



# Addressing High Energy Burdens in Rural Communities

Energy Efficiency as a Tool for Rural Prosperity

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The American Council for an Energy-Efficient Economy is a nonprofit 501(c)(3) founded in 1980. We act as a catalyst to advance energy efficiency policies, programs, technologies, investments, & behaviors.

Our research explores economic impacts, financing options, behavior changes, program design, and utility planning, as well as US national, state, & local policy. Our work is made possible by foundation funding, contracts, government grants, and conference revenue.

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**ACEEE**  
American Council for an Energy-Efficient Economy

# ACEEE's Rural Energy Initiative

- Historic focus on agricultural energy efficiency
- Equity in energy efficiency program delivery
- **Goals**
  - **Identify successful rural EE programs and policies**
  - **Disseminate best practices**
  - **Provide technical assistance**
  - **Convene and connect**
- Partnerships with utilities, policymakers, and efficiency program implementers.



# What is an energy burden?

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$$\text{Energy burden \%} = \frac{\text{Annual energy costs}}{\text{Annual household income}}$$

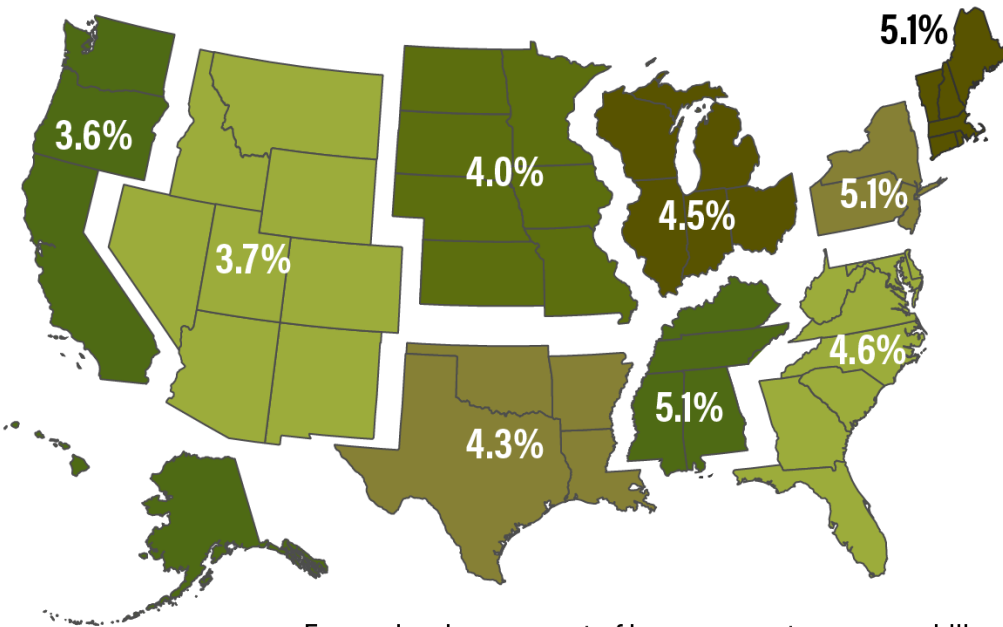
- **Drivers:** Physical, economic, policy, behavioral
- **Impacts:** Health, economic, social

*E.g. (\$200/month) \* 12 months / \$60,000 = 4%*

# Why do energy burdens matter in rural communities?

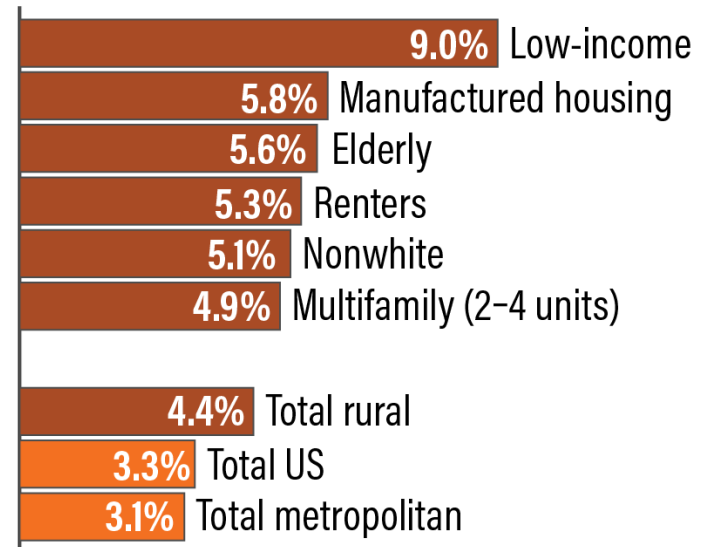
## Rural energy burden

### By region



Energy burden: percent of income spent on energy bills

### By demographic\*



\*Based on national figures.

# Energy efficiency and rural energy burdens

- Long-term solution to high burdens
- Provide bill savings for households
  - Can lower burdens by 25% and save households up to \$400/year
- Additional benefits such as improved public health and job creation.

Low energy prices do not equate to affordable bills!



# Services provided by energy efficiency programs

1. Identify energy savings opportunities.



Photo Source: Rachel Norton, MACED



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1. Identify energy savings opportunities.
2. Leverage funding or financing to lower up-front costs for efficiency improvements.



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# Services provided by energy efficiency programs

1. Identify energy savings opportunities.
2. Leverage funding or financing to lower up-front costs for efficiency improvements.
3. Access technical experts to implement efficiency technologies.



Photo Source: Rachel Norton, MACED

# A snapshot of federal funds for rural energy efficiency

- U.S. Department of Agriculture
  - Rural Energy Savings Program (RESP)
  - Rural Energy for America Program (REAP)
  - Energy Efficiency and Conservation Loan Program (EECLP)
- U.S. Department of Energy
  - Weatherization Assistance Program (WAP)
  - State Energy Program (SEP)
  - Industrial Assessment Centers (IACs)



# ACEEE's Rural Energy Conference

## *Driving Rural Prosperity Through Clean Energy*

- February 25, 2020
- Chicago, Illinois
- Topics:
  - EE program design
  - Renewable energy
  - Electrification
  - Rural economic development
  - Broadband access
  - Resilience and disaster recovery



# Thank you!

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# Challenges to rural efficiency program delivery

- Low population density
- Financial constraints
- High costs
- Unfamiliarity with energy efficiency
- Shortage of local workers and lack of expertise
- Insufficient outcome data
- Lack of broadband access