

# Knox County Energy Burden

## Impact of Rising Energy Prices on Lower Income Households

**Energy Burden** is the share of annual household income that is used to pay annual energy bills. For example, if a household has an annual energy bill of \$1000 and a gross annual income of \$10,000, the energy burden is 10%. Home energy burden, by definition, refers to heating and cooling alone. Heating and cooling together make up 50-60% of annual low-income consumer bills, depending on weather and price.

**Variations in Energy Burden:** Lower income households have higher home energy burdens: The lower the income, the higher the energy burden for the same energy bill.

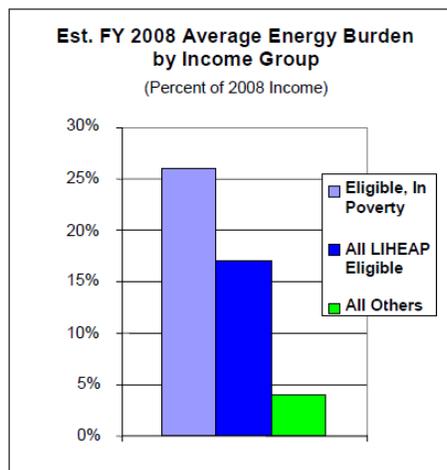
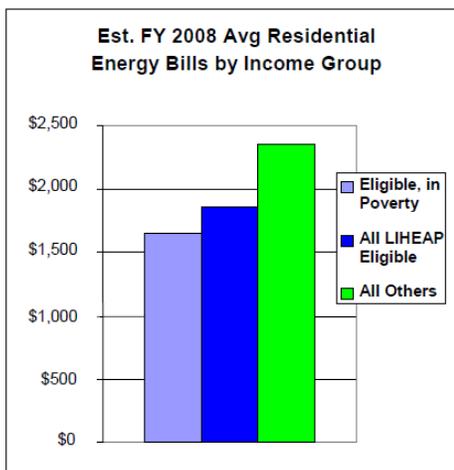
Tennessee 2012 Home Energy Affordability Gap (May 2013)					
	Knox County				State
	Individual HH Shortfall	Number of Households	Aggregate Shortfall	Home Energy Burden	Home Energy Burden
Less than 50% poverty level	\$1,429	11,838	\$16,916,381	27.80%	28.30%
50-99% poverty level	1,085	12,656	\$13,727,312	14.80%	15.48%
100%-124% poverty level	\$716	7319	\$5,238,293	9.90%	10.32%
125%-149% poverty level	\$470	7963	\$3,740,648	8.10%	8.44%
150%-184% poverty level	\$175	11,208	\$1,969,533	6.60%	6.94%
185%-199% poverty level		4,471		5.80%	6.03%
Total <200% FPL		55,527	\$41,592,166		

**LIHEAP:** The Low-Income Home Energy Assistance Program (LIHEAP) is a federally funded grant program that offers one-time financial assistance to qualifying low-income households who require support in paying their home heating or cooling bills. Applicants must have an income less than 150% of federal poverty level or 60% of state median poverty level to be eligible. LIHEAP benefits reach only 5 million (17%) of 30 million eligible households. In 2012, the primary heating fuel for Tennessee homeowners was electricity (50% of homeowners). The primary heating fuel for Tennessee renters was also electricity (73% of renters).

### 2012 Poverty Guidelines for the 48 Contiguous States and the District of Columbia

Persons in family/household	Poverty guideline
1	\$11,170
2	15,130
3	19,090
4	23,050
5	27,010
6	30,970
7	34,930
8	38,890

For families/households with more than 8 persons, add \$3,960 for each additional person.



The two charts compare the forecast bills and energy burdens for the entire nation's eligible population and for the subgroup of eligible households in poverty to bills and burdens of all households with incomes higher than the LIHEAP eligibility ceiling.

The first chart confirms

that the lower income use less fuel than others, but the second chart shows how it costs them a far higher share of their very limited incomes. Households not eligible for LIHEAP average a 4% annual energy burden.

Families living on low wages, disability payments, or a fixed income like Social Security face spending an average of roughly 14% of their income on energy. The average low-income family spends about one in five of their dollars on home energy costs every year. The energy bill can reach 70 percent of monthly income during the hottest and coldest months.

Older consumers are particularly vulnerable to rapid increases in energy prices. Although they consume approximately the same amount of energy as younger people do, older Americans devote a higher percentage of total spending to residential energy costs. This may be because older people spend a greater proportion of their income on home heating costs (even after adjusting for weather and home size). About one of every four low-income older households spends 15 percent or more of its entire income on home energy bills. Too often low-income older people risk their health or comfort by choosing between cutting back on energy expenditures and reducing spending for other necessities.

### **High Home Energy Costs Have Painful Consequences**

The high percentage of income paid by low-income households on home energy costs is more than just a cold fact. That higher percentage translates into serious family and social problems that impact each and every American, either directly or in the form of increased government expenditures to address those problems.

Several studies have demonstrated a strong connection between a family's inability to pay its home energy bills and some obvious-and not so obvious-consequences.

- Children are removed from their homes because of loss of heat or electricity.
- Senior homeowners are forced to leave their homes because they cannot keep up with their energy bills.
- Inability to pay utilities is second only to inability to pay rent as a reason for homelessness.

In 2001, 11% of US households could not afford to pay their energy bills at least once during the year. This was the most common of all inability-to-pay problems reported by the 21 million households who could not afford one or more essential services or goods that year. The majority of those with unaffordable energy bills experienced several hardships at once during the same period; the most common listed in order were

- Experienced hunger ("critical food insecurity")
- Skipped medical or dental care
- Missed rent or mortgage payment

Nearly half of those who could not afford their energy had incomes too high for LIHEAP eligibility, and nearly every one of them was a working family. The number and severity of simultaneous hardships rose in inverse proportion to income, so that the lowest-income had the most simultaneous hardships and the most severe or "critical" hardships. Those in poverty were by far the most likely to experience crisis-proportion hardships: hunger, utility shutoff and eviction.

**Resources:** The Burden of FY 2008 Residential Energy Bills on Low Income Consumers, Meg Powers (Economic Opportunity Studies, 2013), The TN Home Energy Affordability Gap (Fisher, Sheehan & Colton, 2013), TN 2012 Home Energy Affordability Gap Shortfall Calculation (Fisher & Colton, 2013.)