

Energy affordability is a critical issue that can significantly impact the financial, mental and physical well-being of households across Kentucky. Many factors including demographics, housing stock, and utility costs all play a vital role in determining the ability of Kentucky households to afford the cost of living, particularly in terms of energy expenses. Energy affordability is also influenced by federal and state energy assistance programs. These programs, such as LIHEAP, help low-income households cover energy expenses, reducing the burden of energy costs. However, the availability and funding of these programs can fluctuate, impacting the ability of Kentucky households to afford energy. Moreover, these programs may not reach all eligible households, leaving some struggling to manage their energy bills. This data summary will delve into the key factors affecting energy affordability in Kentucky.

Demographics:

Demographics have a substantial influence on energy affordability. Kentucky has a diverse population, but a notable portion of residents face socioeconomic challenges. Energy burden is the percentage of household income spent on energy costs; it is typically a key performance indicator for the affordability of energy in a particular area. In Kentucky, the average energy burden was 3% for the total population and 8% for low-income population. However, energy burden can be as steep as 12% in some counties across the Commonwealth. Rising energy burden raises the cost of living for all Kentucky families. However, the negative impacts on low-income communities is greater due to the larger percentage of burden compared to the total income earned. In 2021, Kentucky's median household income was \$49,573; while this number has increased by 6% since 2020, the cost of living has kept pace with this increase. Additionally, Kentucky is 28% below the national median household income. 19% of Kentucky's population is considered to be below the poverty level, which is well above the national average of 11.6%. Kentucky's impoverished communities are concentrated in specific areas of the state, particularly in the eastern part of the state. In terms of educational attainment, Kentucky has made significant improvements in the percentage of people with high school diplomas and post-secondary degrees. In 2021, only 15% of the population, ages 18-64, did not have a high school diploma – an 18% decrease from 2016. For post-secondary degrees, 26% of the population, ages 25-64, received an associate degree and 18% received a bachelor's degree. Kentucky has seen a 15% increase in associate degrees and a 16% increase in bachelor's degrees since 2016.

Housing:

Housing conditions is another critical factor that affects energy affordability. Many households in the state reside in older and less energy-efficient homes which can lead to higher energy consumption and costs. The state's housing stock often lacks proper insulation and energy-efficient appliances, forcing residents to use more energy to maintain comfortable living

conditions. The age of homes and a lack of investment in energy-efficient upgrades contribute to the challenge of balancing housing and energy costs. Thus, making energy affordability a pressing issue for many Kentuckians. In 2021, 57% of the occupied housing stock utilized electric heating as their primary heating source while gas accounted for 25%. In terms of age, the majority of Kentucky's housing stock was built between the years of 1980 and 1999, 32%, and 20% were built before 1960. Regarding the units that make up the housing stock, manufactured homes have been a focal point for the past five years as they can provide quality and affordable housing, especially for in low-income and disadvantaged communities. In 2021, manufactured houses made up 17% of the housing stock with the majority of these units being in the eastern part of the state. In Martin County specifically, nearly half of the occupied housing units are manufacture homes. 11% of the housing stock are apartments (2+ units) and the remainder of the housing stock is made up of detached and attached units.

Utilities:

Utilities are a major part of the equation when assessing energy affordability in Kentucky. Historically, the state has had some of the lowest electricity rates in the nation, due to its coal-rich energy production. However, energy production has been transitioning towards cleaner sources, which can affect utility rates. Kentucky households are increasingly facing the need to invest in energy-efficient technologies and practices to keep energy costs under control. For lower-income households or those in older, inefficient homes, this transition can be particularly challenging. In 2021, Kentucky's average monthly electric utility bill was \$134, an increase of 8% since 2016. As with demographics and housing stock, the highest electricity costs are focused in the eastern part of the state with Boyd, Perry and Pike counties having the highest of the 120 counties. Most counties in the central part of the state have electricity prices below the state average. In terms of utility gas costs, the average monthly bill was \$96, a 17% increase from 2016. Like electricity, the eastern part of the state has the highest utility gas costs. Water utility costs are the cheapest of the utility bills across the state with an average monthly bill of \$42, while still experiencing an 8% increase since 2016. Jefferson County has the highest water utility cost in that state at \$78 monthly. Lastly, for other fuel costs, which include fuels such as wood, coal, and solar energy, the average monthly cost in 2021 was \$47, only a 1% increase from 2016.

Energy affordability in Kentucky is a multifaceted issue largely shaped by demographics, housing conditions, and utility costs. The state's lower median income, older housing stock, and increasing utility costs all impact the ability of Kentucky households to afford the cost of living, with energy expenses being a significant component. Addressing these challenges requires a comprehensive approach, which includes improving the energy efficiency of housing stock, ensuring equitable access to energy assistance programs, and balancing the economic impact of transitioning to cleaner energy sources. Energy affordability is a critical issue that requires ongoing attention and policy measures to support Kentucky residents in maintaining a reasonable quality of life while managing their energy expenses.

All data presented in this fact sheet are 2021 estimates. To find the sources of the data presented, please refer to the [Kentucky Energy Affordability Dashboard Technical Notes and Data Dictionary](#).