

Figure 16. Changes in Comfort Due to Actions Taken from Tips

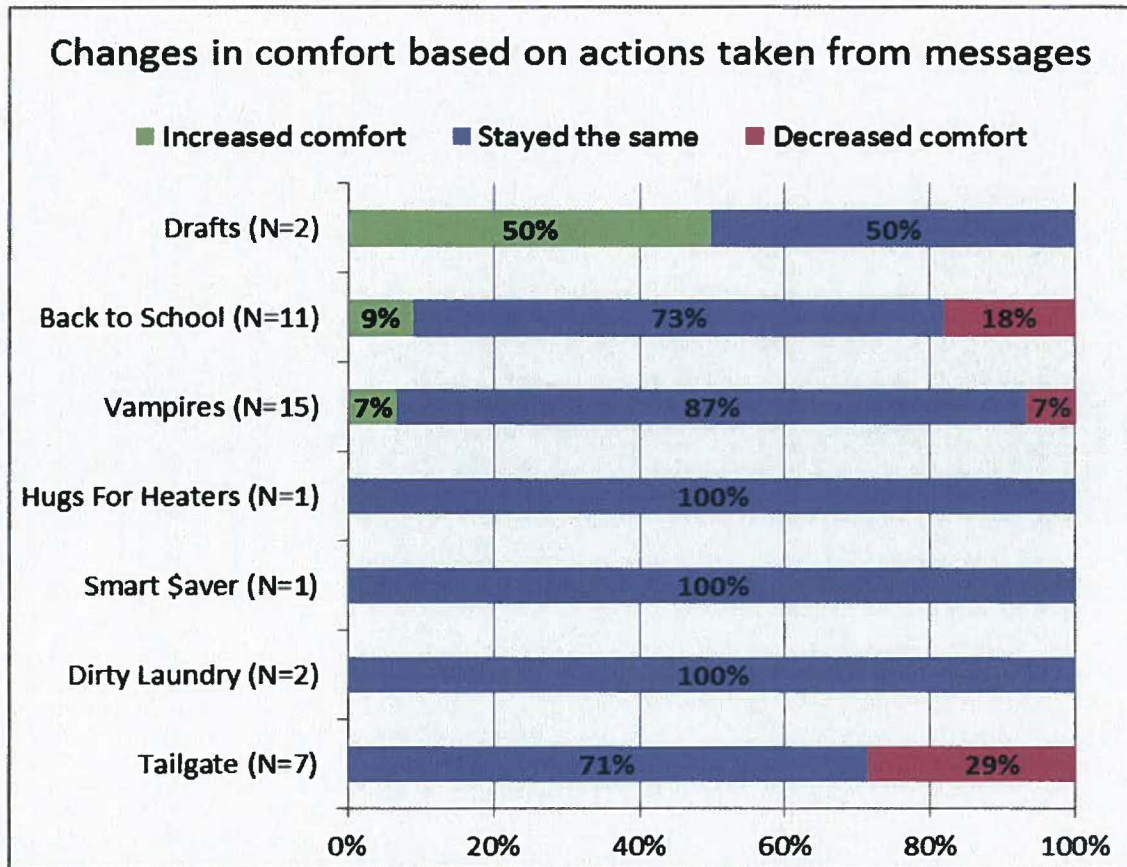


Figure 17. Changes in Comfort Due to Actions Taken from Messages

Customers Receiving Duplicate Reports

During some months, a portion of customers in the MyHER program received more than one MyHER report; this was apparently due to a data handling issue at the program vendor. Duke Energy became aware of the problem, having discovered it independently during their own quality control process. As of Spring, 2013, this problem has been corrected. All of the duplicate reports sent to surveyed customers in Kentucky were sent in August, 2012 (8.8% or 22 out of 249 customer surveyed received two reports that month). When these duplicate reports were sent, both included the same messages, but different sets of tips.

Table 22. Customers Receiving Multiple Reports in the Same Month

Month of Report	Customers Receiving Two Reports (N=249)
August 2012	8.8%
September 2012	0.0%
October 2012	0.0%
December 2012	0.0%
January 2013	0.0%
February 2013	0.0%
March 2013	0.0%

For the purposes of matching tips and messages to what customers recall from the reports, duplicate reports were included in the analysis (if a customer remembered a tip from either report received in a month, it was considered a correct match and the “days to recall” is calculated from the drop date of the report with the matching tip or message).

Other Energy Efficiency Actions Taken

Some of the surveyed MyHER customers have taken actions since they started receiving¹⁷ MyHER which they say were not influenced by MyHER messages or tips. Table 23 presents percentages of customers surveyed who have reported that they have taken such additional energy efficient actions. If the customer indicated that they took action, we asked them what they did. These open-ended responses are in Appendix K: List of Self-Reported Energy Efficiency Actions. The first question was open-ended, directed towards activities not influenced by MyHER, and elicited a variety of responses. The series of questions following the first asked about specific changes that respondents may have made in their homes and includes both actions inspired by the program and actions not inspired by the program.

When the initial open-ended question was asked about actions taken beyond those recommended by MyHER tips and messages, overall nearly one in five (18.1% or 45 out of 249) had taken additional actions. Customers who believe they “do more than others” are significantly more likely to have taken actions beyond the program (25.0% or 31 out of 124) compared to those who do “about the same as others” (11.2% or 11 out of 98, which is significant at $p < .05$ using student’s t-test; the sample size for those who “do less than others” is too small to be significant).

For actions taken by category (including both program-inspired actions and actions beyond the program), there are no significant differences between customers who read MyHER versus those who throw the reports away, or between those who do “more than others” versus those who do “about the same as others” for energy efficiency. However, customers who believe they do “less than others” were significantly less likely to have reduced energy consumption from home appliances (0.0%), cooling the home (9.1%), lighting the home (9.1%), and heating water (9.1%) compared to the other groups (all at $p < .10$ or better using student’s t-test).

Overall, the actions most likely to have been taken by surveyed customers involve reducing energy used to light the home (57.4% or 143 out of 249) and reducing energy used to heat the home (45.4% or 113 out of 249).

Only about one surveyed customer in ten has a pool (10.4% or 26 out of 249); the sample size of customers with pools is too small to show statistically significant differences, but both of the customers who did make efficiency improvements to their pools read the reports and believe they do “more than others” for energy efficiency.

¹⁷ All 249 customers surveyed in Kentucky began receiving MyHER in August 2012.

Table 23. Energy Efficiency Actions Taken by Customers

Statement	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Taken additional action to save electricity in the home (beyond actions influenced by MyHER)	18.3%	11.1%	25.0%	11.2%	9.1%	18.1%
Reduce energy from home appliances (including actions influenced by MyHER)	28.3%	33.3%	33.1%	25.5%	0.0%	28.5%
Reduce energy used to cool home (including actions influenced by MyHER)	34.2%	22.2%	39.5%	31.6%	9.1%	33.7%
Reduce energy used to heat home (including actions influenced by MyHER)	45.8%	33.3%	50.8%	41.8%	36.4%	45.4%
Reduce energy used to light home (including actions influenced by MyHER)	57.9%	44.4%	60.5%	61.2%	9.1%	57.4%
Reduce energy from home computers or electronics (including actions influenced by MyHER)	26.7%	44.4%	30.6%	25.5%	27.3%	27.3%
Reduce energy used to heat water (including actions influenced by MyHER)	24.6%	11.1%	26.6%	19.4%	9.1%	24.1%
Have a pool	10.4%	11.1%	10.5%	10.2%	18.2%	10.4%
Base: respondents with a pool	N=25	N=1	N=13	N=10	N=2	N=26
Made changes to pool to make it more efficient	8.0%	0.0%	15.4%	0.0%	0.0%	7.7%

Those who "don't know" how they compare to others are not shown in this table.

After asking customers whether they have taken actions to reduce energy in their home in the categories shown above, we asked what they did (recording up to three actions taken per respondent) and if MyHER had any influence on these actions taken. MyHER recipients could either say MyHER was the "main reason," "one reason among several (but not the main reason)," or that MyHER "did not have an influence" on their actions. These results are shown in Figure 18 for six specific areas of energy efficiency action (lighting, cooling, heating, water heating, home computers and electronics, and appliances).

The program influenced more than half of the actions taken to reduce energy in every category covered by this survey. Customers who took actions cited MyHER as the "main reason" for from 8.9% to 28.4% of actions taken, depending on the category. The greatest number of actions were taken in the area of lighting (N=172 actions taken by 143 customers who took action in this area) and this was also the area where MyHER's influence was greatest overall with MyHER being either the "main reason" or "one reason of several" for 79.1% (136 out of 172) of actions taken to reduce energy used to light the home. The areas where MyHER had the least influence are reducing energy from heating water with only 12.8% (10 out of 78) of actions inspired by MyHER as the "main reason" and overall 59.0% (46 out of 78) including actions where MyHER

was “one reason of several” for taking the action, and reducing energy from home appliances which was the “main reason” for 8.9% (8 out of 90) of actions taken, and had some influence on 61.1% (55 out of 90) including “one reason of several but not the main reason”.

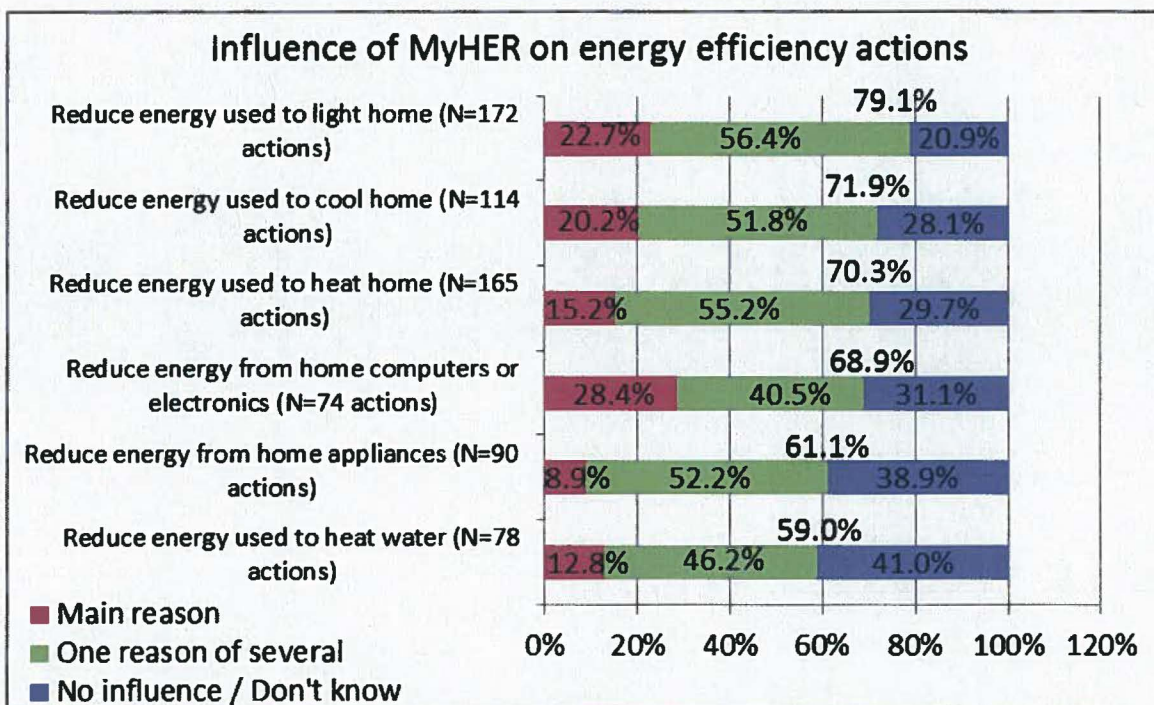


Figure 18. Influence of MyHER on Energy Efficiency Actions

MyHER customers were also asked if they had taken any actions since joining the program that might have increased their energy usage. These results are shown in Table 24; overall, the proportion of MyHER customers taking these actions is under 7% for every category covered by this survey, except home computers and electronics where 12.4% (31 out of 249) of customers reported they had taken actions which would increase energy use.

Only three actions that increased energy use were taken by the nine customers who throw the reports away (one each in the areas of home electronics, heating and water heating). However, due to small sample size, there are no significant differences between customers who read the reports and those who throw them away.

There is only one mildly significant difference between groups based on how customers think their energy efficiency efforts compare to others: 8.9% (11 out of 124) of those who “do more than others” report increased energy usage from home lighting, compared to 4.1% (4 out of 98) who “do about the same” (significant at $p < .10$ using student’s t-test). There are not enough customers who say they “do less than others” for differences with this group to achieve statistical significance.

Table 24. Actions Taken by Customers that Increase Energy Use

Statement	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Increased energy from home computers or electronics	12.5%	11.1%	12.9%	11.2%	9.1%	12.4%
Increased energy used to heat water	4.6%	11.1%	6.5%	3.1%	0.0%	4.8%
Increased energy from home appliances	5.8%	0.0%	6.5%	5.1%	0.0%	5.6%
Increased energy used to heat home	5.8%	11.1%	7.3%	6.1%	0.0%	6.0%
Increased energy used to light home	6.7%	0.0%	8.9%	4.1%	0.0%	6.4%
Increased energy used to cool home	2.1%	0.0%	1.6%	3.1%	0.0%	2.0%

Those who "don't know" how they compare to others are not shown in this table.

Satisfaction with MyHER

Surveyed customers provided ratings of satisfaction with various aspects of the MyHER, their overall satisfaction with the program, and their satisfaction with Duke Energy. These satisfaction scores are presented in this section.

Surveyed MyHER customers who read the report were asked to indicate their agreement with a series of statements using a 10-point scale with "1" indicating that they strongly disagreed with the statement and "10" indicating that they strongly agreed with the statement. A summary of the results are presented in Table 25.

Overall, the aspects of the program which received the highest ratings were the reports being easy to read and understand (9.08), graphics being helpful for understanding how usage changes over the year (8.74), and graphics being helpful for understanding how usage compares to others (8.56). The lowest-rated aspect of the program was for the energy saving tips providing new ideas (6.72). The reasonableness and appropriateness of the comparisons (7.60) and usefulness of those comparisons (7.50) also received relatively lower ratings, though overall satisfaction with the program among participants surveyed is quite high at 8.90. These customers are also satisfied with Duke Energy, giving their utility a mean satisfaction score of 8.30.

Customers who read the Home Energy Report consistently give higher satisfaction ratings than those who throw them away and the differences are significant for all eight aspects of the report, as well as overall satisfaction with the program and Duke Energy (all at $p < .05$ using ANOVA; significant differences are noted in the table with bold italics). However, there are no significant differences in terms of customers' perception of how their efforts to save energy compare to others.

Table 25. Mean Satisfaction with MyHER

Statement	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
The report's comparisons are reasonable and appropriate.	7.67	3.75	7.66	7.73	6.63	7.60
The report's comparisons are useful.	7.64	2.50	7.67	7.60	6.56	7.50
The reports are easy to read and understand.	9.12	7.33	9.03	9.32	8.30	9.08
The energy saving tips in the report provided new ideas that I was not previously considering.	6.78	3.80	6.66	6.95	6.33	6.72
I find the reports useful.	8.27	4.00	8.10	8.41	7.00	8.15
I enjoy receiving and reading the reports.	8.13	3.00	7.93	8.24	6.40	7.98
I find the graphics helpful in understanding how my energy usage compares to others like me.	8.69	4.00	8.57	8.81	7.30	8.56
I find the graphics helpful in understanding how my energy usage changes over the seasons.	8.85	4.33	8.69	9.02	7.50	8.74
Overall I am satisfied with the reports.	9.00	5.00	8.88	9.03	7.60	8.90
Overall satisfaction with Duke Energy	8.34	6.86	8.25	8.43	7.90	8.30

Those who "don't know" how they compare to others are not shown in this table.

MyHER recipients who rated aspects of the program at "7" or less on a 10-point scale were asked how this could be improved; verbatim responses are listed in Appendix L: Improving Aspects of the Program.

There are also some significant differences by actual recent MyHER scores when it comes to satisfaction ratings; these are identified in Table 26 with bold italic text. Customers whose recent MyHER report showed their usage was "less than efficient" gave a higher rating for the report's comparisons being useful (8.19) than the other two groups (7.18 for "less than average, more than efficient" and 7.27 for "more than average"; both differences significant at $p < .10$ using ANOVA). Customers whose usage was "less than average, more than efficient" on their recent reports were also more satisfied with the tips being new ideas (7.21) compared to those whose usage is "more than average" (6.20; significant at $p < .05$ using ANOVA).

Table 26. Mean Satisfaction with MyHER by Recent MyHER Score

Statement	Recent MyHER Score		
	Less than efficient home (N=61)	Less than average, but more than efficient home (N=86)	More than average home (N=95)
The report's comparisons are reasonable and appropriate.	7.68	7.51	7.61
The report's comparisons are useful.	8.19	7.18	7.27
The reports are easy to read and understand.	9.07	9.07	9.05
The energy saving tips in the report provided new ideas that I was not previously considering.	6.89	7.21	6.20
I find the reports useful.	8.37	8.26	7.91
I enjoy receiving and reading the reports.	8.28	7.89	7.94
I find the graphics helpful in understanding how my energy usage compares to others like me.	8.78	8.49	8.47
I find the graphics helpful in understanding how my energy usage changes over the seasons.	8.58	8.83	8.73
Overall I am satisfied with the reports.	9.13	8.89	8.77
Overall satisfaction with Duke Energy	8.36	8.49	8.19

Those who "don't know" how they compare to others are not shown in this table.

Comparison Units: Dollars vs. Kilowatt Hours vs. Pounds of Pollution

Surveyed MyHER recipients were asked to rate the usefulness of three types of measures of energy usage which could be used to show household comparisons: kilowatt hours, pounds of pollution and dollars (the report currently presents comparisons in dollars). As seen in Table 27, the comparison unit which received the highest usefulness rating overall is dollars, with a mean score of 8.42 on a 10-point scale (significantly higher than the other comparison units at $p < .05$ using student's t-test). Kilowatt hours received a mean usefulness rating of 5.53, while pounds of pollution received a mean rating of 4.83 (this difference is also significant at $p < .05$ using student's t-test). The mean ratings for usefulness of making comparisons in dollar terms is very consistent among customers who read MyHER and those who don't, and regardless of how customers feel their energy efficiency efforts compare to others. Though it always receives the lowest usefulness ratings of these three comparison units, pounds of pollution is rated significantly higher by customers who say they "do more than others" compared to those who do "about the same" or "less than others" (at $p < .05$ using ANOVA).

Table 27. Mean Usefulness Ratings of Three Comparison Units: Dollars, Kilowatt Hours and Pounds of Pollution

Statement	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Usefulness of comparison measured in dollars	8.42	8.33	8.34	8.60	8.50	8.42
Usefulness of comparison measured in kilowatt hours	5.56	4.20	5.91	5.14	4.30	5.53
Usefulness of comparison measured in pounds of pollution	4.89	2.83	5.33	4.48	2.44	4.83

Those who “don’t know” how they compare to others are not shown in this table.

All customers in the survey were also asked an open-ended follow-up question: *Can you think of any other comparisons that could be made between your home and similar homes that would be more useful to you than the ones I have just mentioned?* Seventy-seven surveyed customers (30.9% of 249) made suggestions, which are listed below (these responses total to more than 249 because some respondents gave multiple suggestions). Most of these suggestions do not mention units of comparison; they are mostly about additional factors that customers think should be taken into account when comparing “similar homes”.

- Don’t know / no suggestions (N=172)
- Compare number of people in the home (N=19)
- Compare fuel sources (gas vs. electric, use wood, etc.) (N=10)
- Compare appliances (N=7)
- Compare style of home (condo, ranch, mobile, etc.) (N=6)
- Compare building materials (brick, log, siding, etc.) (N=6)
- Compare insulation levels (N=4)
- Compare within specific neighborhoods / immediate neighbors only (N=4)
- Include both kWh and dollars (N=4)
- Just use dollar comparisons (N=2)

Unique responses:

- *Compare prices with other energy companies.*
- *Have the report show a comparison of energy saved and used between incandescent bulbs and CFLs. It would be great to see actual proof of the difference.*
- *I like a comparison between my home and others between years.*
- *I think a comparison between my home and other homes that also have a Jacuzzi, pool, and multiple computers could be useful.*
- *I think comparing specific regions' energy usage and the relative weather patterns would be useful.*
- *I would find comparisons between different sized homes useful.*

- *I would find quarterly and yearly energy use comparisons useful.*
- *I would like to see dollars spent per square foot compared to other homes. I don't know if this is possible.*
- *I'd like to see a comparison of high degree days vs. kilowatt hours, a more detailed account of those high usage days.*
- *Include type and age of windows, and whether there is cooking and baking at home.*
- *It would be nice to know some of the details of what the other comparison homes might have if they're doing better than me. Maybe have some survey results with what has helped people. Also, I'd like to know what homes are doing to conserve energy when they have animals they're letting in and out. Do they have new windows, or where have they installed insulation that's made a difference?*
- *Just get more specific with square footage and such factors as whether or not a home has a pool, and how much things like that contribute to my use.*
- *Lighting use.*
- *More specific square footage. Type of windows installed.*
- *Number of rooms.*
- *Occupancy time.*
- *Provide more comparisons for the average income user rather than high income fix-it suggestions.*
- *This report has been able to give us a good idea of where we stand with our lifestyle. I'm home alone a lot, my wife travels all week. So, the report mainly represents my energy use.*
- *With kilowatts, sometimes the cost varies at different times, so it's not always easy to compare when the rates change. I would like to know when rates change.*
- *I would like to see how and what they are basing the comparisons on, because I don't think they say on the reports.*
- *I'm really not concerned with what other people have to spend. That's their problem.*

Sharing MyHER and Using Social Media

Most of the surveyed MyHER customers in Kentucky are sharing or discussing their reports with others (60.2% or 150 out of 249). Table 28 presents the percent of customers sharing or discussing their Home Energy Report with other people.

MyHER customers are most likely to discuss their report with family members (49.8% or 124 out of 249), and they are significantly more likely to discuss the report with others if they read the reports (rather than throw them away; $p < .05$ using student's t-test), or if they believe they do "more than others" or "about the same as others" for energy efficiency (compared to those who do "less than others"; $p < .10$ or better using student's t-test). Those who read MyHER are also more likely to have discussed their reports with family compared to those who throw the reports away ($p < .05$ using student's t-test).

Table 28. Percent of MyHER Customers Sharing Their Reports with Others

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Percent discussing their MyHER with others (total)	61.7%	22.2%	63.7%	59.2%	36.4%	60.2%
Discussed with family	50.8%	22.2%	49.2%	52.0%	36.4%	49.8%
Discussed with friends	11.3%	11.1%	14.5%	9.2%	9.1%	11.2%
Discussed with neighbors	10.8%	1.1%	12.9%	10.2%	0.0%	10.8%
Discussed with co-workers	3.8%	0.0%	5.6%	1.0%	0.0%	3.6%
Discussed with others (landlord, home assistant, HVAC installers)	1.3%	0.0%	2.4%	0.0%	0.0%	1.2%

Percentages total to more than 100% because respondents could give multiple responses. Those who "don't know" how they compare to others are not shown in this table.

Although 38.6% (96 out of 249) of customers surveyed use social media, only 3.6% (9 out of 249) said they have interacted with Duke Energy through Facebook and only one customer apiece (0.4% of 249) say that they have interacted with Duke Energy through Twitter, LinkedIn and Pinterest. Additionally, 4.4% (11 out of 249) of surveyed customers say they have discussed energy-related topics with other people using social media. None of the customers who throw reports away or believe they do "less than others" to be energy efficient have communicated with Duke or about energy-related topics via social media.

Table 29. Social Media Usage

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Use social media (in general)	39.2%	22.2%	44.4%	36.7%	36.4%	38.6%
Interacted with Duke Energy through Facebook	3.8%	0.0%	4.8%	3.1%	0.0%	3.6%
Interacted with Duke Energy through Twitter	0.4%	0.0%	0.8%	0.0%	0.0%	0.4%
Interacted with Duke Energy through LinkedIn	0.4%	0.0%	0.8%	0.0%	0.0%	0.4%
Interacted with Duke Energy through Pinterest	0.4%	0.0%	0.8%	0.0%	0.0%	0.4%
Use social media to communicate with other people about energy-related topics	4.6%	0.0%	3.2%	7.1%	0.0%	4.4%

Those who "don't know" how they compare to others are not shown in this table.

The eleven MyHER recipients (4.4% of 249) who said they discussed energy-related issues through social media were asked what they communicated about. These responses are listed below.

- *I had friends going on rants about prices and alternative energy sources. Some people were saying that we should use more alternatives, while others said that these can't supply all the power that we need.*

- *I can't think of any specific instances, but I'm sure I have discussed energy many times with my son over Facebook.*
- *I communicated about energy pricing.*
- *I discussed the price of gasoline a time or two.*
- *We discussed the home energy reports.*
- *We discussed energy and money-saving ideas.*
- *We discussed energy efficiency, green lifestyle choices, and ways to reduce our carbon footprint.*
- *We discussed hybrid electric automobiles.*
- *We talked about how high the electric bills have been.*
- *Don't know / can't remember. (N=2)*

Customers Contacting Duke Energy

About a third of MyHER recipients (34.5% or 86 out of 249) say they have visited the Duke Energy website in the past year, as seen in Table 30. The most commonly cited reason for visiting the website is to pay bills (16.9% of 249 customers surveyed, which is 48.8% or 42 out of 86 who visited the website). There were no other reasons for visiting the Duke Energy site mentioned by more than 5% of customers surveyed.

Table 30. Duke Energy Website Usage

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Visited Duke Energy website within the past year (for any reason)	35.0%	22.2%	37.9%	34.7%	27.3%	34.5%
Pay bill at website	17.1%	11.1%	21.8%	13.3%	9.1%	16.9%
Review or change account info	4.6%	11.1%	4.0%	7.1%	0.0%	4.8%
Look at / print out bill (not pay it)	2.5%	11.1%	3.2%	3.1%	0.0%	2.8%
Look for customer service contact info	2.9%	0.0%	2.4%	4.1%	0.0%	2.8%
Search for ways to save on bills	2.5%	0.0%	1.6%	4.1%	0.0%	2.4%
Power outage related (find info or report outage)	2.5%	0.0%	0.8%	4.1%	0.0%	2.4%
Search for info on EE programs	1.7%	0.0%	2.4%	1.0%	0.0%	1.6%
Check energy usage charts / look up history	1.7%	0.0%	3.2%	0.0%	0.0%	1.6%
To get free CFLs	1.7%	0.0%	2.4%	1.0%	0.0%	1.6%
Find out about Duke Energy activities (power plants, community programs)	0.8%	0.0%	1.6%	0.0%	0.0%	0.8%
Look for / apply for jobs	0.4%	0.0%	0.8%	0.0%	0.0%	0.4%
Unique reasons (listed below)	4.2%	0.0%	4.8%	3.1%	9.1%	4.0%
Don't know why visited website	1.7%	0.0%	0.8%	2.0%	9.1%	1.6%

Those who "don't know" how they compare to others are not shown in this table.

Ten MyHER recipients visited the Duke Energy Website for unique reasons, which are listed below.

- *I checked into paying online, but paid by phone instead.*
- *To find out how to pay my bill online, but I did not choose to do this because of the additional fee.*
- *I sought information about paying my bill online.*
- *I had my daughter help me look for more information about the graph comparisons on the first home energy report I received last year.*
- *I was looking up financial info about the company, because I am a stockholder.*
- *I submitted a meter reading.*
- *To see what Duke's green efforts are.*
- *To sign up for the Christmas train thing.*
- *To research data for my son's school project.*
- *I was simply curious about what was on the Duke website.*

About one MyHER recipient in six (17.3% or 43 out of 249, including both phone and email) has contacted customer support (for any reason), as shown in Table 31. The vast majority of these contacts were made by telephone (93.0% or 40 out of 43 contacts). Only three customers (1.2% of 249 surveyed) contacted Duke Energy by email.

Table 31. MyHER Customers Contacting Customer Support

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Called customer support	15.8%	22.2%	16.9%	14.3%	27.3%	16.1%
Emailed customer support	1.3%	0.0%	2.4%	0.0%	0.0%	1.2%
Did not contact customer support	81.7%	77.8%	79.8%	83.7%	81.7%	81.5%
Don't know / can't remember	1.3%	0.0%	0.8%	2.0%	0.0%	1.2%

Those who "don't know" how they compare to others are not shown in this table.

When MyHER recipients who said they contacted Duke Energy were asked what they contacted Duke Energy about, about half of these customers said they were calling about power outages and service issues (48.8% or 21 out of 43 customers who contacted Duke Energy or overall 8.4% of 249 customers surveyed), and another third called about billing, accounts, and related issues (30.2% or 13 out of 43 customers who contacted Duke Energy or overall 5.2% of 249 customers surveyed). Four customers (1.6% of 249) called to correct information or ask questions about their Home Energy Report and another four (1.6% of 249) contacted Duke Energy about other energy efficiency programs. These responses of the 43 customers who contacted Duke Energy are categorized and listed below; the total number of responses adds to more than 43 because respondents could mention multiple reasons for contacting Duke Energy.

Power outages, power lines and service issues (N=21)

- *We had a power outage. (N=17)*
- *We have had several street lights burn out.*
- *I called about work on a severed cable.*
- *I called about tree trimming around power lines.*
- *Two years ago, I called about marking the ground for yard work.*

Billing, metering, account and cost issues (N=13)

- *It was concerning my bill. (N=4)*
- *I call every month about my gas bill.*
- *I had concerns about a late-arriving bill and for estimates for a home that isn't currently occupied.*
- *In 2010, I was involved in a very serious accident that caused multiple injuries to me and the death of my longtime roommate. Shortly after, I discovered that she wasn't paying the household bills because of gambling and we were behind in our payments.*
- *Our meter was read incorrectly so the bill was 'unusual' for that month.*
- *I needed to supply Duke with an access code so they could read my meter.*
- *To set up a payment arrangement.*
- *I called to ask for financial assistance.*
- *I called to discuss getting my electric meter moved.*
- *After we moved into this house, we were being double billed for our old home and the new home.*

Questions about or corrections to MyHER (N=4)

- *I called because the report listed the wrong type of heat used for our house.*
- *I called to complain about the inaccuracy of the report.*
- *I told them to stop sending the report unless they correct the information.*
- *I called to ask about the report.*

Other Energy Efficiency programs (N=4)

- *I called to set up an energy efficiency visit.*
- *I signed up to receive a Home Energy House Call and free CFLs.*
- *I called to order CFLs.*
- *Last summer, I was on the Power Manager Program and the A/C was turned off, but not turned back on, so our house remained over 100 degrees at night. With a young baby, that was so bad that we could not stay in our home.*

Other reasons (N=5)

- *I called to switch service addresses.*
- *I had problems accessing my account online.*

- *I called for some information on computer and furnace settings.*
- *I phoned Duke regarding a call I received from Bessler Electric falsely claiming that there was a power outage in my area.*
- *I can't remember why I called.*

MyHER recipients who contacted Duke Energy customer support were asked if they were satisfied with the response they received. More than half (58.1% or 25 out of 43) reported that they were satisfied, while eleven customers said they were not satisfied (25.6% of 43, or 4.4% of all 249 customers surveyed) and seven customers (16.2% of 43, or 2.8% of all 249 customers surveyed) reported mixed or inconclusive results. Among the eleven customers who say they were not satisfied with their customer support experience, five contacted Duke Energy about billing issues, three contacted Duke Energy about power outages and service issues, one called about inaccuracies on their MyHER report, one called about Home Energy House Call, and two called for other reasons (one of these customers called about both billing and a service issue). The negative, mixed, and inconclusive results are categorized and listed below.

Not satisfied, billing-related (N=5)

- *I was not satisfied. Customer service lacked clarity in communication; I was transferred several times and they refused to let me speak to a manager.*
- *I was not satisfied; the person I needed to talk to was on vacation.*
- *They couldn't help me; they said it was because I have a propane heater, but I don't use that, I use an electric heater. I really wish they could help me with my bills or maybe some insulation.*
- *After several attempts over a few years, the meter has not yet been moved. They keep telling me that they are working on it and I could expect it in the future, though my neighbors have had it done.*
- *I dislike the automated phone rigmarole and lack of local customer service.*

Not satisfied, power outage and service related (N=3)

- *I was not satisfied; I was told that someone would call me back about the outage but no one did. I did get an e-mail about it at 4:00 a.m.*
- *The automated phone response is barely helpful. I would prefer to speak directly to a customer service representative.*
- *I dislike the automated phone rigmarole and lack of local customer service. (Same customer who also called about billing above)*

Not satisfied, all other reasons (N=4)

- *Duke sent me out a new report, but it still did not apply to me in an accurate fashion. (Called about inaccuracies on MyHER)*
- *I was not satisfied because I rent, and pay the bills, but the landlady has to arrange the visit. (Called about HEHC)*

- *I dislike the automated phone system. When calling, I would prefer to speak to a customer service representative right away. (Could not recall reason for contacting Duke Energy)*
- *I was denied my request to receive both paper and electronic billing statements.*

Mixed or inconclusive results (N=7)

- *I'm not sure, because they said that they were going to correct the mistake, but I don't know if they really changed it. (Called about correcting MyHER information)*
- *Yes and no, the Home Energy House Call should ideally occur within two to four weeks of signing up, rather than six months later.*
- *I was eventually satisfied, but it took effort. What upset me was that if I hadn't checked, I would have paid close to \$1,000 that I didn't owe because someone was too lazy to look at the meter in-person.*
- *I was not really satisfied, because I was transferred to a lot of other departments. Though everyone I spoke with was friendly enough and they really did try to resolve my issues.*
- *This was a few years ago; yes, we were very satisfied with the response time, but also not satisfied because the blackouts kept recurring.*
- *I was satisfied because Duke got the power back on, but I was not satisfied because it takes so long to talk to a human.*
- *I was somewhat satisfied. I would prefer to speak to an actual customer service representative immediately and receive accurate time estimates for when they expect service to be restored.*

Customer-Suggested Changes to MyHER

About one in four MyHER recipients surveyed (28.5% or 71 out of 249) had something they would like to see changed about the MyHER program as seen in Table 32. Customers who say they do “more than others” (33.9% or 42 out of 124) for energy efficiency are more likely to have suggestions than customers who say they do “about the same” as others (20.4% or 20 out of 98; significant at $p < .05$ using student’s t-test).

Table 32. Customers That Would Like Changes Made to MyHER

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Customers that would like to see changes to MyHER	29.2%	11.1%	33.9%	20.4%	36.4%	28.5%
No change / fine as is	65.0%	66.7%	57.3%	75.5%	54.5%	65.1%
Don't know / not specified	5.8%	22.2%	8.9%	4.1%	9.1%	6.4%

Those who “don’t know” how they compare to others are not shown in this table.

Table 33 shows the types of suggestions made by MyHER customers who made suggestions to improve the program. The most common suggestions involved wanting to see more information or detail on the report (made by 23 customers, or 9.2% of all 249 customers surveyed), wanting

to receive the reports less frequently (mentioned by 15 customers or 6.0% of 249), and concerns about the accuracy of household comparisons (mentioned by twelve customers, or 4.8% of 249).

Table 33. Changes Customers Would Like Made to the MyHER

Base: customers who made specific suggestions to improve program	Read MyHER		Overall (N=71)
	Read (N=70)	Throw Away (N=1)	
Want more information / details (listed below)	32.9%	0.0%	32.4%
Send reports less often	21.4%	0.0%	21.1%
Household info or comparison group is not accurate	15.7%	100.0%	16.9%
Include number of residents in home for comparisons	12.9%	0.0%	12.7%
More / better / less repetitious tips	11.4%	0.0%	11.3%
Send by email / available online	8.6%	0.0%	8.5%
Want less information / simplify	2.9%	0.0%	2.8%
Use larger print	2.9%	0.0%	2.8%
Send reports more often	1.4%	0.0%	1.4%
Don't want to receive reports	1.4%	0.0%	1.4%
Unique suggestions (listed below)	10.0%	0.0%	9.9%

Percentages total to more than 100% because respondents could give multiple suggestions.

Twenty-three customers (9.2% of 249) said they wanted more information or details on their Home Energy Report, which was the most frequently made suggestion (none of the surveyed customers who throw reports away made this suggestion). The verbatim responses of these customers, which explain the type of details or information, are listed below. Some common themes from these suggestions include: providing information about appliance usage, more information about the homes customers are being compared to, and more seasonal and annual usage data. Three recipients requested kilowatt hours be shown on the reports. All of the customers who requested more information or details read MyHER (none throw it away).

Read MyHER: suggest more information or details (N=23)

- *Add kilowatt cost.*
- *Please add kilowatt comparison and pollution comparison.*
- *Maybe show the dollar amount and the kilowatt usage on the 'How am I Doing Over Time' graph.*
- *I would also like to receive a yearly comprehensive energy use summary.*
- *Emphasize the seasonal data.*
- *I would like to see a 12 month running comparison graph of energy usage from my appliances, so that I can see each month if an area is using more or less and have the comparison there.*
- *Add what the structure is made of.*
- *More information about what and who makes up 'the average home'.*
- *I would like the report to account for the energy use of my Jacuzzi, pool, and multiple computers.*

- *I would like to see data that shows the effectiveness of using Energy Star appliances.*
- *Include information about how much energy is being used by different things so people will be inspired to conserve more.*
- *I would like to see the costs associated with gas versus electric energy.*
- *It would be preferable if the comparisons were made within specific neighborhoods rather than a broader general area.*
- *Include information about my gas usage. I could also use more precise information about what is the best insulation available now, and what sort of rebates are being offered through Duke and the state and federal government for different improvements.*
- *Include information about the building materials of the home. Our house is cinder block construction, as opposed to 'two by four' construction. I don't think the comparison between our home and the other homes is accurate because building materials will make a difference in home energy efficiency.*
- *Look more into the age of homes and the number of people in the home and how those people are using power.*
- *Include more accurate comparison of use, and give unit price changes.*
- *Separate gas usage dollar amount from electric dollar amount in the comparisons, if possible.*
- *Alternative heating sources should be considered such as a fireplace or infra-red heaters.*
- *The comparison between other homes should be more realistic. Our home is in an unincorporated area but the zip code places us in a large city. The reality is that our area is very rural so comparing us to someone in the city is unrealistic. Make the reports emphasize the seasons as far as seasonal comparisons go, and then in December show the whole year.*
- *They need to fill in the variables, such as temperature, time spent at home, et cetera.*
- *Measure according to the type of material the home is made of.*
- *I would like to see what 'similar homes' really are.*

Seven customers (2.8% of 249) made unique suggestions for improving the program, which are listed below. All of the customers with unique suggestions read MyHER (none throw it away).

Read MyHER: unique suggestions (N=7)

- *Provide bill credits as incentives for home improvements.*
- *It would be great if they made the free CFLs available again. Maybe include coupons for local window and door companies, or other incentives that would provoke me to want to be more energy efficient.*
- *Offer a small incentive for people to switch from standard mail to electronic.*
- *The reports could be on thinner paper, and for people who like it on email, they should have it that way. The report could use a more customized delivery mode.*
- *Include a self-addressed stamped envelope for customer responses.*

- *I'd like it if there was someone you could call and talk to about the reports. I'd like it if someone could tell me why our usage is so high and help me figure out ways to save money.*
- *I don't understand why my energy use isn't lower when I have new equipment and only one person lives here.*

Participation and Interest in Other Duke Energy Programs

Surveyed customers were asked what other Duke Energy programs they have participated in, which is shown in Table 34. The most frequently mentioned programs were CFLs by mail (overall 49.8% or 124 out of 249) and Power Manager (12.4% or 31 out of 249).

Recipients who say they do “more than others” for energy efficiency are more likely to have participated in the CFL program (59.7% or 74 out of 124) than those who do say they do “about the same as others” (43.9% or 43 out of 98) and “less than other” (27.3% or 3 out of 11, both significant at $p < .05$ using student’s t-test). Consequently, customers who “do more than others” are also more likely to have participated in at least one program, and to have participated in two programs compared to the other groups ($p < .10$ or better using student’s t-test). However, there are no significant differences in self-reported participation in the programs listed below aside from CFLs by mail.

Table 34. Self-Reported Participation in Other Duke Energy Programs

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Residential Smart Saver [®] CFLs	49.2%	66.7%	59.7%	43.9%	27.3%	49.8%
Power Manager	12.5%	11.1%	12.9%	8.2%	18.2%	12.4%
Residential Energy Assessments	8.8%	0.0%	9.7%	7.1%	18.2%	8.4%
Residential Smart Saver [®] HVAC	2.9%	0.0%	3.2%	2.0%	0.0%	2.8%
Personal Energy Report Program	7.5%	0.0%	7.3%	8.2%	9.1%	7.2%
Appliance Recycling Program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
None of the above	45.4%	33.3%	36.3%	51.0%	63.6%	45.0%
Average number of programs participated in (from the list above)	0.81	0.78	0.93	0.69	0.73	0.81
Participating in two or more programs (from the list above)	17.5%	11.1%	21.8%	13.3%	18.2%	17.3%

Those who “don’t know” how they compare to others are not shown in this table; percentages may total to more than 100% since respondents can participate in more than one program.

MyHER recipients were also asked to rate their interest in participating in Duke Energy programs in which they had not already participated in. Mean interest ratings on a 10-point scale (where 10 is most interested and 1 is least interested) are shown in Table 35. The highest interest score is for CFLs by mail at 7.5 overall, which is significantly higher than the interest rating in any of the other programs listed (significant at $p < .10$ or better using student’s t-test). Power Manager had the lowest interest rating at 4.0 on a 10-point scale, significantly lower than any other programs listed below ($p < .05$ using student’s t-test).

Customers who throw MyHER away gave lower ratings for all programs asked about, though the sample size is too small for the differences to be statistically significant. Customers who say they “do more” than others for energy efficiency give higher interest ratings for HEHC and PER than other customers ($p < .10$ or better using ANOVA).

Table 35. Ratings of Interest in Other Duke Energy Programs

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Residential Smart Saver [®] CFLs	7.6	6.2	7.7	7.6	7.6	7.5
Residential Smart Saver [®] HVAC	7.2	5.9	7.5	6.7	7.2	7.2
Appliance Recycling Program	6.8	6.2	7.1	6.6	6.3	6.8
Residential Energy Assessments	7.2	5.8	7.8	6.7	5.8	7.2
Personal Energy Report Program	6.5	5.3	6.8	6.3	4.4	6.4
Power Manager	4.0	3.5	4.3	3.6	4.0	4.0

Those who “don’t know” how they compare to others are not shown in this table. Customers were only asked to rate programs that they had not already participated in.

Additional Services from Duke Energy

TecMarket Works asked surveyed MyHER customers (those that read it and those that throw the MyHER away, N=249) about their interest in a list of additional services that Duke Energy may offer. TecMarket Works read the following statement: *As a follow up to the report, Duke Energy is interested in providing further services that might be of interest to customers. I am going to read a list of possible services that Duke Energy may consider offering. On a scale from 1-10, with 1 indicating that you would be very uninterested, and 10 indicating that you would be very interested agree, please rate your interest in the following services.*

A summary of the responses is presented in Table 36 below. Surveyed MyHER customers have the most interest (mean rating 8.0 on a 10-point scale) in rebates for energy efficient home improvements, which are provided through Duke Energy's Smart Saver[®] program. Mean interest ratings for the other services inquired about were all significantly lower than for Smart Saver rebates ($p < .05$ using student's t-test). The next-highest ratings given by respondents were for home energy audits and inspections at 6.4, and all but one of the other services received mean ratings between 5.1 and 5.9 on a 10-point scale. Interest in social networking sites set up by Duke Energy received a mean interest rating significantly lower than any of the other services at 3.2 on a 10-point scale (significantly lower than all of the other services at $p < .05$ using student's t-test).

There was not a follow up question asking customers how they would like to receive further information if they indicated they were interested in these services, but since many read the MyHER, directions to finding this kind of information could be included in a MyHER mailing. Indeed, compared to customers who throw MyHER away, those who read MyHER give significantly higher ratings of interest in almost every program described ($p < .10$ or better using ANOVA, except for help in finding weatherization contractors which is not significant).

Compared to customers who say they do “about the same” as others for energy efficiency, those who say they “do more” than others have significantly higher interest in rebates for home improvements (8.3 vs. 7.8) and home energy audits (7.0 vs. 6.0; both differences significant at $p < .10$ or better using ANOVA).

Table 36. Ratings of Interest in Additional Duke Energy Services

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Rebates for energy efficient home improvements	8.1	5.4	8.3	7.8	7.9	8.0
Home energy audits or inspections of your home with specific recommendations for improvements	6.5	4.7	7.0	6.0	4.9	6.4
Inspection services of work performed by contractors	6.0	2.9	6.2	5.7	3.8	5.9
Help in finding energy efficient equipment and appliances	6.1	3.0	6.2	5.9	5.5	5.9
Financing for energy efficient home improvements	5.8	2.7	6.1	5.4	4.5	5.7
Help in finding weatherization contractors to make your home more efficient	5.1	4.3	5.3	5.0	5.0	5.1
Social Networking sites such as Facebook and Twitter to read about or discuss energy efficient solutions with energy experts.	3.3	1.0	3.5	3.2	2.4	3.2

Those who “don’t know” how they compare to others are not shown in this table.

Customers were also asked an open-ended question, *What other services could Duke Energy provide to help improve home energy efficiency?* Forty-six customers made suggestions, which are categorized and listed below (two customers made multiple suggestions, thus the responses below total to 49).

Duke Energy should provide more information / inform customers better (N=16)

- Provide information about geothermal units.
- I'd like to see a report that has comparisons between me and my neighbors for electricity and gas dollars.
- Duke could provide more information on how people can catch up on payments when they are behind on their bills.
- Duke could make calls to customers to discuss energy use.
- Perhaps Duke can provide a list of trusted contractors, or suggested experts to consider calling when I am looking to have some work done in my home. Also, to provide options or a checklist to verify a contractor is offering accurate suggestions for the specific

upgrade I am considering. Basically just some information that I could educate myself with before asking a contractor over to my place to assess a job.

- *I don't have any services to recommend, but better advertisement for the services that Duke does have would be extremely helpful, because I didn't know about any of the programs that we just discussed.*
- *Provide a 'red flag' service that notifies customers of unusual spikes in their energy use.*
- *Duke customer service representatives should have the ability to provide possible reasons as to why some energy bills are higher than others.*
- *It would be helpful to let people know what to do when a CFL breaks. We had two explode in two different lamps and I thought I should call a hazmat team.*
- *Call customers to inform them of the Home Energy House Call, Power Manager and other efficiency programs.*
- *Just keep offering the different tips on the MyHERs, I like those.*
- *I would like to know how they are gathering our usage data for the billing rates.*
- *Duke could alert customers by phone, e-mail, or text when peak demand is reached.*
- *Duke could provide more information and education about ways to be energy efficient.*
- *Duke can provide a program where a customer could contact Duke when there is a sudden unexplained spike in their power bill. Duke would then help investigate the cause of the spike.*
- *We can use gas as well as electricity. I am wondering if one is more cost effective or efficient. Some information about that would help.*

Other free or discounted items / rebates (N=6)

- *I really like the idea of the Home Energy House Call assessor and getting free stuff.*
- *I am not interested in the house call program, so provide free light switch and plug gaskets via mail.*
- *Duke could supply high energy appliances for free to those who otherwise would be unable to afford them.*
- *I think the rebates are the best programs to offer.*
- *Anything that involves the incentive of a rebate.*
- *Provide incentives for reducing the amount of energy used by your home.*

Lower rates (N=5)

- *Lower the rates (N=3)*
- *Duke's disaster costs should not be 'reflected' onto the customer. Don't make the customer pay for Duke's costs. Let Duke pay for its own spending.*
- *Duke Energy needs to lower the price. Rates are too high. They need a program that helps support elderly people and low income people.*

Green energy (N=4)

- *I'd like information about solar panels.*

- *I would also like some information about solar panels: which ones would be best for my home, how many would I need, recommendations for contractors, etc.*
- *Duke could help with solar installations.*
- *Duke could provide more education and practical training about solar and wind power, and also rainwater collection.*

Insulation and sealing (N=4)

- *If you could add checking for air leaks using infrared lighting to see where we're losing heat and A/C to the Home Energy House Call, that would be very helpful.*
- *I would like to see an insulation program with a rebate or free materials for insulating your attic.*
- *Have someone check on insulation and have contractors participate in that program.*
- *Offer free insulation.*

LED program (N=3)

- *I would like to see an LED rebate program and an auto timer program.*
- *I would like a program, coupon, or rebate for LED lighting: a free LED program to replace the CFLs. Also a coupon, rebate, or program for water heater jackets.*
- *I would like to see a discount LED program.*

Service issues (N=2)

- *Test and maintain the electrical infrastructure to make sure it's as efficient as possible.*
- *More communication as why we have an abundance of power outages. They never inform us why.*

Other suggestions (N=9)

- *A program that offers rebates for water heaters and water heater blankets.*
- *Provide a service that installs and instructs customers on how to use a programmable thermostat.*
- *It would be so helpful if there was some sort of meter that you could put somewhere where we could see how much energy we're using at any given time either somewhere in the house or online. That way we'd be thinking about conservation more.*
- *It would be so helpful if there was a device that you could plug into the wall and then plug appliances in so the device could tell you how much energy is being used by the appliance.*
- *I would love to see Duke kick Cincinnati Bell out of the water and offer home phone and Internet packages like they do.*
- *Maybe, Duke Energy could increase their interest on our Senior Notes. It's 1.15% now.*
- *Have the ability to customize when Power Manager events occur on a per customer basis, according to their schedule in order to minimize discomfort.*
- *Offer low interest loans to increase efficiencies.*

- Hire more knowledgeable employees to provide better customer service.

Electric Vehicles and Solar Power

MyHER customers were also asked if they had an electric vehicle, solar water heating or solar panels for their home.

Four customers surveyed own electric vehicles: all own one electric vehicle apiece. Two of these customers specified that they own hybrids and two did not specify the type of vehicle.

One customer reported owning a solar photovoltaic system (solar panels), but did not know the size. No surveyed customers reported having a solar water heater.

Additionally, there was one participant who said they have a “solar blanket” for their pool, and four surveyed customers who report that they have solar-powered outdoor lighting; these responses are not included in the table below because these are not really solar “water heating” or “photovoltaic” systems.

Table 37. Electric Vehicles and Solar Power

	Read MyHER		Compared to Others			Overall (N=249)
	Read (N=240)	Throw Away (N=9)	Do More (N=124)	Same (N=98)	Do Less (N=11)	
Own an electric vehicle	1.7%	0.0%	0.8%	3.1%	0.0%	1.6%
Solar water heating system	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Solar photovoltaic system (solar panels)	0.4%	0.0%	0.0%	0.4%	0.0%	0.4%

Those who “don’t know” how they compare to others are not shown in this table.

Conclusions and Recommendations for Program Changes

The Home Energy Report provides Duke Energy residential customers with a meaningful comparison of their home's energy use compared to other homes similar to their own.

TecMarket Works presents the following recommendations for program changes.

1. Add CFL coupons to the MyHER mailing, if it can be shown that the participants can use additional CFLs that they are not likely to purchase on their own. Customers who use the coupons will show that they are reading the MyHER, are open to the messages and tips, and possibly to solicitations for participation in other Duke Energy programs. The number of redeemed coupons can also be utilized in the billing analysis and allow for engineering estimates of energy savings.
2. Some surveyed customers suggested including the number of people in the household as a factor in drawing comparisons with other homes, since more people living in a home does correspond to more energy usage. Duke Energy should consider adding this variable to the comparison group clustering algorithm and reporting household size on reports

along with other facts about comparison groups. Doing so may help to increase the perceived accuracy of the home energy use comparisons in the minds of these customers. Although, such a potential advantage should be weighed against the data collection and programming required to add such a factor to the clustering methodology.

Appendix A: Program Manager Interview Instrument

Name: _____

Title: _____

We are conducting this interview to obtain your opinions about and experience with the [STATE NAME] My Home Energy Report Program. We'll talk about the Program and its objectives, your thoughts on improving the program and its participation rates, and the technologies the program covers. Do you have any questions before we begin?

PROGRAM DESCRIPTION

In your own words, please describe the [STATE NAME] My Home Energy Report Program.

Please discuss the history and development of the program. What was the influence of HECR pilot on the full program? How has MyHER changed since the pilot phase?

Why did Duke Energy chose to use vendors instead of launching this as an in house commercialized project as you did for the pilots? What were the pros and cons of using vendors vs. doing it in-house? How did using vendors change program design and program implementation?

What are the current program's objectives? That is, what is the program trying to accomplish (e.g. generate energy savings via behavior change, installation of efficiency devices, enrollment in other programs, non-energy benefits)? In your opinion, which objectives do you think are being met or will be met? Have the objectives changed over time. If yes, how do you think they have changed?

Are there any program objectives that are not being addressed or that you think should have more attention focused on them? If yes, which ones? How should these objectives be addressed? What should be changed? How will these changes improve the program? Would it improve customer satisfaction, lower program costs or delivery a better product to customers?

Should the program objectives be changed in any way because of market conditions, other external or internal program influences, or any other conditions that have developed since the program objectives were devised? What changes would you put into place, and how would it affect the objectives?

How many households receive the MyHER report in [service territory]?

What are the program requirements for inclusion/participation? Does MyHER go to renters as well as homeowners? Why or why not?

What kinds of marketing, outreach and customer contact approaches do you use to make your customers aware of the program and its options?

Why is the program designed as opt-out and not opt-in? How have customers responded to this? How many (what percentage) have opted out? How are customers informed about their opt-out choice? What are the steps they need to take to opt-out? Conversely, how does the program handle customers who want to opt-in?

Since the opt-out nature of the program naturally brings together different types of customers into one large pool, are the customers segmented after inclusion? For instance, does MyHER go to residential customers of different rate classes beyond standard, such as TOU? If so, how is this differentiated?

What are the program's goals? That is, what goals and metrics are you tasked with achieving (such as energy savings targets, numbers of new enrollments, numbers of installs, website visits, etc.)? What is the current performance towards these targets?

Are there any program changes that you think would improve the program's performance towards its goals and objectives?

PROGRAM MANAGEMENT AND OPERATIONS

Please describe your role and scope of responsibility in detail. What is it that you are responsible for as it relates to this program? When did you take on this role? If a recent change in management...Do you feel that Duke Energy gave you enough time to adequately prepare to manage this program? Did you get all the support that you needed to manage this program?

Please review with us how the My Home Energy Report Program operates relative to your duties, that is, please walk us through the processes and procedures and key events that allow you do currently fulfill your duties.

Have any recent changes been made to your duties? If so, please tell us what changes were made and why they were made. What are the results of the change?

Is there any other person or group within Duke Energy that you work with on the implementation of this program? Who is that and what role do they serve?

Which third parties or vendors do you work with to implement this program? Please describe their roles in the implementation of the program.

How effective is the vendor in its assigned role? What works well? What could be improved? (Repeat for each third party vendor.)

How often and in what form do you communicate with the vendors? How would you characterize your working relationships?

How do you manage and monitor or evaluate third-party involvement or performance? What do you do if contractor performance is exemplary or below expectations?

Describe the use of any advisors, technical groups or organizations that have in the past or are currently helping you think through the program's approach or methods. How often do you use them? What do you use them for?

PROGRAM IMPLEMENTATION

What information, research or assessments are you using to identify barriers and to develop more effective approaches/mechanisms for achieving program goals?

Can you cite any market, operational or technical barriers that impede a more efficient program operation? Please describe.

How does the program accommodate that customers may become eligible and ineligible at any time? Please describe the process used for forecasting participation and production. How are differences between forecasts and actual numbers adjusted?

Overall, what about the My Home Energy Report Program works well and why?

Do you have any suggestions for how program performance toward goals can be increased?

In what ways can the My Home Energy Report Program's operations be improved?

If you could change any part of the program what would you change and why?

What are your quality assurance measures? What have those efforts uncovered?

REPORT GENERATION AND DELIVERY

Please describe the process by which the reports are actually generated and distributed.

Please describe any challenges or quality concerns with the report generation and delivery process.

In what format are reports delivered? Why was it chosen? What other formats were considered? How has it been working out?

How was the current report delivery schedule determined? How has it been working? Any challenges? Any changes made or planned?

COMPARISONS

Now let's look more closely at the actual home energy reports and the process that you use to generate them. More specifically let's discuss the framework for scoring homes and the comparisons between similar homes.

The reports compare the customer's energy usage with other customers. My notes indicate that the pilot considered homes that are similar in four main characteristics: heat source, square footage, age of home, and number of occupants. Is this true of the current program? How are each of these characteristics defined?

Another factor is geography. How is that accounted for?

Where does the data for these comparisons come from?

How are similar homes actually identified and grouped?

What is the range of sample sizes used for comparison? What is the smallest allowable pool for comparison? What is the largest? Why these limits?

Once the comparison pool is established, it is my understanding that the customer's energy usage is calculated and compared to the pool average and to the most efficient homes in the comparison pool. Is this correct?

How is the individual customer home's monthly energy use figure generated?

How is the average home's energy usage determined within the pool of comparable homes?

How is the efficient home's usage determined? What percentage of households is considered efficient? How is this group determined? How do you control for households with unusually low or high usage?

Is the program making an attempt to verify information about the home characteristics used for comparisons? During an earlier evaluation of PER, Kelly Griffin mentioned that PER data was considered to be more accurate than public records because it was self-generated by the customer. Is this type of data being incorporated into the program? If so, how?

Is the energy usage figure different from the comparison score? If so, how? How is the comparison score generated? How is the score adjusted for variations in house attributes such as age, size, heat source, and number of occupants within the pool? Are there other adjustments?

The pilot evaluation in OH discussed single month scores versus long term scores. Please explain the difference, tell me which you use now and why. Are there any drawbacks? What are they? How are they addressed?

Can you suggest any ideas for improving the comparisons used by the program?

DATA PRESENTATION

The data presented in the reports is designed to drive energy savings. On what research or communications principles (such as social norms, psychology, logic, persuasion, etc.) did you base your decisions for how to present the data?

How do you establish the context of your data presentation? For instance, the data can be presented in terms of saving energy, saving money, helping the environment, etc. How do you present the concept of reducing energy use and why do you this approach?

Why is monthly energy use presented in dollars and not kWh?
How is the influence of data presentation measured or otherwise accounted for?

The pilot evaluation considered questions about layout, language, and other data presentation. How were those findings incorporated into the current format? What changes have been made since the roll out? Is further testing being conducted? Are additional changes planned? If so, what are those changes?

When did you change from one to two page reports? Why did this happen? What was the impact of the change? How do you know?

Have you made any other changes to the way you present the data? If so why? What was done?

Can you suggest any ideas for improving the data presentation aspect of the program?

ENERGY SAVING TIPS AND MESSAGES

What is the difference between an energy saving tip and a message?

How are energy savings tips and messages generated?

Do you draw a distinction between encouraging persistent behaviors and taking action to be more efficient? That is, do you make a distinction between repeated behaviors such as turning off or unplugging and one time actions such as the purchase and installation of equipment that is more efficient? If so how? Which are you driving toward? Why? How? Please provide examples.

How do you ensure the tips are relevant to the household in question? For instance, are tips different for renters than homeowners, older homes versus newer homes, for pool owners vs. people without pools, or for people who are already enrolled in other Duke Energy programs?

The pilot evaluation mentions concerns about the ability to determine which tips are presented to which customers and when. Is this still true? If so, why? If so, what do you do about it? If not, what was changed? How has this change improved things?

Part of the challenge of presenting an on-going report is maintaining customer interest and driving continued energy savings. How do you address this consideration? For instance, the Ohio pilot evaluation states "While tips directly aimed at energy savings are necessary to supplement social norm messaging, it may be useful to include other relevant and interesting facts so that customers continue to be engaged and interested." How is this addressed? How do you keep tips fresh for people who have been the program for a while?