

NY HEAT IS A WIN FOR ENERGY AFFORDABILITY

The NY HEAT Act's impact on energy burdens in New York State

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This is a report by [NY RENEWS](#), a coalition of over 370 environmental, justice, faith, labor, and community groups, and the force behind NY's Climate Act.

NY HEAT is part of the coalition's 2024 [Climate Jobs and Justice Package](#).



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INTRODUCTION

Overview of NY HEAT

New York State is currently considering the **NY HEAT Act** ([S2016/A4592](#)), an ambitious piece of legislation that would pave the way for the state's buildings to transition from fossil-fueled to electric heating, with broad implications for energy affordability.

NY HEAT eliminates subsidies for new gas hookups (the so-called **"100-foot rule"**), which would halt the growth of New York's natural gas distribution network.

By removing the **"obligation to serve"**, a regulation that requires utilities to offer natural gas to any customer who requests it, the bill also enables the network to be decommissioned in favor of neighborhood-scale electrification.

Savings from eliminating gas subsidies could be redirected to electrification efforts. And the savings could be significant: in National Grid's territory, hooking a single customer into the gas system can range from \$5,350 to \$14,420,¹ which represents 26% to 72% of the average cost of a new heat pump.

¹ See National Grid's [connection costs report](#) [3]

NY HEAT's 6% affordability provision

But the NY HEAT Act also aims to address New York's energy affordability crisis more directly: the bill creates a goal for the state to **ensure no household pays more than 6%** of their annual income on gas and electric bills.²

² See [§5](#) of the NY HEAT Act [4].

This report from the NYRenews coalition, compiled by Win Climate, focuses specifically on NY HEAT's 6% affordability provision, evaluating how it would impact energy burdens across the state.

CONTEXT

What is an energy burden?

A household's energy burden refers to the **percentage** of annual income spent on energy bills. For instance, if a family makes \$30K and spends \$3K a year on gas and electricity, they have an energy burden of **10%**.

Households with energy burdens above **6%** are considered **highly burdened**.

Why is 6% the threshold of energy affordability? It is based on the standard definition of housing affordability: to avoid financial strain, households should spend no more than 30% of their income on housing. Low and moderate-income households, meanwhile, typically spend around 20% of their housing costs on energy. Putting these facts together suggests 6% is an affordable level.³

Six percent is the standard adopted by energy researchers and governments, including the State of New York, and for good reason: highly burdened households are more likely to stay stuck in cycles of poverty⁴, and are often forced to choose between energy and other necessities: one in five U.S. households reported reducing or forgoing food or medicine to pay an energy bill.⁵

Who would benefit from NY HEAT?

If fully implemented, NY HEAT would benefit any household that pays more than 6% of their income on electricity or natural gas bills, whether they own and live in a single-family home, rent an apartment in a multifamily building, or anything in between.

In multifamily rental buildings, gas and electric bills are sometimes paid by landlords, not tenants. Our analysis assumes landlords would pass on any bill savings resulting from NY HEAT to tenants in the form of reduced rent.

³ Since $30\% \times 20\% = 6\%$. For more background, see page 2 of NYSERDA [5].

⁴ After controlling for common predictors of poverty, Bohr and McCreery [1] found that energy-burdened households were nearly twice as likely to remain in poverty for longer than non-burdened households.

⁵ According to the 2015 Residential Energy Consumption Survey [2].

EXECUTIVE SUMMARY

How many residents have high energy burdens?

1 in 4 New York residents have a high energy burden: they pay more than **6%** of their annual income on electricity, natural gas, and delivered fossil fuels.

How much money would residents save?

If NY HEAT were enacted, the 25% of New York residents who have high energy burdens would cut their bills by **over 44%**, saving an average of **\$136 a month**.

FINDINGS

How do high energy burdens vary across New York?

Different areas of New York have a higher share of highly burdened households than others.

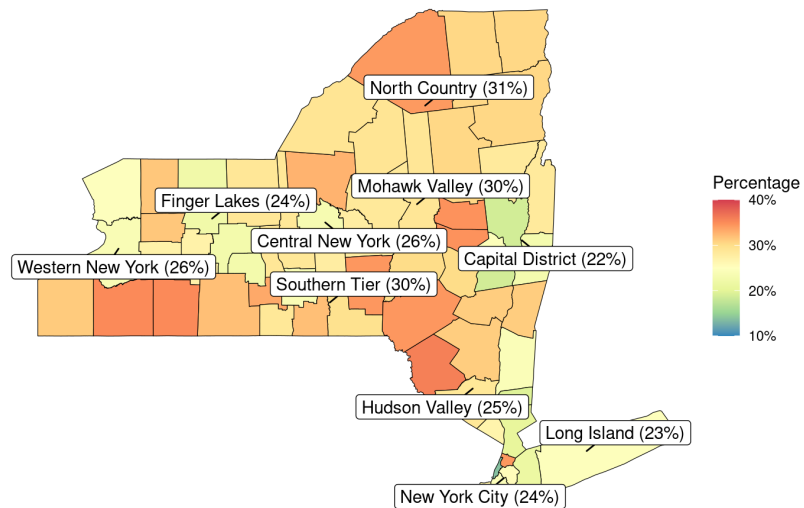


Figure 1: Percent of households with high energy burdens, per county

Twenty-two percent of households in the Capital District are highly burdened, the lowest share in the state.

On the other end of the spectrum, nearly a third of households in the North Country face high energy burdens.

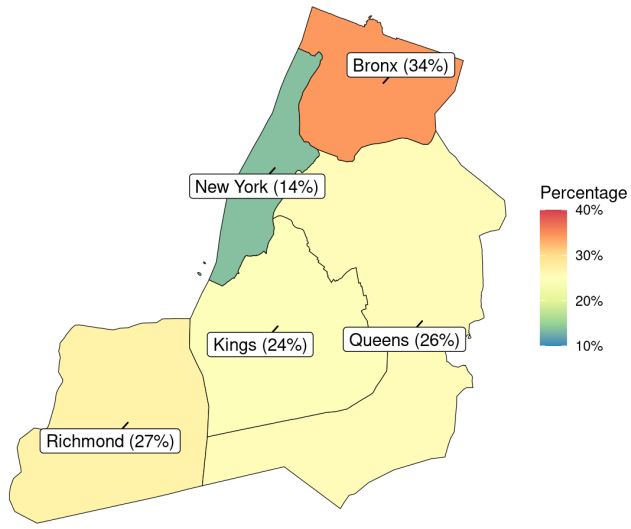


Figure 2: Percent of households with high energy burdens, per NYC borough

At thirty-four percent, nine points higher than the statewide average, the Bronx has the highest high-burden share in New York City, and one of the highest of any county in the state.

By contrast, Manhattan has the lowest high-burden share statewide.

How would bill savings from NY HEAT vary across New York?

Energy bill savings resulting from fully implementing NY HEAT's 6% affordability provision vary somewhat by location:

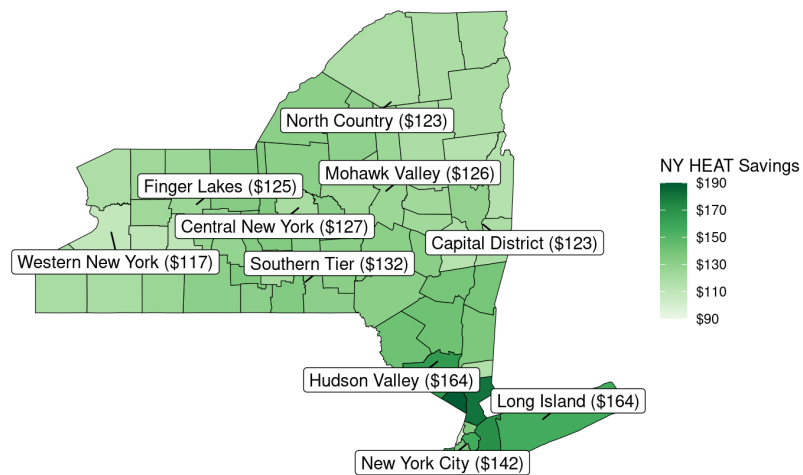


Figure 3: Average bill savings under NY HEAT, per county

Bill savings would be generally similar across the state (\$120-140 per month), with higher amounts saved in the Hudson Valley and Long Island.

This is due to the higher utility bills in those areas, which are 20-30% higher than the state average for highly burdened households.

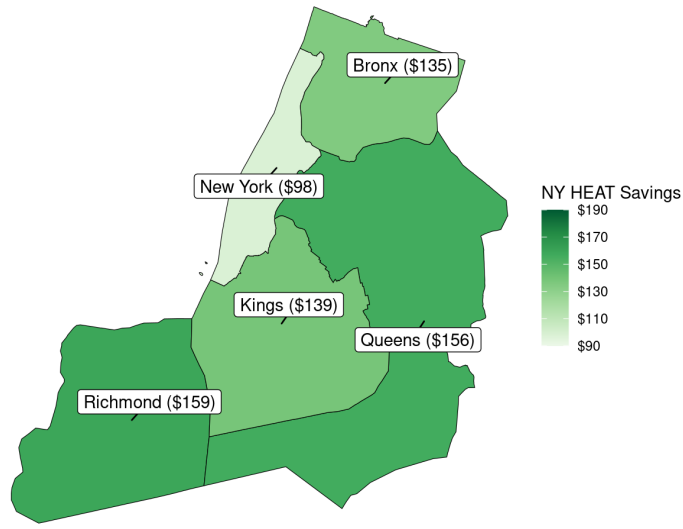


Figure 4: Average bill savings under NY HEAT, per NYC borough

In New York City, Queens and Staten Island would enjoy some of the highest savings in the state (\$156 and \$159 a month, respectively).

Manhattan would see the lowest savings, at around \$100 a month.

Highly-burdened residents of the Bronx and Brooklyn would save an average of \$135 and \$139 every month.

Energy burdens and savings in detail

The following table contains a complete breakdown of our findings, for every county and region in the state.

County	Percent of households with high energy burdens	Avg. monthly energy bills of high-burden households	Avg. monthly savings for high-burden households under NY HEAT
New York State			
All	25%	\$309	\$136
Finger Lakes			
<i>(Region)</i>	24%	\$273	\$125
Monroe	22%	\$261	\$125
Ontario	23%	\$297	\$128
Yates	23%	\$297	\$128
Genesee	32%	\$284	\$124
Orleans	32%	\$284	\$124
Seneca	29%	\$296	\$133
Wayne	29%	\$296	\$133
Livingston	27%	\$271	\$111
Wyoming	27%	\$271	\$111
New York City			
<i>(Region)</i>	24%	\$287	\$142
Kings	24%	\$287	\$139
Richmond	27%	\$366	\$159
New York	14%	\$187	\$98
Bronx	34%	\$251	\$135
Queens	26%	\$341	\$156

Capital District			
<i>(Region)</i>	22%	\$288	\$123
Albany	19%	\$259	\$114
Warren	28%	\$289	\$115
Washington	28%	\$289	\$115
Saratoga	19%	\$306	\$129
Schenectady	24%	\$276	\$118
Rensselaer	23%	\$293	\$119
Columbia	31%	\$322	\$139
Greene	31%	\$322	\$139
Mohawk Valley			
<i>(Region)</i>	30%	\$288	\$126
Herkimer	29%	\$302	\$125
Oneida	29%	\$277	\$124
Otsego	30%	\$305	\$132
Schoharie	30%	\$305	\$132
Fulton	35%	\$288	\$123
Montgomery	35%	\$288	\$123
Hudson Valley			
<i>(Region)</i>	25%	\$381	\$164
Rockland	27%	\$393	\$189
Westchester	21%	\$413	\$181
Orange	29%	\$379	\$166
Dutchess	24%	\$344	\$137
Ulster	31%	\$344	\$142
Sullivan	36%	\$335	\$142
Putnam	19%	\$363	\$116

Western New York

<i>(Region)</i>	26%	\$242	\$117
Erie	24%	\$232	\$109
Niagara	25%	\$266	\$118
Cattaraugus	35%	\$267	\$120
Chautauqua	31%	\$234	\$120
Allegany	35%	\$267	\$126
Long Island			
<i>(Region)</i>	23%	\$405	\$164
Nassau	21%	\$414	\$171
Suffolk	25%	\$398	\$156
Central New York			
<i>(Region)</i>	26%	\$281	\$127
Onondaga	23%	\$257	\$120
Cayuga	29%	\$322	\$134
Oswego	33%	\$310	\$132
Cortland	28%	\$298	\$131
Madison	28%	\$298	\$131
Southern Tier			
<i>(Region)</i>	30%	\$285	\$132
Broome	30%	\$269	\$131
Chenango	34%	\$322	\$132
Delaware	34%	\$322	\$132
Tioga	32%	\$298	\$134
Chemung	29%	\$279	\$131
Steuben	32%	\$294	\$131
Tompkins	24%	\$254	\$121
Schuyler	33%	\$300	\$136

North Country

<i>(Region)</i>	31%	\$290	\$123
St. Lawrence	34%	\$266	\$119
Clinton	30%	\$298	\$119
Essex	30%	\$298	\$119
Franklin	30%	\$298	\$119
Hamilton	30%	\$298	\$119
Jefferson	29%	\$301	\$132
Lewis	29%	\$301	\$130

Who benefits from bill savings?

The 25% of New Yorkers who pay more than 6% of their income on energy bills (the red area of the chart below), have a very wide range of energy burdens:

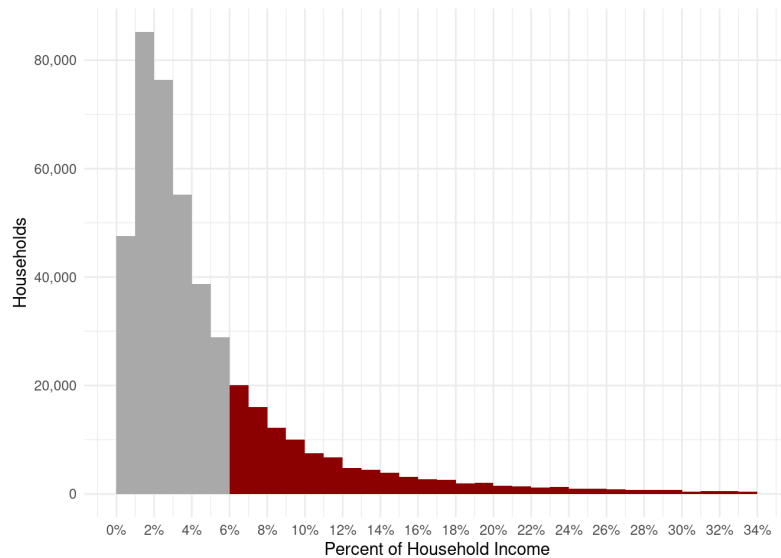


Figure 5: Distribution of household energy burdens in New York State, before NY HEAT

While most highly burdened households spend between 6% and 10% of their income, the lowest income households can pay upwards of 20% or beyond.

NY HEAT's 6% affordability provision would push the vast majority of these highly burdened households to 6%:

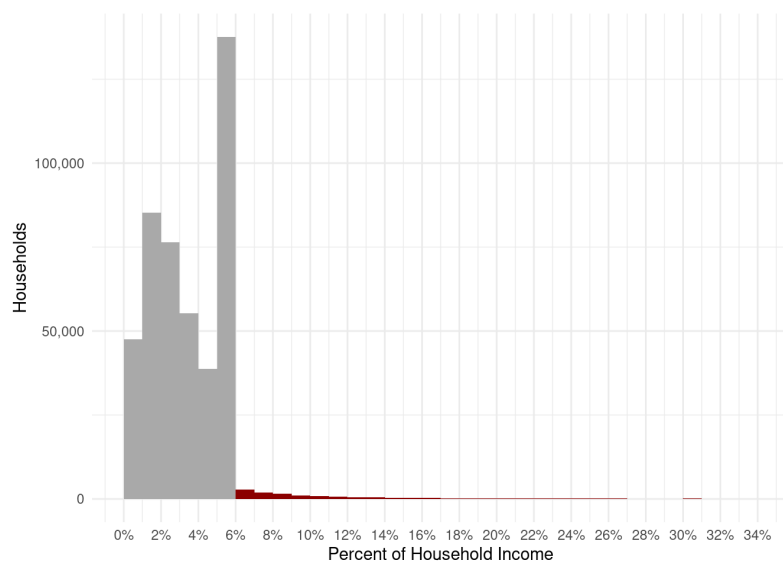


Figure 6: Distribution of household energy burdens in New York State, under NY HEAT

The red zone wouldn't be entirely eliminated, however.

Not all households end up at or below 6% energy burden because the bill would likely reduce only gas and electric bills, not delivered fuel payments.

Savings by building type

What kinds of buildings do these beneficiaries live in?

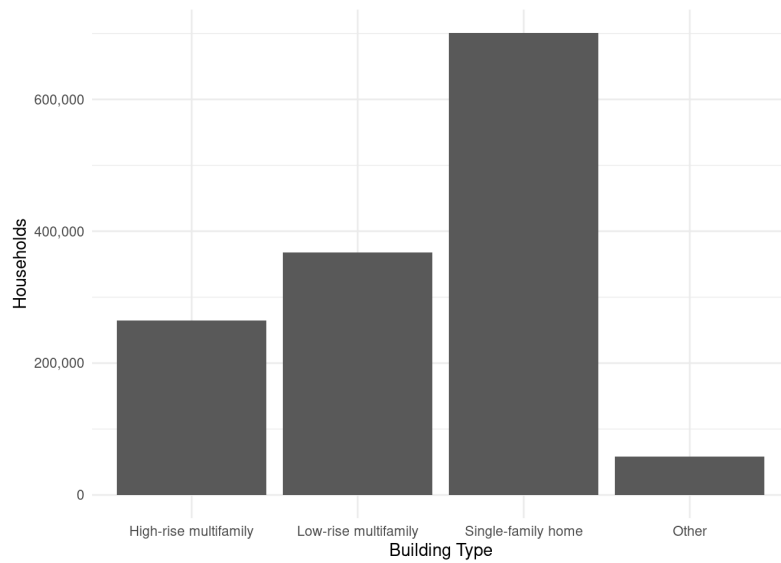


Figure 7: Number of utility-burdened households who would benefit from NY HEAT, by building type

The split is almost exactly even between households in single-family homes and households in apartments.

“Other” here is mostly mobile homes, though it includes a several less common building styles as well.

Here's a breakdown the income and savings of each group:

Building Type	Median Income	Percent Renter	Avg. Monthly Energy Bills Today	Avg. Monthly Energy Bills Under NY HEAT	Avg. Monthly Savings Under NY HEAT
Single-family home	\$30,065	16%	\$366	\$189	\$177
Low-rise multifamily	\$20,000	67%	\$272	\$137	\$135
High-rise multifamily	\$12,500	91%	\$166	\$82	\$84
Other	\$22,000	26%	\$298	\$129	\$169

Excluding households with utility bills in rent, or missing fuel or income information. Source: 2022 ACS. Win Climate, 2024

The median income of highly-burdened households living in single-family homes is \$30K, and only 16% are renters.

On the other end, 91% of highly-burdened households living in high-rise multifamily buildings are renters, and their median income is \$12,500. This means the majority of these households are living under the poverty line.

No matter the building type, highly-burdened households would see their energy bills approximately cut in half.

Because single-family home residents have more expensive monthly bills, however, they would save more than twice as many dollars a month as high-rise multifamily residents, on average.

Savings by heating fuel

We can also see the same information by fuel type instead of building type.

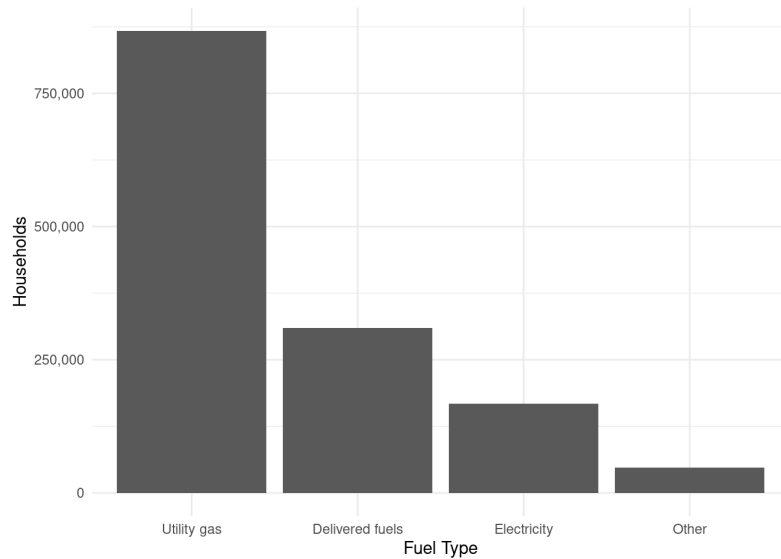


Figure 8: Number of utility-burdened households who would benefit from NY HEAT, by primary heating fuel

And in more detail:

Fuel Type	Avg. Monthly Energy Bills Today	Avg. Monthly Energy Bills Under NY HEAT	Avg. Monthly Savings Under NY HEAT
Utility gas	\$303	\$161	\$142
Delivered fuels	\$331	\$132	\$200
Electricity	\$236	\$115	\$121
Other	\$272	\$102	\$170

Excluding households with utility bills in rent, or missing fuel or income information. Source: 2022 ACS. Win Climate, 2024

62% of households who would benefit from NY HEAT heat their homes with natural gas, compared with 58% for all households.

The discrepancy is explained by the fact that NY HEAT doesn't apply to delivered fuels.

Savings by ownership status

Households which both rent and own would benefit from NY HEAT.
How does the impact compare?

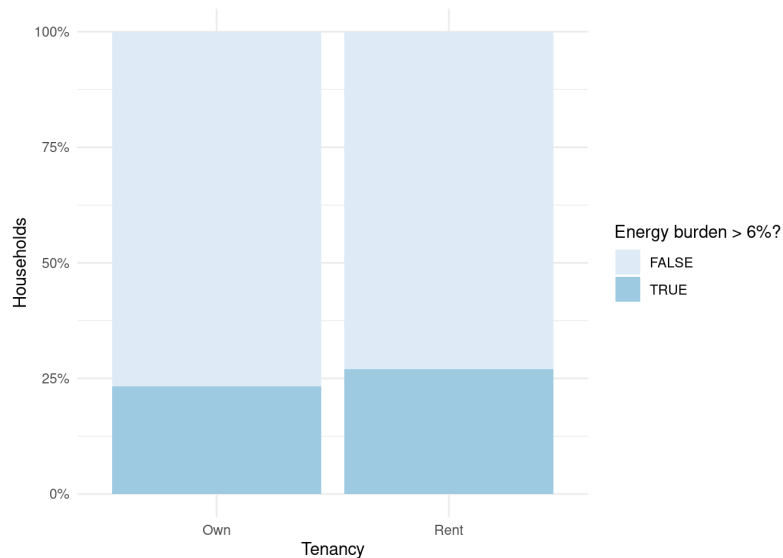


Figure 9: Percent of household who rent vs. own that are energy burdened, New York State

While the highly-burdened share is similar for households that own vs. rent their homes, highly-burdened owners have much higher bills than renters:

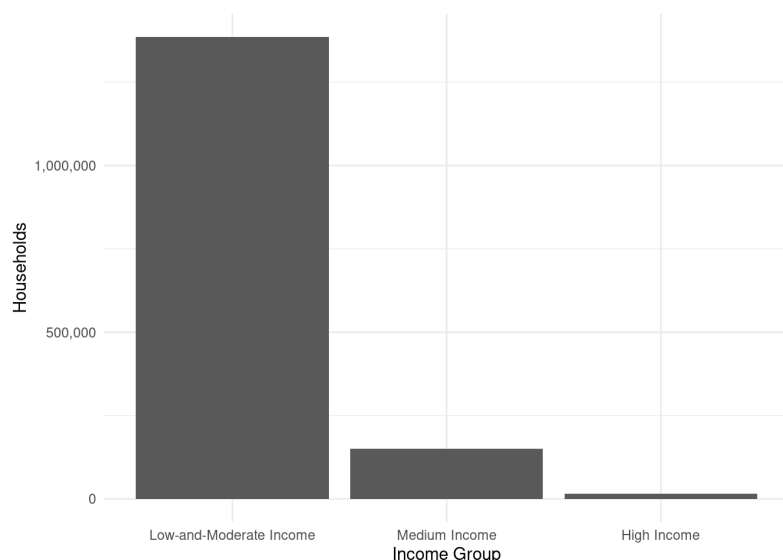
Ownership Status	Avg. Monthly Energy Bills Today	Avg. Monthly Energy Bills Under NY HEAT	Avg. Monthly Savings Under NY HEAT
Own	\$374	\$215	\$159
Rent	\$219	\$99	\$120

Excluding households with utility bills in rent, or missing fuel or income information. Source: 2022 ACS. Win Climate, 2024

While owners would save more dollars per month (\$159 vs. \$120), renters would save a higher percentage of their bill (42% vs. 54%).

Savings by income level

Lastly, we can look at differences by income level. We use the income ranges below, defined in terms of Area Median Income (AMI).⁶



⁶ AMI is the median income for households of the same size in the same county.

Figure 10: Number of utility-burdened households who would benefit from NY HEAT, by income level

Ninety-two percent of the households who would see bill reductions from NY HEAT are low or moderate-income.⁷

Income Group	Avg. Monthly Energy Bills Today	Avg. Monthly Energy Bills Under NY HEAT	Avg. Monthly Savings Under NY HEAT
Low-and-Moderate Income	\$271	\$126	\$145
Medium Income	\$586	\$416	\$170
High Income	\$901	\$698	\$203

Excluding households with utility bills in rent, or missing fuel or income information. Source: 2022 ACS. Win Climate, 2024

⁷ Following NYSERDA, we define households with income at or below 80% of AMI as low-and-moderate income (LMI), 80-150% of AMI as medium-income, and 150%+ as high-income.

They would have their bills cut by 53% on average, while the very small number of medium and high income beneficiaries would see reductions of 29% and 22%, respectively.

APPENDIX

Data & Methods

To understand how much New York State residents are spending on energy, we turned to the American Community Survey (ACS)⁸, the flagship yearly survey from the US Census.

⁸ Specifically, [these variables](#) from the 2022 PUMS dataset [6]

- **Energy burdens:** For a representative sample of households in New York, we calculated their yearly energy bill costs (combining electricity, natural gas, heating oil and propane), and calculated which households spent more than 6% of their annual income. To ensure we're comparing apples-to-apples, we excluded any households whose bills are included in their rent, and any with missing income or utility data.
- **Savings under NY HEAT:** We identified households that spent more than 6% of their income on electricity and natural gas. For homes heated by delivered fuels, we selected households that spent more than 6% of their income on electricity alone. We then calculated the savings that would result if the bills of these two populations shrunk to 6%.

Assumptions

Our analysis rests on the following assumptions:

- **Self-reported energy bills:** our data on energy bill costs comes from the American Community Survey, where it is self-reported by households. We assume that this data accurately reflects—on average—what households are paying for electricity, natural gas, and delivered fuels in New York State.
- **Low-income energy affordability programs:** we assume that these self-reported energy bills reflect any bill reductions households are already receiving by being enrolled in low-income energy affordability programs such as the federal [Heating Energy Assistance Program](#) (HEAP) and the state [Energy Affordability Program](#) (EAP). Under this assumption, our analysis estimates the number of households that are still energy burdened *after* factoring in these payments.
- **Delivered fuels:** NY HEAT's 6% affordability provision does not apply to delivered fuels like heating oil or propane. While we factor fuel delivery payments in our **energy burden calculation**, we do not factor them in to our **savings calculation**: in our model, households receive no assistance with delivered fuel bills. Further, in order to receive assistance on their electric bills, households on delivered fuels must pay more than 6% of their income on electricity alone.
 - This is why our results suggest that NY HEAT would not completely eliminate energy burdened households in New York State.
 - We believe this assumption reflects how the NY Public Service Commission (PSC) would likely implement NY HEAT.

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