



Lighten the Energy Burden

Targeting Energy Efficiency Programs on Underserved and Overburdened Customers

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Context: the cost squeeze

- **Fast-growing energy demand, constrained supply**
→ *increasing energy costs*
- **Constrained household finances + cuts to safety net programs (LIHEAP, WAP, SNAP)**
→ *decreasing ability to pay*

Key definitions

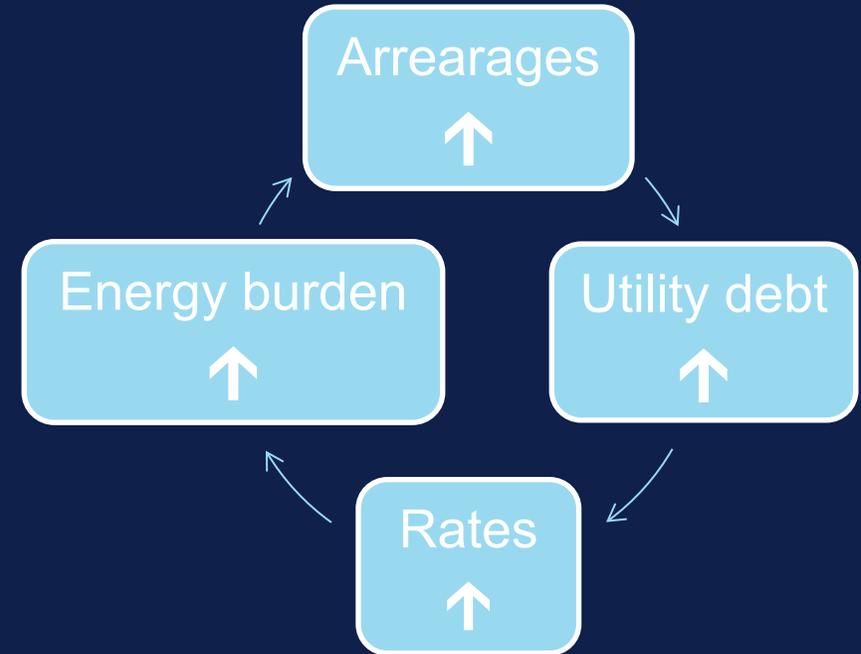
High energy burden: electricity + gas bills > 6% of household income—widely used threshold

- Per-fuel thresholds of >3% for electricity or gas alone

Arrearages: unpaid, overdue utility bills

- Analyzed as of December each year (2017–2023)

Context: the debt spiral



CT Office of Consumer Counsel (Sep 2024): “*the costs of uncollectible outstanding balances for hardship-designated customers ...are historically significant this year, in large part due to the lingering impacts of the COVID pandemic.*” → **\$70M in 2024 rate increases due to uncollectible balances**

Context

As building new power gets harder, US utilities seek record rate increases



Politics Government Health Environment Money Crossing Connecticut Explain

Loss of Revolution Wind could cost ratepayers \$500M a year, DEEP says



by John Moritz

September 9, 2025 @ 5:00 am Updated

September 11, 2025 @ 3:20 pm



Utilities Have Requested \$29 Billion in Rate Hikes for 2025, Surpassing 2024

Press · July 10, 2025

CULTURE MUSIC PODCASTS & SHOWS SEARCH

ECONOMY

Electricity prices are climbing more than twice as fast as inflation

AUGUST 16, 2025 · 5:00 AM ET

"Utility Bills Are Rising"
Q2 2025 Update
Skyrocketing Utility Bills Amidst Scorching Summer Heat
JULY 2025

Methods and data

- Merged 900+ datasets into a relational database, covering program tracking and customer account data and account-level demographic data

Data	Description	Time period	Source
Program tracking data	Energy efficiency program tracking records Key data fields: electric & gas savings, incentives, project address, account numbers	2017-2023	Eversource and Avangrid
Customer billing data	Electric and gas consumption and billing data for all customers Key data fields: monthly bills , consumption, arrearages	2017-2023	Eversource and Avangrid
Customer demographic data	Residential demographic data for all Eversource customers Key data fields: household income , dwelling type, and renter/owner status	2023	Eversource
Environmental Justice Community (EJC) data	List as of 2023 of (1) distressed municipalities as designated by state of CT, and (2) defined Census block groups where 30% of the population is living below 200% of the federal poverty level	2023	CT Department of Energy and Environmental Protection (DEEP)

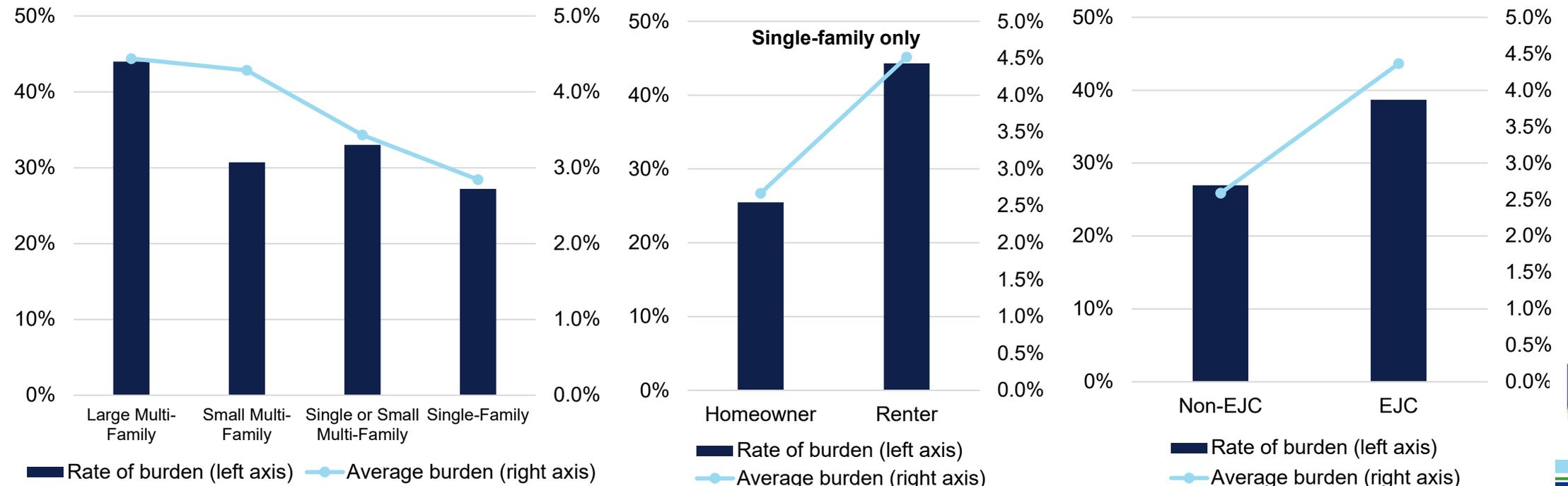
Key Findings

High energy burden is common, particularly among multifamily, renter-occupied and EJC households

Based on 2023 data, approximately 40% of households in Eversource territory meet the definition of high energy burden—non-transportation energy expenses >6% of income

- Approximately 30% of homes (~264,000 homes) are electricity-burdened (electric costs >3% of income)
- Approximately 25% of homes (~43,000 homes) are gas-burdened (gas costs >3% of income)

Electric* energy burden, Eversource only, 2023



*Gas burden shows the same patterns

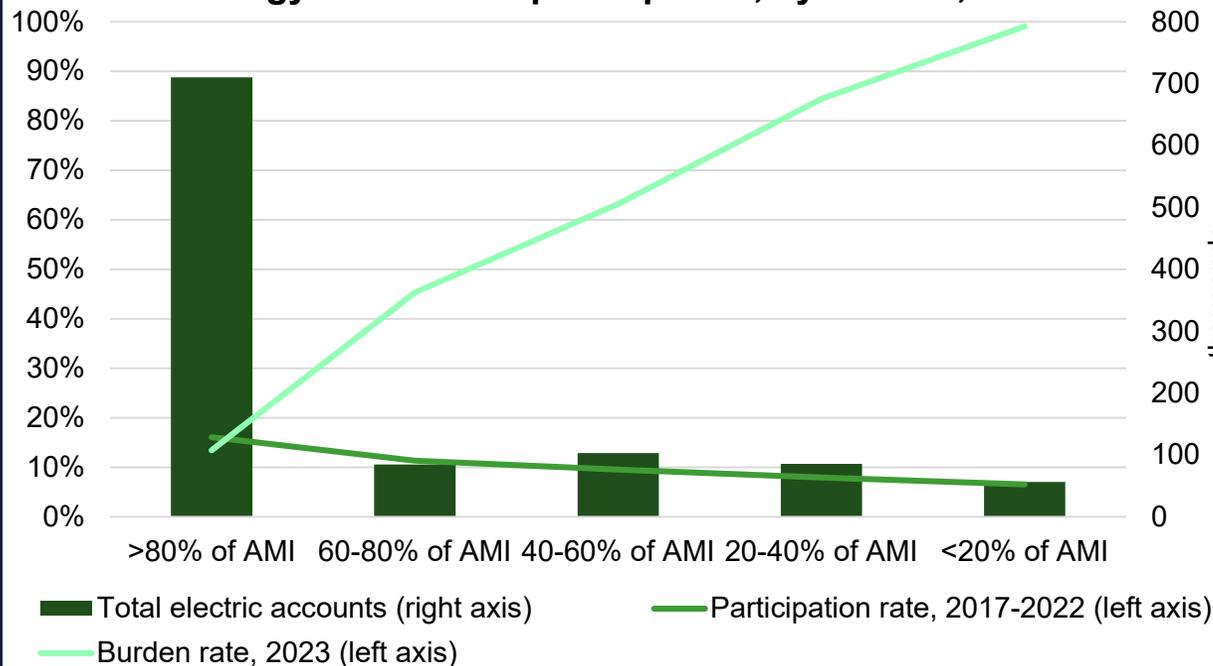


Lower income households have greater burdens and lower participation rates

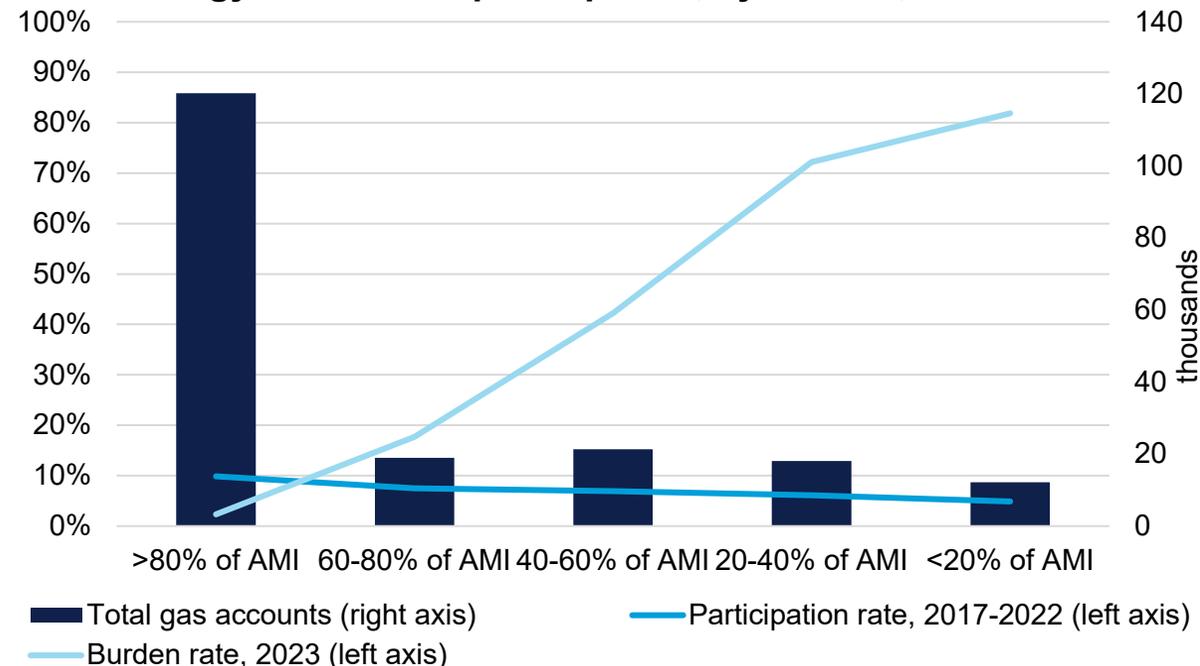
There is a steady trend of increasing burden and decreasing participation at lower levels of household income, both among electric and gas households.

- Most households have incomes of >80% of area median, but the 400,000+ homes with lower incomes see far higher rates of burden and decreasing rates of participation
- Energy burden is driven more by income, and less by higher energy use.

Electric energy burden and participation, by income, Eversource



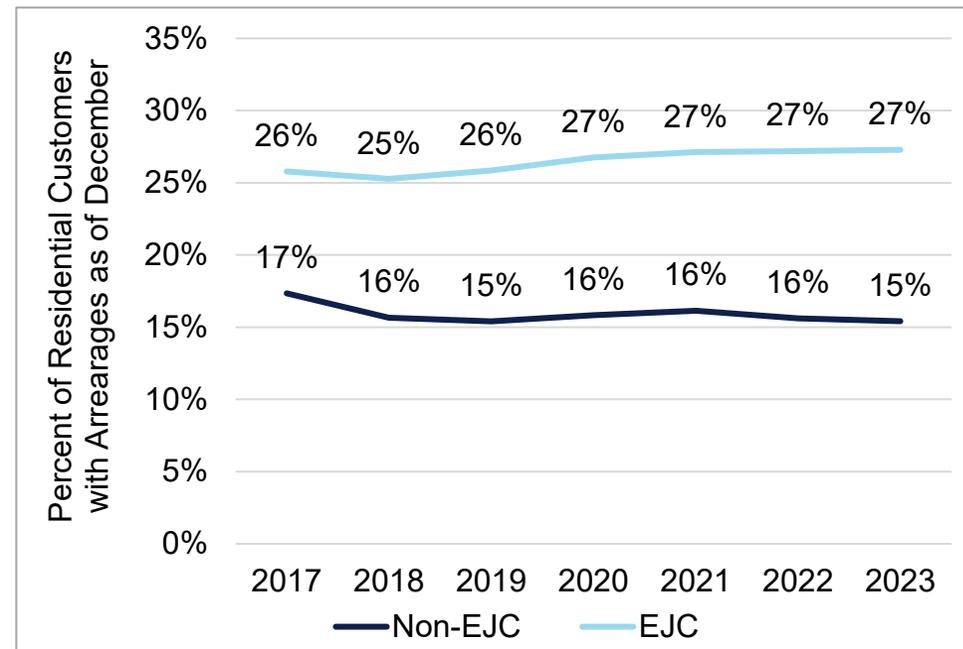
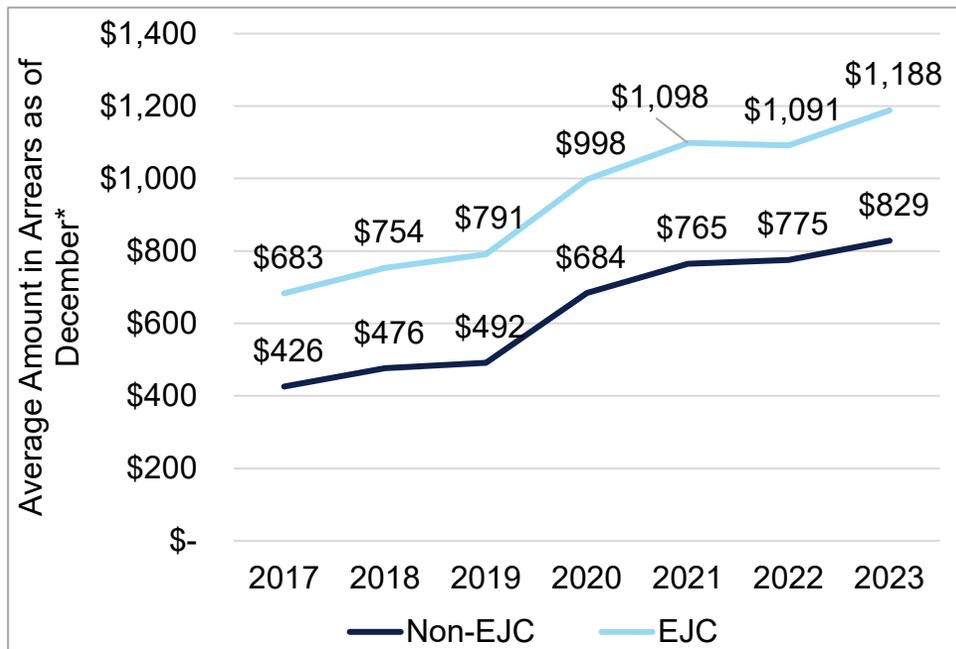
Gas energy burden and participation, by income, Eversource



The amount of unpaid bills has been steadily increasing since 2017 and is significantly greater in EJC's

The amount of arrearages has been steadily increasing, although the rate of households in arrearages is relatively stable

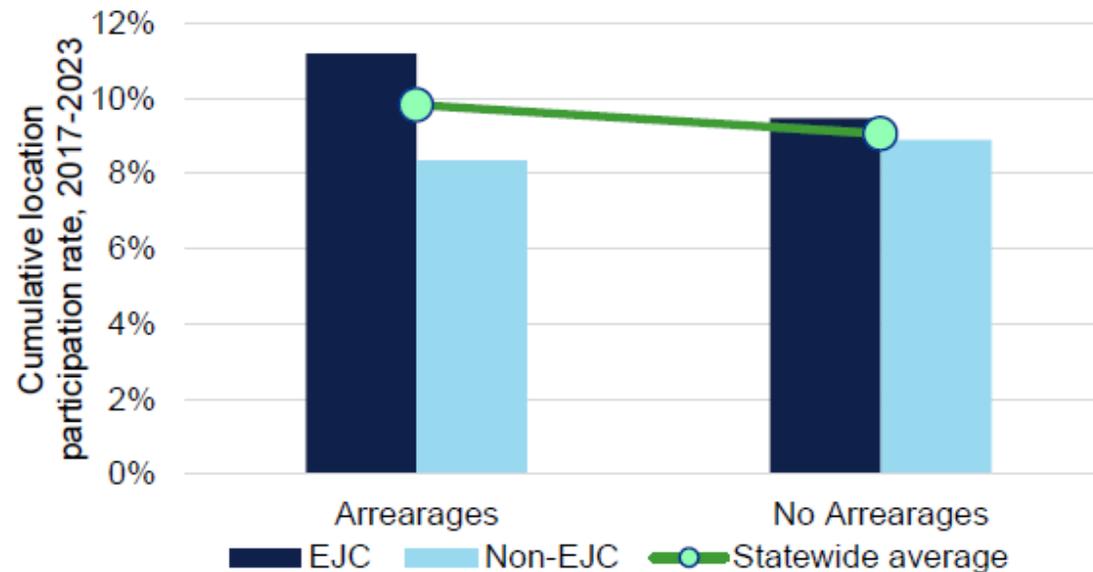
- Both the amount and rate of arrearages are worse for customers in EJC's
- The increase in arrearages is greater than the increase of the cost of electricity in CT over the same period (47%, per EIA)



The programs have had some success in serving customers with arrearages

Customers with arrearages during the evaluation period—particularly those in EJCs—participated at higher rates than those without arrearages.

- This is due in part to programs leveraging customer touchpoints—such as notices and communications about unpaid bills and enrollment in hardship rates—as an opportunity for program recruitment and enrollment

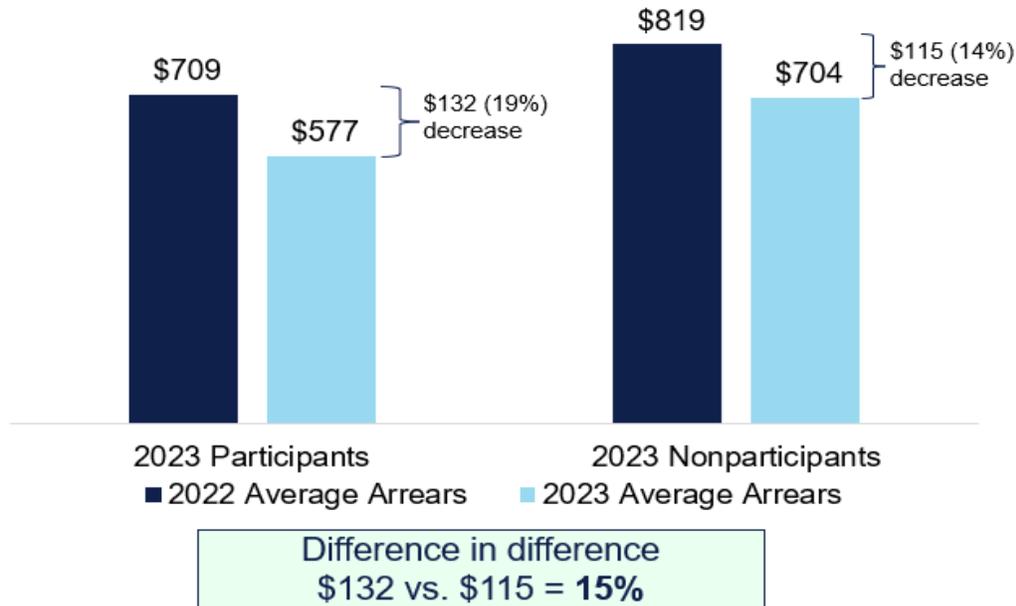


There is evidence that programs help low-income and struggling customers pay their energy bills

Amounts in arrears decreased more for participants than nonparticipants

- Among customers remaining in arrears at the end of 2023, those who participated had, on average, a 15% larger reduction in arrearage amounts than those who did not participate

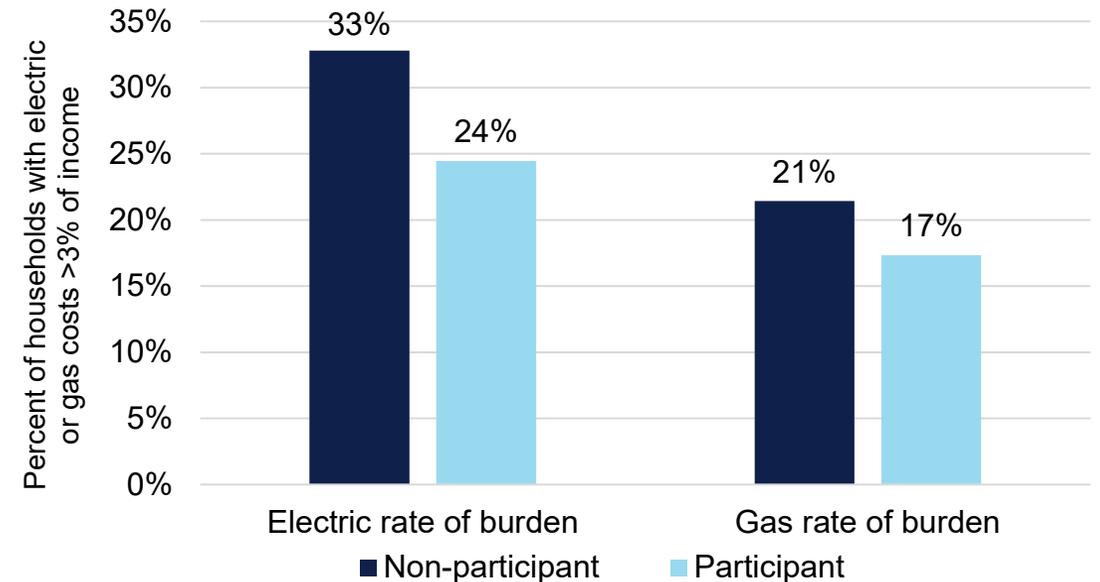
Change in arrearages during 2023 for those previously in arrears



Households that participated at least once in 2017-2022 had lower rates of burden in 2023 than non-participants.

- Electric burden was ~25% lower for participants than non-parts
- Gas burden also lower, but differs by income (detail in paper)

Rate of high burden in 2023, by participation in 2017-2022, Eversource



We did not definitively establish causality in the current study.
Doing so requires further data and analysis (e.g., additional years of household income data)

Conclusions and Recommendations

The road ahead

- **High energy burden and rising arrearages threaten household and utility financial stability**
- **Programs can help reduce burden and arrearages, but under-serve the most burdened**
- **Recommendations**
 - Use account-level burden data to target marketing.
 - Pair efficiency program enrollment with other programs (e.g., hardship rate enrollment, energy assistance)
 - Establish equity-focused performance metrics (e.g., burden reduction in EJC's)
 - Monitor the impact of decreasing federal aid & increasing energy costs to inform program strategies

Thank you

This presentation is based on the paper "Lighten the Energy Burden" (Ingram et al., 2025). All data and figures are cited from the document.

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