

Madison County Energy and Empowerment Survey Report



Summer/Fall 2008

October 23, 2008

Conducted by Berea College student Beth Bissmeyer in partnership with Kentuckians for the Commonwealth (KFTC). Special thanks to Berea College 2008 graduate Ian McHugh for his efforts conducting surveys and compiling data for this project.



KENTUCKIANS FOR THE COMMONWEALTH

25 years of Action for Justice

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Introduction

Much has been in the news recently about the rising costs of energy supplies. To date, the nation's focus has been on the rising cost of crude oil (gasoline and diesel fuel). However, while oil prices are going up, they are not the only energy threat facing Kentuckians. The price of coal has gone up faster than that of oil, natural gas, diesel or gasoline. This is especially significant in Kentucky where we rely on coal for 94% of our electricity.ⁱ "Between 2000 and 2006, the average price of Kentucky's electricity has increased nearly 30%. The year-to-year price increase in 2005 and 2006 was over 8 percent."ⁱⁱⁱ

Kentuckians are also less energy efficient than most other states. "Kentucky's average residential electric price is 33% less than the national average but the average residential bill is only 16% below the national average."ⁱⁱⁱ Kentucky's inefficient electricity use, coupled with the escalating cost of coal, could leave low and middle-income Kentuckians in a difficult position this winter and beyond.

The Madison County Energy Survey attempted to gauge the extent to which Kentuckians, specifically middle and low-income families, are being impacted by rising energy costs. In addition, the study attempted to learn more about the level of knowledge that Kentuckians have about energy and conservation. The community-based research study used a survey to discover, among other things:

- How people are impacted by rising electricity costs
- What people identify as the cause of rising prices
- In what ways do people need assistance in saving energy
- How much people pay on average for electricity

- What people identify as the source of their electricity.

Berea College senior Beth Bissmeyer and Berea College 2008 graduate Ian McHugh, conducted the study as interns with a local, grassroots social justice group called Kentuckians for the Commonwealth (KFTC). The partnership between Berea College and KFTC through the study provided benefits on both ends. KFTC staff provided guidance and knowledge in developing the survey instrument, developing a method and plan for conducting the surveys throughout the community, and assistance with the data entry. In turn, KFTC obtained valuable information about the current needs in the community and contact information for folks participating in the survey that can be used in their ongoing organizational work in the community.

Background

Berea College's CELTS program awarded Bissmeyer and McHugh a \$600 Energy and Empowerment grant to conduct this study. Bissmeyer and McHugh spent the summer conducting the study as interns for KFTC. Locations where the surveys were conducted included: Kroger Shopping Center in Richmond, Sav-A-Lot store in Berea, Wal-Mart store in Berea, and walking door-to-door in several Berea neighborhoods. Participation was voluntary, and all who opted into the survey received a free compact fluorescent light bulb and information about the energy saved using a CFL bulb and also an energy efficiency tip-sheet. 259 individuals participated in the study over a three-month period.

A key demographic question that was asked of respondents was their household annual income. The breakdown of the income brackets for respondents can be found in Figure A. Almost half of respondents (48%) had an income of \$25,000 or less.

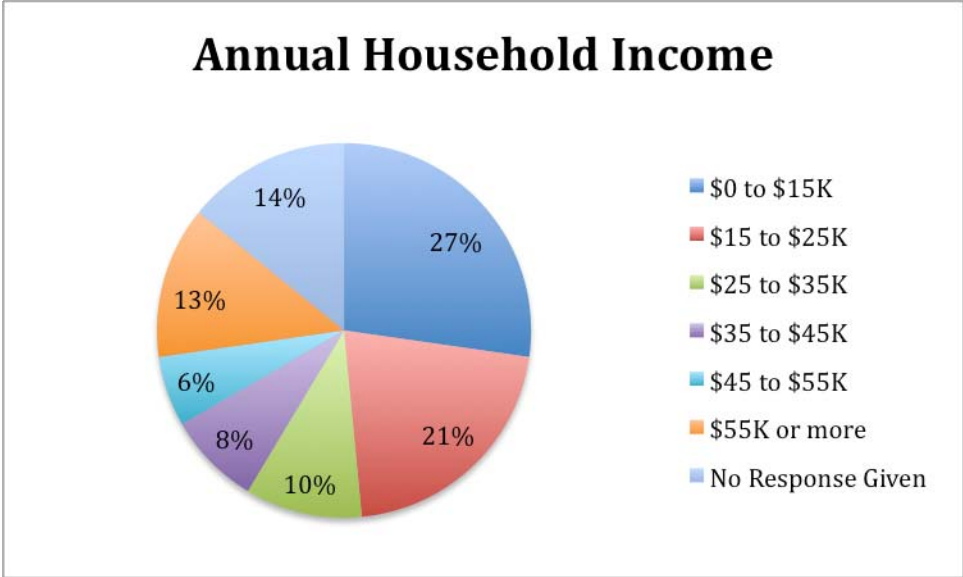


Figure A

Most of the survey respondents were from Berea (43%) and Richmond (24%) since the focus of the study was Madison County. Another 20% were from towns outside of Madison County and 13% did not provide their addresses. (Figure B)

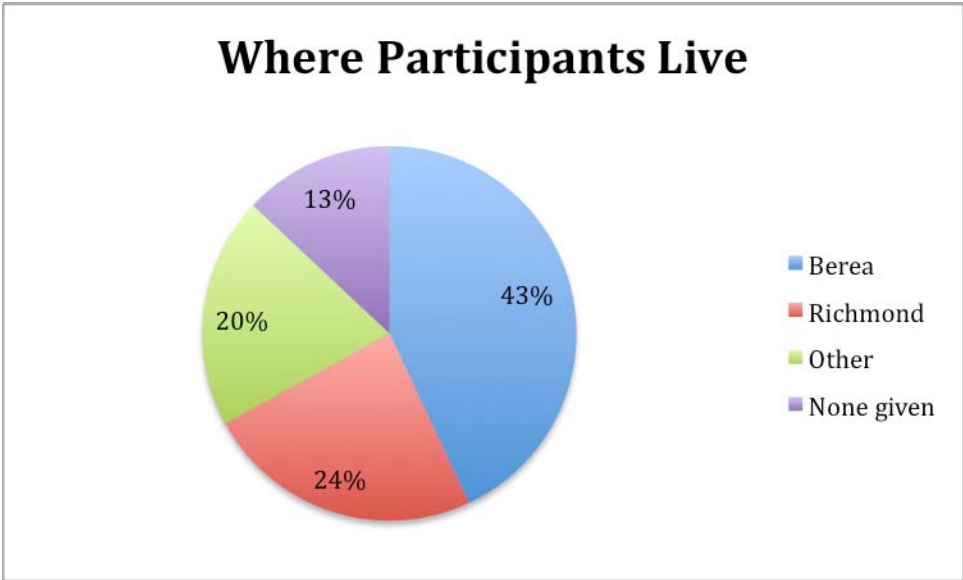


Figure B

Findings

The study produced three key findings. First, almost everyone surveyed said they were being impacted by rising energy costs. Secondly, almost all participants did not know how their electricity was generated. Finally, almost all participants are taking small measures to conserve energy but lack the resources to reduce larger sources of energy use in their home.

Impact from rising energy costs

94% of respondents said they were being impacted by rising energy costs. Just 16 of the 259 individuals said they were not being impacted. Participants indicated that they were being forced to cut back on their energy use in their homes, the amount they drive, and also with other expenses not directly related to energy including food and healthcare. “I’ve cut down on food and drugs. I have to make a choice,” described one participant. “I don’t know what I am gonna do.”

“It takes away from other things, like food and stuff,” one person said of her efforts to keep her energy bill paid.

Other participants talked about the impact on their fixed social security income. “I’m on a limited disability income and only have so much. Anything going up will really hurt us.”

Another survey respondent on a fixed income said, “Don’t think I can do any less. I don’t waste much. I’m a stingy woman. I’ve learned to save.” She finished by saying, “I take each day as it comes. When you’re low-income and have to live on Social Security, you learn to save.”

If not already on a fixed-income, folks expressed how they now have no extra wiggle room with their paycheck. “I don’t make enough to have extra,” one respondent said.

Another simply said, “My money isn’t going as far.”

Some participants expressed a feeling of hopelessness. “Not much you can do, if you don't pinch every penny. And people on disability have it hard. There is just no help.” The same hopelessness was expressed when one person said, “We’ve tried to cut back. Don’t see how we could cut back anymore.”

Another person said, “If it keeps going up, we just won’t be able to afford it.”

Some folks expressed varying levels of distrust, fear, and anger. “I feel like I am being ripped off,” one participant stated.

Knowledge of how electricity is generated

Currently, Kentucky is almost solely dependent on coal as the state’s energy source. Kentucky receives 93% of its energy from coal, 3% from hydroelectric, 3% from petroleum, and 1% from natural gas (Figure C).

27% of survey respondents identified coal as the source of their electricity in Kentucky. Water was named as the main source by another 8%. The other 65% of respondents did not know how their electricity is generated (Figure D).

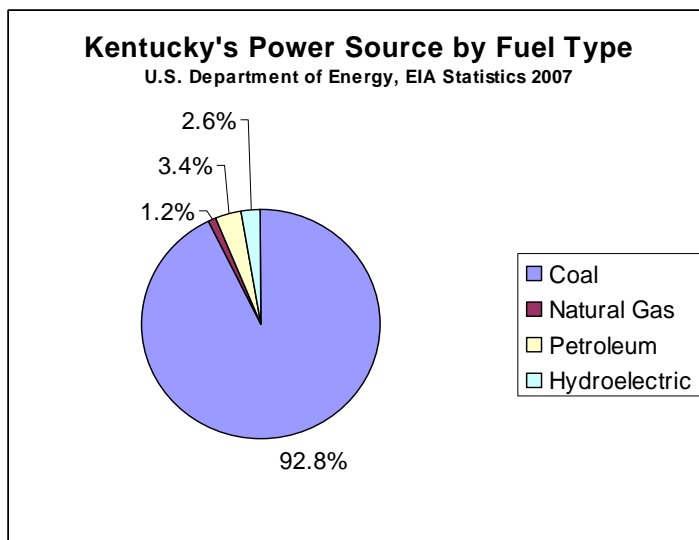


Figure C

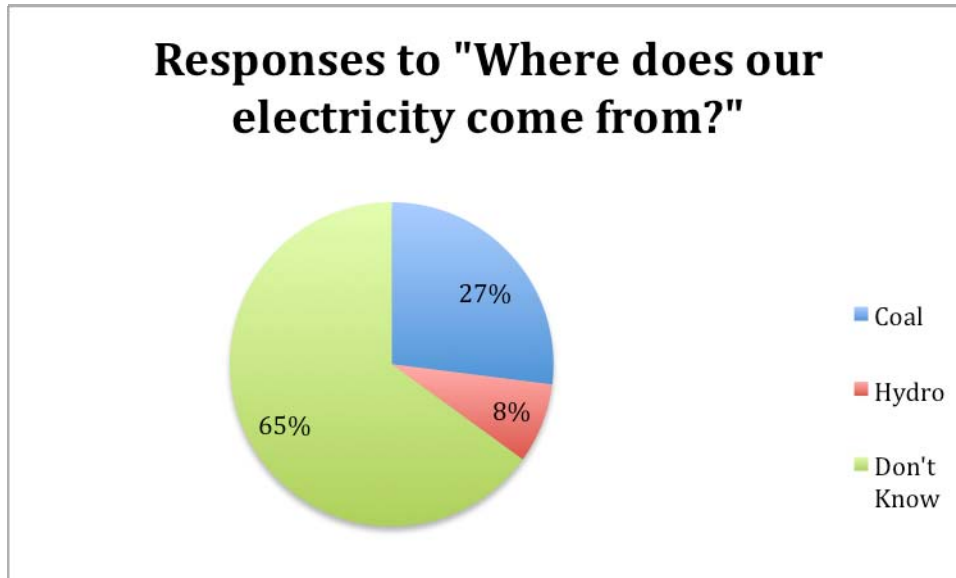


Figure D

Conservation Efforts

94% of respondents said they have taken steps to cut back on energy costs. Of the 16 folks who said they have NOT cut back their energy consumption, 12 of them (or 75%) rented their homes instead of owning them. This is a high percentage when compared to the 41% of renters in the overall sample. An interesting question that the survey did not ask was if the renters paid their utility bill directly or if the energy bill was included in the price of rent. If a renter does not see their utility bill directly, they perhaps see less of a need to conserve their usage.

Of the renters, just 10% said they have spoken to their landlord about taking steps to make the home more energy efficient. One participant who spoke to their landlord said he “wanted to weatherproof, but after two years the landlord still has not done anything.” Another two participants said that their landlords told them that they couldn’t afford to make any upgrades. Another said their landlord “did caulk the doors and windows, but that was all.” One survey respondent did say that their landlord agreed to put in new windows.

The most common conservation effort participants listed was reducing their energy use on heating and cooling of their homes and the use of lights in their homes. Another 13% of participants said they had replaced the windows in their homes for more energy efficient windows.

The number one energy efficiency barrier participants gave was money. One participant on a fixed income said in response, “Tell me a cheap way to do it.” Lack of knowledge about energy efficiency was the second most popular answer given when talking about the barriers. “Don’t know what else to do, we are doing all we can,” one frustrated respondent said.

Limitations

This community-based research study was challenged by the data collection method used. By surveying the majority of participants at two grocery-store fronts, there is no way of knowing if it is a representative sample of the population. In addition, surveying more than 250 participants is a large number for a qualitative study such as this. However, this sample size does not lend itself easily to a large quantitative study. It is important to note that this challenge is not unique to this study, but is a challenge with most community-based research.^{iv}

Recommendations

While this study did not directly explore policy solutions, through its findings it became evident that reform is needed to implement energy efficiency efforts among low and middle-income utility consumers. Through discussions with the 259 local residents, many of whom are low and middle-income, 94% said they had already taken steps to conserve and reduce the cost of their energy bill. In addition, an overwhelming majority, 84%, said they would like to receive additional

information about ways to reduce their energy use. This demonstrates a strong need for additional education surrounding low-cost energy efficiency information.

In addition, many surveyed were aware of the cost impediments to energy efficiency and lacked the capital to install energy efficient products that provide a pay-off in the future. More direct assistance is needed to serve the needs of the low-income community who could gain the most from energy efficiency.

“A tax credit, by its nature, presumes that the recipient has access to the capital needed to make the qualifying investments. Any household that cannot self-finance or borrow funds for the energy efficiency investments will not be able to get the credits. There is generally a correlation between household income and the quality of the housing stock it occupies, so the greatest need for energy saving investments is likely to be in those homes that are least likely to take advantage of the credit since the owners cannot obtain the funds for the needed improvements.”^v

Tax credits are a first step towards making Kentucky energy efficient; however, this approach leaves behind lower-income folks who often need energy efficiency the most.

In addition to increased education and direct assistance to low and middle-income Kentuckians, policy is needed to address the issue with housing that is not owner-occupied. Many renters surveyed were unaware that they could talk to their landlord about the efficiency of their home. Or, if they did speak to their landlord, the landlord was unwilling to make the voluntary upgrades. More exploration of this barrier to energy efficiency is needed that then results in action that protects tenants living in inefficient housing.

Conclusion

The Madison County Energy and Empowerment Survey incorporated and addressed the theme of Energy and Empowerment through its attempt to learn how ordinary citizens understand energy issues and utilities issues and also in its aim to reach out to community members.

One of the largest positive outcomes of this project was the interaction between Berea College students and the Madison County community. Bissmeyer and McHugh learned more about the needs and struggles of the community and were given an opportunity to learn about an issue from a different perspective than their own. Also, in educating the community on simple, inexpensive ways they can save energy in their home and distributing free energy-saving light bulbs, Bissmeyer and McHugh worked to directly empower people to cut back on electricity usage and costs.

Another positive aspect in the study was the collaboration between the Berea College students and Kentuckians for the Commonwealth. By partnering and sharing the data and contact information, Bissmeyer and McHugh's work can continue long past the summer as KFTC works in the community with survey participants and uses the data collected in their efforts to lobby for strong energy efficiency policies at the state and local level.

This report attempted to analyze the data collected from the survey and outlined in a way that demonstrates the needs of the community. This report will be made available through Kentuckians for the Commonwealth.

ⁱ Meyer, P. (2008). Protecting Kentuckians' Economic Well-Being in the Face of Energy Cost Increases. October 2008. Center for Environmental Policy and Management, University of Louisville.

ⁱⁱ Kentucky Energy Watch, January 8, 2008, p. 3.

ⁱⁱⁱ Kentucky Energy Watch, January 8, 2008, p. 4.

^{iv} Israel, B. et al. (1998). Review of Community-Based Research: Assessing Partnership Approaches to Improve Public Health. *Annual Review of Public Health*, (19), 173-202.

^v Meyer, P. (2008). Protecting Kentuckians' Economic Well-Being in the Face of Energy Cost Increases. October 2008. Center for Environmental Policy and Management, University of Louisville.

Appendix A

Survey on Energy – KFTC – Madison County – Summer 2008

Objective: To learn how people understand energy issues and utilities issues, and to also gain an understanding for their feelings about the energy and/or the environment. To learn how low-income residents are impacted. With this information, we hope to develop community outreach programs to help people cut back on energy use and costs.

Some of these questions ask for personal information that would be helpful for us to know, but if you are not comfortable answering a question, feel free to skip it.

1. Are you feeling the pinch of rising costs of electricity? YES or NO

-If YES, In what ways?

-If YES, what do you think is the cause of rising electricity rates?

2. What is the name of your electric utilities provider?

- Berea Utilities
- BlueGrass Energy
- Other? _____

3. Do you own or rent your home?

- Own
- Rent

3a. If a renter, have you spoken with your landlord about taking measures to make your home more energy efficient?

- Yes
- No

3b. What was the outcome of that conversation? What obstacles, if any, did you encounter?

3c. If an owner, have you taken steps, or are you considering taking steps, to make your home more energy efficient? Please describe.

3d. What are the barriers or challenges that you face in making your home more efficient? What incentives, information or other kinds of assistance would be helpful?

4. Have you done anything to cut back on electricity costs?

- Yes
- No

If YES, what have you done?

5. What is the average amount you spend each month on:

- Electricity? _____
- Natural Gas? _____

6. Please mark which annual income bracket your household falls under.

Annual income	Check the one that best describes your household.
\$0 - \$15,000	
\$15,000 - \$25,000	
\$25,000 - \$35,000	
\$35,000 - \$45,000	
\$45,000 - \$55,000	
\$55,000 - \$65,000	
\$65,000 or more	

7. Do you think most Kentuckians know where our electricity comes from? What's your sense of where it comes from?

8. Would you be interested in receiving information about how to save energy and possibly reduce costs?

- Yes
- No

9. Is there anything else you'd like to share with us?
