

# The Energy Rights Project

What we learned from the research

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Funded by NSF grant #1849592





## United Mountain Defense (Tennessee)



## Philadelphia Health & Environment Ethnography Lab (PHEEL)



## Climate Ready Philly

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- BA, English, University at Albany, SUNY, 2003

#### **Curriculum Vitae:**

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#### **Research Interests:**

- Energy Justice
- Climate Change
- Feminist Political Theory
- Asthma and Air Quality
- Experimental Ethnography
- Urban Politics

# Ethnography is a research method that is used to study specific parts of culture, like energy systems.

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## Ethnography....

**01**

Is used to tell stories so that we can understand the full context of a problem, and how people are addressing the problem.

**02**

Uses a method called participant observation where the researcher spends years in a community studying the problem, in the “field”.

**03**

Pairs well with other research methods like surveys or focus groups because it can add context and fill in gaps in how we think about problems.

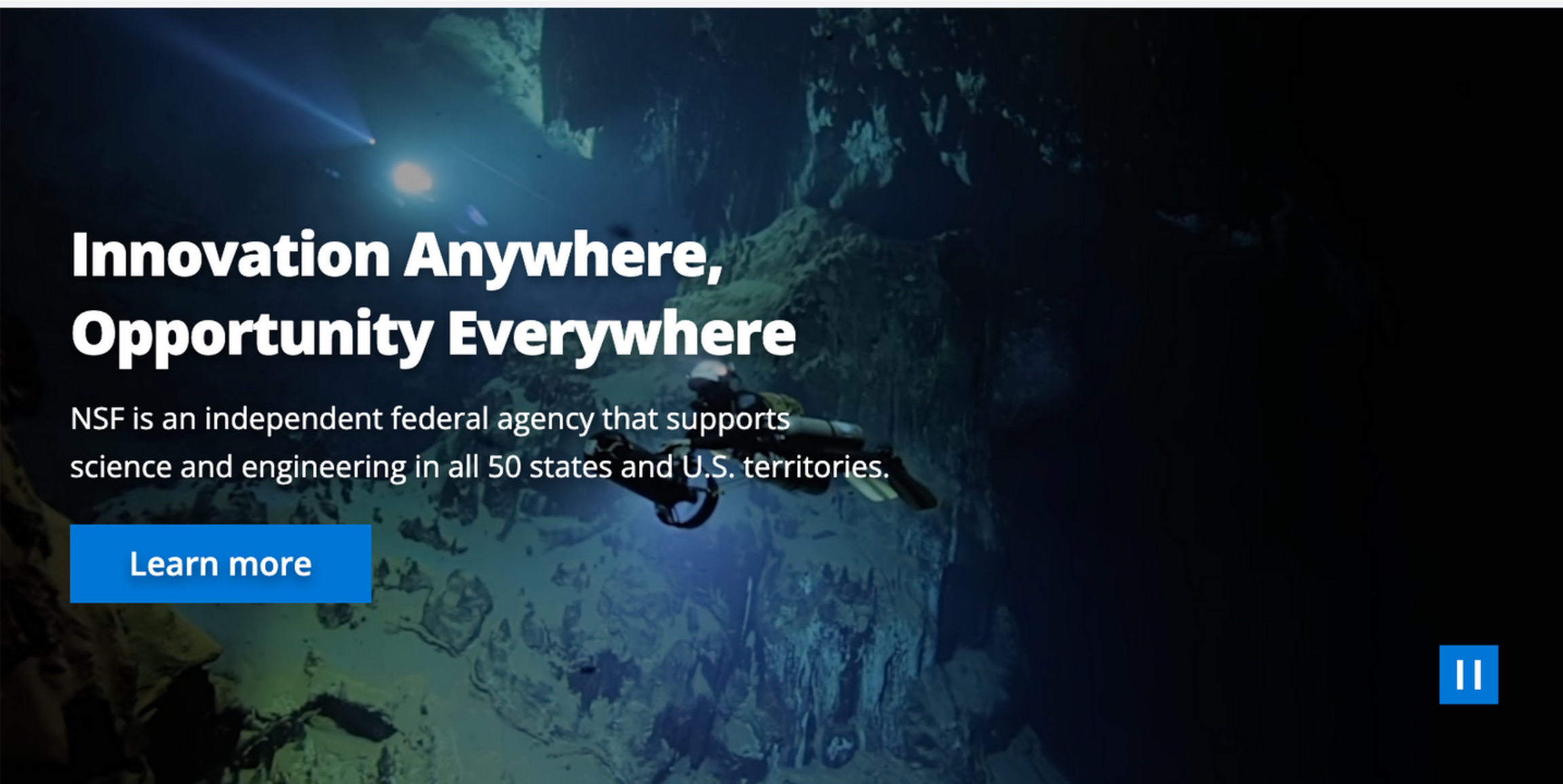
**04**

Is a research method that prioritizes building long-term relationships and doing projects that benefits community.



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## Award Abstract # 1849592 STANDARD GRANT: Indexing Energy Performance in Housing Servicescapes: A Multiscale Study in the U.S. Mid-Atlantic Region

<b>NSF Org:</b>	<a href="#">SES</a> <a href="#">Divn Of Social and Economic Sciences</a>
<b>Recipient:</b>	DREXEL UNIVERSITY
<b>Initial Amendment Date:</b>	March 1, 2019
<b>Latest Amendment Date:</b>	March 1, 2019
<b>Award Number:</b>	1849592
<b>Award Instrument:</b>	Standard Grant
<b>Program Manager:</b>	Christine Leuenberger cleunbe@nsf.gov (703)292-7563 SES Divn Of Social and Economic Sciences SBE Direct For Social, Behav & Economic Scie
<b>Start Date:</b>	April 1, 2019
<b>End Date:</b>	March 31, 2023 (Estimated)

## Project Goals

- To learn what energy vulnerability looks like in Philadelphia.
- To learn what local organizations and also state and city government are doing to address energy vulnerability.

# Interview Data

- 234 structured interviews (May-June 2020; December 2020 - June 2021)
  - 86 people from field school;
  - 148 people from PGW workshops
- 100 open-ended interviews from summer workshops (June - Sept 2021)

# Interview Questions

- Impacts of COVID-19 on the household:
  - expenses & income; energy use; living and working conditions
- Emergency preparedness
- Energy service disruptions, before and during the pandemic
- Knowledge and use of assistance programs, such as WAP and LIHEAP
- Knowledge of energy systems broadly
- Energy rights; workshop experience; and pedagogical value of the interview

## Energy Poverty among Tertiary Students in Aotearoa New Zealand

by  Isobel Kiri Harris Clark ,  Saera Chun ,  Kimberley Clare O'Sullivan \* ,  and  Nevil Piers , 

Department of Public Health, University of Otago, Wellington P.O. Box 7343, Wellington 6242, New Zealand

\* Author to whom correspondence should be addressed.

*Energies* **2022**, *15*(1), 76; <https://doi.org/10.3390/en15010076>

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## Energy Poverty among College Students in Japan in a Survey of Students' Knowledge, Attitude and Practices towards Energy Use

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*Sustainability* **2021**, *13*(15), 8484; <https://doi.org/10.3390/su13158484>

Received: 27 June 2021 / Revised: 19 July 2021 / Accepted: 26 July 2021 / Published: 29 July 2021

## Determinants of the Energy Poverty of Polish Students during the COVID-19 Pandemic

by  Łukasz Mamica <sup>1</sup> , ,  Jakub Głowacki <sup>1,\*</sup>  and  Kamil Makiela <sup>2</sup> , 

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\* Author to whom correspondence should be addressed.

*Energies* **2021**, *14*(11), 3233; <https://doi.org/10.3390/en14113233>

We know less about how  
18-24 year olds experience  
energy insecurity.



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### OPEN ACCESS

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Students' perception of energy  
poverty—A comparative analysis  
between local and exchange  
university students from  
Montevideo, Lisbon, and Padua

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**Table 1**

Interview data comparing self-reported respondent gender between the field school group ( $N = 86$ ; data collected between May–June 2020) and the weatherization workshop group ( $N = 83$ ; data collected between December 2020–February 2021).

Gender	Field school ( $n = 85$ )	Workshop ( $n = 83$ )	Cumulative ( $n = 167$ )
Women	34.12 %	79.52 %	56.56 %
Women; cisgender	9.41 %	4.82 %	7.14 %
Men	30.59 %	13.25 %	21.89 %
Men; cisgender	23.5 %	0 %	11.91 %
Cisgender	1.18 %	0 %	0.6 %
Prefer not to say	1.18 %	1.21 %	1.19 %
Transgender	0 %	1.21 %	0.59 %
Any identity not listed	0 %	1.21 %	0.59 %

**Table 2**

Interview data comparing self-reported respondent age between the field school group ( $N = 86$ ; data collected between May–June 2020) and the weatherization workshop group ( $N = 83$ ; data collected between December 2020–February 2021).

Age	Field school ( $n = 86$ )	Workshop ( $n = 83$ )	Cumulative ( $n = 169$ )
18–24	43.02 %	2.41 %	23.08 %
25–34	17.44 %	15.66 %	16.57 %
34–44	20.93 %	28.92 %	24.85 %
45–54	5.81 %	13.25 %	8.88 %
55–64	5.81 %	28.92 %	17.16 %
65–74	5.81 %	9.64 %	7.96 %
75–84	1.16 %	0 %	0.59 %
85–94	0 %	1.21 %	0.59 %

# Who did we interview?

**Table 3**

Interview data comparing self-reported respondent race/ethnicity between the field school group ( $N = 86$ ; data collected between May–June 2020) and the weatherization workshop group ( $N = 83$ ; data collected between December 2020–February 2021). Categories were taken from the U.S. census.

Race/Ethnicity	Field school ( $n = 86$ )	Workshop ( $n = 82$ )	Cumulative ( $n = 168$ )
Asian	24.42 %	6.1 %	15.48 %
Black or African American	8.14 %	67.07 %	36.91 %
Middle Eastern or Northern Africa	2.33 %	1.22 %	1.79 %
Native Hawaiian or Other Pacific Islander	2.33 %	1.22 %	1.79 %
White	61.63 %	12.20 %	37.5 %
Hispanic, Latino, or Spanish origin	3.49 %	12.20 %	7.74 %
Any identity not listed above	3.49 %	1.21 %	2.38 %
Prefer not to say	0 %	3.66 %	1.79 %

# Interview Data

- 234 structured interviews (May-June 2020; December 2020 - June 2021)
  - 86 people from field school;
  - 148 people from PGW workshops
- 100 open-ended interviews from summer workshops (June - Sept 2021)

# Interview Questions

- Impacts of COVID-19 on the household:
  - expenses & income; energy use; living and working conditions
- Emergency preparedness
- Energy service disruptions, before and during the pandemic
- Knowledge and use of assistance programs, such as WAP and LIHEAP
- Knowledge of energy systems broadly
- Energy rights; workshop experience; and pedagogical value of the interview



# “If you receive a utility shut-off notice and don’t have the money to pay it, what would you do?”

"What is energy literacy?  
Responding to vulnerability in  
Philadelphia's energy ecologies."  
*Energy Research & Social Science*  
91 (2022): 102718.

**Table 7**

This table shows coded responses to an open-ended interview question that asked interviewees what they would do if they received a utility shutoff notice and they did not have the money to pay the bill.

Response to utility shutoff	Field school (n = 84)	Workshop (n = 83)	Cumulative (n = 167)
Take out a loan	14.29 %	16.87 %	14.37 %
Go to family or friends	23.81 %	16.87 %	20.36 %
Call provider	16.67 %	32.53 %	24.55 %
Government assistance	8.33 %	10.84 %	9.58 %
Deal with it	11.91 %	3.62 %	7.78 %
Seek (unspecified) help	1.19 %	7.14 %	4.19 %
Save up money	4.76 %	3.62 %	4.79 %
Relocate	5.96 %	1.21 %	3.59 %
Contact landlord	0 %	1.21 %	0.60 %
Go to a community agency	0 %	10.84 %	5.39 %
I don't know	26.19 %	9.5 %	17.95 %
Just pay it	0 %	1.21 %	0.60 %
Go into 403	0 %	1.21 %	0.60 %

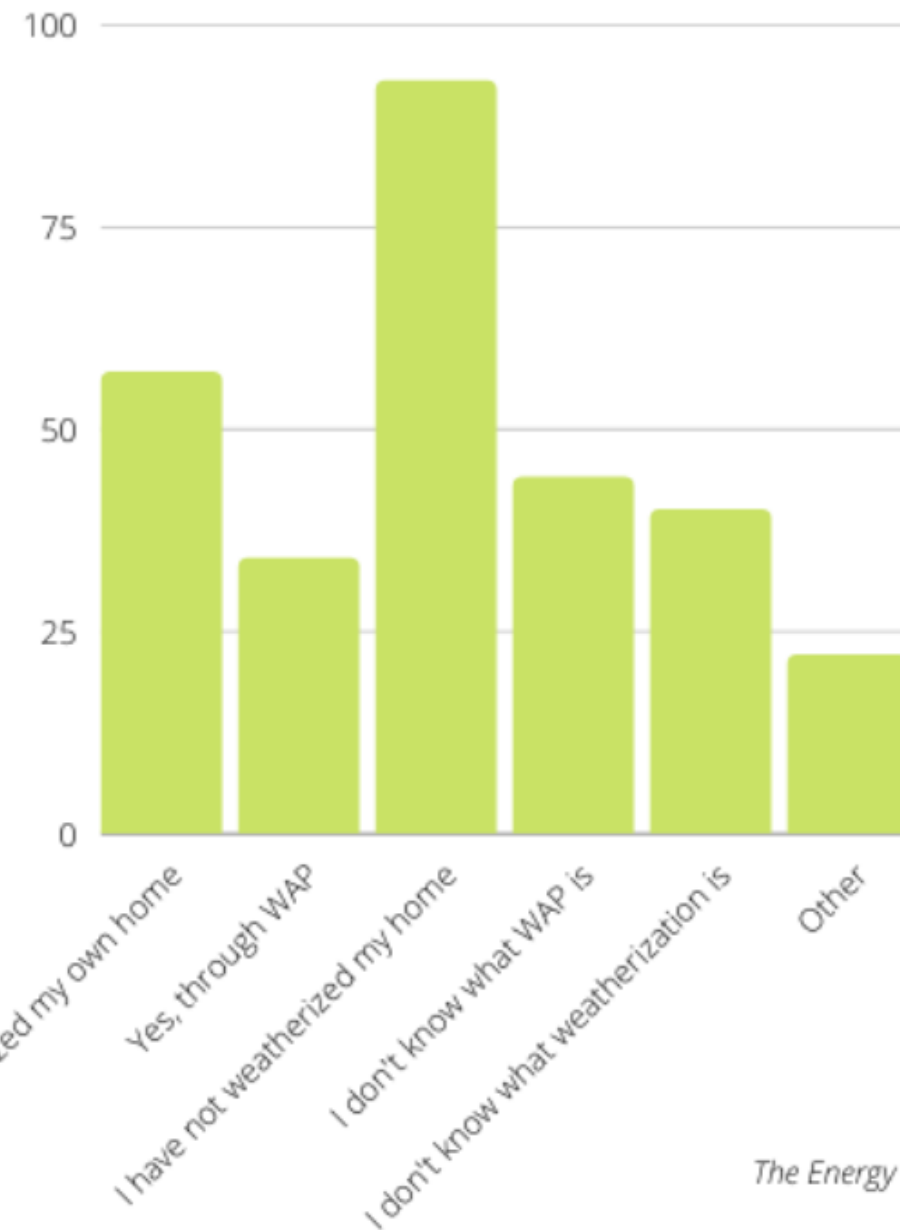
# “Are you aware of the following programs?”

**Table 8**

This table shows the number of interviewees who were aware of the following assistance programs: Low-Income Household Energy Assistance Program; customer assistance programs; Weatherization Assistance Program; Earned Income Tax Credit; and Social Security Income.

Familiarity with assistance	Field school ( $n = 81$ )	Workshop ( $n = 83$ )	Cumulative ( $n = 164$ )
LIHEAP	14.81 %	92.77 %	52.27 %
CAP	7.41 %	68.68 %	38.41 %
WAP	7.41 %	67.47 %	37.81 %
EITC	37.04 %	60.24 %	48.78 %
SSI	29.63 %	56.63 %	40.85 %
All of the above	1.24 %	34.94 %	18.29 %
None of the above	50.62 %	1.21 %	26.61 %

# “Has your home ever been weatherized through the state weatherization program?”



**93 out of 221 (42%) - “No, my home is not weatherized”**

**44 out of 221 (19%) - “I don’t know what WAP is”**

-->4 respondents (6%) from Spring 2021 PGW Workshops

-->14 respondents (17%) from the Winter 2020 PGW Workshops

-->26 respondents (31%) from Spring 2020 Field School

**42 out of 221 (18%) - “I don’t know what weatherization is”**

-->2 respondents (3%) from the Spring 2021 PGW Workshops

--> 8 respondents (9%) from the Winter 2020 PGW Workshops

-->32 respondents (37%) from the Spring 2020 Field School

**57 out of 221 (25%) - “No, but I have weatherized my own home”**

-->27 respondents (41%) from the Spring 2021 PGW Workshops

-->14 respondents (17%) from the Winter 2020 PGW Workshops

-->13 respondents (15%) from the Spring 2020 Field School

**34 out of 221 (15%) - “Yes, it has been weatherized through WAP”**

# Household Medical Vulnerability Defined

**72 out of 231 respondents  
(31%) live in a medically  
vulnerable household**

## Households with electric- powered medical devices (EMD)

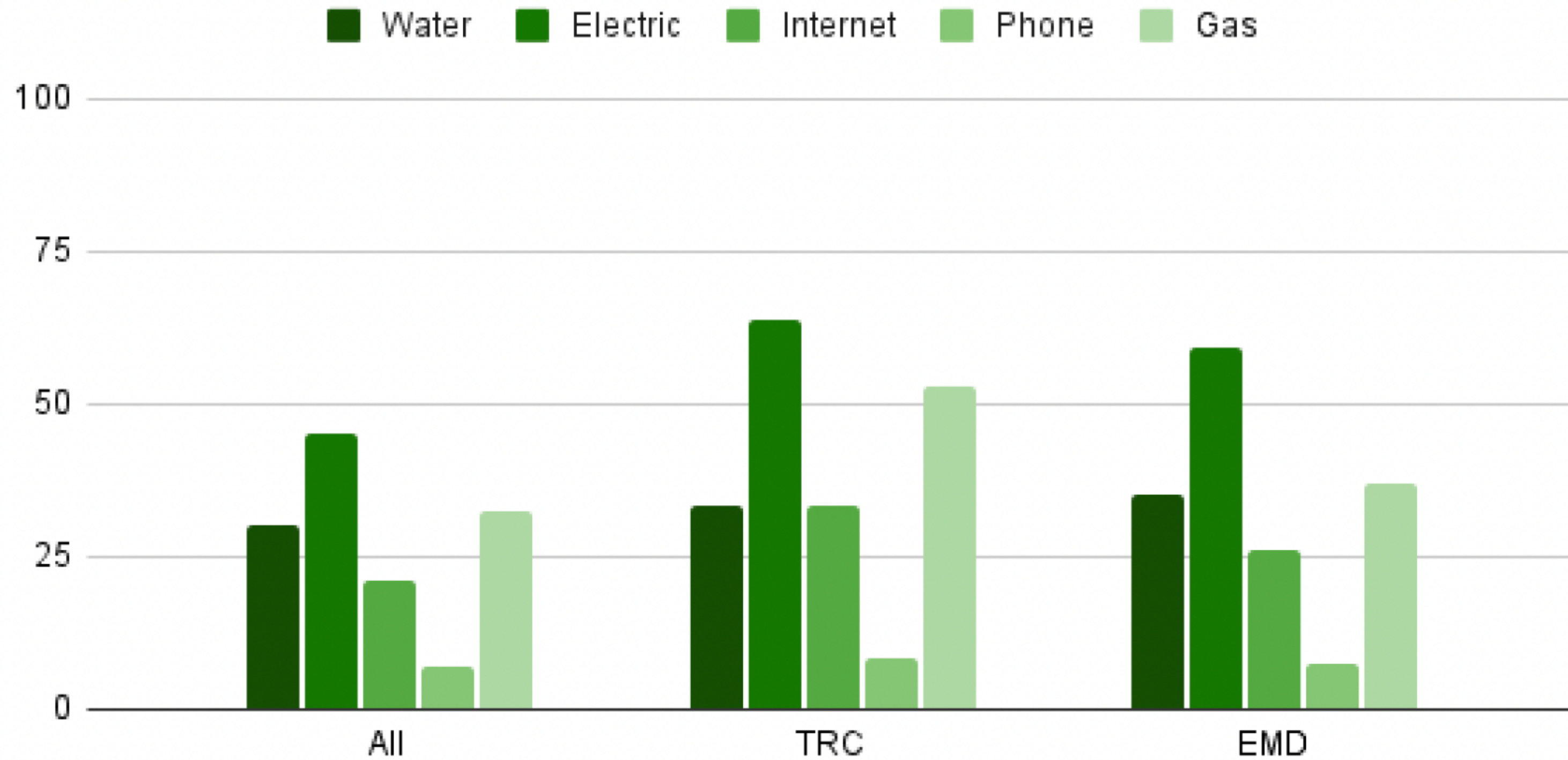
**23% of respondents reported that someone  
in their household uses a medical device  
powered by electricity.**

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## Households with temperature- related health issues (TRC)

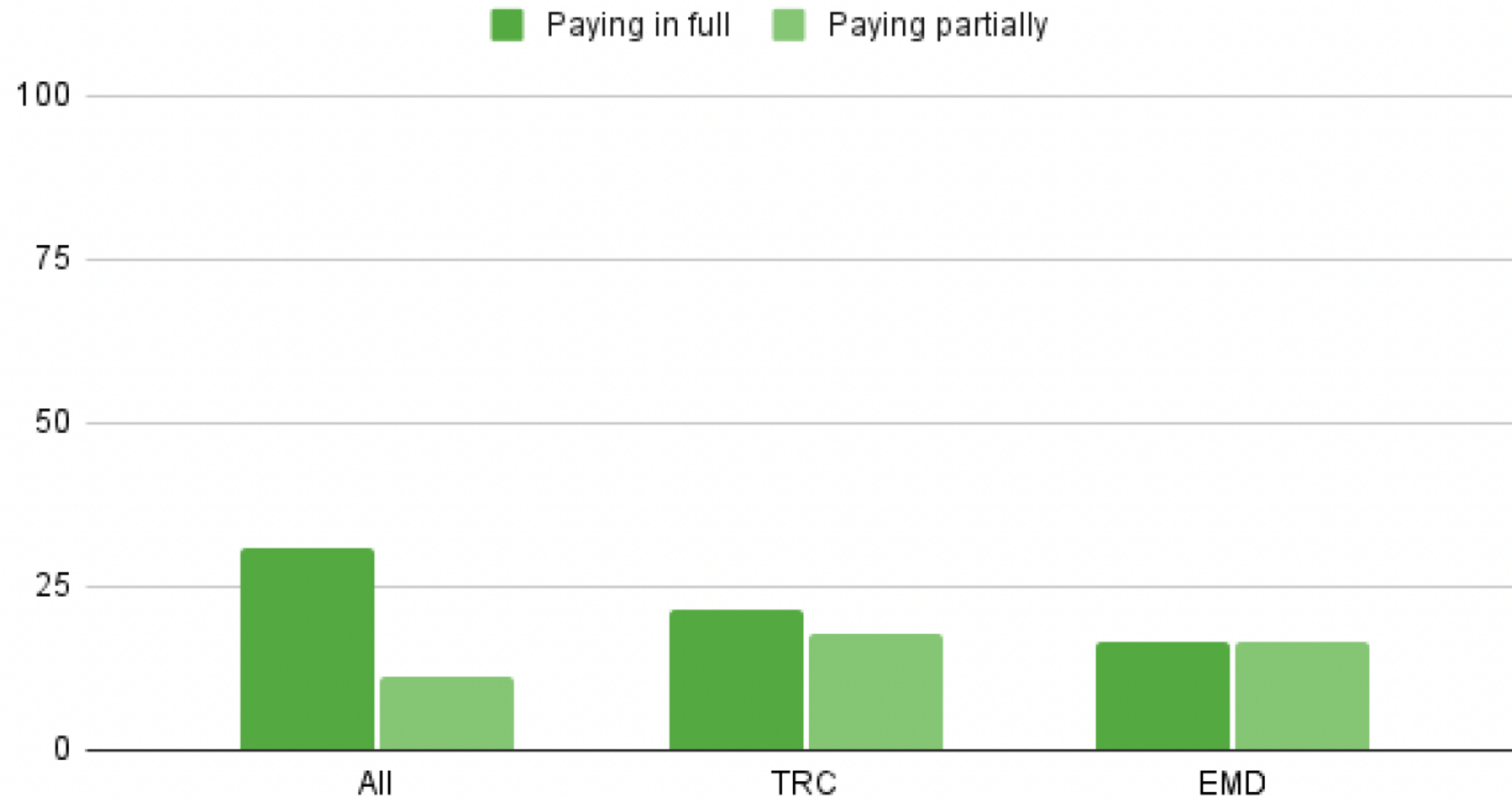
**15% of respondents live with someone who  
has a medical issue caused by or worsened  
by the temperature of the home**

# Households reporting an increase in utility bills during the pandemic



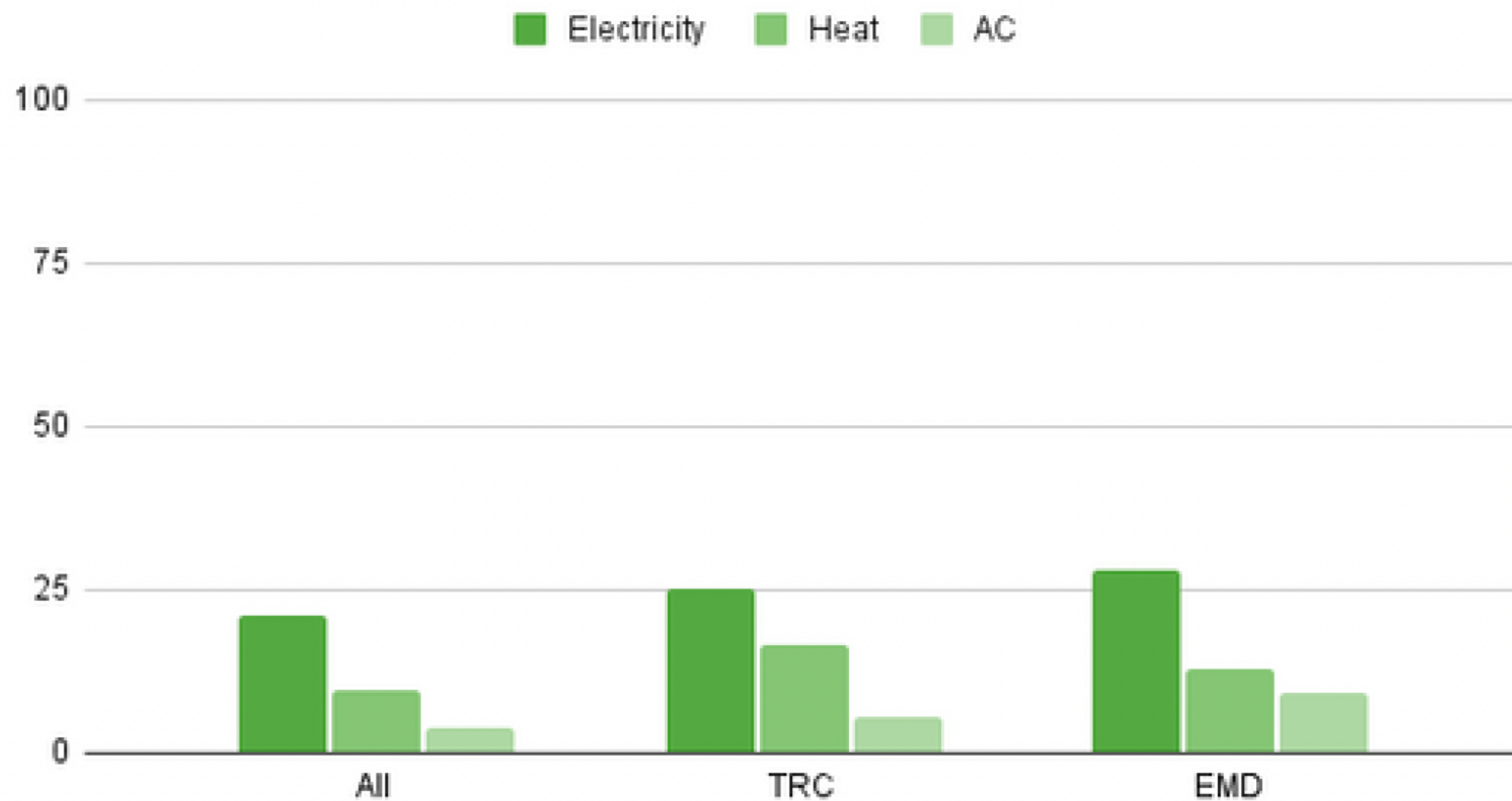
*This graph shows the percentage of households that reported an increase in their utility bills since the pandemic began.*

## Households' coping strategies for increased utility bills



*This graph shows the percentage of households that are making partial versus full payments on their utility bills when those bills are higher than pre-pandemic bills.*

## Households reporting a power outages since March 2020



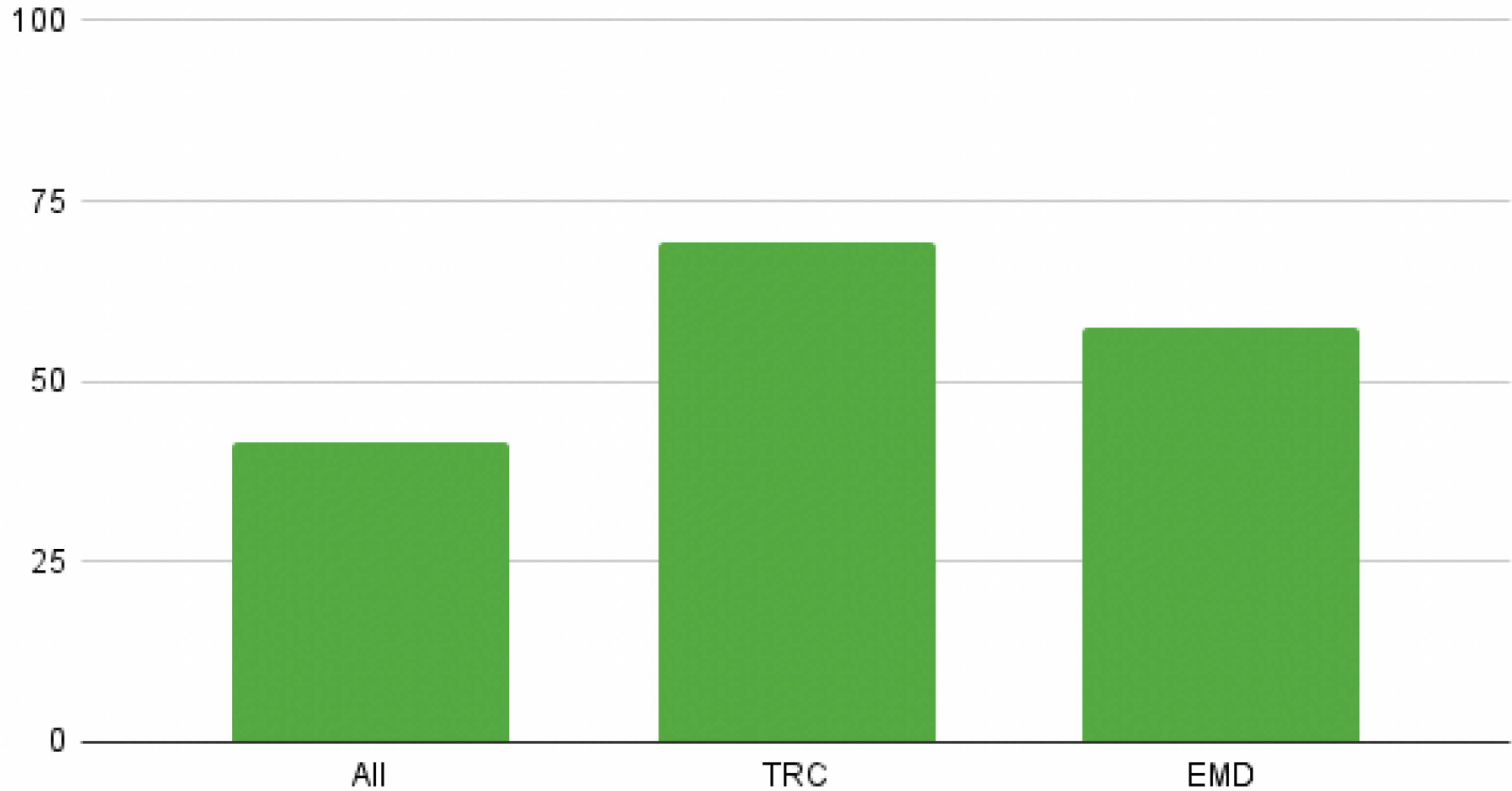
# Households that received a utility shutoff notice prior to the COVID-19 pandemic



*This graph shows the percentage of households that reported a utility shutoff notice prior to the pandemic.*

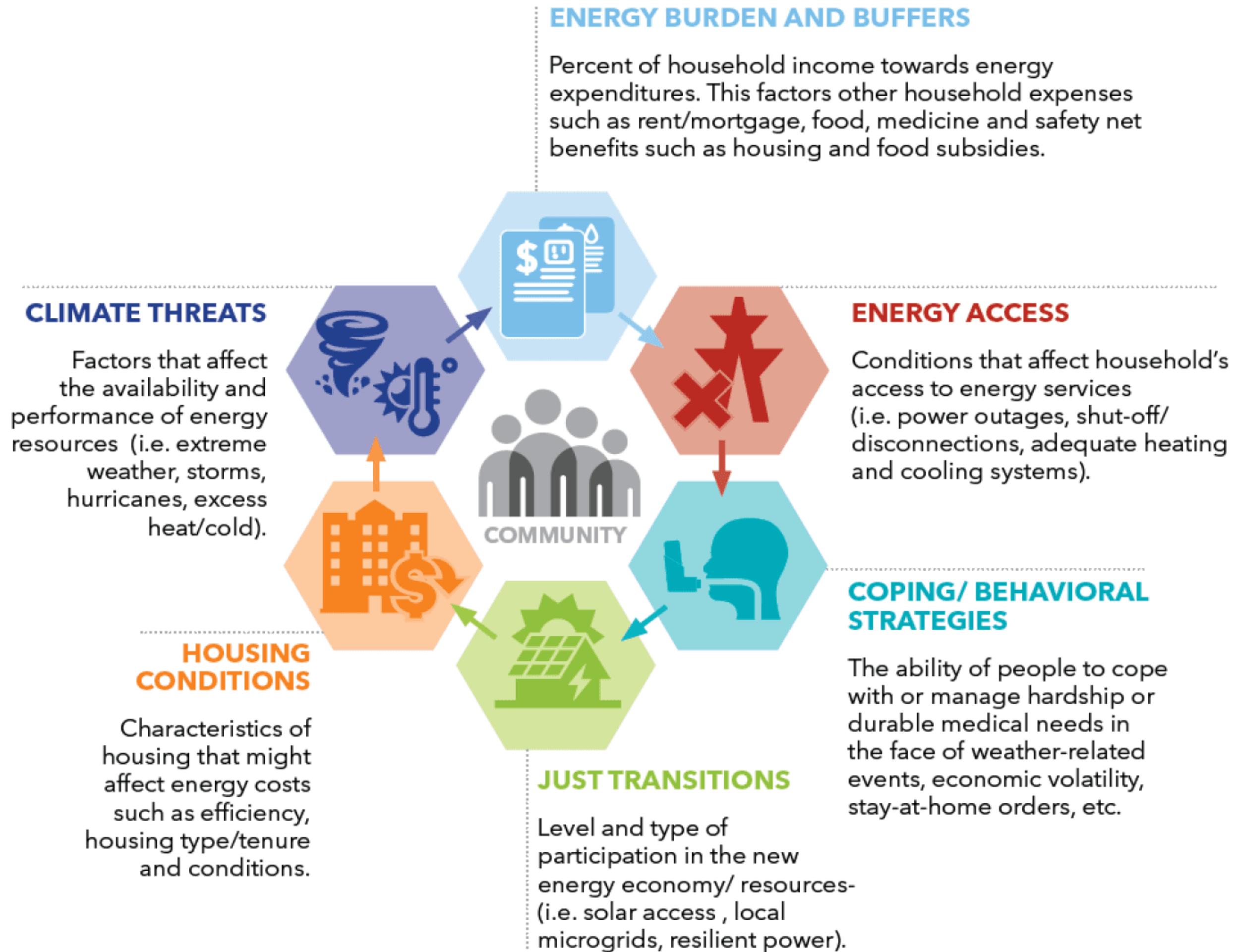


# Household reported enrollment in energy assistance programs



*This graph shows the percentage of households that enrolled in an energy assistance program at any point in time.*

# UNDERSTANDING ENERGY INSECURITY

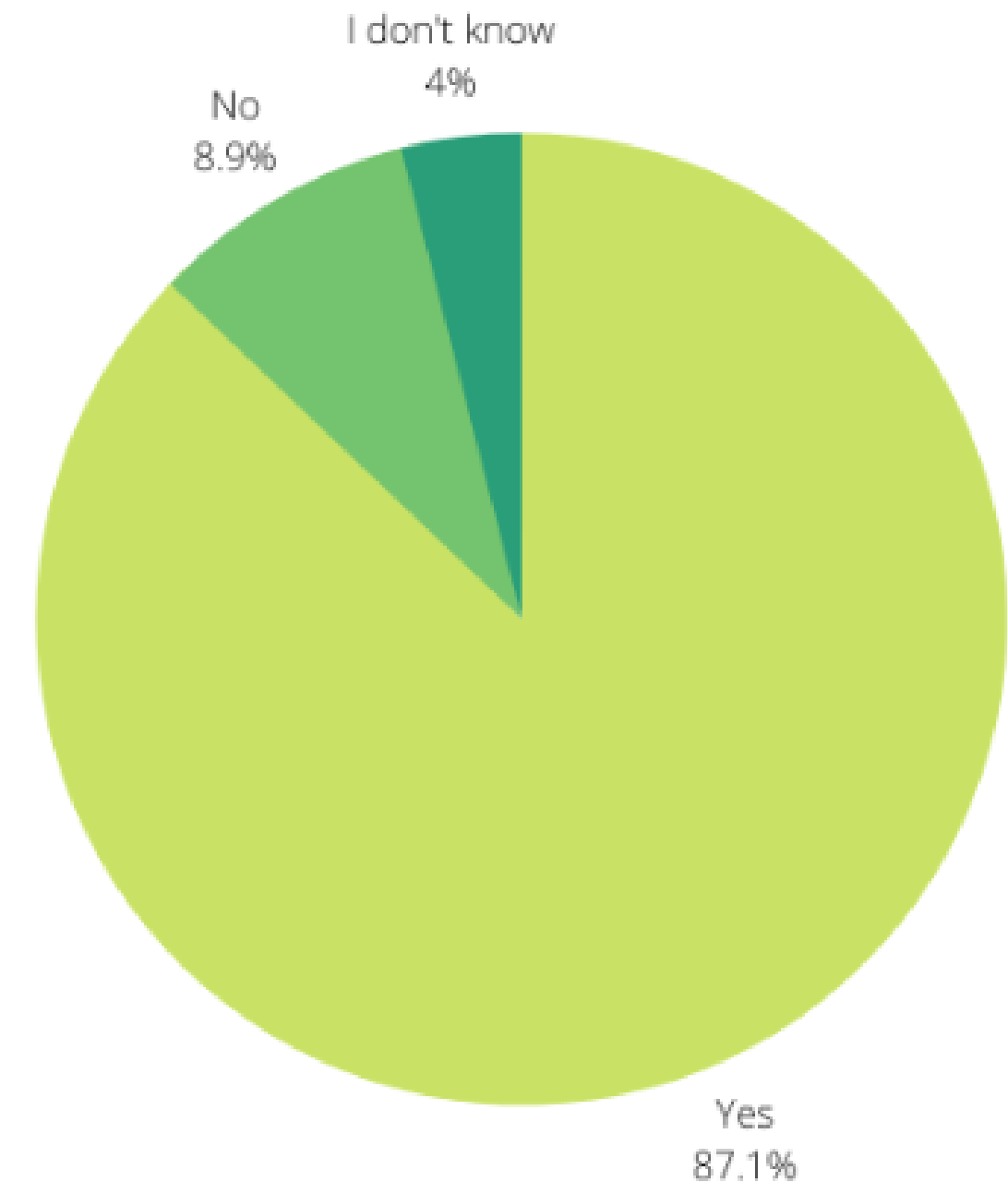




## 43/49. Do you think you have a right to energy?

This chart reflects responses to Question #49 from the Spring 2020 and Winter 2020 surveys, and Question #43 from the Spring 2021 surveys which asks respondents “Do you think you have a right to energy?” The available options were yes, no, and I don’t know. Two hundred and twenty-five respondents answered this question.

- 196 respondents (87.1%) answered “yes.”
- Twenty respondents (8.9%) answered “no.”
- Nine respondents (4%) answered “I don’t know.”



The data was produced by the Shifting Energy Demands in COVID-19 Survey, which has been administered to 234 people over three time periods. The Spring 2020 survey was administered to 86 people between May and June, and the Winter 2020 survey was administered to 83 people between December 2020 and March 2021. The Spring 2021 survey was administered to 65 people between March 2021 and June 2021. Visit the [Shifting Energy Demands in COVID-19 - Spring + Winter 2020 Survey Results](#) page to view more data from our survey. The project is approved by Drexel’s IRB.

“Yeah, I think it's a human right. Basics like electricity, regardless of income, *there should be a way* to have the ability to have electricity, to heat your home, the basic things, and for clean water, accessibility to clean water.”

— *George, Black man, 55-64 yo; Philadelphia, PA, March 2021*

“I have a right to buy energy.” - Phil, white man, 65-74 yo; November 2020

“Rights come with payment.” - Liz, white woman, 65-74 yo; May 2020

“Well, *I know you have to pay for stuff*, but you need electric and gas and water to live. *I think it is a right and a necessity. You gotta pay to have it, I believe*, but I don't see why you gotta pay so much, but i mean you need it to survive.“

- Sandy, Black woman, 45-54 yo, Winter 2020

“I have the right to have companies compete for my business and pick the one that best suits my economic situation and my needs. Unfortunately at this time, I prefer to keep the status quo of PECO and not open it up just yet because I do not trust them.” - Gabe, Latino man, 35-44 yo, Winter 2020

## Data highlights from our ongoing survey

56% of respondents reported that their household is consuming more energy due to COVID-19

47.4% of respondents were not aware of energy assistance programs that could help with utility bill payment during COVID-19

24% of respondents did not know what weatherization was when asked.

Most respondents practice some form of energy conservation. For example, 35% of respondents use sunlight instead of electric lighting to save on electricity, 32% wear more clothes or use more blankets in order to save on heat, and 48% unplug devices not in use to save on electricity.

80% of respondents believe that they have the right to energy

## What do you think?

## About the Project

The Energy Rights Project is a social science study that investigates 1) how people understand energy systems, 2) how people access and use energy in their homes, 3) how organizations shape understanding of energy systems and everyday access to energy, and 4) how policy shapes relationships between energy users, energy providers, and energy assistance organizations.

The Energy Rights Project has three main objectives:

- To collect data and provide analysis that is useful for energy service organizations (ESOs) and policymakers.
- To provide an archive of material that can lend insight into household energy use, the struggle to secure affordable access, to energy and what can be done to address common problems related to energy affordability and security.
- To help educate people about energy - through our research activities and also by working with other organizations.

This project is funded by a National Science Foundation standard grant in the Division of Social and Economic Sciences Science and Technology Studies program.

### Contact Us

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<https://energyrights.info>



## The Energy Rights Project

Engaging Citizens. Speaking to Policy

## What are energy rights?

In the United States, we are not taught to think about energy as a right. But shouldn't it be?

Below is a list of energy rights that the Energy Rights Project team came up with before beginning our research. We invite you to think about your relationship to the below items and provide us feedback. Maybe there is something that is not on the list that you think is an energy right.

- I have a right to electricity.
- I have a right to internet access.
- I have a right to air conditioning.
- I have a right to clean water for bathing, cooking, and drinking.
- I have a right to heat.
- I have a right to choose my energy provider.
- I have a right to choose the source of my energy supply.
- I have a right to phone service.
- I have a right to financial assistance to pay my utilities as needed.
- I have a right to itemized utility bills.
- I have a right to updated appliances, if I am a renter, so that my bills are affordable.
- I have a right to appliances and HVAC units that keep my living space healthy.
- I have a right to a weatherized home.



## What people have said about their right to energy:

"I believe I have a right to be able to make payment agreements if I'm having a difficult situation, a longer payment plan than just a short term agreement."

"That energy should be available. That energy should be consistent and well maintained. And reasonably priced. This is dependent on government oversight."

"I have a right to sustainable energy. I think the government has to put things in place for people to be able to afford energy, and they also need to educate people on proper use of energy."

"I have a right to the basics to live. Come to think of it, it sucks that they charge you for that. These are things you need to live. Never looked at it that way until just now."

## Barriers to affordable energy

One of the things we've learned from talking to Philadelphians is that, while it seems like everyone should have access to energy --- utilities like electricity, gas for heating and cooking, water for bathing and drinking, and oil for heating systems -- many people face barriers to consistent access to energy that is affordable. Here are some of the biggest barriers to affordable energy that we've found:

- Income guidelines for energy assistance programs prevent working families from getting what they need
- Homes that have older model appliances, drafty windows and doors, use more energy, making it harder to heat and cool homes affordably
- Utility bills are often confusing to read and it's not always clear what we're paying for

**Join us in the effort to shift thinking and policy so that affordable, sustainable, and healthy energy is guaranteed to everyone.**



Pamphlet from *The Energy Rights Project*

# **Thank you!**

**Please contact me at  
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for further information.**