

Low-Income Residential Energy Needs:
*Responding to Projected Increases in
Residential Natural Gas Prices*

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APPRISE

NASUCA Meeting

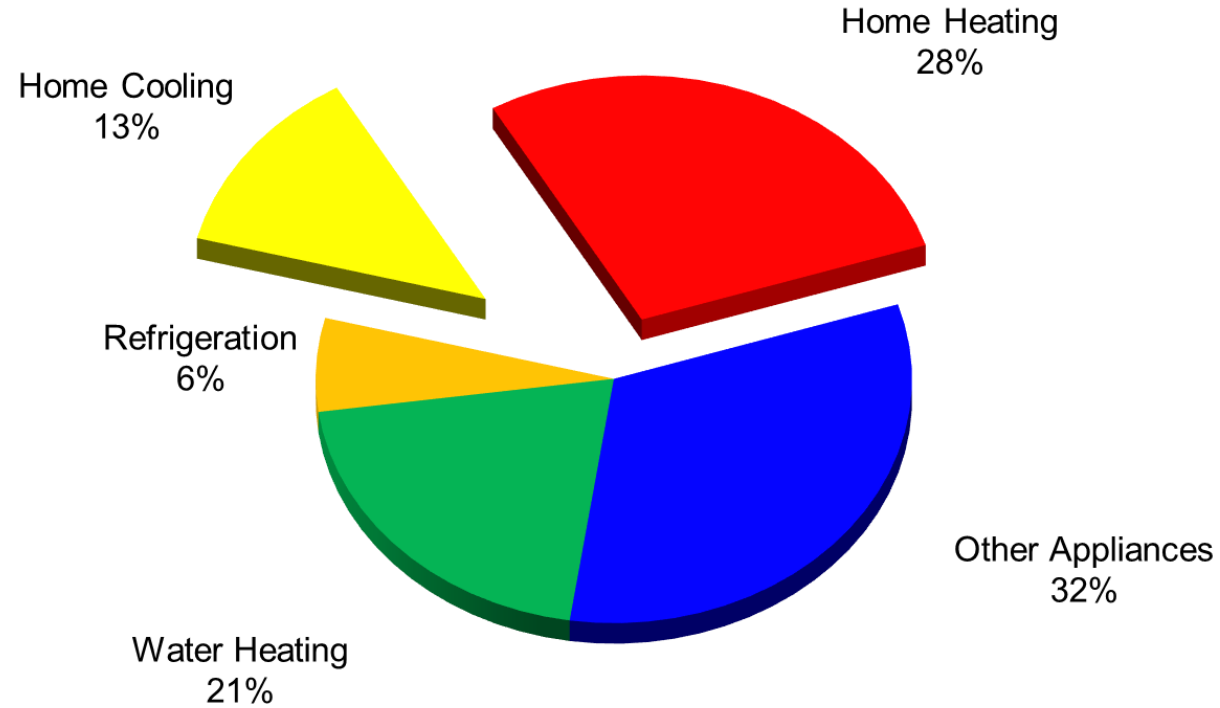
November 14, 2022

Background on APPRISE

- Nonprofit research institute in Princeton, NJ
- Founded in 2002
- Specializes in low-income energy policy research and program evaluation
- Provides technical assistance to HHS for LIHEAP
- APPRISE Website: www.appriseinc.org

Low-Income Residential Energy Characteristics and Trends

Low-Income Residential Energy Expenditures by End Use



Source: 2015 RECS data

Natural Gas for Heating

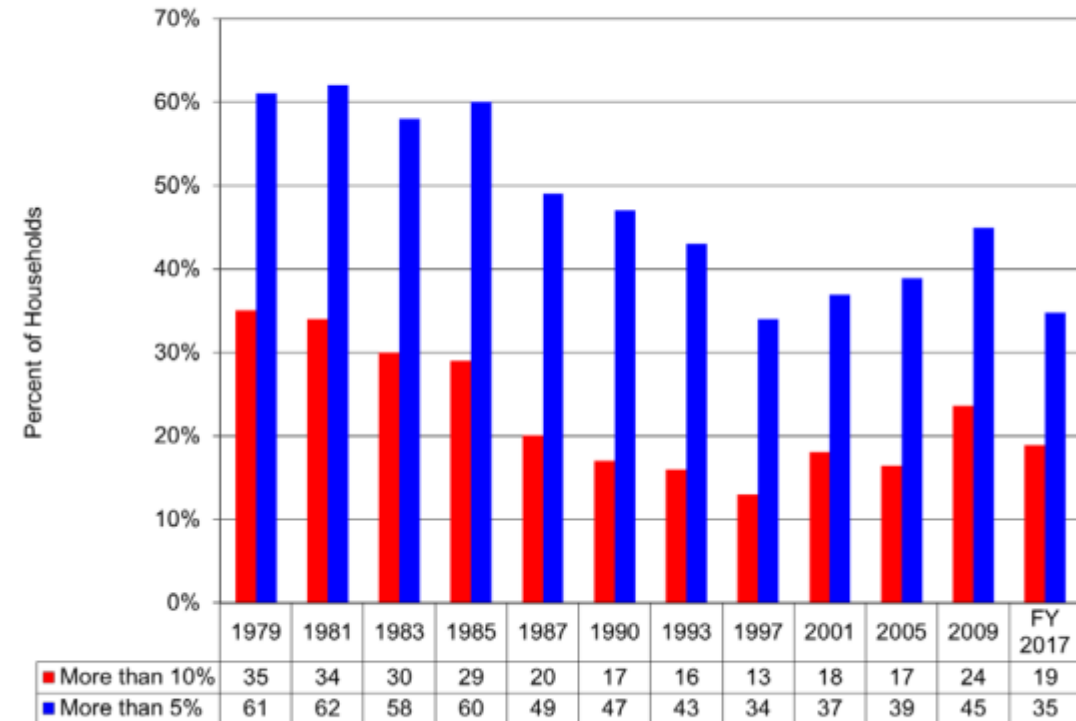
- 42% of low-income households use natural gas for heating (2015 RECS).
- Residential Energy Comparison for Homes with Natural Gas Main Heat (FY 2021):

Group	Consumption (MMBtus)	Energy Expenditures (\$)	Mean Individual Burden (%)	Mean Group Burden (%)
Low-Income	83	\$1,729	11%	7.9%
Non-Low-Income	99	\$2,129	2.8%	1.7%

Trends

- Low-income energy burdens have remained relatively stable since the 90s.
- LIHEAP has served approximately 16%-17% of the LIHEAP income-eligible population in recent years.
- 35% of low-income households spend above 5% of income on home energy (heating & cooling)

Figure 2-9. Percent of low income households spending over 5 percent and 10 percent of income on home energy, 1979 to FY 2017



Source: 2017 LIHEAP Home Energy Data Report

Expectations for FY 2023

EIA Winter Fuel Outlook

Projected Increase in Winter Energy Expenditures

Fuel Type	Dollar Increase (\$)	Percent Increase (%)
Natural Gas	\$900	25%
Electricity	\$1,366	11%
Heating Oil	\$2,694	45%
Propane	\$25	1%

Source: EIA Winter Fuel Outlook, Table WF01, Updated November 2022;
<https://www.eia.gov/outlooks/steo/pdf/wf01.pdf>

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Projected Impact of Increased Energy Costs During FY 2023

BACKGROUND

The U.S. Energy Information Administration (EIA) has forecasted higher residential energy expenditures this winter due to higher energy prices and increased heating consumption from an anticipated colder winter.

To understand how the increase in energy expenditures will impact LIHEAP recipients, the most recent Performance Measures data for FY 2021 was used to estimate changes in energy bills and burdens for FY 2023 based on the EIA regional fuel forecasts.

Highlights for Wisconsin

Average Total Annual Energy Bill of LIHEAP Households Projected in FY 2023:
\$2,398

Estimated Average LIHEAP Benefit Amount Needed in FY 2023 to Achieve FY 2021 Post-LIHEAP Energy Burden Level:
\$1,599 per household

Main Heating Type with the Highest Projected Energy Bills in FY 2023:
Fuel Oil

LIHEAP Households by Main Heating Fuel Type

FY 2021 (Reported)

	All	Electricity	Natural Gas	Propane	Fuel Oil
LIHEAP Households	184,150	24,682	138,634	17,975	2,859
Average Main Heating Bill	\$766	N/A	\$601	\$1,051	\$1,286
Average Total Energy Bill	\$1,823	\$1,317	\$1,801	\$2,508	\$2,732
Energy Burden Before LIHEAP	9.2%	8.0%	8.8%	12.2%	13.6%
Average LIHEAP Benefit Amount	\$1,024	\$708	\$1,028	\$1,346	\$1,515
Energy Burden after LIHEAP	4.0%	3.7%	3.8%	5.7%	6.1%

FY 2023 (Projected)

	All	Electricity	Natural Gas	Propane	Fuel Oil
Average Main Heating Bill	\$1,240	N/A	\$1,105	\$1,618	\$2,498
Average Total Energy Bill	\$2,398	\$1,473	\$2,418	\$3,213	\$4,080
Energy Burden before LIHEAP	12.0%	9.0%	11.8%	15.7%	20.3%

Projected Percent Change in Average Total Energy Bill from FY 2021 to FY 2023:
31.6%

Average Total Energy Bill (All Households):
 FY 2021: **\$1,823** **FY 2023: \$2,398**
Reported *Projected*

Range of Benefits for Heating Assistance:
 FY21: \$30-\$2,213 **FY23: \$30-\$1,518**
Reported *Planned*

Total Expenditures for All LIHEAP Households:
 FY 2021: **\$336M** **FY 2023: \$442M**
Reported *Projected*

Notes: FY 2021 values are those reported in the FY 2021 Performance Data Form – Module 2A. FY 2023 projections are based on adjusting FY 2021 annual values using the [2022 EIA fuel expenditure changes and Winter 2022/2023 expenditure forecasts for the region](#). Other fuels are excluded. Current as of Oct. 28, 2022

How can programs, policymakers,
and stakeholders respond?

Items to Remember

- **Gas Is Not Alone** – Price increases are projected for all major energy sources.
- **Heating is Not Alone** – There is growing need for summer cooling energy assistance, and baseload electricity costs
- **Projection Uncertainty** – Programs need to think carefully about how to plan given that projections are not certain
- **Diverse Goals** – Programs need to balance multiple goals and priorities
- **Funding Realities** – Needs exceed funding, and funding distribution varies.

LIHEAP Program

- The Block Grant structure of LIHEAP provides programs with flexibility in how to allocate funds and design their assistance.
- While states have already submitted their Annual Plans for FFY 2023, states can adjust their Plans and make “midstream” program changes (with meaningful public input for substantial changes).

LIHEAP Program:

Examples of Program Actions to Address Energy Needs

- **Adjusting Funding to Program Components**

- Programs seeing a large increase in need for heating or crisis situations may want to consider allocating a larger portion of funds for those components

	# of State/Territory Grantees*	Lowest % of Funds Allocated	Highest % of Funds Allocated
Heating	51 of 54	5%	78%
Cooling	32 of 54	1%	84%
Crisis	54 of 54	0.25%	42%
Weatherization	53 of 54	2%	25%

* Including America Samoa, Puerto Rico, and Washington DC

LIHEAP Program:

Examples of Program Actions to Address Energy Needs

- **Using Additional Funds for Increased Need**
 - These funds could be used to...
 - Increase benefit amounts
 - Serve additional households
 - Issue extra supplemental benefits
 - Provide more households with LIHEAP Weatherization
 - Provide budget counseling and energy education (Assurance 16)

LIHEAP Program:

Examples of Program Actions to Address Energy Needs

- **Adjust Outreach Approaches**
 - Encourage collaboration with utilities/partners on outreach
 - Mention energy and utility bills increases in materials
 - Increase outreach to working households / families with children
- **Improve benefit determination procedures**
 - Collect client data to help determine a household's need
 - Use a benefits matrix or formula that helps meet goals and maximize use of resources

Utilities & States:

Examples of Actions to Address Energy Needs

- Proactively communicate on winter bill increase expectations
- Increase visibility of program assistance resources



**We're
Here
For You**



Helping You Manage Higher Energy Costs

As we head into the winter season, higher wholesale prices of natural gas could impact your bill and household budget. Natural gas is still 50-70% less expensive than other fuel sources, and the price we pay for the commodity is the same you pay — without any markup. Regardless, we understand nobody wants to see higher costs. We're here for you and committed more than ever to providing resources to help manage your energy bills.

If you're having difficulty keeping up with your energy bills, there are available programs to help meet your needs, including:

- **Grants are available*** – to help pay your energy bills and minimize the impact on your household budget.
- **NJNG Budget Plan** – anticipate your NJNG bills by spreading estimated annual natural gas costs over 12 monthly payments.
- **No-cost Quick Home Energy Checkup** – identify opportunities to save energy.

Utilities & States:

Examples of Actions to Address Energy Needs

- **Be careful with advising households to reduce thermostat temperature settings.**
 - Due to hypothermia risks, the Institute of Aging advises that senior citizens maintain an indoor temperature of at least 68°F.
<https://www.nia.nih.gov/health/cold-weather-safety-older-adults>
- **Provide information about dangers of using oven/stove for heat and of fire risks from supplemental space heaters.**
 - These practices are likely to increase due to avoid use of main heating system / heating whole home.

Utilities & States:

Examples of Program Actions to Address Energy Needs

- **Provide or Expand Assistance Programs**
 - Additional program resources may be needed to meet need
 - Coordinate assistance and energy usage reduction efforts
- **Late Payment Collections/Arrearages**
 - Consider flexibilities based on increased affordability challenges
 - Provide payment plan options for households struggling

WAP and LMI Energy Efficiency Programs: *Examples of Program Actions to Address Energy Needs*

- **Utilize cost-effectiveness opportunities**
 - Higher prices can mean weatherization opportunities are more cost-effective than previously
- **Electrification & Renewables**
 - Examine electrification opportunities for non-electric main heat households
 - More LMI households may be interested in emerging / pilot opportunities

Conclusion

Items to Remember

- Residential energy expenditures for low-income households are projected to increase substantially this winter.
- Low-income households using natural gas are expected to see substantial increases and are distributed throughout the country.
- Energy Assistance programs can work to respond to anticipated needs by making program adjustments and monitoring program applications and data to make mid-stream changes.
- Stakeholders and consumer advocates play a vital role and making program managers aware of constituent needs and in ensuring program success.

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