

Energy Poverty Profile for Waterloo Region

Prepared by: Reep Green Solutions with support from Kambo Energy Group

Prepared for: Region of Waterloo

One in six households in Waterloo Region are experiencing energy poverty.

[Reep Green Solutions](#) and [Kambo Energy Group](#) worked with Allison Ashcroft, Canadian Urban Sustainability Practitioners, to develop data visualization dashboards to analyze and better understand energy poverty in Waterloo Region. With support from Acacia Consulting providing the technical Tableau development expertise, these dashboards are based on custom datasets acquired from the 2016 Statistics Canada census.

The dashboards are available [here](#)

What is Energy Poverty?

In Canada, households pay on average 3% of their after-tax income on energy. Households that spend double this average — 6% — are paying a disproportionate amount of their income towards energy costs and are considered to be experiencing energy poverty¹.

$$\text{Energy Cost Burden [\%]} = \frac{\text{Energy Expenditures [\$]}}{\text{After-Tax Income [\$]}}$$

= 3% for households with **median** national home energy cost burdens

= 6% or **2x median**, are defined as households with high home energy cost burdens*

*quantitative proxy for 'Energy Poverty'

What are the Impacts of Energy Poverty?

Households experiencing energy poverty may face significant barriers to paying for their home energy costs.

Households in this situation often face challenges including:

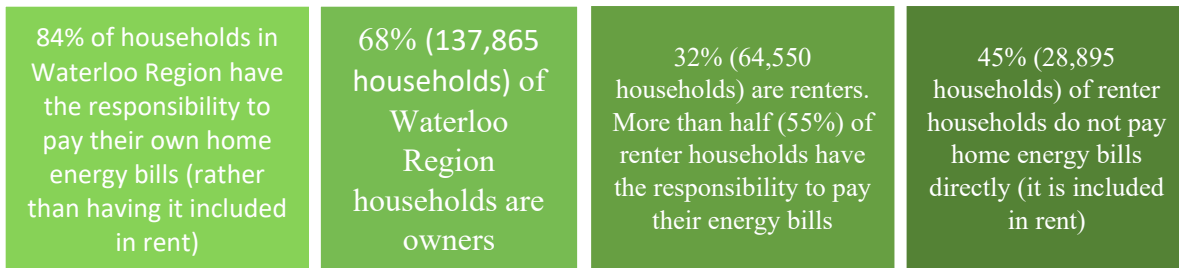
- Discomfort from living in cold and drafty homes.
- Disruptions from abrupt utility shutoffs, such as inability to cook and spoiled food.
- Sacrificing essentials such as groceries and medication in order to keep up with energy bills.
- Higher stress and poor mental health outcomes for adults.
- Difficulty participating fully in community life.

¹ This definition of energy poverty and the image below are from the Canadian Urban Sustainability Practitioners website [EnergyPoverty.ca](https://www.energy-poverty.ca/).

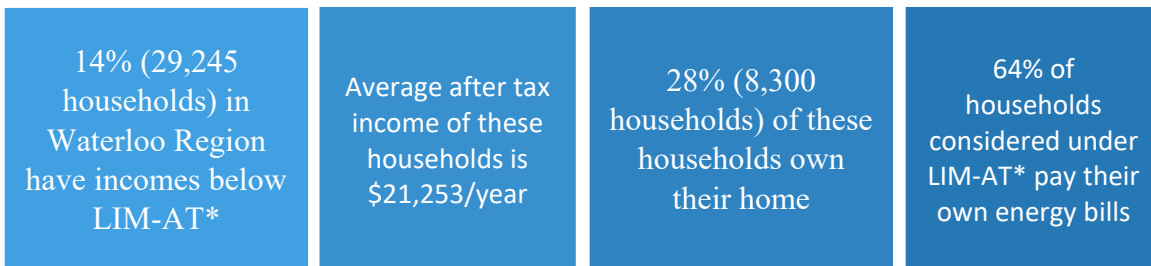
Energy Poverty in Waterloo Region:

| | Number of households | Annual energy bill compared with median (Median = \$2,491/yr) | Annual income compared with median (Median = \$86,128/yr) | Number of households who own their homes |
|---|----------------------|---|---|--|
| Spend more than twice the national average of their income on their energy costs | 32,010 | \$3,390 (35% higher) | \$37,439 (57% lower) | 22,555 |
| Spend more than three times the national average of their income on their energy costs | 11,930 | \$3,808 (53% higher) | \$23,658 (73% lower) | 7,365 |
| Spend more than five times the national average of their income on their energy costs | 6,060 | \$4,001 (61% higher) | \$15,840 (82% lower) | 3,240 |

Owner versus Renter Breakdown:



Households with incomes below Low-Income Measure After Tax (LIM-AT)*:



***Low-Income Measure After Tax (LIM-AT)** refers to whether an individual, family, or household had an income below a specific low-income line. It is the statistic used most frequently and as a key indicator by Statistics Canada.

Demographics of households in Energy Poverty:

| Waterloo Region - General | Total | Indigenous | Racialized | Recent immigrant | Lone parent | Senior |
|---|--------------|-------------------|-------------------|-------------------------|--------------------|---------------|
| # of households | 170,675 | 4,025 | 27,750 | 4,905 | 15,115 | 42,570 |
| # in energy poverty | 32,010 | 695 | 5,815 | 1,015 | 4,610 | 11,235 |
| % of demographic of households in energy poverty | 19% | 17% | 21% | 21% | 30% | 26% |

| Waterloo Region - Low Income (LIM-AT) | Total | Indigenous | Racialized | Recent immigrant | Lone parent | Senior |
|---|--------------|-------------------|-------------------|-------------------------|--------------------|---------------|
| # of households | 18,675 | 555 | 5,090 | 1,185 | 3,815 | 4,105 |
| # in energy poverty | 13,155 | 320 | 3,375 | 730 | 2,690 | 3,015 |
| % of demographic of households in energy poverty | 70% | 58% | 66% | 62% | 71% | 73% |

Data Limitations:

While the dashboards provide a good initial indication of the extent of energy poverty in the Region, there are limitations to the data collection. This is particularly true for demographics that have a lower incidence of filing annual taxes and/or completing and submitting census data (as the source of the data is based on answers to questions on the long-form census and CRA information). To learn more about data limitations and other notes, click [here](#).

Special Thanks

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