- *Bring back the $200 gas furnace incentive, or make it more of an incentive to the contractor to push the program.*
- *Make program information available at Lowes, Home Depot, etc.*
- *Give out more free stuff.*

Rebate for central air conditioning (N=5)

- *Target neighborhoods that are older. Our neighborhood is relatively new and no one pays attention to the program.*
- *Draw more attention to the webpage for the program through the My Home Energy Report.*
- *Use radio.*
- *Do a better job letting people know they can get free money from the program.*
- *I have no suggestions for the Smart Saver Program, but Duke could work at increasing participation in the Power Manager program, which would probably be more beneficial to decreased energy consumption.*

Energy Efficiency Actions and Upgrading Other Appliances

As Table 17 shows, 29.8% of respondents (48 out of 161) think Smart $aver has influenced them to become more energy efficient in other areas. Actions most commonly cited include using more efficient light bulbs (7.5% or 12 out of 161), upgrading appliances (6.2% or 10 out of 161), upgrading windows or doors (6.2% or 10 out of 161), and adding insulation (5.6% or 9 out of 161).

Although there is no significant difference by in the overall number of customers taking action by rebated unit, customers who received rebates for heat pumps were more likely to mention using more efficient bulbs (11.1% or 9 out of 81), while customers who received rebates for central air conditioning were more likely to make additional upgrades to their HVAC system (8.8% or 7 out of 80; both of these differences are significant at $p<.05$ using student's t-test).

Table 17. Additional Energy Efficiency Actions Influenced by Smart $aver

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
Have taken additional energy efficiency actions inspired by this program (all actions)	28.4%	31.3%	29.8%
Use more efficient light bulbs	11.1%	3.8%	7.5%
Upgrade to more efficient appliances / Energy Star	6.2%	6.3%	6.2%
Upgrade windows / doors	7.4%	5.0%	6.2%
Added insulation	6.2%	5.0%	5.6%
Weather stripping	3.7%	6.3%	5.0%
Upgrade HVAC system	0.0%	8.8%	4.3%
Install programmable thermostat	2.5%	1.3%	1.9%
Upgrade duct work	1.2%	1.3%	1.2%
HEHC / home energy audit	1.2%	1.3%	1.2%
Power Manager	1.2%	0.0%	0.6%
Unplug extra freezer or refrigerator	0.0%	1.3%	0.6%
Other (listed below)	3.7%	2.5%	3.1%

Five survey respondents mentioned "other" energy efficiency actions; their responses are listed below.

Rebate for heat pump (N=3)

- *Installing low-flow faucets as part of bathroom and kitchen remodeling.*
- *I've been making my family more conscious about turning out lights when they are not using them.*
- *We bought black-out curtains that we keep closed during the day.*

Rebate for central air conditioning (N=2)

- *We installed a new roof.*
- *We are getting ready to install insulated siding and air vents in the attic.*

The 48 respondents (29.6% of 162) who said they were influenced to do more by the Smart $aver program were also asked to rate the influence of participating in Smart $aver on these additional actions, and how much money they think they have saved from these additional energy efficiency activities. Table 18 shows the average influence ratings of the program on additional actions (on a 10-point scale where 10 is the highest influence and 1 is the least).

The sample sizes in Table 18 are too small for any given category of action to show significant differences by unit rebated (including for the overall average ratings of influence for heat pump and air conditioning rebate recipients, which are not statistically different). The overall average influence score (for all actions by all rebated units) is 4.6 on a 10-point scale, which is a moderate level of influence.

Table 18. Average Ratings of the Influence of Smart $aver HVAC on Additional Actions

Base: respondents taking each action	Heat Pump	Central Air Conditioning	All Surveyed Participants
Use more efficient light bulbs (N=12)	6.6	3.3	5.8
Upgrade to more efficient appliances / Energy Star (N=10)	3.0	5.6	4.3
Upgrade windows / doors (N=10)	4.3	2.5	3.6
Added insulation (N=9)	4.2	3.5	3.9
Weather stripping (N=8)	8.0	4.0	5.5
Upgrade HVAC system (N=7)	NA	4.9	4.9
Install programmable thermostat (N=3)	7.0	3.0	4.3
HEHC / home energy audit (N=2)	10.0	8.0	9.0
Upgrade duct work (N=2)	4.0	5.0	4.5
Power Manager (N=1)	8.0	NA	8.0
Unplug extra freezer or refrigerator (N=1)	NA	NA	NA
Other: *We bought black-out curtains that we keep closed during the day* (N=1)	10.0	NA	10.0
Other: *Making my family more conscious about turning out lights when they are not using them* (N=1)	5.0	NA	5.0
Other: *Installing low-flow faucets as part of bathroom and kitchen remodeling* (N=1)	1.0	NA	1.0
Other: *Getting ready to install air vents in the attic* (N=1)	NA	1.0	1.0
Other: *We installed a new roof* (N=1)	NA	1.0	1.0
Overall average rating of influence (all actions rated)	5.5	3.8	4.6

Note: "NA" is shown for cells in this table where there were no customers who took the action, and/or where there are no customers who provided influence ratings for the action (missing data).

Survey respondents who have taken additional energy efficiency actions inspired by participating in Smart $aver HVAC were asked if they know how much money they saved; these responses are categorized and listed below (including noting the type of unit installed, HP for heat pumps and CAC for central air conditioning). For several of these responses, customers mentioned multiple actions but only gave a savings estimate for the actions taken together (not individually).

Use more efficient light bulbs (N=12)

- *$250 per year* (HP)
- *$20 per month* (HP – multiple projects combined)
- *$10 per month* (HP)
- *$2 per month* (HP)
- *I haven't had them long enough to tell.* (CAC)
- *I know that my A/C bill is less than it was as last year, no idea about the CFLs.* (CAC)
- *Don't know* (N=6, five HP and one CAC)

Upgrade appliances / Energy Star (N=10)

- *$35 per month* (CAC – multiple projects combined)

- *$250 per year* (HP)
- *I really can't tell because I got the new heat pump and new water heater installed in the same month.* (HP)
- *Don't know* (N=7, three HP and four CAC)

Added insulation (N=9)

- *$1000 per year* (HP – multiple projects combined)
- *$500 per year* (HP – multiple projects combined)
- *$35 per month* (CAC – multiple projects combined)
- *$300 per year* (CAC – including savings from replacing A/C)
- *$15 per month* (HP – multiple projects combined)
- *I don't have a dollar amount, but the reports Duke sends us are showing a significant difference.* (CAC – also replaced drywall)
- *We are getting ready to install insulated siding, but haven't done it yet.* (CAC)
- *Don't know* (N=2, both HP)

Upgrade windows / doors (N=10)

- *$500 per year* (HP – multiple projects combined)
- *$35 per month* (CAC – multiple projects combined)
- *$15 per month* (HP – multiple projects combined)
- *$25 per year* (HP)
- *I'm not sure about the money, but we're scoring better than efficient on our My Home Energy Report now.* (CAC)
- *Don't know* (N=5, three HP and two CAC)

Weather stripping (N=8)

- *$1000 per year* (HP – multiple projects combined)
- *$75 per month* (CAC – including savings from replacing A/C and furnace)
- *$10 to $15 per month* (HP)
- *Not sure, but our monthly bill now stays under $100.* (CAC)
- *It's too soon to tell.* (CAC)
- *Don't know* (N=3, one HP and two CAC)

Upgrade HVAC system (N=7)

- *$75 per month* (CAC – including savings from programmable thermostat and replacing A/C)
- *$50-$60 per month* (CAC)
- *$20 per month* (CAC)
- *It's too soon to tell.* (CAC)

- *Don't know* (N=3, all CAC)

Programmable thermostat (N=3)

- *$75 per month* (CAC – including savings from replacing A/C and furnace)
- *$80 per month* (HP – multiple projects combined)
- *Don't know* (HP)

Upgrade duct work (N=2)

- *$80 per month* (HP –multiple projects combined)
- *Don't know* (CAC)

HEHC / Home Energy Audit (N=2)

- *It's too soon to tell.* (CAC)
- *We had to pay for the audit.* (HP – follow-up to insulation installation)

Power Manager (N=1)

- *It's too soon to tell.* (HP)

Unplug extra freezer or refrigerator (N=1)

- *Don't know* (CAC)

Other actions (N=5)

- *$20 per month* (HP – black-out curtains; multiple projects combined)
- *We are getting ready to install air vents in the attic, but haven't done it yet.* (CAC)
- *Don't know* (HP – turn lights off)
- *Don't know* (HP – installed low-flow faucets)
- *Don't know* (CAC – installed new roof)

Overall, about a third of Smart $aver participants (34.8% or 56 out of 161) added other major new electrical appliances in the past year. The most common new appliances are furnaces (14.3% or 23 out of 161), water heaters (6.8% or 11 out of 161), refrigerators (6.2% or 5 out of 161) and stoves/ovens (6.2% or 5 out of 161).

Customers who installed central air conditioning are significantly more likely to have installed other major appliances in the past year (40.0% or 32 out of 80) compared to those who installed heat pumps (29.6% or 24 out of 81; this difference is significant at $p<.10$ using student's t-test). The main reason for this difference is that customers who upgraded their air conditioning were much more likely to also upgrade their furnace (26.3% or 21 out of 80) compared to heat pump installers (2.5% or 2 out of 81; this difference is significant at $p<.05$ using student's t-test). Customers who installed a heat pump were also more likely to install a new refrigerator (8.6% or 7 out of 81) compared to air conditioning installers (3.8% or 3 out of 80; this difference is significant at $p<.10$ using student's t-test).

Table 19. Added Other Major Electrical Appliances to Home in Past Year

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
Have added major electrical appliances besides rebated items in past year (all appliances)	29.6%	40.0%	34.8%
Furnace	2.5%	26.3%	14.3%
Water heater	7.4%	6.3%	6.8%
Refrigerator	8.6%	3.8%	6.2%
Stove / oven	6.2%	6.3%	6.2%
Dishwasher	3.7%	6.3%	5.0%
Clothes washer	6.2%	2.5%	4.3%
Dryer	3.7%	2.5%	3.1%
Microwave	1.2%	2.5%	1.9%
TV / home entertainment	1.2%	1.3%	1.2%
Hot tub / Jacuzzi	2.5%	0.0%	1.2%
"All appliances" replaced	1.2%	0.0%	0.6%
Other (listed below)	1.2%	3.8%	2.5%

Four surveyed customers mentioned "other" types of appliances; these are listed below.

Rebate for heat pump (N=1)

- *Dehumidifier*

Rebate for central air conditioning (N=3)

- *Freezer*
- *Humidifier*
- *Water softener*

Thermostat Settings

Figure 15 shows that the most common outdoor temperatures at which Smart $aver participants in Ohio and Kentucky turn on their cooling units are in the 79-81 degree range, which is also the median temperature at which participants turn on their cooling units (for all participants surveyed, as well as for each type of rebate separately).

Heat pump rebate recipients are more likely to wait until warmer weather before turning on their cooling units: 62.9% (51 out of 81) of heat pump rebate recipients only turn their units on when it is 79 degrees or higher outside, compared to 48.8% (39 out of 80) of central air conditioning rebate recipients (this difference is significant at $p<.05$ using student's t-test).

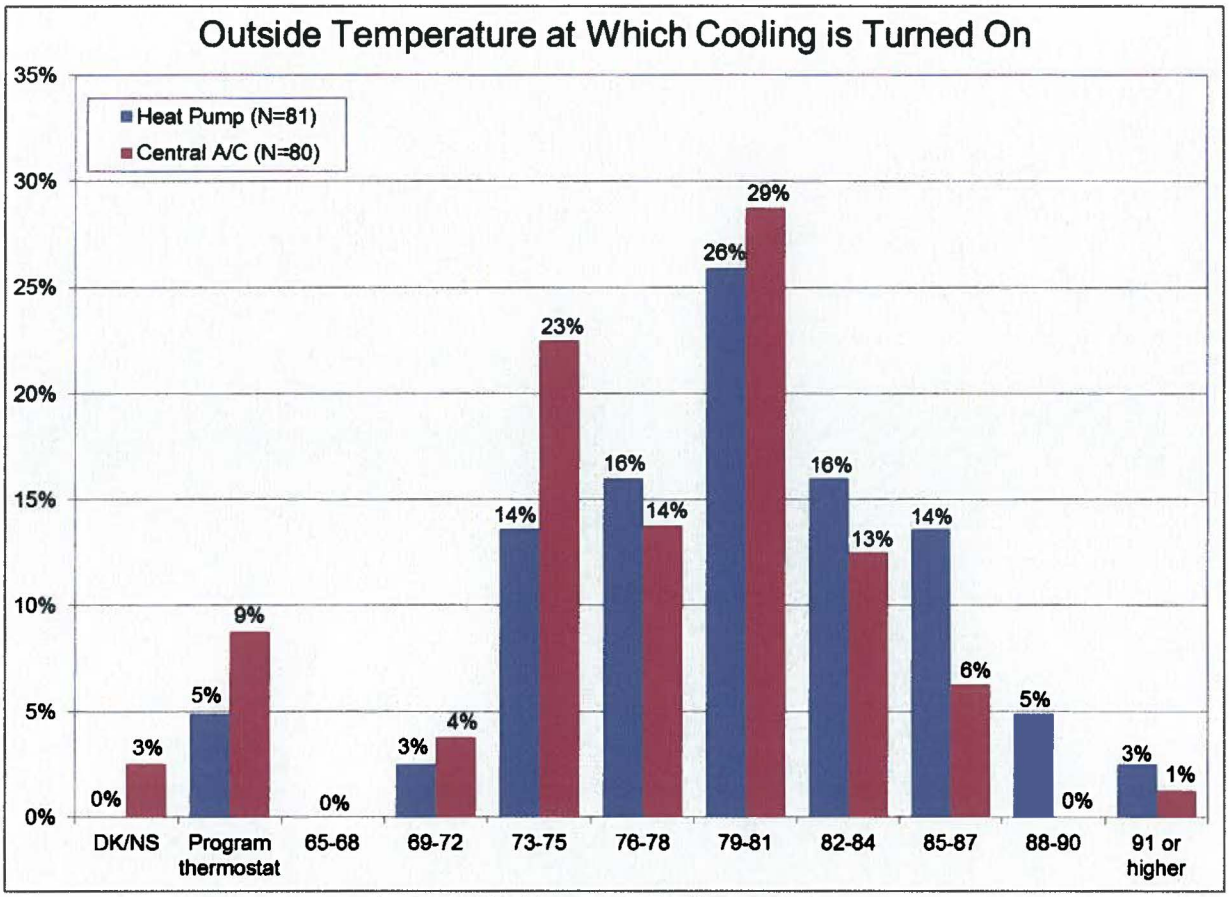

Figure 15. Temperature at Which Cooling Unit Is Turned On

Most respondents in this survey set their thermostats to about the same temperature "before" and "after" installation of their new Smart $aver rebated unit (overall 47.8% or 93 out of 161). As seen in Table 20, another 24.2% (39 out of 161) report that they are now setting their thermostats at a higher temperature than before installing their new unit, while 10.6% (17 out of 161) report that they set their thermostats at lower temperatures since installing their new units.

Customers who installed new heat pumps are more likely to set their thermostats lower after installing the new unit (14.8% or 24 out of 81) compared to central air conditioning installers (6.3% or 5 out of 80; this difference is significant at $p<.05$ using student's t-test).

Table 20. Change in Thermostat Settings Before and After Installation of New Unit

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
Set thermostat at same level "before" and "after"	54.3%	61.3%	57.8%
Set thermostat higher "after" than "before"	23.5%	25.0%	24.2%
Set thermostat lower "after" than "before"	14.8%	6.3%	10.6%
Don't know / programmed into the thermostat / did not answer both questions	7.4%	7.5%	7.5%

The complete distribution of specific responses to both "before" and "after" questions about

thermostat settings is shown in Table 21. Overall, there were very few respondents who changed their thermostat settings after installing a new unit by more than one response category (equal to about 3 or 4 degrees Fahrenheit) – just eight respondents (5.4% of 149 who were able to give specific "before" and "after" settings) turned up their thermostats by two or more response categories (equal to 6 or 7 degrees or more), while another three respondents (2.0% of 149) turned down their thermostat by two or more response categories.

In Table 21, the black numbers on the diagonal indicate respondents who set their thermostats to the same settings "before" and "after" installing their new units, while green numbers indicate those who are setting their thermostats higher "after", and red numbers indicate those who are setting their thermostats lower "after" installing their new units.

Table 21. Thermostat Settings Before and After Installation of New Unit (Heat Pumps and Central Air Conditioning Combined)

% out of 149 # of responses	Less than 65	After: 65-68	After: 69-72	After: 73-75	After: 76-78	After: 79-81	After: 82-84	After: 85-87	After: 88-90
Less than 65			0.7% 1		0.7% 1				
Before: 65-68			1.3% 2	2.0% 3					
Before: 69-72		0.7% 1	16.1% 24	14.1% 21	1.3% 2				
Before: 73-75		0.7% 1	4.7% 7	28.2% 42	4.7% 7		0.7% 1		
Before: 76-78			1.3% 2	3.4% 5	14.1% 21	0.7% 1			
Before: 79-81						3.4% 5			
Before: 82-84						0.7% 1			
Before: 85-87								0.7% 1	
Before: 88-90									

Note: This table only includes the 149 out of 161 respondents who were able to give specific "before" and "after" thermostat settings; twelve respondents either did not answer both questions, or said it was "programmed into the thermostat" without stating the setting.

According to Table 22, only about a third (34.6% or 28 out of 81) of heat pump rebate recipients are using their units "every day" during cooling season, compared to 53.8% (43 out of 80) of air conditioner rebate recipients (this difference is significant at $p<.05$ using student's t-test). Customers who installed heat pumps are also more likely to say they use their units "only on the hottest days" (17.3% or 14 out of 81) compared to those who installed air conditioning (10.0% or 8 out of 80; this difference is significant at $p<.10$ using student's t-test).

Table 22. Usage of Cooling Units

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
Not at all	0.0%	0.0%	0.0%
Only on the hottest days	17.3%	10.0%	13.7%
Frequently during cooling season	11.1%	13.8%	12.4%
Most days during cooling season	33.3%	21.3%	27.3%
Every day during cooling season	34.6%	53.8%	44.1%
Don't know	3.7%	1.3%	2.5%

Figure 16 indicates that most customers (55.9% or 90 out of 161) say they had their cooling units on "13 to 24 hours per day" on average before they installed their new unit. Customers who received rebates for installing central air conditioning were using their units more often than heat pump installers: 65.0% (52 out of 80) used their units 13 or more hours per day (compared to 46.9% or 38 out of 81 heat pump installers), and only 10.0% (8 out of 80) used their units less than 10 hours per day (compared to 25.9% or 21 out of 81 heat pump installers; both of these

differences are significant at p<.05 using student's t-test).

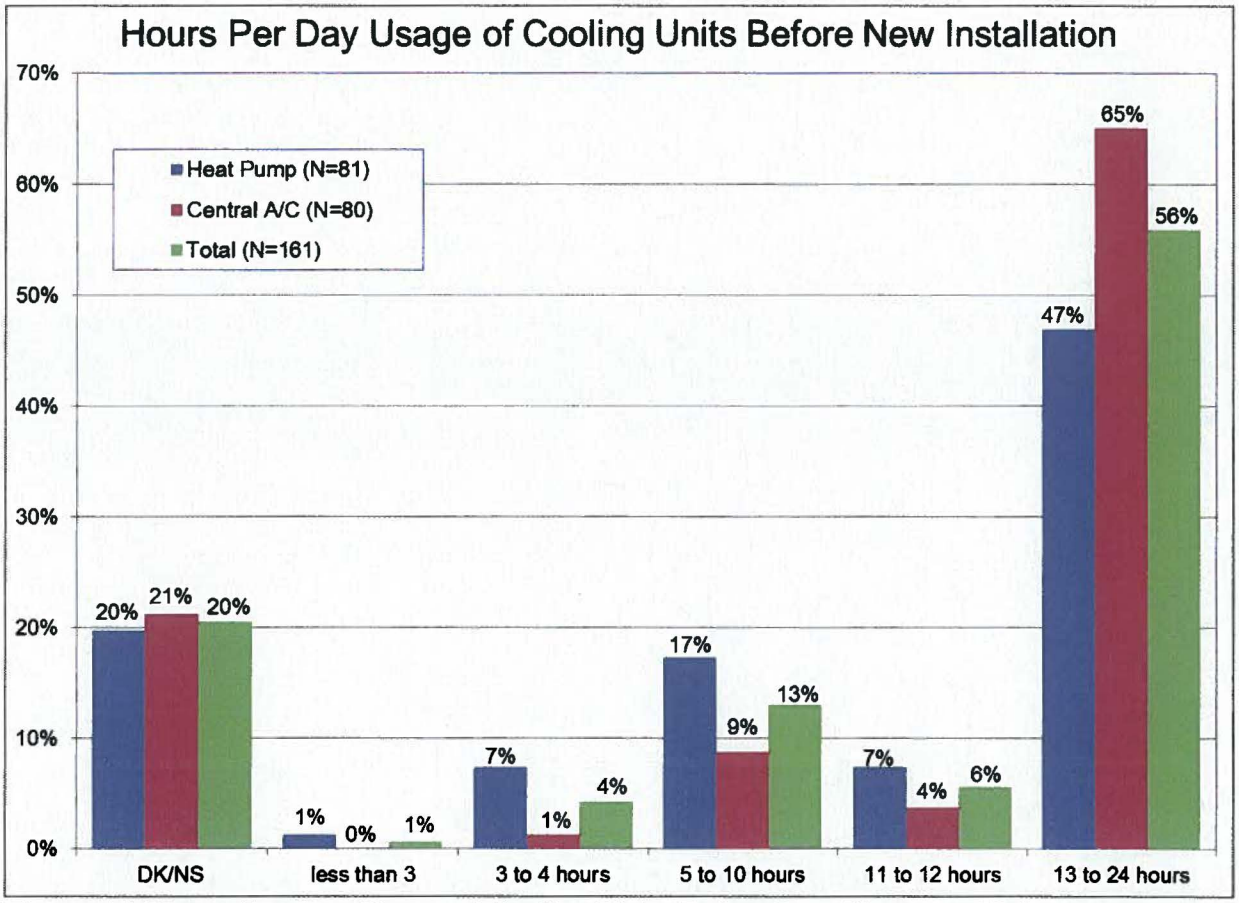

Figure 16. Hours Per Day Usage of Cooling Units Before Installing New Unit

Survey participants were asked whether the number of hours per day their cooling units were being used increased or decreased after installing their new equipment. The pattern of response to this question is different for heat pump and central air conditioning respondents, as seen in Table 23. Most customers who received rebates for central air conditioning say their usage stayed the same (58.8% or 47 out of 80) while about a quarter say it decreased (28.8% or 23 out of 80). However, a larger number of heat pump rebate recipients said their usage declined (46.9% or 38 out of 81) compared to the number saying it stayed the same (37.0% or 30 out of 81; these differences are significant at p<.05 using student's t-test).

The average number of hours per day that usage decreased was estimated by customers at 4.6 hours per day overall (per customer whose usage decreased; though heat pump installers averaged 5.0 hours less usage per day, this is not significantly higher than the 3.8 hours per day decline among air conditioning rebate recipients). Among the three customers whose usage increased, only one provided an estimate for the number of hours of increase: one heat pump customer's usage increased by 2 hours per day.

Table 23. Change in Average Daily Use since Replacing Cooling Unit

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
Usage decreased	46.9%	28.8%	37.9%
Average decrease in hours (among those who decreased)	5.0	3.8	4.6
Usage increased	2.5%	1.3%	1.9%
Average increase in hours (among those who increased)	2.0	NA	2.0
Usage stayed the same	37.0%	58.8%	47.8%
Don't know	13.6%	11.3%	12.4%

Participation in Other Duke Energy Efficiency Programs

Smart $aver participants were asked if they have participated in other Duke Energy efficiency programs. Most surveyed customers report having received CFLs by mail (64.6% or 104 out of 161) and My Home Energy Reports (54.0% or 87 out of 161), with about 20% each having participated in online services, Power Manager and Home Energy House Call. Heat pump rebate recipients are more likely to have received CFLs (70.4% or 57 out of 81), and to have participated in online services (24.7% or 20 out of 81) and Personal Energy Reports (13.6% or 11 out of 81), while air conditioning installers are more likely to report receiving MyHER (60.0% or 48 out of 80; differences significant at $p<.10$ or better using student's t-test). Surveyed customers participated in an average of 1.9 of the programs listed in Table 24, with no statistically significant difference by unit rebated.

Table 24. Have You Participated In Any of These Duke Energy Programs

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
CFLs by mail	70.4%	58.8%	64.6%
My Home Energy Report (MyHER)	48.1%	60.0%	54.0%
Online services	24.7%	15.0%	19.9%
Power Manager	17.3%	20.0%	18.6%
Home Energy House Call (HEHC)	22.2%	15.0%	18.6%
Personal Energy Report (PER)	13.6%	6.3%	9.9%
None of the above	12.3%	13.8%	13.0%
Average number of programs above	2.0	1.8	1.9

Percentages may total to more than 100% because participants could give multiple responses.

Customers who have not already participated in other Duke Energy efficiency programs were asked to rate their interest in participating in these programs on a 10-point scale where "10" represents the highest level of interest. As seen in Table 25, customers expressed modest interest in Home Energy House Call (average rating 5.64 on a 10-point scale), My Home Energy Report

(average rating 5.75) and Personal Energy Reports (5.45), with somewhat higher interest in free CFLs (6.75) and lower interest in Power Manager (3.33).

The average ratings for these programs are not significantly different between heat pump and air conditioning rebate recipients.

Table 25. Ratings of Interest in Energy Efficiency Programs by Non-Participants

Base: customers who have not participated in these programs	Heat Pump	Central Air Conditioning	All Surveyed Participants
Home Energy House Call	5.89 (N=62)	5.42 (N=96)	5.64 (N=131)
My Home Energy Report	5.30 (N=44)	6.20 (N=44)	5.75 (N=88)
Power Manager	3.60 (N=67)	3.07 (N=70)	3.33 (N=137)
CFLs by mail	6.59 (N=27)	6.86 (N=37)	6.75 (N=64)
Personal Energy Report	5.86 (N=69)	5.08 (N=75)	5.45 (N=144)

Respondents in this survey were asked, "What other services could Duke Energy provide to help improve home energy efficiency?" Suggestions made by survey respondents are listed in Table 26; three-quarters of respondents (73.9% or 119 out of 161) made no suggestions.

The most common suggestions for services Duke Energy could offer involve providing more education and information about efficiency and conservation to customers (5.6% or 9 out of 161), followed by encouraging insulation and home shell sealing (3.7% or 6 out of 161).

Table 26. Suggestions for Other Services Duke Energy Should Offer

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
More education / information about efficiency and conservation	3.7%	7.5%	5.6%
Encourage insulation / sealing home shell	3.7%	3.8%	3.7%
Encourage efficient lighting	2.5%	3.8%	3.1%
Incentives for more efficiency upgrades (besides cooling)	2.5%	3.8%	3.1%
Home audits	3.7%	1.3%	2.5%
Lower rates	0.0%	5.0%	2.5%
Improve metering / smart meters	2.5%	1.3%	1.9%
Encourage window upgrades	2.5%	1.3%	1.9%
Encourage green energy (solar, wind, geothermal, etc.)	2.5%	1.3%	1.9%
Credit for recycling appliances (other than Power Manager for cooling)	1.2%	1.3%	1.2%
Power line maintenance / tree trimming	1.2%	0.0%	0.6%
Other (listed below)	3.7%	6.3%	5.0%
Nothing / don't know	75.3%	72.5%	73.9%

Percentages may total to more than 100% because participants could give multiple responses.

Eight surveyed participants gave unique suggestions for additional services Duke Energy could offer, which are listed below.

Rebate for heat pump (N=3)

- *Duke should do their best to ensure that competing energy providers are not giving false and/or misleading information to their customers.*
- *I think that Duke Energy could make their Strike Force program better known. It's a surge protector program that I did not know they offered until it was too late and my house was struck by lightning and fried my whole heating and cooling system.*
- *Duke should provide more home energy efficiency assistance for low income customers.*

Rebate for central air conditioning (N=5)

- *I would like to see Duke Energy provide CFL disposal or recycling, maybe a mailing box that I can fill and send to Duke for proper disposal. I don't want them ending up in the landfill, and I forget to take them to the store for recycling.*
- *I'd like to see them get into the DSL business. I'd like to see internet service; I could get very interested in that, if they're competitively priced.*
- *A program that encourages people to get their furnaces and A/C checked every year for safety and burning efficiency; a program that can help get people with acquiring a generator when the power goes out so they can keep their medical equipment and freezers working.*
- *Duke could periodically supply home energy kits such as those used in the HEHC program, and offer more incentives for energy efficient home improvements.*

- *Expand the Smart Grid concept. Have pricing be dependent on the hour, and have the thermostat tell you how much it's costing with variable rate pricing. Similar to the Power Manager program, only with greater feedback.*

Attitudes toward Energy and the Environment

Energy and environmental issues are important to Smart $aver participants, as shown in Figure 17 through Figure 20. Fully 80.7% (130 out of 161) view "environmental issues" as either "important" or "very important", while the corresponding number for "reducing air pollution" is 83.9% (135 out of 161). A clear majority of 54.7% (88 out of 161) also view "climate change issues" as "important" or "very important". However "reducing the rate of building new power plants" is deemed "important" or "very important" by only 45.3% (73 out of 161) of Smart $aver participants.

Figure 17 through Figure 20 show the complete distributions for these questions about the importance of environmental issues by the type of rebate received. There are no statistically significant differences by unit rebated.

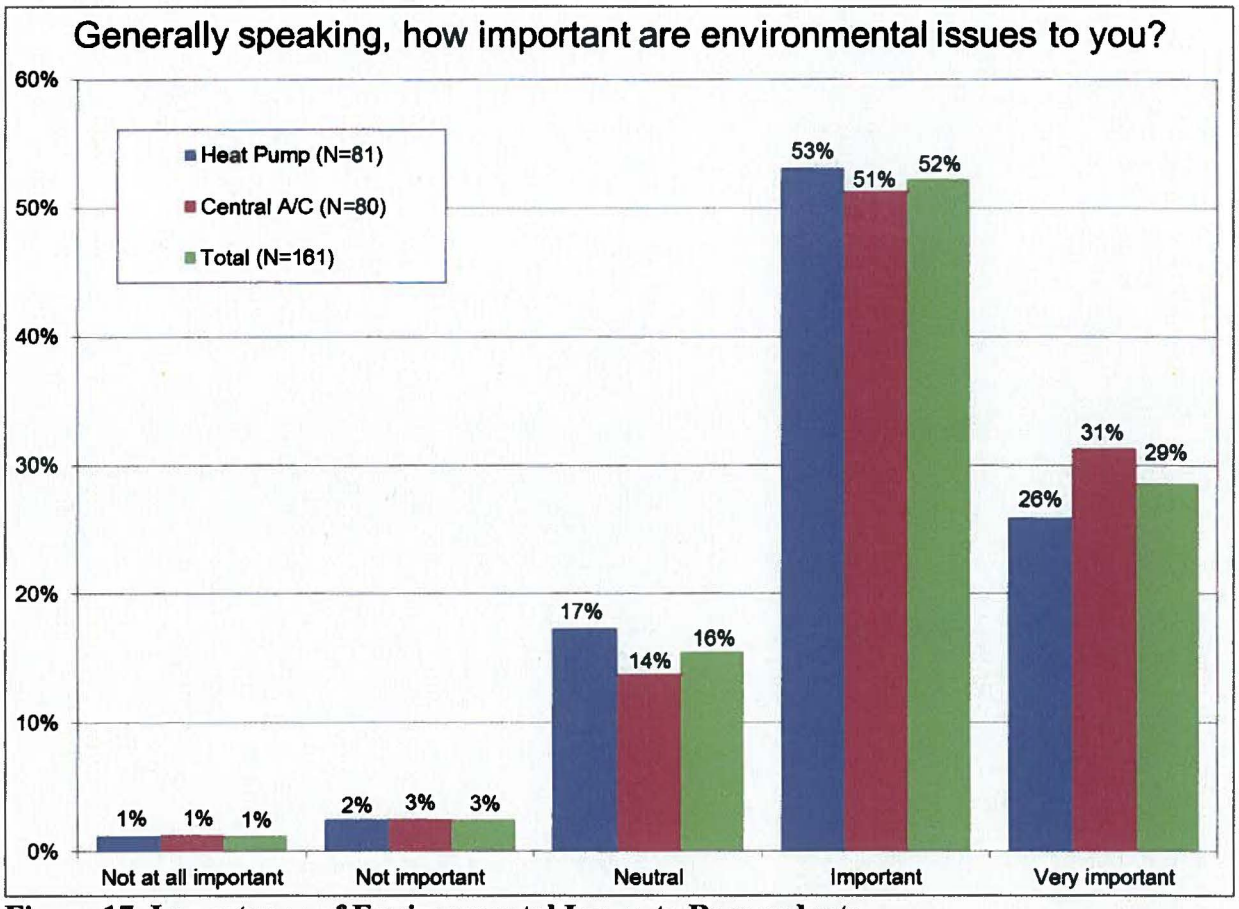

Figure 17. Importance of Environmental Issues to Respondents

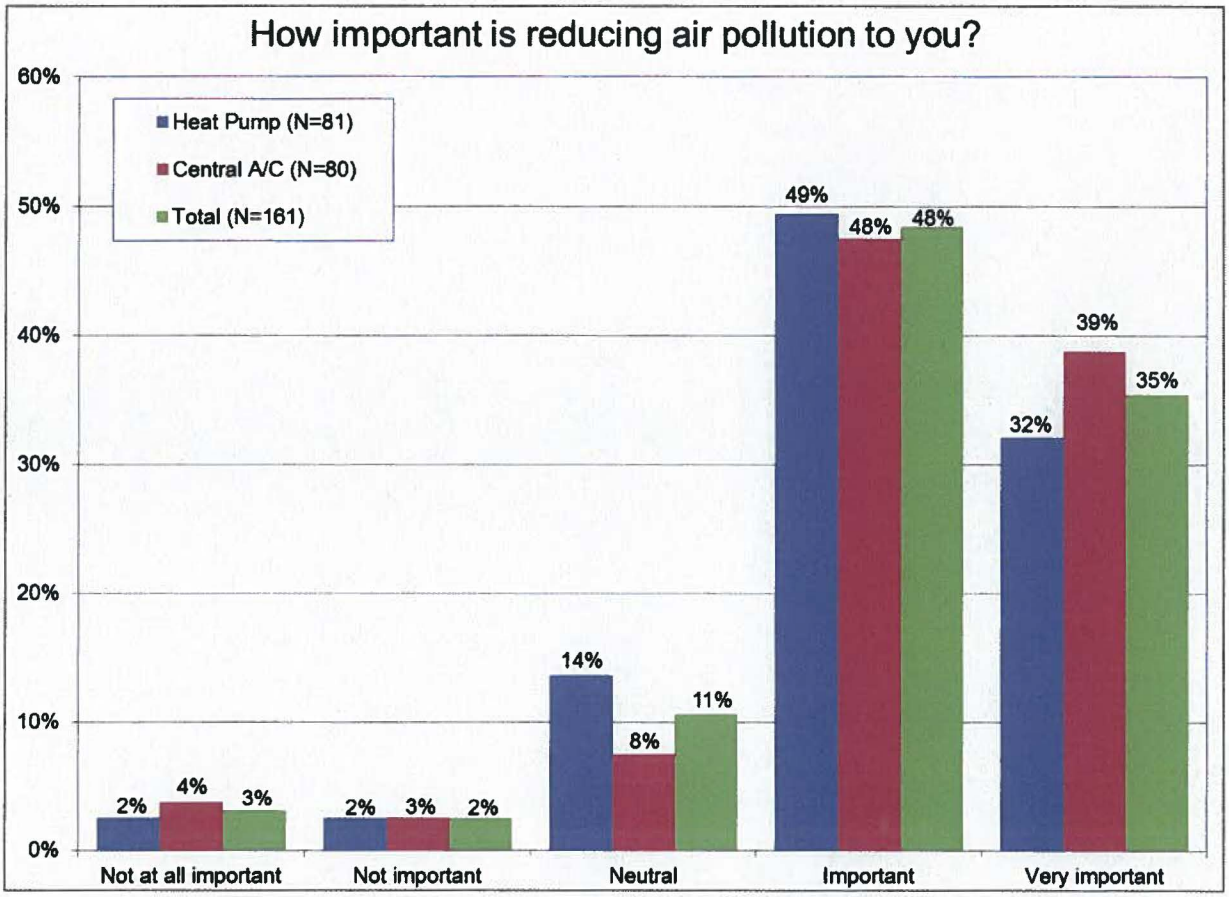

Figure 18. Importance of Reducing Air Pollution to Respondents

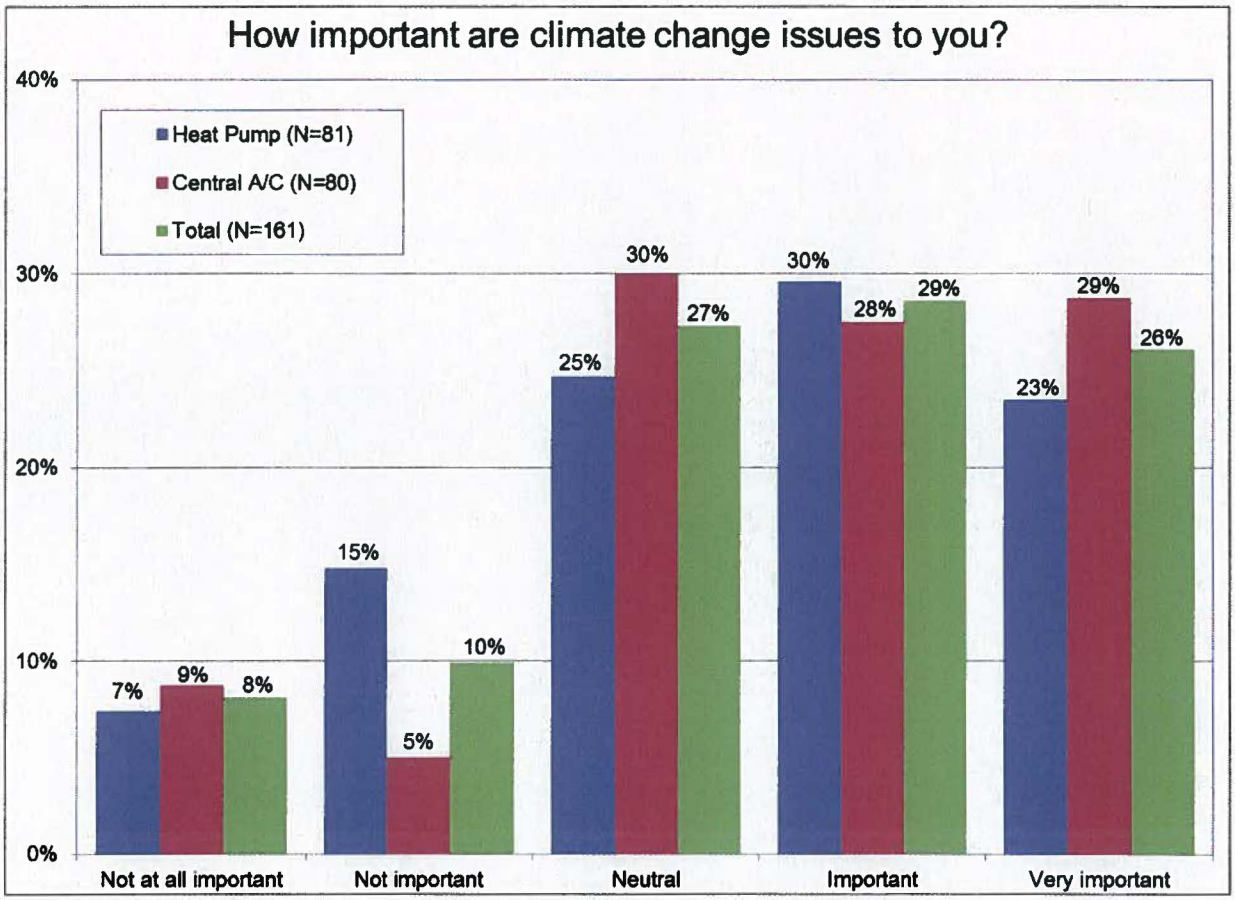

Figure 19. Importance of Climate Change Issues to Respondents

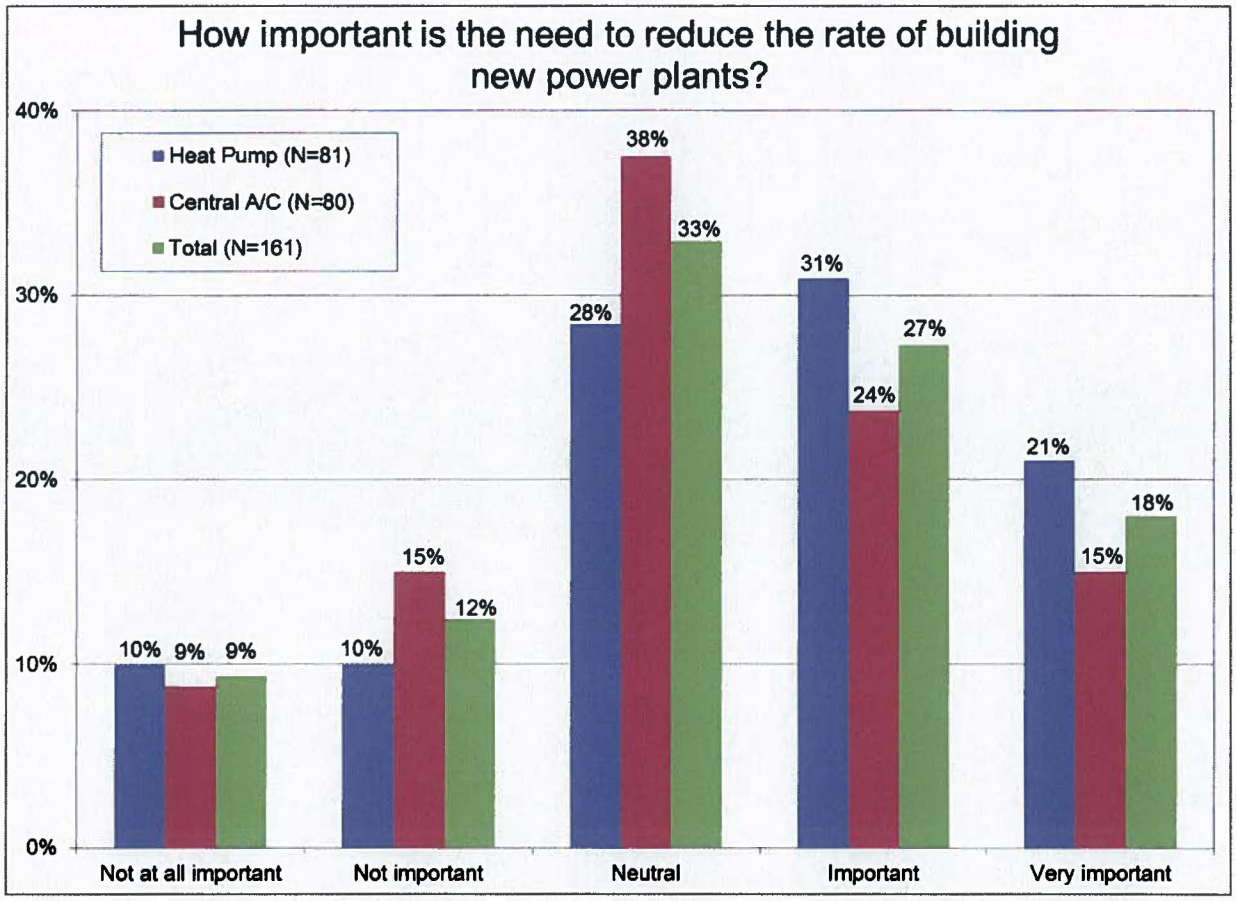

Figure 20. Importance of Reducing Rate of Building New Power Plants to Respondents

However, only 12.4% (20 out of 161) of Residential Smart $aver survey participants actually belong to groups or clubs with environmental missions, as seen in Table 27. Customers who received rebates for heat pumps are more likely to belong to such groups (16.0% or 13 out of 81) compared to air conditioner rebate recipients (8.8% or 7 out of 80; this difference is significant at $p<.10$ using student's t-test).

Table 27. Membership in Groups with Environmental Missions

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
Belong to a group or club with an environmental mission	16.0%	8.8%	12.4%
Do not belong to a group or club with an environmental mission	84.0%	91.3%	87.6%

The groups and clubs these 20 respondents belong to are listed below; the number of responses adds up to more than 20 because some of these respondents claimed membership in more than one group.

- *Sierra Club* (N=4)
- *NRA / gun club* (N=3)

- *World Wildlife Fund*
- *Nature Conservancy*
- *American Whitewater*
- *Greenpeace*
- *Greater Cincinnati Energy Alliance*
- *Knights of Columbus*
- *Democratic Party*
- *Republican Party*
- *Tea Party*
- *Democracy Now*
- *Ohio PIRG*
- *Ohio Citizen Action*
- *Ohio Sportsman's Club*
- *U.S. Green Vehicle Council (USGVC)*
- *Illuminating Engineering Society (IES)*
- *American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)*
- *REI (Recreational Equipment Inc.)*
- *"I am a LEED accredited professional"*
- *"I am on a green committee at work"*
- *"My church does a lot with solar energy"*
- *"I am a Kroger employee"*
- *"I drive a Lexus hybrid"*

Using the Duke Energy Website

A little less than half of the program participants surveyed (44.1% or 71 out of 161) have "never" visited the Duke Energy website, while about one in five (21.7% or 35 out of 161) visit the site "often" (at least once a month). There are no significant differences between customers who received Smart $aver rebates for different types of unit.

Table 28. Frequency of Using the Duke Energy Website

	Heat Pump (N=81)	Central Air Conditioning (N=80)	All Surveyed Participants (N=161)
Often (once a month or more)	24.7%	18.8%	21.7%
Sometimes (less than once a month)	35.8%	32.5%	34.2%
Never	39.5%	48.8%	44.1%

Net to Gross Methodology

The net to gross ratio for the Residential Smart $aver HVAC program will be calculated and presented in the impact report. This section presents the methodology for determining the net to gross results.

The process evaluation includes participant surveys and surveys and in-depth interviews with trade allies, as presented in this report. However, the program's incentives are typically unknown to the participant. Many trade allies typically complete the application to receive the program's rebate and pass the savings on to the participating customer. In this common scenario, the participating customer is not a reliable source for freeridership information. With this program's operational structure, TecMarket Works determined that the best source for freeridership information is the trade allies. In August and September, 2013, TecMarket Works conducted a survey with 79 Ohio and Kentucky trade allies (out of 313 trade allies located in Ohio and 51 trade allies in Kentucky that participated in the HVAC program) in order to get as much information about freeridership as possible. The resulting methodology will be presented in full detail in the impact report.

Net to Gross Battery

A short survey was fielded with partnering trade allies: all of the questions asked can be found in *Appendix C: HVAC Trade Ally Survey Instrument,* and the responses of surveyed trade allies are presented in the section of this report titled *Trade Ally Survey.*

The two key questions that are used to calculate a net to gross ratio for this program are listed below:

- *Of the energy efficient equipment that was rebated through the program, what percentage of those customers do you think would have still gone with an energy efficient model if the Duke Energy rebate were not available?*

- *Using a scale of 1 to 10, where 1 means not at all influential and 10 means very influential, how important would you say the rebate is to your customers' decision when considering all the various factors that a customer typically contemplates prior to making a purchase from your company?*

The results of the net to gross calculations will be presented in the impact report for the Residential Smart $aver HVAC program.

Appendix A: Management Interview Instrument

Name: _____

Title: _____

Position description and general responsibilities:

_____

We are conducting this interview to obtain your opinions about and experiences with the Smart $aver program. We'll talk about the Smart $aver Program and its objectives, your thoughts on improving the program, and the technologies the program covers. The purpose of this study is to capture the program's current operations as well as help identify areas where the program might be improved. Your responses will feed into a report that will be shared with Duke Energy and the state regulatory agency. I want to assure you that the information you share with me will be kept confidential; we will not identify you by name. However, you may provide some information or opinions that could be attributed to you by virtue of your position and role in this program. If there is sensitive information you wish to share, please warn me and we can discuss how best to include that information in the report.

Do you have any questions for me before we begin?

Program Description

In your own words, please describe the [STATE NAME] Smart $aver HVAC Program. In what other service territories does the program operate?

Why did Duke Energy chose to offer prescriptive incentives for trade ally-installed HVAC measures?

Why did Duke Energy decide to use a third party vendor to administer this program?

Please discuss the history and development of the program. How does this differ in the various service territories the program is offered?

What are the current program's objectives? That is, what is the program trying to accomplish (e.g. generate energy savings, 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?

What are the program's energy savings goals? Over what time period? How are you performing toward these goals? Will this goal be met?

Does the program have participation goals? If so, what are they? Over what time period? How is the program performing toward these goals? Will this goal be met?

Does the program have any other goals? How are you performing toward these goals? Over what time period? Will these goals be met?

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 Smart $aver HVAC 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 trade ally 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 Measures and Incentives

Please describe the energy saving measures used by the program. How were they determined? Why were they selected?

What is a health check? What measures or steps are included? Why?

What are the eligibility requirements for each measure?

Why were systems such as through-the-wall room HP or AC, Window HP or AC, Mini Spit or Multi split HP or AC, Portable HP or AC, Evaporative AC, and natural gas furnace and boilers excluded?

What are the trade ally, customer, and builder incentive amounts in [STATE}] for each measure? Please send table with numbers for each state. How were the incentive amounts determined? What information or research was used to determine those levels? Why these amounts?

How often are incentive amounts reviewed? What criteria are used for the review? Have you changed any incentive levels? If which ones? When? By how much? And why?

Trade Allies

What benefits does the Smart $aver HVAC program offer to potential trade allies? Why would they want to participate?

It is my understanding that GoodCents is responsible for trade ally marketing and recruiting, is this correct? How does GoodCents market to and recruit trade allies? What role does Duke Energy serve in this process?

What barriers have been encountered in trade ally marketing and recruiting efforts? How can trade ally recruitment be improved?

What are the eligibility requirements for trade allies (e.g. licenses, good standing, certifications, safety, financials, etc.)? Do requirements differ by program offering (HVAC, Health Check, Insulate and Seal)? If so, how? Do they differ by state? If so, how?

Are trade allies required to hold certain certifications such as NATE, BPI, etc.? If so, which certifications are considered acceptable (e.g. AC, Air Distribution, HVAC Analyst, AC and HP, etc.)? Do these requirements apply to the business overall or to each individual technician serving customers?

What is the trade ally screening process? Is it handled by GoodCents alone or is Duke Energy involved?

Are there criteria for continued trade ally and individual technician participation in the program? If so, what are they? How often are they reviewed?

What is the training process? How long is it? What is covered? Who teaches it? Please provide sample training materials. What is the success rate of training? What are the requirements for successful training to participate in program?

How do you track and manage trade ally interactions and field operations?

What challenges have you previously encountered with trade allies and how have they been overcome? Please describe any current challenges you are facing.

In what ways can trade ally recruitment and management be improved?

Customer Marketing

Does the program have specific customer enrollment goals? How are you performing toward these goals?

Does the program have specific marketing goals? What metrics do you use? How are you performing?

What are the eligibility requirements for customers?

Please describe how you identify target markets. Which markets does this program focus on and why?

Are potential customers segmented? If so, how?

How are customers made aware of and recruited into the program?

Is marketing done by GoodCents, Duke Energy, and/or trade allies? Please explain.

Please describe the marketing plan and execution for this program. What types of marketing are used? How often?

How are marketing efforts coordinated?

Are marketing results tracked? If not, why? If so, what metrics are used? Which types of marketing are most effective? Why?

Please describe any specific marketing and or branding requirements from Duke Energy and/or GoodCents. How are trade allies instructed to deal with GoodCents and Duke Energy branding?

What happens when a customer learns about the program? How do they learn more? How do they sign up?

How are customers enrolled?

What challenges have you previously encountered with marketing and how have they been overcome? Please describe any current challenges you are facing.

In what ways can program marketing be improved?

Call Center Operations

Please describe the role of the call center in the operation of this program.

What are your service level agreements? What are the metrics used (call handle time, etc.)?

Please describe the call center reporting process. How is the call center performing?

How does Duke Energy oversee and maintain call quality? What types of issues have been uncovered? How have these been addressed?

What challenges have you previously encountered with call center operations and how have they been overcome? Please describe any current challenges you are facing.

In what ways can call center operations be improved?

Incentive Presentation to Customers and Measure Installation

Please describe a typical interaction between customers and trade allies, including initial visit, repeat visits, measure performance/installation, and follow up, including paperwork.

How are trade allies trained to present the measures and associated incentives to customers? Are they presented one at a time or as a bundle? Are steps for presentation to customers standardized or left flexible? Why?

Has any testing been done on the most effective ways to encourage customer participation? If so, what was done and what were the results? If not, why?

What types of challenges or difficulties might be encountered during a customer interaction (technical, customer service, etc.) How are trade allies trained to deal with these difficulties?

What kind of paperwork is required by the customer? What paperwork is required on the part of the trade ally? Please provide samples.

Do you perform post-installation measure verification? If so, please describe that process. How frequently is it used? If not, why? What alternatives are used?

How are trade allies instructed to deal with customer satisfaction? Is customer satisfaction measured? If so, how? If not, why?

How overall quality assurance maintained? What types of issues have been uncovered? How have these been addressed?

What other challenges have you previously encountered with trade ally/customer interactions and how have they been overcome? Please describe any current challenges you are facing.

In what ways can trade ally/customer interactions be improved?

Incentive Processing

Please describe how incentives are processed from start to finish.

In what form are customer and trade ally payments issued?

How long does it typically take for the customer to receive payment? How long does it take for the trade ally to receive payment?

How are numbers of incentives and amounts reported to Duke Energy? How often are reports filed? Please describe the report and provide a sample.

How is compensation for incentive amounts handled between the two organizations?

How is quality assurance handled during incentive processing? What issues have been uncovered and how were they resolved?

What other challenges have you previously encountered with incentives and how have they been overcome? Please describe any current challenges you are facing.

In what ways can incentive processing be improved?

Data Systems and Management

Please describe the systems and processes used to track, measure, analyze and report on program performance.

What metrics are used for to report program performance?

Please describe the reporting process that GoodCents uses to inform Duke Energy. What types of reports are provided? How often? Please provide samples.

Does GoodCents provide an online portal or other means that Duke Energy can access this information directly? If so, please describe it.

Measurement and Verification

How does Duke Energy track and attribute energy savings?

Please describe the measurement and verification process used for this program.

What types of data is GoodCents required to collect and maintain?

Is measurement and verification part of the compensation plan for GoodCents administration of the program?

Vendor Assessment

(If not captured earlier) Please explain how the interactions between Duke Energy and vendors work.

How effective are vendors in their assigned roles? What works well? What could be improved? (Repeat for each vendor.)

Do you think these interactions should be changed in any way? If so, how and why?

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

Are key industry experts, trade professional or peer used to identify program enhancements, cost reduction opportunities or process improvements? If so, how does this work?

Are key industry experts and trade professionals used in other advisory roles such as market or marketing experts or industry professionals? If so how does this work and what kind of support is obtained?

Overall Strengths, Needs, and Suggestions

Overall, what about the [STATE NAME] program works well and why?

What doesn't work well and why? Do you think this discourages customer acceptance or the quality of the offer to the customer?

Do you have suggestions for improvements to the program that would increase offer quality, customer interest or lower costs?

Do you have suggestions for the making the program operate more smoothly or effectively?

Do you have suggestions for improving or increasing energy impacts?

Operational, Market & Technical Barriers and Suggestions

What information, research or assessments are you using to identify barriers to implementation and develop more effective ways to deliver this program?

Can you identify any market, operational or technical barriers that impede a more efficient program operation?

Anything on the horizon that you think will impact the energy savings generated by this program?

In what ways can program operations or operational efficiencies be improved?

Closing Suggestions and Comments

If you could change anything else about the program, what would you change and why?
Are there any other issues or topics you think we should know about and discuss for this evaluation?
Is there anyone else that I should speak with to better complete this evaluation?

Appendix B: Trade Ally Interview Instrument

Target 10 in OH & KY (each)
Use four attempts at different times of the day and different days before dropping from contact list. Call times are from 9:00 a.m. to 5:00 p.m. EPT, Monday - Friday.

Note: Only read words in bold type.

for answering machine 1st through penultimate attempts:
Hello, my name is _____ and I am calling with a survey about the Duke Energy Smart Saver HVAC rebate program that your company participates in. I'm sorry I missed you. I'll try again another time.

for answering machine - Final Attempt:
Hello, my name is _____ and I am calling with a survey about the Duke Energy Smart Saver HVAC program that your company participates in. I'm sorry I missed you.This is my last attempt at reaching you, my apologies for any inconvenience.

if person answers
Hello, my name is _____. May I please speak with _____ or whoever helps to coordinate your company's participation in the Duke Energy Smart Saver HVAC rebate program?

I am calling on behalf of Duke Energy to conduct an interview to obtain your opinions about and experiences with Duke Energy's Residential Smart $aver program. **We are not selling or promoting anything, there are no wrong answers, and your responses to our questions will be combined with other responses and used to help us make improvements to the program.**

We'll talk about your understanding of the Residential Smart $aver Program and its objectives, your thoughts on improving the program, and the technologies the program covers. The interview will take about 45 minutes to complete. May we begin?

Note: If this is not a good time, ask if there is a better time to schedule a callback.

We initially have some brief quantitative questions to ask you. After these we'd like to discuss some other questions where we'd appreciate hearing your insights and opinions.

Identification
- Surveyor Name _____
- Survey ID _____
- Name _____
- Title _____
- Company _____
- Address _____
- City _____
- State _____

Zip _____
Phone _____
Email _____

1. **What is your best estimate regarding the number of customers per year that your company serves who participate in the Smart Saver program?** _____
Comments: _____

2. **What percentage of these Smart Saver buyers your company works with do you think are replacing failed units?** _____
Comments: _____

3. **What percentage of the Smart Saver buyers do you think are replacing older equipment that is still functioning, but less efficient?** _____
Comments: _____

4. **What percentage of your total high efficiency equipment sales were rebated through the Smart Saver program last year?** _____
Comments: _____

5. **Of the energy efficient equipment that was rebated through the program, what percentage of those customers do you think would have still gone with an energy efficient model if the Duke Energy rebate were not available?** _____
Comments: _____

6. **What percentage of customers would you estimate were aware of the rebate for high efficiency equipment prior to contacting your company?** _____
Comments: _____

7. **What percentage of customers would you estimate decide to install a lower efficiency model after being made aware of the rebate for high efficiency equipment?** _____
Comments: _____

8. **Using a scale of 1 to 10, where 1 means not at all influential and 10 means very influential, how important would you say the rebate is to your customers' decision when considering all the various factors that a customer typically contemplates prior to making a purchase from your company?**

( ) 1
...

( ) 10
( ) DK/NS

If less than 8,
9. **Why do you give that response? _____**

10. **What other factors are commonly more influential than the rebate in a customer's decision to purchase the high efficiency unit from your company?**
Do Not Read. Allow for Any Response.
[ ] Overall purchase price
[ ] Payment options
[ ] Equipment operating cost
[ ] Equipment efficiency rating
[ ] Equipment warranty
[ ] Labor warranty
[ ] Service contract
[ ] Equipment reputation/brand
[ ] Your company's reputation/brand
[ ] Duke Energy reputation/brand
[ ] Sales person influence
[ ] Recommendation or referral *ask:* **From whom**
[ ] Monthly utility bill reduction
[ ] Tax credits
[ ] Other utility or manufacturer rebates
[ ] Other
[ ] DK/NS

11. **Using a scale of 1 to 10, where 1 means not at all helpful and 10 means very helpful, how useful would you say the rebate is to your company's ability to sell high efficiency equipment?**
( ) 1
...
( ) 10
( ) DK/NS

If less than 8,
12. **Why do you give that response? _____**

13. **On a scale from 1-10, with 1 indicating that you are very dissatisfied, and 10 indicating that you are very satisfied, please rate your satisfaction with the Smart Saver HVAC Rebate Program**
( ) 1
...
( ) 10
( ) DK/NS

If less than 8,
14. **Why do you give that response? _____**

Understanding the Program
Now we would like to ask you about your understanding of the Smart $aver program. We would like to ask you to…

1. **Please review for me how you are involved in the program and the steps you take in the participation process. Walk me though the typical steps you take to help a customer become eligible for this program and what you do to receive or help the customer receive the program incentive.**

2. **What kinds of problems or issues have come up in the Smart $aver program?**

3. **Have you heard of any customer complaints that are in any way associated with this program? Have callbacks increased due to the program technologies?**

Program Design and Design Assistance

4. **Do you feel that the proper technologies and equipment are being covered through the program?**

5. **Are the incentive levels appropriate? How do they impact the choice by the customers of the higher efficient equipment?**

6. **Are there other technologies or energy efficient systems that you think should be included in the program?**

7. **Are there components that are now included that you feel should not be included? What are they and why should they not be included?**

Reasons for Participation in the Program

We would like to better understand why contractors become partners in the Smart $aver Program.

9. **How long have you been a partner in the Smart $aver Program?**

10. **What are your primary reasons for participating in the program? Why do you continue to be a partner?….** *If prompts are needed…* **Is this a wise business move for you, is it something you believe in professionally, does it provide a service to your customers, do you want to build a relationship with Duke Energy, or other reasons?**

11. **Has this program made a difference in your business? How?**

12. How do you think Duke Energy can get more contractors to participate in this program?

Program Participation Experiences

The next few questions ask about the process for submitting participation forms and obtaining the incentive payments.

13. Do you think the process could be streamlined in any way? How?

14. How long does it take between the time that you apply for your incentive, to the time that you and your customer receive the payments? Is this a reasonable amount of time? What should it be? Why?

15. Do you have the right amount of materials such as forms, information sheets, brochures or marketing materials that you need to effectively show and sell your Smart $aver® heat pumps and air conditioners? What else do you need?

16. Overall, what about the Smart $aver Program do you think works well and why?

17. What changes would you suggest to improve the program?

18. Do you feel that communications between you and Duke Energy's Smart $aver program staff is adequate? How might this be improved?

19. What benefits do you receive as a result of participating in Duke Energy's Smart $aver Program or from selling Smart $aver items?

20. What do you think are the primary benefits to the people who buy a Smart $aver appliance? Are there other benefits that are important to a potential customer?

Market Impacts and Effects

21. How do you make customers aware of the Program?

22. Are customers more satisfied with this equipment? Why or why not?

23. Do you have fewer calls or more calls to correct problems with the Smart $aver appliances?

24. Do you market or sell the Smart $aver equipment differently than your other equipment? How?

25. What percent of Smart $aver buyers do you think are replacing older equipment that is still functioning, but less efficient? What percent of Smart $aver buyers do you think are replacing failed units?

26. Other than the energy efficient heat pumps and air conditioners, has the program influenced you to carry other energy efficient equipment that is not rebated through the program?

a. *If yes,* **what do you now carry?**

b. *If yes,* **About how many of these units did you install/sell in the last year?**

27. Do you bundle air conditioners with any other efficiency options?
a. *If yes,* **what percent?**

28. Has the program influenced your decision to market or sell more high efficiency equipment than you would have without the program?

a. *If yes,* **To what extent?**

29. We would like to know what your practices were before you became a partner in the program, and what you would offer your customers without the program.

30. There are no plans to terminate the program, but we would like to know how the program affects trade allies. If the program were to be discontinued, would you still offer the same energy efficient equipment options?

31. If the program were not offered, how would you structure pricing differently to make up for the program loss?

32. In your opinion is the Smart $aver program still needed? Why?

Recommended Changes from the Participating Trade Allies

33. Are there any other changes that you would recommend to Duke Energy for their Program not already discussed?

Appendix C: HVAC Trade Ally Survey Instrument

Target 80 in IN, 80 in OH&KY (combined)

Use four attempts at different times of the day and different days before dropping from contact list. Call times are from 9:00 a.m. to 5:00 p.m. EPT, Monday - Friday.

Note: Only read words in bold type.

for answering machine 1st through penultimate attempts:
Hello, my name is _____ and I am calling with a survey about the Duke Energy Smart Saver HVAC rebate program that your company participates in. I'm sorry I missed you. I'll try again another time.

for answering machine - Final Attempt:
Hello, my name is _____ and I am calling with a survey about the Duke Energy Smart Saver HVAC program that your company participates in. I'm sorry I missed you.This is my last attempt at reaching you, my apologies for any inconvenience.

if person answers
Hello, my name is _____. May I please speak with _____ or whoever helps to coordinate your company's participation in the Duke Energy Smart Saver HVAC rebate program?

I am calling on behalf of Duke Energy to conduct a contractor survey to get feedback about your company's experiences with the program. We are not selling or promoting anything, there are no wrong answers, and your responses to our questions will be combined with other responses and used to help us make improvements to the program.

The survey only has 10 questions and will take just 3 or 4 minutes.
Note: If this is not a good time, ask if there is a better time to schedule a callback.

Identification

Surveyor Name _____
Survey ID _____
Name _____
Title _____
Company _____
Address _____
City _____
State _____
Zip _____
Phone _____
Email _____

1. **What is your best estimate regarding the number of customers per year that your company serves who participate in the Smart Saver program? _____**

Comments: _____

2. **What percentage of these Smart Saver buyers your company works with do you think are replacing failed units?** _____
Comments: _____

3. **What percentage of the Smart Saver buyers do you think are replacing older equipment that is still functioning, but less efficient?** _____
Comments: _____

4. **What percentage of your total high efficiency equipment sales were rebated through the Smart Saver program last year?** _____
Comments: _____

5. **Of the energy efficient equipment that was rebated through the program, what percentage of those customers do you think would have still gone with an energy efficient model if the Duke Energy rebate were not available?** _____
Comments: _____

6. **What percentage of customers would you estimate were aware of the rebate for high efficiency equipment prior to contacting your company?** _____
Comments: _____

7. **What percentage of customers would you estimate decide to install a lower efficiency model after being made aware of the rebate for high efficiency equipment?** _____
Comments: _____

8. **Using a scale of 1 to 10, where 1 means not at all influential and 10 means very influential, how important would you say the rebate is to your customers' decision when considering all the various factors that a customer typically contemplates prior to making a purchase from your company?**

( ) 1
...
( ) 10
( ) DK/NS

If less than 8,
9. **Why do you give that response?** _____

10. **What other factors are commonly more influential than the rebate in a customer's decision to purchase the high efficiency unit from your company?**
Do Not Read. Allow for Any Response.

[ ] Overall purchase price
[ ] Payment options
[ ] Equipment operating cost
[ ] Equipment efficiency rating
[ ] Equipment warranty
[ ] Labor warranty
[ ] Service contract
[ ] Equipment reputation/brand
[ ] Your company's reputation/brand
[ ] Duke Energy reputation/brand
[ ] Sales person influence
[ ] Recommendation or referral *ask:* **From whom**
[ ] Monthly utility bill reduction
[ ] Tax credits
[ ] Other utility or manufacturer rebates
[ ] Other
[ ] DK/NS

11. **Using a scale of 1 to 10, where 1 means not at all helpful and 10 means very helpful, how useful would you say the rebate is to your company's ability to sell high efficiency equipment?**

( ) 1
...
( ) 10
( ) DK/NS

If less than 8,
12. **Why do you give that response?** _____

13. **On a scale from 1-10, with 1 indicating that you are very dissatisfied, and 10 indicating that you are very satisfied, please rate your satisfaction with the Smart Saver HVAC Rebate Program**

( ) 1
...
( ) 10
( ) DK/NS

If less than 8,
14. **Why do you give that response?** _____

Thank you for taking our survey. Your response is very important to us.

Appendix D: Sample Rebate Application Form

Rebate applications are similar for Ohio and Kentucky.

DUKE ENERGY. | Smart $aver®

Ohio Residential Smart $aver Incentive Application – HVAC Install

Preliminary Information

Whom should we contact with questions? ☐ Customer ☐ Contractor ☐ Builder Total Project Cost: $_____

Incentive Recipient

If Builder Submission, who should receive the incentive?
☐ Builder ☐ Other: _____ *(Place name here and address in mailing address below)*

If rental property, the landlord will receive the incentive. Please provide the landlord's name below:
_____ *(Place name here and address in mailing address below)*

Customer Information *(All information must match the information on the utility bill)*

Duke Energy Electric Account #: _____

Customer Name on Duke Energy Account: _____

Contact Person: _____ Email: _____

How did you hear about this program (mailing, email, web, contractor, word of mouth, etc.)? _____

☐ By providing my email address, I acknowledge that I'm signing up to receive email messages from Duke Energy.

Installation Address
Address 1: _____
Address 2: _____
City: _____
State, Zip Code: _____
Phone: (___) _____

Mailing Address (☐ *Same as Installation Address*)
Address 1: _____
Address 2: _____
City: _____
State, Zip Code: _____
Alternate Phone: (___) _____

Trade Ally Information

Company Name: _____ ☐ Payee
Mailing Address 1: _____
Mailing Address 2: _____
City, State, Zip: _____

Contact Person: _____ ☐ Payee
Telephone: (___) _____
Fax: (___) _____
Email: _____

Application Checklist

☐ Complete all sections ☐ Agree to Terms & Conditions ☐ Include invoice ☐ Submit within 90 days of installation

Send signed application and all required documents to:
Smart $aver Incentive Program, P.O. Box 525, Sneliville, GA 30078
Or Fax: 1.866.728.8293 *Or Email:* incentives@dukeressmartsaver.com
Questions? Visit duke-energy.com/smartsaver or call 1-866-765-6209.

Terms and Conditions

I have read and hereby agree to the Program Requirements as stated on the Smart $aver Trade Ally Registration Form on file with Duke Energy. I hereby certify that the information contained on this application is true and accurate to the best of my knowledge.

_____ _____
Trade Ally Signature *Date*

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Ohio Residential Smart $aver Incentive Application – HVAC Install

New Unit							
Air Conditioner / Heat Pump	New Construction /Replacement	Make - Outdoor Unit	Model Number - Outdoor Unit	Serial Number - Outdoor Unit	Make - Indoor Unit	Model Number - Indoor Unit	Serial Number - Indoor Unit

AHRI Number of System	SEER	EER	HSPF	COP	Open or Closed Loop	Back-up Fuel	ECM Present?	Date Installed and Operable	Number of Tons

Replaced Unit						
Air Conditioner / Heat Pump / Gas Furnace	Make - Outdoor Unit	Model Number - Outdoor Unit	Serial Number - Outdoor Unit	Make - Indoor Unit	Model Number - Indoor Unit	Serial Number - Indoor Unit

AHRI Number of System	SEER	EER	HSPF	COP	AFUE	Number of Tons	Approximate System Age

Home Characteristics:

Residence Type: ☐ Single Family Detached ☐ Townhome/Condo ☐ Multi-family (2-4 Units) ☐ Multi-family (5+ Units)

Year of Construction: _____

Heated Square Footage of Home: _____

Number of HVAC Systems in Home: _____

Number of stories above grade: _____

Foundation Type: ☐ Slab ☐ Crawlspace ☐ Basement

Duct Location: ☐ Attic ☐ Unconditioned Basement/Crawlspace ☐ Conditioned Basement/Closed Crawlspace

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DUKE ENERGY. | Smart $aver®

Ohio Residential Smart $aver Incentive Application – HVAC Install

Instructions

Important: The application must be submitted within 90 days of project completion. Incomplete or illegible applications will not be processed and will be returned to the submitting party for correction. Also, specialized or contractors' forms will not be accepted in lieu of this application form.

Please review all items listed below prior to the submission of this application:

1. Complete all parts of the incentive applications. Note the following required information that is often overlooked:
   a. Customer information as shown on your electric bill including account number and name.
   b. Trade Ally signature
   c. Serviced measure information in the chart on page 2 (other charts or tables are not acceptable).
2. Additional information about this program and other programs offered by Duke Energy may be found by:
   a. Visiting the program website at duke-energy.com/smartsaver.
   b. Calling the program at 1-866-785-6209.
   c. Emailing the program at incentives@dukeenergysmartsaver.com
3. Make a copy of all application documents for your records.

Program Rules and Equipment Eligibility Requirements

1. Work must be completed by a participating contractor. If you do not have a contractor, please visit duke-energy.com/smartsaver to view a list of participating contractors.
2. Customer must be served under a Duke Energy residential electric rate and have an active electric account with Duke Energy to qualify for the incentive
3. All installed measures must be new. No refurbished measures will be accepted.
4. The approved incentive will be processed and mailed within 45 days of the application's receipt.
5. All applications are subject to on-site inspection and payment will be mailed after the passed inspection (if inspection was required).
6. Incentive checks will only be mailed to the customer's or Trade Ally's mailing address as indicated on this application.
7. The amount and availability of incentives are subject to change. The program funding is limited and available on a first come, first served basis.
8. Only one account number per application is accepted. If upgrades are made across multiple account numbers, separate applications must be submitted to reflect the quantities associated with each account number.
9. Leased equipment is not eligible.
10. The incentive recipient assumes all responsibilities for any tax consequences resulting from incentive payment.
11. Incentives may not exceed the cost of the installed measures.
12. An additional program available from Duke Energy is the Power Manager program. You've taken an important step in lowering your energy bills. Learn how you can save even more with Power Manager. Visit duke-energy.com/powermanager.asp to see how.
13. Attach the required AHRI certification indicating the SEER efficiency level of the installed heat pump or air conditioner. See www.ahridirectory.org.
14. HVAC dealer, dealer sales representative or builder must fill out the Participating Trade Ally Registration form prior to or in conjunction with their first incentive application.

Appendix E: Participant Survey Instrument

Need to know this regarding customer:
- [technology] type of equipment - air conditioner or heat pump
- [date] approximate date of participation
NOTE: the program provided a $300 dollar incentive amount per unit. Retrofit incentives consisted of a $200 incentive to the customer and a $100 incentive to the trade ally. But a builder of new construction got the entire $300 incentive.

Equipment
( ) Heat Pump
( ) Central Air Conditioner

State
( ) Ohio
( ) Kentucky

Info
Surveyor Name _____
Survey ID _____
Date _____

for answering machine 1st through penultimate attempts
Hello, my name is _____ and I am calling with a survey about the rebate that you received from Duke Energy's Smart Saver program. I'm sorry I missed you. I'll try again another time.

for answering machine - Final Attempt
Hello, my name is _____ and I am calling with a survey about the rebate that you received from Duke Energy's Smart Saver program. This is my last attempt at reaching you, my apologies for any inconvenience.

if person answers
Hello, my name is _____ and I am calling in regard to the rebate that you received from Duke Energy's Smart Saver program. The purpose of this call is to ask you a few questions about your purchase and your satisfaction with the application and rebate. We are not selling anything. Your answers will be confidential, and will help us to make improvements to the program to better serve others. If you qualify for the survey it will take about 20-30 minutes, but when we are done with the survey I will confirm your address and we will send you $20 for your time. May we begin?

1. **Our records indicate that you participated in the Smart Saver Program in** [date] **and that you installed** [air conditioner or heat pump] **through the program and received an incentive for your purchase. Do you recall participating in this program?**
( ) Yes
( ) No

( ) DK/NS

This program was provided through Duke Energy. In this program, you purchased an energy efficient [air conditioner or heat pump]**. In exchange for purchasing the energy efficient option, Duke Energy provided you with a rebate check for $200.**

1a. **Do you remember participating in this program?**
( ) Yes
( ) No
( ) DK/NS

If No or DK/NS terminate interview politely, mark as 'Unaware' on the calling sheet, and proceed to next participant.

2. **How did you become aware of the Smart Saver Program?**
Mark all that apply.
[ ] Duke Energy sent me a brochure
[ ] Duke Energy website.
[ ] A contractor or salesperson I was working with told me about the program
[ ] I saw an ad in… _____
[ ] Other _____
[ ] DK/NS

3. **When you first heard about the program and considered taking advantage of the offer, did you do any additional investigation to confirm the program's offering, or was the information you had adequate to make a participation decision?**
Mark all that apply.
[ ] The information was adequate
[ ] Didn't need to confirm/Nothing
[ ] Went to the web site
[ ] Called or emailed Duke Energy
[ ] Called or emailed a contractor
[ ] Called or emailed a salesperson
[ ] Other _____
[ ] DK/NS

If they did do any additional investigation, ask:
3a. **How well did this work for you, were you able to acquire a more complete understanding of the program?**
( ) Yes
( ) No
( ) DK/NS

4. **Did you have additional questions that were not answered? Were there questions that you were unable to answer or information that you were unable to obtain?**
( ) Yes

( ) No
( ) DK/NS

If YES to question 4,
4a. **What were they?** _____

5. **Who filled out the program incentive forms?**
( ) I did
( ) Someone from my family did
( ) Contractor
( ) Salesperson
( ) Someone from Duke Energy
( ) Other _____

If they filled it out themselves.
5a. **Was the incentive form easy to understand?**
( ) Yes
( ) No
( ) DK/NS

If the incentive form was not easy to understand, ask
5b. **Do you remember what it was that was not clear or which part of it was difficult?**
_____

6. **Who submitted the forms to Duke Energy?**
( ) I did
( ) Someone from my family did
( ) The contractor
( ) The salesperson
( ) Someone from Duke Energy
( ) Other _____

7. **Did you have any problems receiving the rebate?**
( ) Yes
( ) No
( ) I didn't receive a rebate
( ) Rebate was provided to the retailer OR through lower unit cost
( ) DK/NS

If Yes, they did have problems receiving the rebate, ask
7a. **Please explain the problem and how it was resolved. Was it resolved to your satisfaction?**
_____

8. **Did you also receive a state or federal tax credit or rebate for the unit you installed?**
( ) Yes

( ) No
( ) DK/NS

8b. **If the price of the equipment you purchased was $300 more, which of the following three responses best represents what would have occurred: You would have purchased the same make and model, you would have considered a less expensive model, or you would have probably purchased a less expensive model?**
( ) Would have purchased the same make and model
( ) Would have considered a less expensive model
( ) Would have probably purchased a cheaper model
( ) DK/NS

9. **Have you taken any additional energy efficiency actions since you participated in Duke Energy's Smart Saver program?**
( ) Yes
( ) No
( ) DK/NS

If yes to question 9, ask 9a-9c (repeat up to four times)

9a1. **What have you done?** _____

9b1. **How much money do you think you have saved as a result?**
if they do not specify a time period, ask follow up and record in the same box
Is that how much you have saved in total, per month or per year? _____

9c1. **When customers have experience with energy efficiency programs or products they sometimes make similar decisions to continue the energy savings in other parts of their homes or work places. On a scale from 1-10, with 1 indicating that the Smart Saver program was not at all influential, and 10 indicating that the program was very influential, please rate the level of influence that your participation in Smart Saver had on taking this action**
( ) 1
...
( ) 10
( ) DK/NS

9a2. **Have you done anything else?**
( ) Yes (*record answer)* _____
( ) No

9b2. **How much money do you think you have saved as a result?**
if they do not specify a time period, ask follow up and record in the same box
Is that how much you have saved in total, per month or per year?) _____