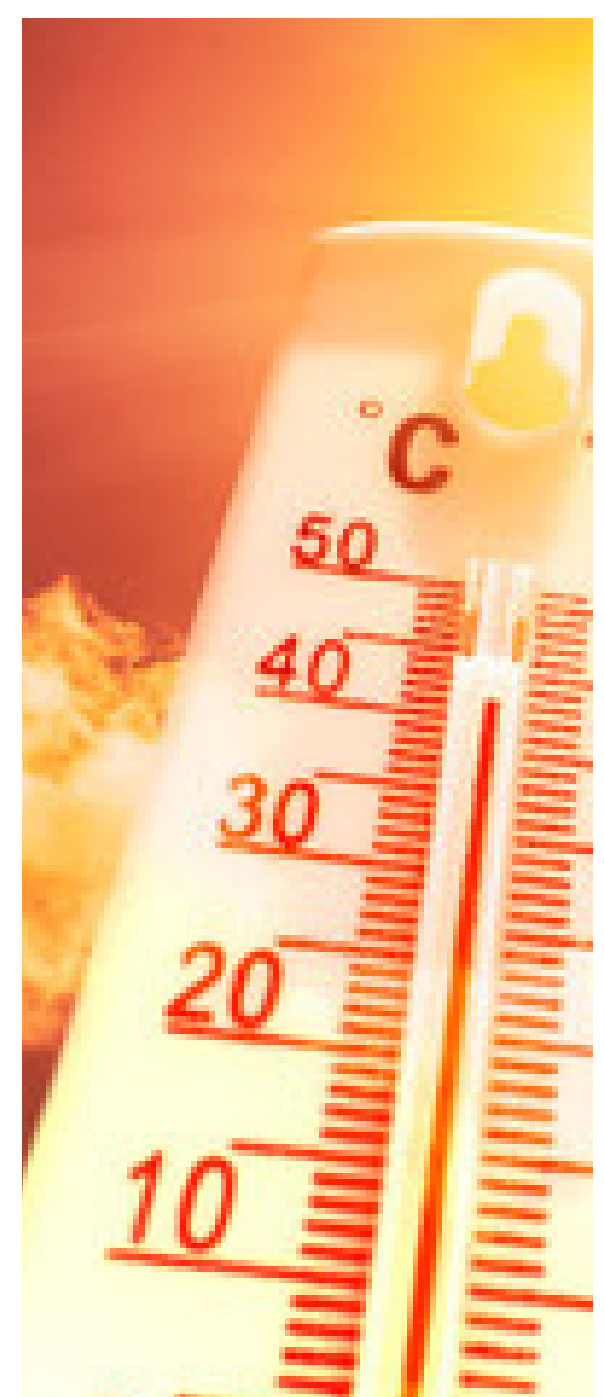
The condition of housing, including insulation, heating systems and overall energy efficiency, directly impacts energy expenses. Poorly insulated homes may require more energy for heating in the winter or cooling in the summer, leading to higher bills.

Many homes in New Brunswick were built before 1960 and lack modern energy-saving features like good insulation, efficient heating/cooling systems and insulated doors and windows. Having an [energy-efficient home](#) means it's ready for unexpected events like heat waves or cold snaps that drive energy usage. Energy-saving technologies and appliances can lower energy usage, and it is important to make these solutions widely available to help reduce energy poverty.

Climate disaster preparedness

With more extreme weather on the rise, it's crucial to be ready for unpredictable changes in the climate that might make us use more energy than expected at home. During extreme heat waves or cold snaps, you might need more heating or cooling to maintain comfortable indoor temperatures, leading to increased energy consumption and higher bills.

When you're already struggling to afford energy, these sudden spikes in costs can make it even harder to meet other essential needs. Implementing energy-saving measures or having an emergency plan can help mitigate the financial impact of extreme weather events and reduce the risk of falling deeper into energy poverty.



Some groups are more vulnerable than others

Vulnerable populations, such as the elderly, or those with chronic illnesses, may be more susceptible to energy poverty due to specific heating or cooling needs. For example, some health conditions require additional equipment that relies on energy use, such as a home dialysis device. Energy poverty can impact health and well-being, particularly during extreme weather conditions requiring people to use more energy to live comfortably indoors. Energy poverty has been [reported](#) to affect one's quality of life as it contributes to mental and physical stresses.

People with fixed incomes could find themselves torn between paying energy bills or covering costs for food and medicine. Given the ongoing rise in electricity rates, it is essential to understand the impact of these increases on fixed-income households, in particular the elderly.

Renters are also vulnerable

Renters have typically been excluded from the energy poverty definition. However, research indicates that renters whose rent does not cover energy expenses are [most susceptible to energy poverty](#), followed by homeowners and then renters whose rent includes some portion of their energy costs. Renters often face limitations in making significant upgrades to their units, such as replacing heating systems, leading to inefficient energy features in their homes.

Transportation costs should be included

One major difference between rural and urban communities is transportation costs. People in rural communities typically need to drive more as there are fewer public transit options, and volatile fuel prices can impact households that are living paycheck to paycheck. Transportation contributes considerably to household energy use, so [future research should look into fuel costs for transportation, especially in the context of energy poverty.](#)





The energy source matters

The type of heating you use can significantly impact your energy poverty situation. If you rely on expensive heating sources like baseboard heating or home heating oil, it can exacerbate your financial struggles by leading to high energy bills, especially during colder months.

However, adopting more modern and efficient heating technologies, such as a heat pump, can help alleviate this burden. [Heat pumps](#) are often more cost-effective to operate than traditional heating systems, as they can efficiently extract heat from the air or ground to warm your home. By switching to a more efficient heating option, households can reduce their energy expenses and mitigate the risk of energy poverty, ultimately improving their financial stability and well-being.

Policy Recommendations

Consider social factors when addressing energy poverty

Energy poverty is unique to each person. Dealing with energy poverty requires a comprehensive strategy that accounts for various factors, especially as we move toward a renewable energy future. Focusing on social aspects is essential to create a fair and sustainable energy future.

Canada, including Atlantic Canada, needs to transition to renewable energy in a cost-effective and equitable way. Policymakers should prioritize affordability, energy efficiency and fairness to ensure everyone benefits from the move to cleaner energy. Implementing supportive government policies is crucial in addressing energy poverty.

Established in 1969, the Conservation Council of New Brunswick is the province's leading public advocate for environmental protection.

A member of the United Nations' Global 500 Roll of Honour, we work to find practical solutions to help families and citizens, educators, governments and businesses protect the air we breathe, the water we drink, the precious marine ecosystem and the land, including the forests, that support us.



Conservation Council of New Brunswick

180 St. John Street

Fredericton New Brunswick

Canada E3B 4A9

T. (506) 458-8747

E.info@conservationcouncil.ca

www.conservationcouncil.ca

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[/conservationcouncilnb](https://instagram.com/conservationcouncilnb)