



# LOW-INCOME ENERGY BURDEN

## MIDDLETON, WI

Energy affordability is a challenge for everyone in this era of supply disruptions, inflationary pressures, and extreme weather events. This is a special problem for low-income households who may spend 9% or more of their income on energy bills. Such high “energy burden” impacts housing affordability, as well as the health and well-being of families. And it is a climate justice issue as well since without programs and policies designed to assist lower-income renters and homeowners, their energy burden is likely to increase dramatically in the coming years as climate change accelerates. A just transition to a fossil-fuel free future must include the most economically vulnerable.

### DEFINITIONS

#### Energy Burden:

The percentage of gross household income spent on energy costs.

#### AMI = Area Median Income

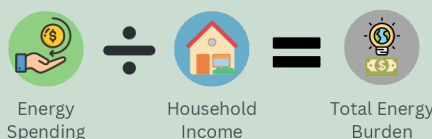
Midpoint of household income in a region

#### Low Income:

Households with less than 80% AMI (<80% AMI)

#### Extremely Low Income:

Households with less than 30% AMI (<30% AMI)



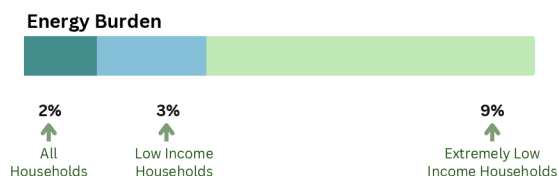
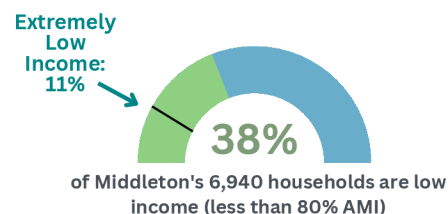
Greater than **6%** is a high energy burden.  
Greater than **10%** is a severe energy burden



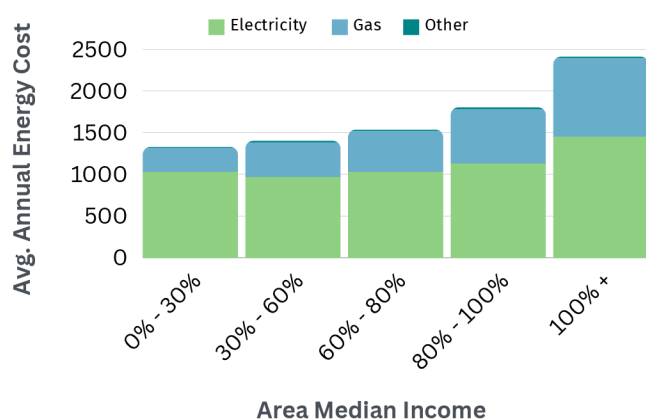
Information in this report comes from the U.S. Department of Energy's LEAD Tool. It draws data from the U.S. Census Bureau's 2022 American Community Survey to **estimate** energy costs for households at different income levels across the country.

### KEY FINDINGS

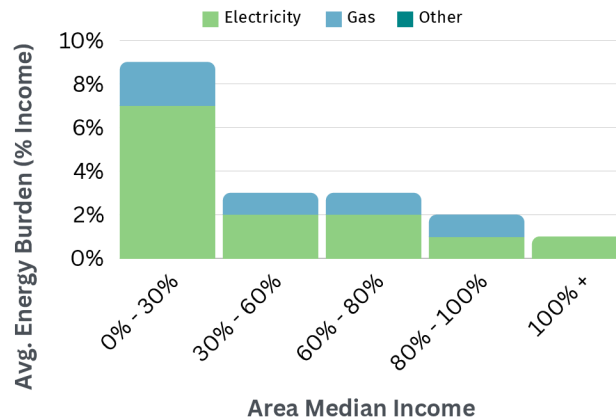
- Overall, the average energy burden for households in Middleton is 2% - lower than the state average of 3%.
- In Middleton, the average energy burden for low-income households (<80% AMI) is **3%** - 50% higher than the city's overall average.
- Extremely low-income households (<30% AMI) have an average energy burden of **9%** -- 9 times greater than the wealthiest households.
- On average, the lowest income households' utility bills are only about **\$90** a month less than those paid by high income households, despite living in smaller spaces. Fixed charges make up a higher proportion of low-income customers' bills and their homes tend to be less energy efficient.



Average Annual Energy Costs by Income Level



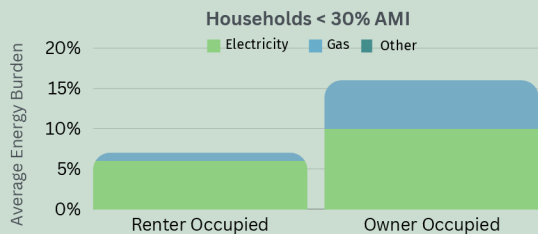
Average Energy Burden by Income Level



## CHARACTERISTICS OF HOUSING WITH HIGH ENERGY BURDEN

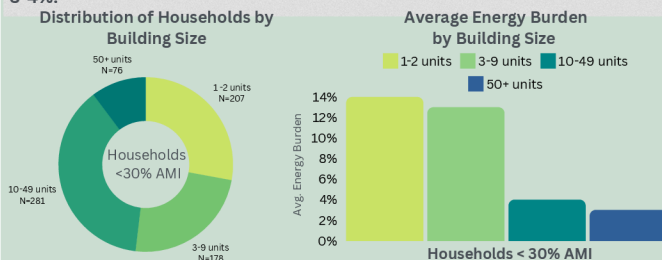
### Renters vs. Owners

In general, Middleton homeowners have higher energy costs than renters but this discrepancy is particularly large for extremely low-income households (<30% AMI). On average, the approximately 187 homeowners at this income level have a severe energy burden of 16%.



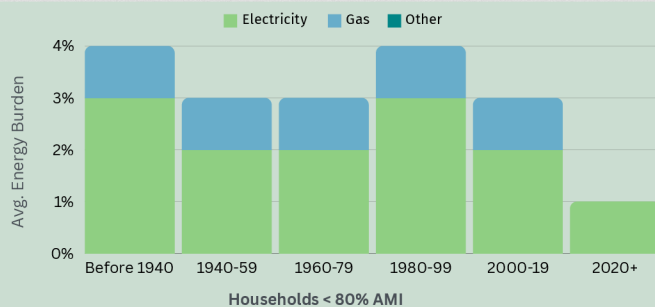
### Type and Size of Building

Approximately half of extremely low-income households in Middleton (<30% AMI) live in single-family or smaller multi-family buildings (2-9 units) and experience a severe energy burden of 13-14%. In comparison, the households at this income level that live in larger-sized apartment buildings (10-50+ units) have a more affordable average energy burden of 3-4%.



### Building Age

Building age can also significantly impact the overall energy burden for extremely low-income households. The higher energy burden for housing units built before 2020 may be due to poor weatherization, older appliances, and/or less efficient heating and cooling systems. These older buildings are also likely to have other health and safety problems, such as poor indoor air quality or lead paint.



## RACIAL AND ETHNIC DISPARITIES

Although the LEAD does not provide in-depth information about the racial and ethnic dimensions of high energy burden, the data do indicate that people of color are disproportionately represented among households with high average energy burdens. For example, African Americans make up 4% of the overall population in Middleton but 10% of households with 9% average energy burden. This aligns with the findings of a recent study of major urban centers across the U.S., which found that **Black and Hispanic households experience significantly higher energy burdens on average than their White (non-Hispanic) counterparts.**



ADrehobj, A. L. Ross, and R. Avala. 2020. How High Are Household Energy Burdens? Washington, DC: American Council for an Energy-Efficient Economy.

## LOCAL SOLUTIONS TO HIGH ENERGY BURDEN

### RECOMMENDATIONS FOR LOCAL GOVERNMENT AND POLICYMAKERS

#### Center energy burden reduction in city policies

- Conduct further research on energy burden in Middleton and share the results with the public.
- Make energy burden reduction an integral part of affordable housing and community health programs.
- Set specific energy burden reduction targets for the city and develop evidence-based plans to achieve these goals. See [St. Paul's climate plan](#) for an example.
- Increase energy efficiency requirements for city-subsidized affordable housing developments.

#### Reach out to energy-burdened communities

- Include these communities in energy and climate planning processes.
- Make information available in multiple languages and formats.

#### Help city residents reduce their energy costs

- Advocate with local utilities to energy bill payment assistance and efficiency programs.
- Promote existing energy bill payment assistance and energy efficiency programs currently available through local utilities, non-profits, and state and federal sources.
- Publicize the new tax credits and discounts available through the Inflation Reduction Act (IRA).
- Collaborate with non-profits and businesses to scale up successful pilot projects to enable landlords with low-income tenants to make energy improvements (e.g., the [Efficiency Navigator](#) program).

#### Pursue federal and state funding to develop new programs

- Utilize new funding opportunities available through the IRA and the Bipartisan Infrastructure Law (see the [Wisconsin Office of Energy Innovation webpage](#) for current grant opportunities).
- Examples of innovative programs in other Midwestern cities:
  - [Milwaukee's Energy Efficiency Program](#) provides low-interest loans and a bonus incentive to finance energy efficiency improvements.
  - [Minneapolis's rental energy transparency ordinance](#) requires landlords to disclose energy costs to prospective tenants.

### RECOMMENDATIONS FOR PROPERTY OWNERS

- New tax credits for energy efficiency, electrification, and renewable energy projects are now available through the Inflation Reduction Act (IRA). See details at [daneclimateaction.org/what-you-can-do/federal-funding](https://daneclimateaction.org/what-you-can-do/federal-funding).
- Low and middle-income homeowners and landlords:
  - Two new Inflation Reduction Act (IRA) rebate programs will provide discounts of 50%-100% for energy efficiency and electrification projects. The first program, the Home Efficiency Rebate, is now available through [focusonenergy.com/ira-homes](https://focusonenergy.com/ira-homes).
  - Apply now for low-income energy bill payment assistance and home weatherization programs offered by the state ([energyandhousing.wi.gov/Pages/Energy.aspx](https://energyandhousing.wi.gov/Pages/Energy.aspx)), [Focus on Energy](#), the [Keep Wisconsin Warm/Cool Fund](#), and local utilities.

### RECOMMENDATIONS FOR LOW AND MIDDLE-INCOME RENTERS

- Talk to your landlord or property manager about their plans for using IRA incentives to improve energy efficiency, add renewable energy, and implement other building upgrades that will lower your energy bills.
- Apply now for energy bill payment assistance available through the government programs listed at [energyandhousing.wi.gov](https://energyandhousing.wi.gov), your utility, and other groups. See resources listed at [daneclimateaction.org/documents/Admin-PDFs/RenterHandout.pdf](https://daneclimateaction.org/documents/Admin-PDFs/RenterHandout.pdf).