

LOW-INCOME ENERGY BURDEN

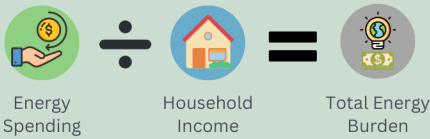
MIDDLETON, WI

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 11% 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.



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

AMI = Area Median Income

Midpoint of household income in a region

Low Income:

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

Extremely Low Income:

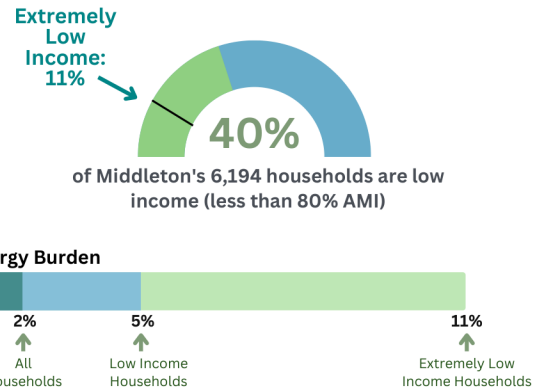
Households with less than 30% AMI (<30% AMI)



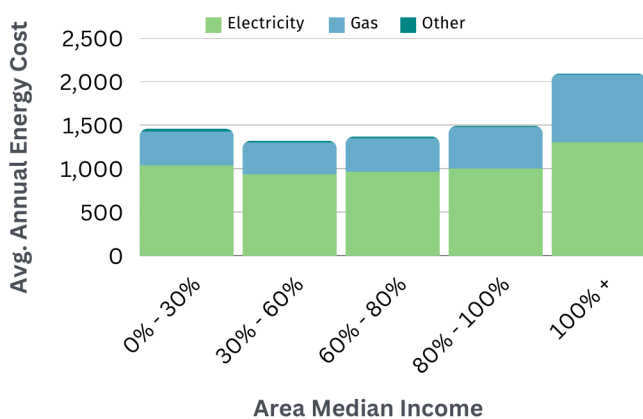
Information in this report comes from the U.S. Department of Energy's LEAD Tool. It draws data from the U.S. Census Bureau's 2020 American Community Survey to **estimate** energy costs for households at different income levels across the country.

KEY FINDINGS

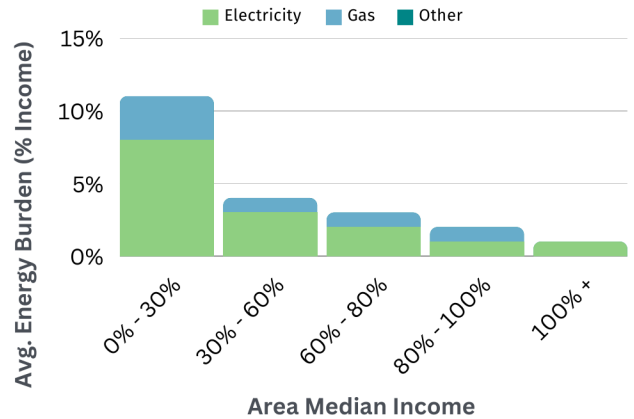
- Overall, the average energy burden for households in Middleton is 2%. The average energy burden across Wisconsin is 2%.
- In Middleton, the average energy burden for low-income households (<80% AMI) is 5% - more than twice that of the overall average energy burden.
- Extremely low-income households (<30% AMI) have an average energy burden of 11% -- 11 times greater than the wealthiest households.
- On average, the lowest income households' annual utility bills are only about \$636 less than those paid by high income households, despite living in smaller spaces, suggesting that these homes are significantly less energy efficient.



Average Annual Energy Costs by Income Level



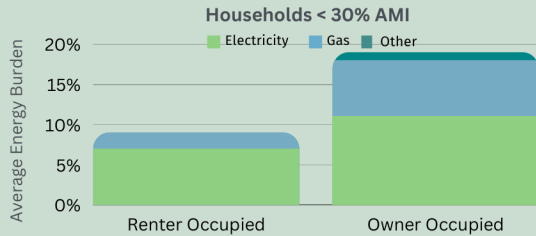
Average Energy Burden by Income Level



CHARACTERISTICS OF HOUSING WITH HIGH ENERGY BURDEN

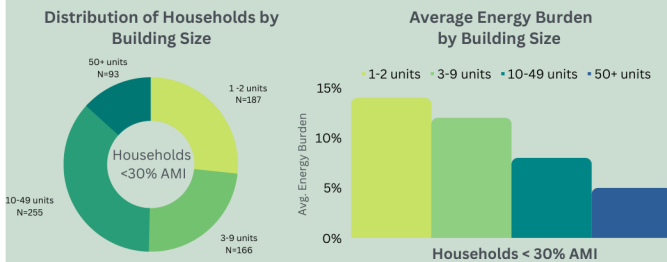
Renters vs. Owners

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 170 homeowners at this income level have a severe energy burden of 19%.



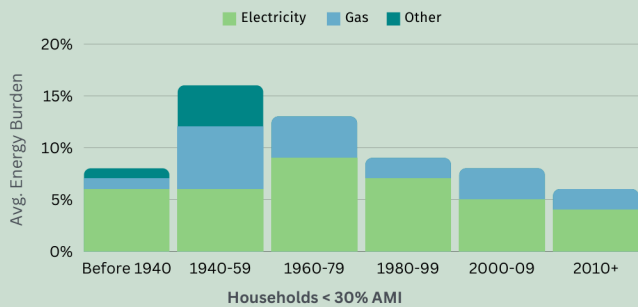
Type and Size of Building

About 27% of extremely low-income households in Middleton (<30% AMI) live in single-family or two-unit dwellings and have a severe energy burden of 17%. In comparison, the 73% of households at this income level that living in medium and large size apartment buildings have a smaller energy burden of only 9%.



Building Age

Building age significantly impacts the overall energy burden for extremely low-income households due to the higher costs of heating with natural gas. The severe energy burden of 12% for housing units built before 1960 (~70 of 700 units) may be due to poor insulation and air sealing, and building deterioration. These older buildings are also likely to have other health and safety problems, such as 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 burden (49% BIPOC vs. 11% in the overall population), especially Black households (28%). 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.**



Adrehobl, A., L. Ross, and R. Ayala. 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

Make reduction of energy burden a central part of city policies

- Conduct further research on energy burden in Middleton and share the results with the public.
- Integrate energy burden reduction into affordable housing and community health programs.
- Set specific energy burden reduction targets for all city residents and develop evidence-based plans to achieve these goals. See [St. Paul's climate plan](#) for an example.

Help energy-burdened communities meet their needs

- Include these communities in the climate planning process.
- Make information available in multiple languages and formats.
- Increase energy efficiency requirements for city-subsidized affordable housing developments.
- 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).

Help city residents get state and federal money to reduce their energy costs

- Promote energy bill payment assistance available through www.energyandhousing.wi.gov.
- Connect residents to state energy efficiency programs such as [Focus on Energy](#) and Weatherization Assistance for low-income housing.
- Publicize the Inflation Reduction Act (IRA) funding - see RewiringAmerica.org and the DOE's [Energy Savings Hub](#) for resources.
- Partner with local stakeholders to develop a "navigator program" to support property owners through the challenging process of implementing energy efficiency projects.

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 further details).
- 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

- Inflation Reduction Act (IRA) tax credits for energy efficiency, electrification, and renewable energy projects are now available. See the [IRA Savings Calculator](#) at RewiringAmerica.org and the DOE's [Energy Savings Hub](#).
- Low and middle-income homeowners and landlords:
 - The IRA rebate program will provide discounts of 50%-100% for heat pumps, electrical upgrades, and other energy efficiency purchases starting in 2024.
 - Apply now for home weatherization programs through [Project Home](#) and [Focus on Energy](#), and energy bill payment assistance from your utility, the [Keep Wisconsin Warm Fund](#), and the programs listed at www.energyandhousing.wi.gov.

RECOMMENDATIONS FOR LOW AND MIDDLE-INCOME RENTERS

- The Inflation Reduction Act (IRA) rebate program will offer discounts of 50%-100% for purchases of personal window heat pumps, induction cook-tops, and other appliances starting in 2024. See the [IRA Savings Calculator](#) at RewiringAmerica.org for details and the DOE's [Energy Savings Hub](#) for details.
- 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 through your utility, the [Keep Wisconsin Warm Fund](#), and at energyandhousing.wi.gov.