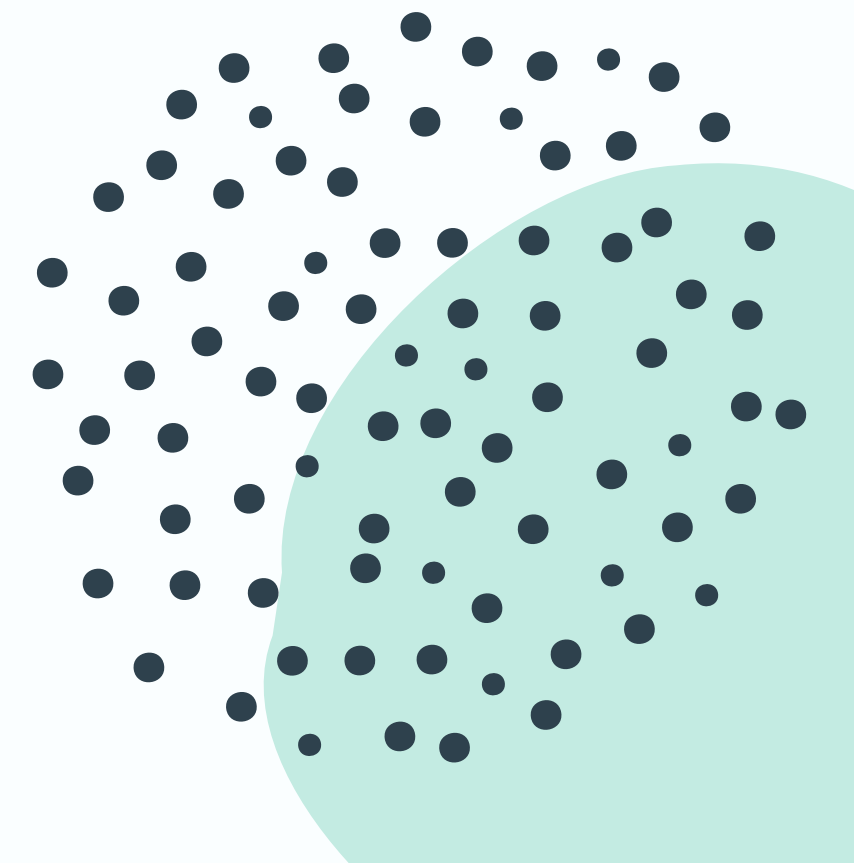


**MIDWEST ENERGY SOLUTIONS
CONFERENCE**

FEBRUARY 1-3, 2022

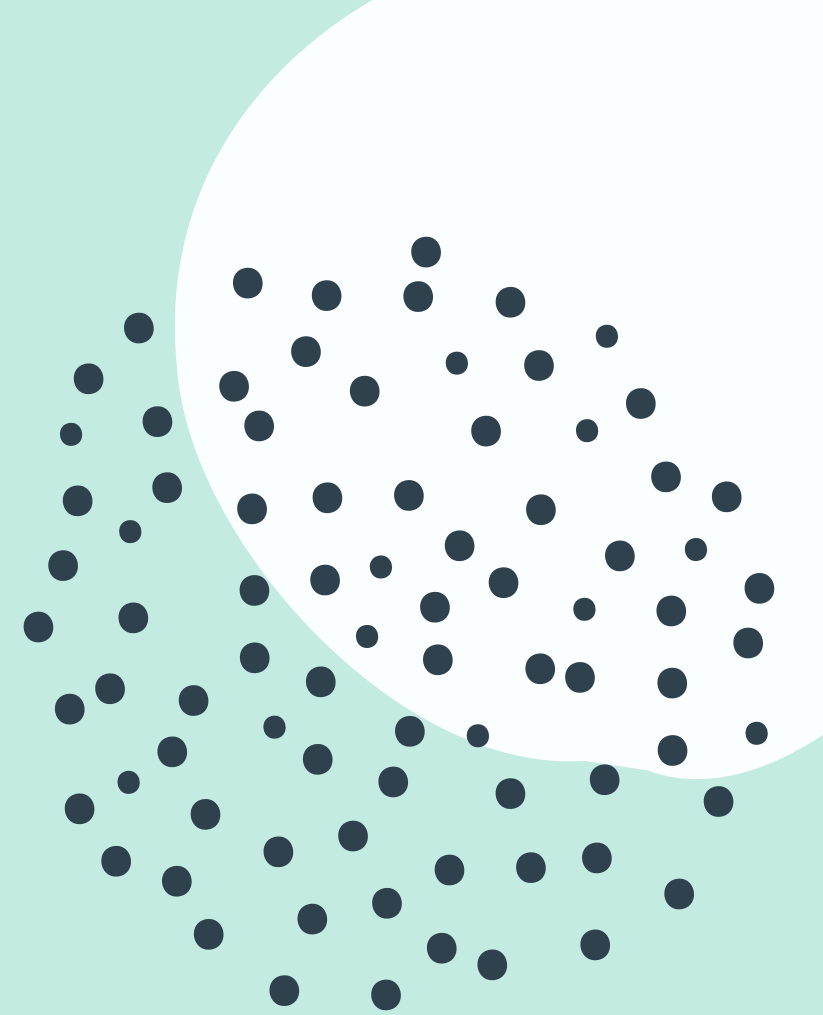
**ENERGY ROADBLOCKS AND STRATEGIES
FOR SUCCESS**



Today's Presentation

DISCUSSION POINTS

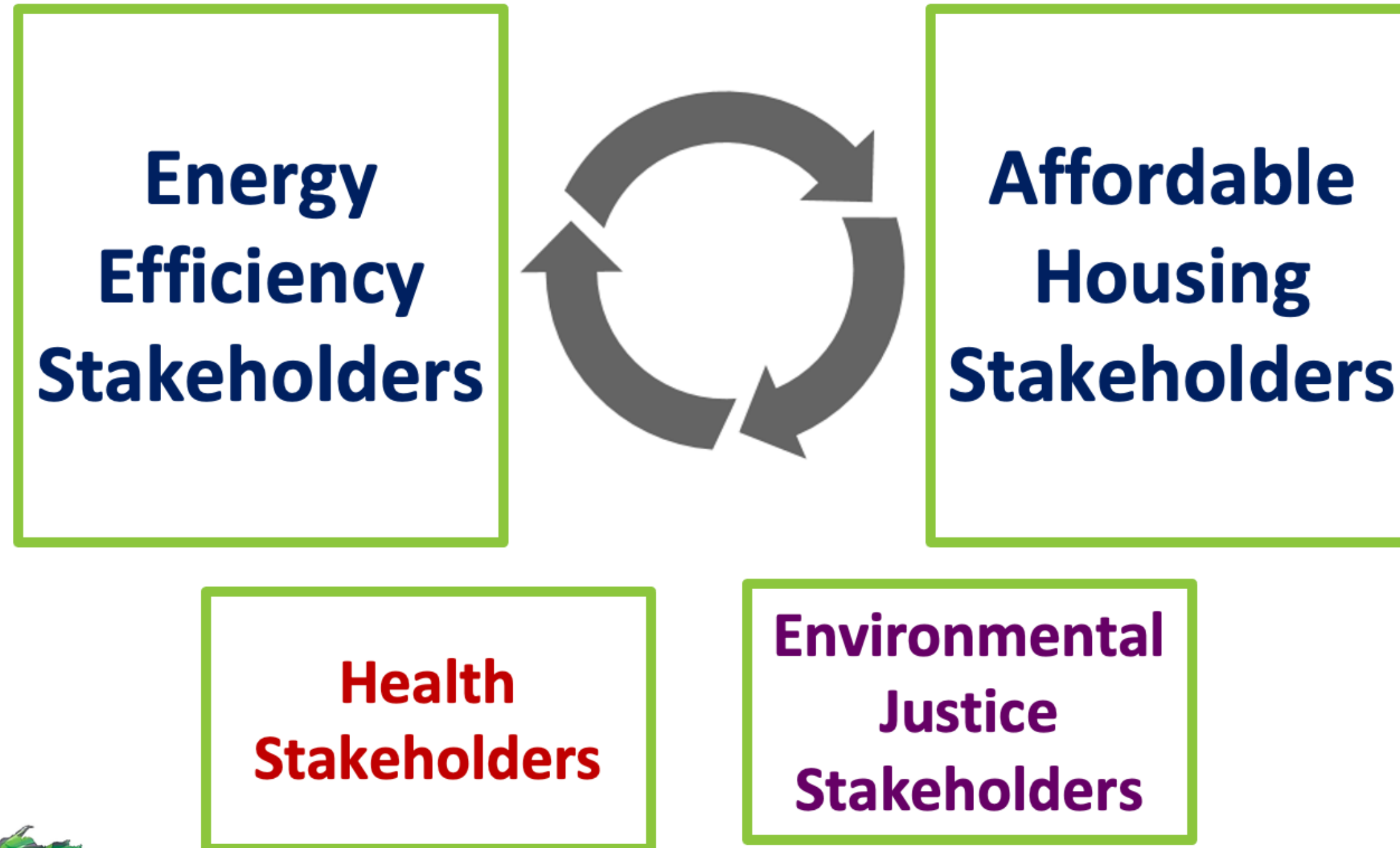
- Overview
- Affordable Energy
- Energy Landscape
- Energy Inequity
- Summary
- Wrap-Up



Vision: All Michigan Residents live in efficient, affordable, safe, and healthy homes

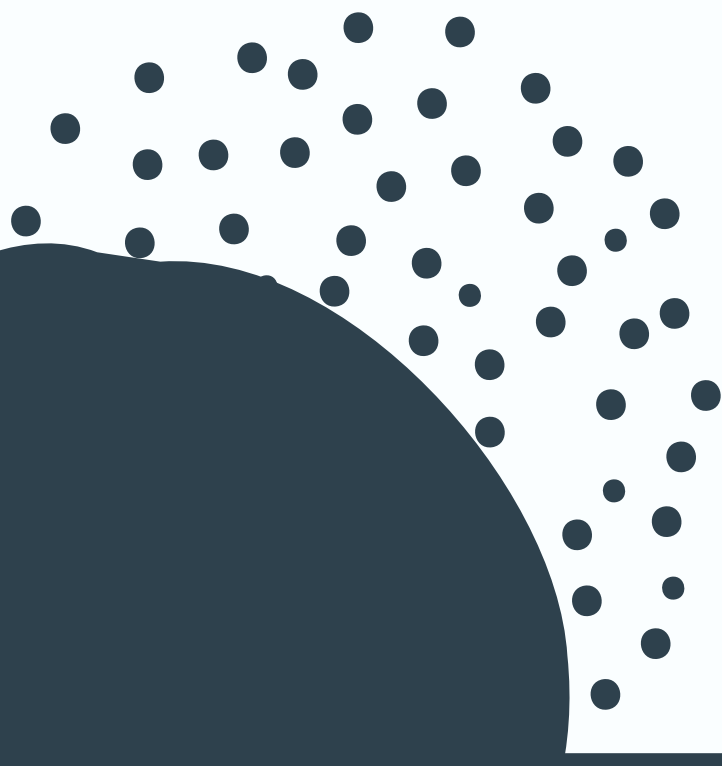
Mission: To coordinate and optimize energy efficiency and clean energy offerings to improve energy affordability and quality of life for Michigan's low-income residents, and to improve program design, accessibility, and delivery

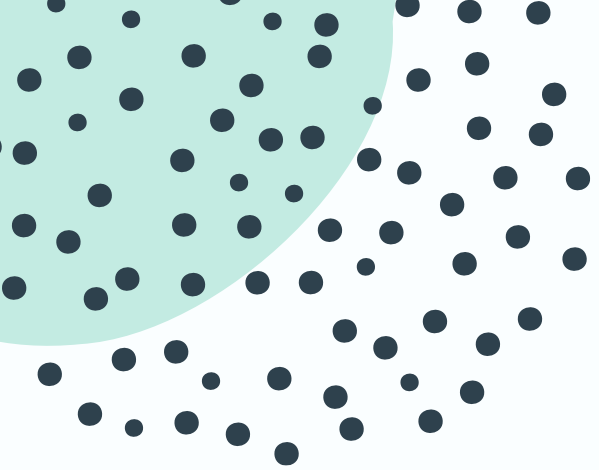
Our Approach



EMPOWERING FAMILIES THROUGH AFFORDABLE ENERGY

FOR MANY FAMILIES WITH LOW INCOMES, HOUSING COMES WITH HIGH ENERGY BILLS. AN AFFORDABLE RENT OR MORTGAGE PAYMENT OFTEN MEANS LIVING IN A HOME WITH OUTDATED HEATING AND COOLING SYSTEMS, SPARSE INSULATION, LEAKY WINDOWS OR OTHER STRUCTURAL ISSUES THAT LEAD TO ENERGY WASTE. HIGH ENERGY BILLS CAN PUSH HOUSING COSTS INTO THE UNAFFORDABLE REALM AND DIMINISH HEALTH. AS THE COVID-19 CRISIS CONTINUES TO STRESS FAMILIES' HEALTH AND FINANCES, STRENGTHENING HOUSEHOLD ENERGY SECURITY IS MORE IMPORTANT THAN EVER TO ENSURE SAFE HOUSING FOR ALL MICHIGANDERS AND PROMOTE THRIVING COMMUNITIES.





Michigan's Energy Landscape

Housing, including utilities, is generally considered affordable when it costs no more than 30% of household income. Michigan families living below 50% of the federal poverty level (FPL), however, spend more than that on energy bills alone. Difficulty paying for energy needs isn't limited to the families with the very lowest incomes.

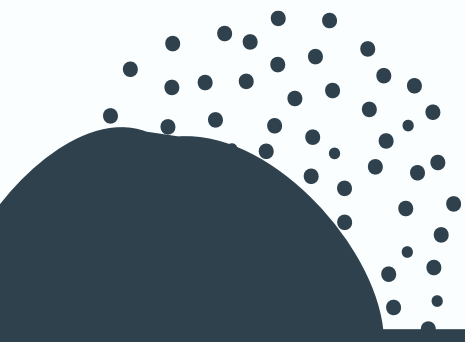
Households up to 200% of the Federal Poverty Level (FPL) face a gap of \$1,315 per year between actual energy bills and what they can afford to pay.



Source: Fisher Sheehan & Colton, Home Energy Affordability Gap 2020.

Michigan's Energy Landscape (continued)

- Before COVID-19 emerged, help with utility bills was consistently one of the most common reasons people contacted Michigan 2-1-1.
- 2-1-1; a free service that connects state residents to local resources for a variety of basic needs. Michigan 2-1-1 has received more than 55,600 calls from people seeking help with electric bill payment as of May 1, 2021.
- Federal and state programs fund a credit to offset winter heating bills, emergency relief for households facing an arrearage or imminent utility shutoff, assistance with budgeting, and weatherization services to improve energy efficiency.
- These vital supports are chronically underfunded: the federal Low Income Home Energy Assistance Program, for example, reaches fewer than 1 in 6 Michigan households who meet the income eligibility requirements.



Household Energy Security is Critical to Housing Stability

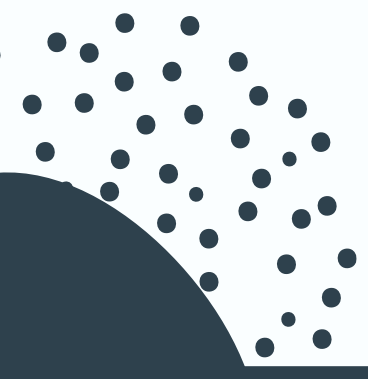
Utility shutoff is the main reason for rental property condemnations in Michigan, meaning tenants who can't pay their energy bills often face eviction—a frequent precursor to homelessness. Utility disconnection and eviction can both trigger the loss of some types of rental assistance, including Housing Choice Vouchers. To avoid literal homelessness, families that can't afford their energy bills may have to move into overcrowded homes or couch surf, which are both conducive to the spread of contagious illnesses and create other school- and work-related challenges.

Energy Inequity by Housing Type, Race and Ethnicity

Home energy burden (the share of income spent on energy bills) varies by housing ownership status, race and ethnicity. These disparities are due in large part to historical and ongoing systemic factors that disproportionately leave families with low incomes and people of color with fewer housing options that are both high-quality and affordable.

Energy bills for renters living in multifamily apartment buildings are an average of 20% higher per square foot than for owners living in single-family homes. This can contribute to a higher overall housing cost burden for renters, placing them at higher risk for eviction and frequent moves that can interfere with school and work.

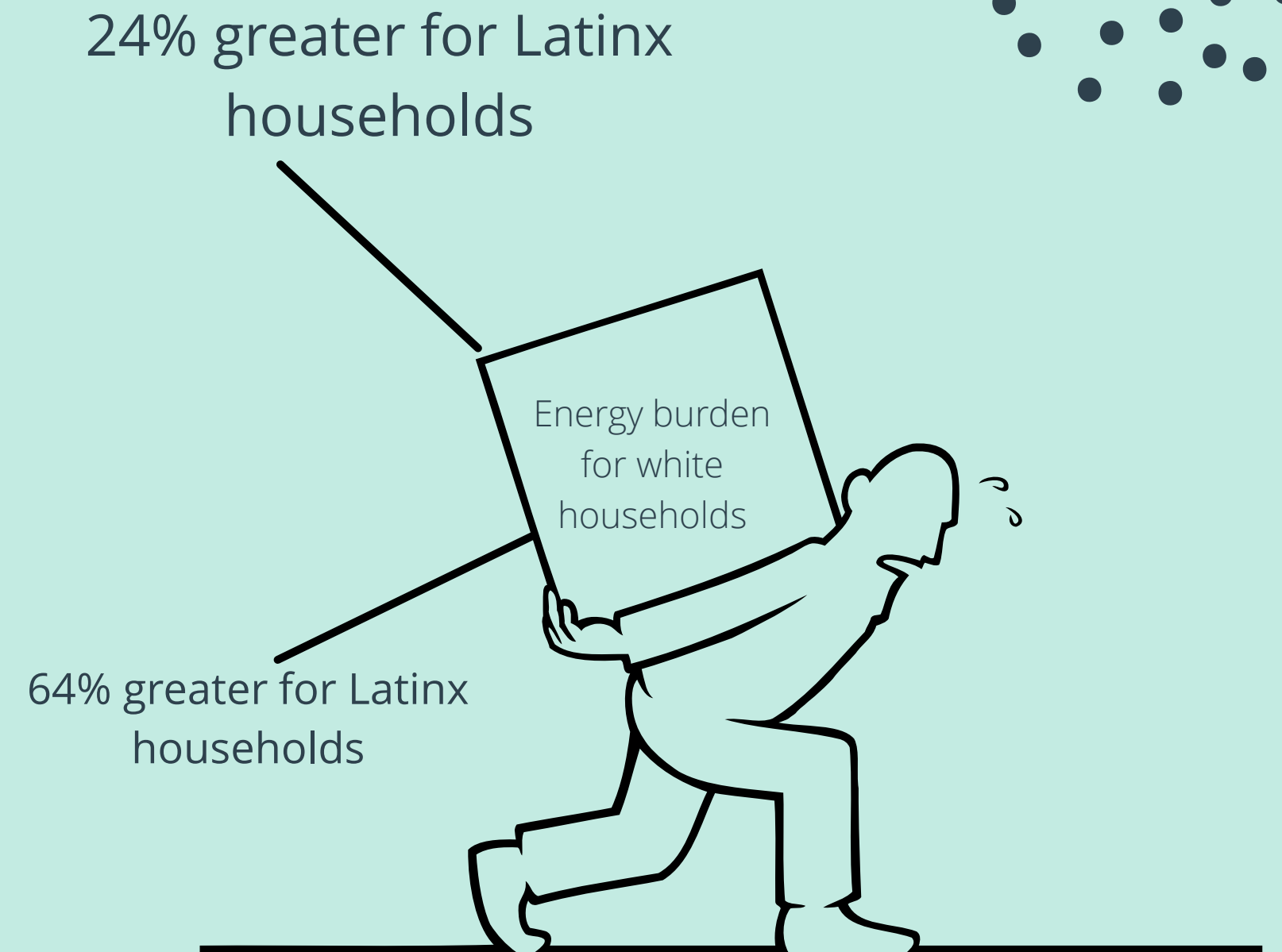
At the same time, renters have lower access to energy efficiency measures that could reduce their utility bills, improve their health and stabilize their housing situations. Landlords may not want to take on the cost of efficiency improvements if energy bills are in tenants' names. Furthermore, in multifamily buildings, all living units, common areas and building-wide systems must be addressed in order for individual families to see a meaningful benefit.



Energy Inequity by Housing Type, Race and Ethnicity (continued)

Today white households consume more energy overall, African American and Latinx families live in less- efficient homes and consume more energy per square foot.

The continuing combination of lower incomes and lower- quality housing requires households of color to spend a larger share of their income on energy bills than White households do.

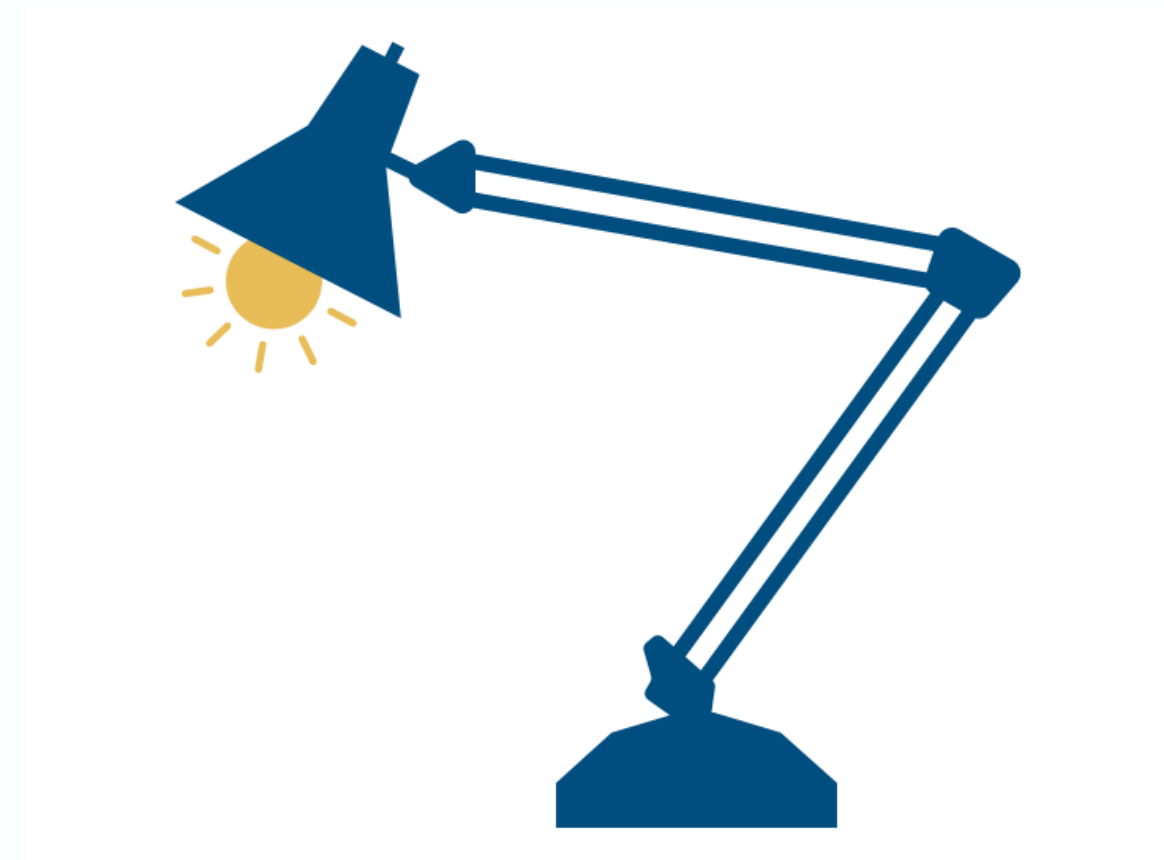


Source: American Council for an Energy Efficient Economy and Energy Efficiency for All.

Energy Inequity by Housing Type, Race and Ethnicity (continued)

Broader economic forces can prevent utility customers with low incomes from taking advantage of even the simplest measures to reduce their home energy use and lower their bills. For example, energy-efficient light bulbs are more widely available and less expensive at big box stores, which are typically located in more affluent areas. Residents of high-poverty neighborhoods must rely on smaller retailers like corner stores and pharmacies, which cannot offer the wide variety and low prices of large retailers.

In Wayne County ZIP codes, the cost to upgrade from an incandescent light bulb to a more efficient light-emitting diode increases with the share of households living in poverty



Percentage of Households Below the Federal Poverty Level & Upgrade Cost

Less than 10%	-> \$3.10
10% - 20%	-> \$4.05
20% - 40%	-> \$5.99
40% or more	-> \$6.24

Source: Reames, T.G., Reiner, M.A., & Stacey, M.B. (2018). An incandescent truth: Disparities in energy-efficient lighting availability and prices in an urban U.S. county.

Due to these same economic forces, Michiganders of color are more likely to live in high-poverty neighborhoods with low access to energy-efficient products like light bulbs—another factor contributing to their higher energy burden.

PERCENTAGE OF THE POPULATION LIVING IN HIGH-POVERTY NEIGHBORHOODS



Source: 1990 and 2000 Census, 2005-2009 and 2009-2013 ACS.



Plugging into Health and Well-Being

Affordable energy makes quality housing attainable and helps families avoid budget tradeoffs that threaten their health and safety. Lower energy bills and healthier living conditions save lives and promote academic achievement and economic security.

Affordable Energy is Essential to:



Safe Home Temperature



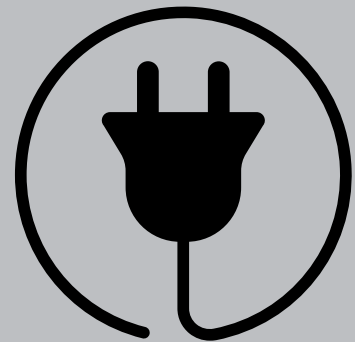
Healthy Diet Choices



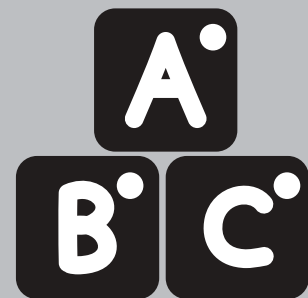
Medicine Storage



Household Cleanliness



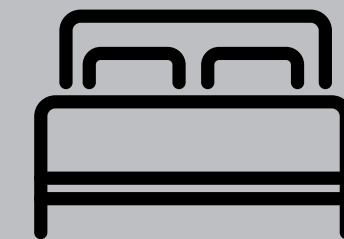
Powered at-home Appliances



Childcare



Personal Hygiene



Adequate Sleep

Summary of Benefits of Energy Efficiency Improvements

MICHIGAN FAMILIES



Reduces the burden of energy bills for low-income Michigan residents.



Creates healthier, more comfortable living environments that can reduce instances of illnesses like asthma, which can be a major cause of missed work and school.



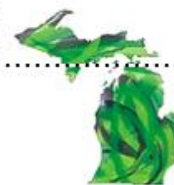
Reduces the high energy demand that drives up energy prices, thereby helping to contain energy costs for all Michigan residents.



Reduces operating and maintenance costs for owners of affordable multifamily properties, freeing up capital for preserving Michigan's affordable housing stock.



Improves local economies by creating clean energy jobs and enables residents to redirect spending to other non-energy necessities.



**ENERGY
EFFICIENCY
FOR ALL**

EcoWorks Our Programs

PROGRAM

Youth Energy Squad

We grow the next generation of green leaders by engaging young people from underrepresented backgrounds in designing hands-on, place-based projects that make their homes, schools, and communities more sustainable for everyone.



PROGRAM

Eco-D

We provide residents and community organizations with resources to achieve healthy, affordable, resilient, and energy secure homes and neighborhoods.



PROGRAM

Strategic Community Initiatives

We develop custom-fit climate and energy solutions for municipalities, school districts, health systems, small businesses, and non-profit organizations.



EcoWorks Strategic Community Initiatives



Technical:

- Project analyses and scoping for energy efficiency, renewables, storage, microgrids
- Utility benchmarking
- Utility rates and incentives optimization
- Greenhouse gas inventories
- Comprehensive energy and climate plans
- Facility energy and water assessments
- Clean energy financing, including revolving loan funds
- Organizational policies and continuous improvement



Project Management:

- Owner's representation and impartial contract review
- Start-to-finish oversight
- Stakeholder coordination
- RFP development & bid specifications
- Financing strategies and recommendations
- QA/QC and project evaluation



Engagement:

- Integration into master plans, capital improvement plans, and procurement policies
- Ambitious climate and energy goal-setting
- Meeting facilitation for leadership and constituents
- Professional development and training
- Inclusive, engaging community outreach

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