○ Final Research & Analysis Report

Iowa Energy Poll, 2008

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To: Iowa Office of Energy Independence/Iowa Power Fund

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STRATEGIC MARKETING SERVICES

Table of Contents

Introduction

Background

The Iowa Power Fund and the Office of Energy Independence are charged with the responsibility of creating an economically viable and sound energy future for Iowa through energy independence. This vision can only be achieved if a majority, if not all Iowans, are united in this cause and actively participate in it.

Objectives

The objectives of this project are to conduct broad based consumer research in late 2008 to:

- *Establish a 2008/09 Benchmark based on Iowans' knowledge, beliefs, attitudes, opinions, concerns, and behaviors as they relate to energy.*
- *Determine energy use, behaviors and motivations.*
- *Identify factors that will influence Iowans to increase their energy related knowledge, raise their level of concern, and modify their behaviors.*

Methodology

In order to address project objectives, Strategic Marketing Services at the University of Northern Iowa in Cedar Falls, Iowa developed three self-administered mail survey instruments. Each of the survey instruments was designed to collect thoughts and opinions related to energy issues involved with housing, transportation and general energy topics. A total of 30,000 survey parcels were sent; 10,000 housing parcels were mailed to a random sample of homeowners in Iowa, while 20,000 were split between a random sample of Iowa citizens for the transportation and general study.

Over a three week data collection period, SMS received a total of 1,484 completed transportation surveys for a response rate of 14.84%; a total of 1,215 completed housing surveys were received for a response rate of 12.15%; and a total of 1,054 completed general surveys were received for a response rate of 10.54%. A quota sample of 425 respondents was derived for each of the three surveys paying close attention to the 2000 Census figures for the state of Iowa. Each sample was proportionally matched to the population demographics by both age and gender as allowed by responses. The following details how each quota sample was derived.

- *Transportation*
  - The transportation sample matched proportionally by both age and gender to the 2000 Census information.
- *Housing*
  - The housing sample had two groups that did not have enough respondents to meet the respective quota: 25-29 year old males and 25-29 year old females. Since each group was very close to the target quota, SMS filled these groups by using male and female respondents from the 30-34 year old category.
- *General*
  - The general sample had four groups that did not have enough respondents to meet the respective quota: 25-29 year old males, 25-29 year old females, 30-34 year old males and 30-34 year old females. Since each group was very close to the target quota, SMS filled these groups by using male and female respondents between the ages of 18-24, 35-39 and 40-44 as needed.

The 425 results in each group created statistically valid samples achieving a 95 ± 4.65% confidence level. This means for any ranking or rating expressed by the group, if the number of responses matches, or comes very close to matching the total 425 responses, we can be 95 percent certain that the data are within plus or minus 4.65 percent of being accurate.[1]

Data Interpretation

The following report details the aggregate responses to each of the three surveys by the individual survey questions. In instances where respondents were asked to rate their level of agreement with statements, to consider how likely they would be to purchase, or to rate their frequency of use, etc. a zero to four scale was used, where zero was low and four was high. Results for this type of question are presented as a mean, or average, of the respondents' answers. Means from 0 to 2 can be considered relatively low in terms of agreement, likelihood, or frequency; whereas, means above the midpoint of two can be considered relatively high. When evaluating questions where respondents were asked to rank their top three choices in terms of importance, the responses were again calculated using a mean, or average, of the respondents' answers. In these instances, a mean closer to one is the factor that is most important to respondents; a mean closer to three is of less importance to the group.

[1] In other words, if we were to conduct the same survey 100 times, 95 out of the 100 administrations should yield results within ± 4.65 percent of the current data.

Executive Summary: Transportation

The age and gender distribution of respondents to this survey closely reflects the 2000 Iowa Census information from the U.S. Census Bureau. A majority of the population, around 60%, had 1-2 residents currently living in their household, with 3-4 residents being the next highest percentage at 33%. Roughly one-fourth reported no one working outside of the home full-time. Roughly 32% had one full-time employee and 42% had two-full time employees outside the home. Almost three-fourths of the respondent group reported at least some college education and about half had received a degree. One-fourth of the respondent group had the educational level of a High School/GED or less.

Roughly 40% of the respondent group reported annual household incomes of $50,000 or less. An additional 40% reported between $50,000 and $100,000 annual household income. Less than 20% reported an annual household income of over $100,000. Roughly two-thirds of respondents' income is generated by an annual salary or hourly wage. Social Security/retirement plans were reported by roughly 22% of the group. Less than 10% of the group generated income through self-employment, while commission, government sources other than Social Security, and other was responsible for less than 4% of the populations primary income source.

Only 20% of Iowa respondent households have one on-road vehicle while 70% have 2-3 on-road vehicles. Roughly half of the respondent group was supportive of the idea that license and registration fees should be based on the number of miles a vehicle is driven each year. About half report that their current primary and secondary vehicles get less than 24 miles per gallon. Overall, respondents were fairly satisfied with their current vehicles including fuel efficiency. Although nearly all respondents, roughly 97%, felt fuel mileage would be a factor when considering the purchase of their next vehicle, most respondents said they would be likely to buy the same make/model when their current vehicle(s) needs to be replaced. They selected cost as the most important factor, by far, when selecting a new vehicle. Size and comfort were distant second and third considerations. Although fuel mileage and reliability were important factors to a large number of people, they weren't ranked among the most important factors by a large portion of respondents. Only 12% of respondents said they would be very likely to trade in their current vehicle to get one with better fuel mileage. A majority, 57.5%, felt fuel prices alone would not cause them to trade in one or more of their current vehicles.

When asked about hybrid and electric vehicles, most respondents felt the cost and useful life of batteries would be a major concern and that hybrid and electric vehicles cost more to buy than traditional gasoline or diesel powered vehicles. The majority of respondents believed that over the long term hybrid and electric vehicles would cost less to own and operate, are as safe, comfortable, and reliable as gasoline or diesel powered vehicles. Slightly over half, 53% of the respondents said they would be somewhat likely or very likely to purchase a hybrid or electric vehicle and 51% said they are either somewhat likely or very likely to purchase a flex-fuel vehicle in the next three years even if the initial cost is 5-10% higher than traditional gas/diesel vehicles.

Approximately 80% of the respondent group reported driving less as gas prices increased in the summer of 2008, while 20% said they drove the same or more. Few chose to carpool, walk, ride a bike or use public transportation for work or shopping trips although most said they did reduce the number of shopping trips. Almost two-thirds of the respondent group reported public transportation was not available to them. Only 34.7% knowingly had access to public transportation, while 1.7% were unsure. About 40% of respondents said they would be willing to use public transportation if it were accessible to them and reasonably priced.

About 17% of respondents believed that ethanol or Biodiesel fuel improves fuel efficiency, while 45% believed they do not and 38% were not sure. Almost three-fourths of the respondent group felt gasoline prices would increase over the next two to five years, about 20% expect prices to stay about the same and 6% thought prices would decrease in the near future. When asked how much gas prices would have to increase over today's price (in October/November 2008, 10% Ethanol was between $1.95-$2.74 per gallon, regular unleaded was between $1.95- $2.81 per gallon and premium unleaded was between $2.06-$2.98 per gallon[2]), to cause respondents to drive significantly less, 27% said they have already reduced the number of miles they drive, 25% said they had little or no choice in the amount they drive, and 4% said they are not willing to drive less. Of the 45% remaining, 28% would need to see prices increase $1.50 or more before significantly reducing the amount of driving they do.

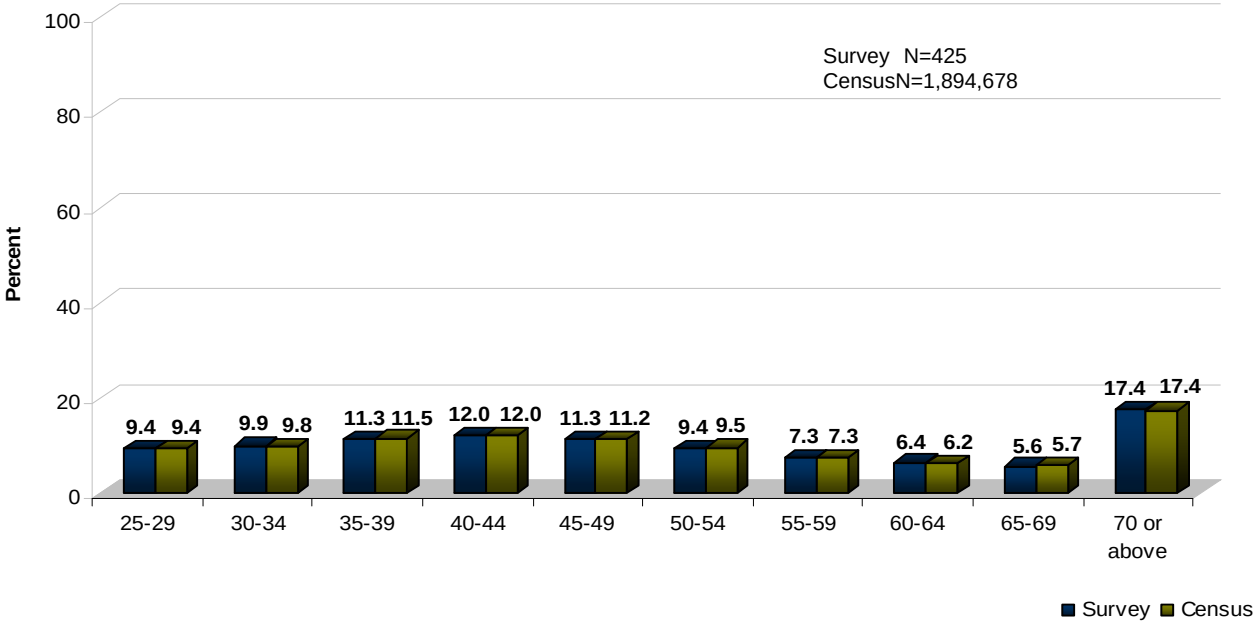
[2] This study was conducted in November 2008 following record high motor vehicle fuel prices in the preceding months. Following are the average monthly fuel prices for Iowa from June to November 2008.

	10% Ethanol	Regular Unleaded	Premium Unleaded	Diesel
June	$3.86	$3.92	4.03	4.68
July	3.93	3.99	4.07	4.69
August	3.54	3.60	3.68	4.23
September	3.62	3.70	3.80	4.00
October	2.74	2.81	2.98	3.70
November	1.89	1.95	2.06	2.80

Results: Transportation

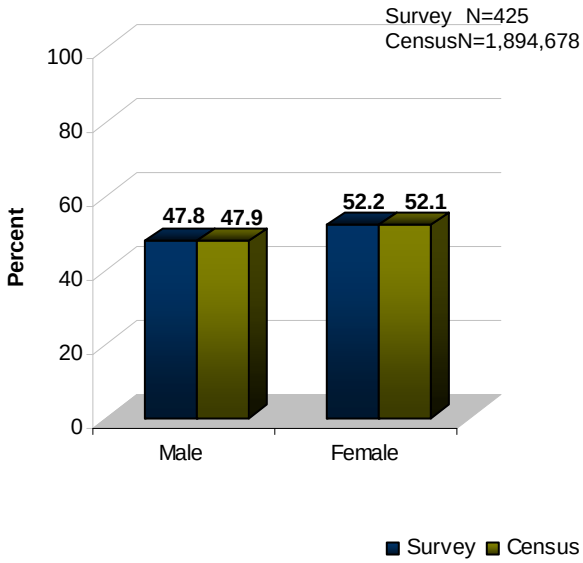
A) To which of the following age groups do you belong?

The age distribution of respondents was matched closely to the 2000 Census information for the state of Iowa.



B) What is your gender?

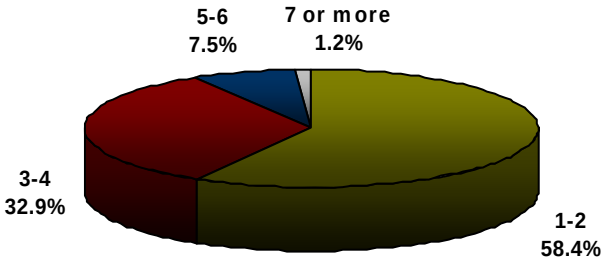
The gender also follows the 2000 Census information for the state of Iowa.



C) How many people live in your household?

A majority of the population, around 60%, had *1-2* residents living in their household, with *3-4* residents being the next highest percentage at 33%. Those respondents stating five and above was around 9% of the survey population.

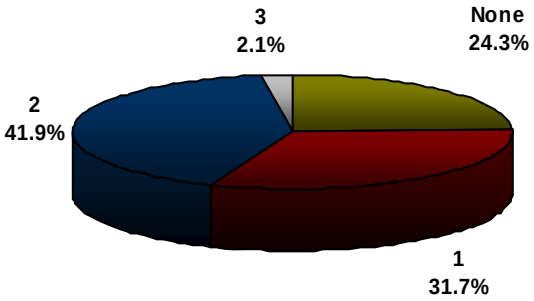
N=425



D) If two or more live in the household, how many work full-time outside the home?

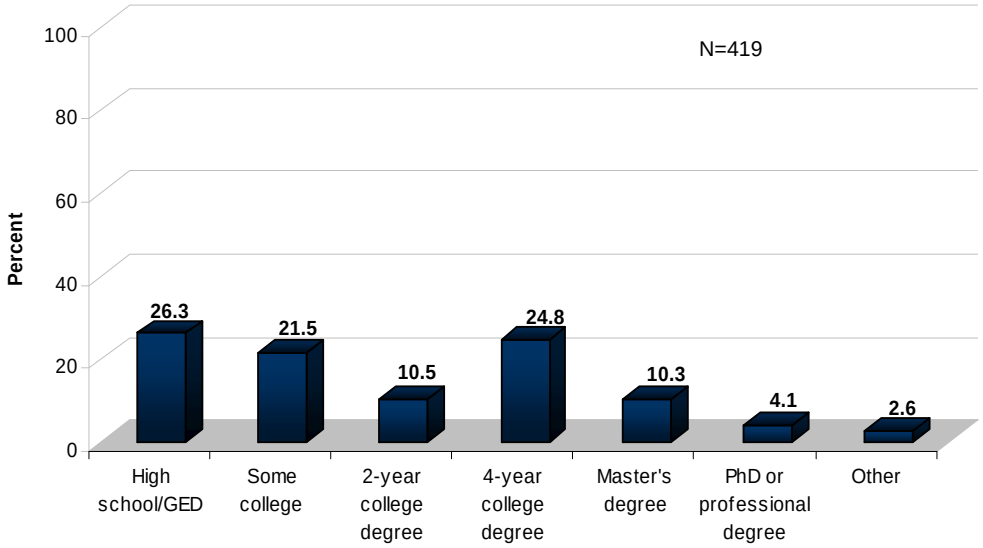
Almost one-fourth of the respondent group had no one working outside the home full-time. Roughly one-third indicated *1* full-time worker, with an additional 42% who reported *2* full-time workers outside the home. Only 2% had more than two full-time workers in their household.

N=382



E) What is the education level of the primary income generator in your household?

The majority, almost three-fourths of the respondent group, completed at least some college level education. Half of the overall group received a degree, with roughly 15% of those who earned an advanced degree. This leaves only one-fourth of the respondent group with the educational level of a *High School/GED* or less.

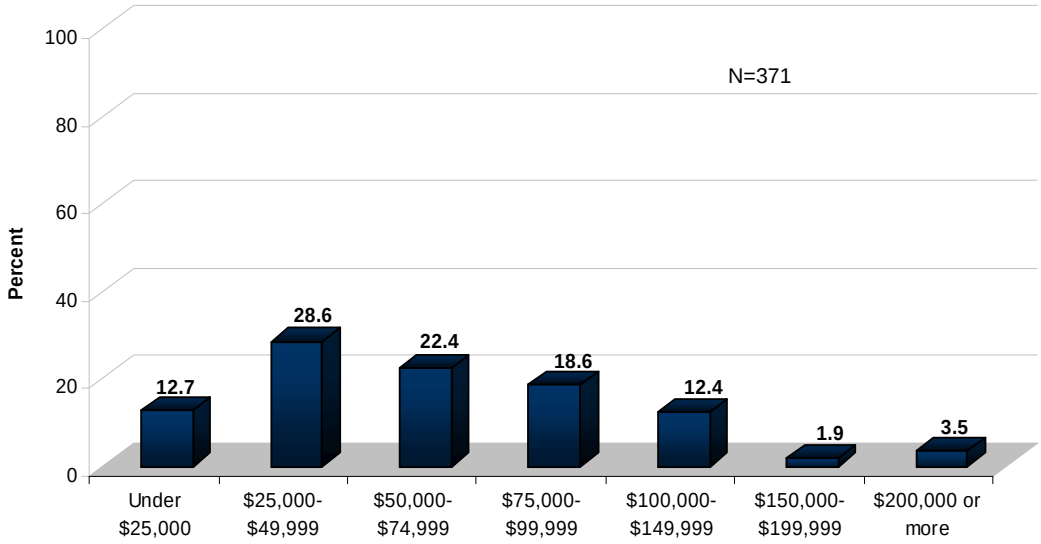


The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Below high school - 5*
  - Non-graduate
  - Some high school
  - 9th grade
  - 10th grade – 2
- *Trade School*
- *Electrician classes while in Navy*
- *RN (3yr diploma)*
- *MD*

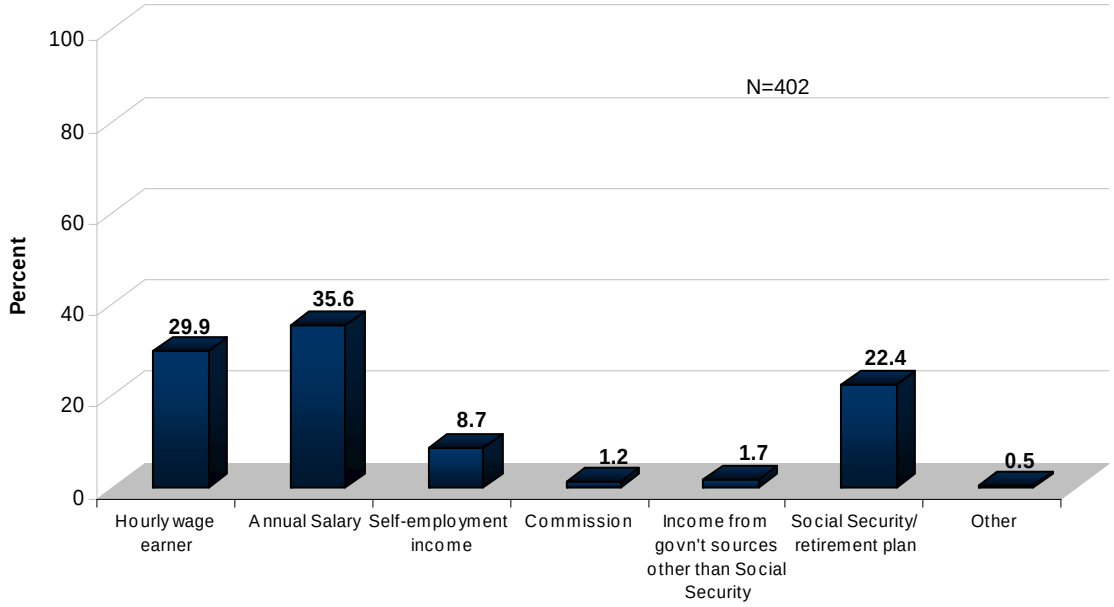
F) What is your annual household income?

Roughly 40% of the respondent group reported annual household incomes of $50,000 or less. An additional 40% fell between $50,000 and $100,000. Less than 20% reported an annual household income of over $100,000.



G) How is your household's primary income generated?

Roughly two-thirds of respondents' income is generated by an *Annual salary* or *Hourly wage*. *Social Security/retirement plans* were reported by roughly 22% of the group. Less than 10% of the group generated income through *Self-employment*, while *Commission*, *Government sources other than Social Security* and *Other* was responsible for less than 4% of the populations' primary income.

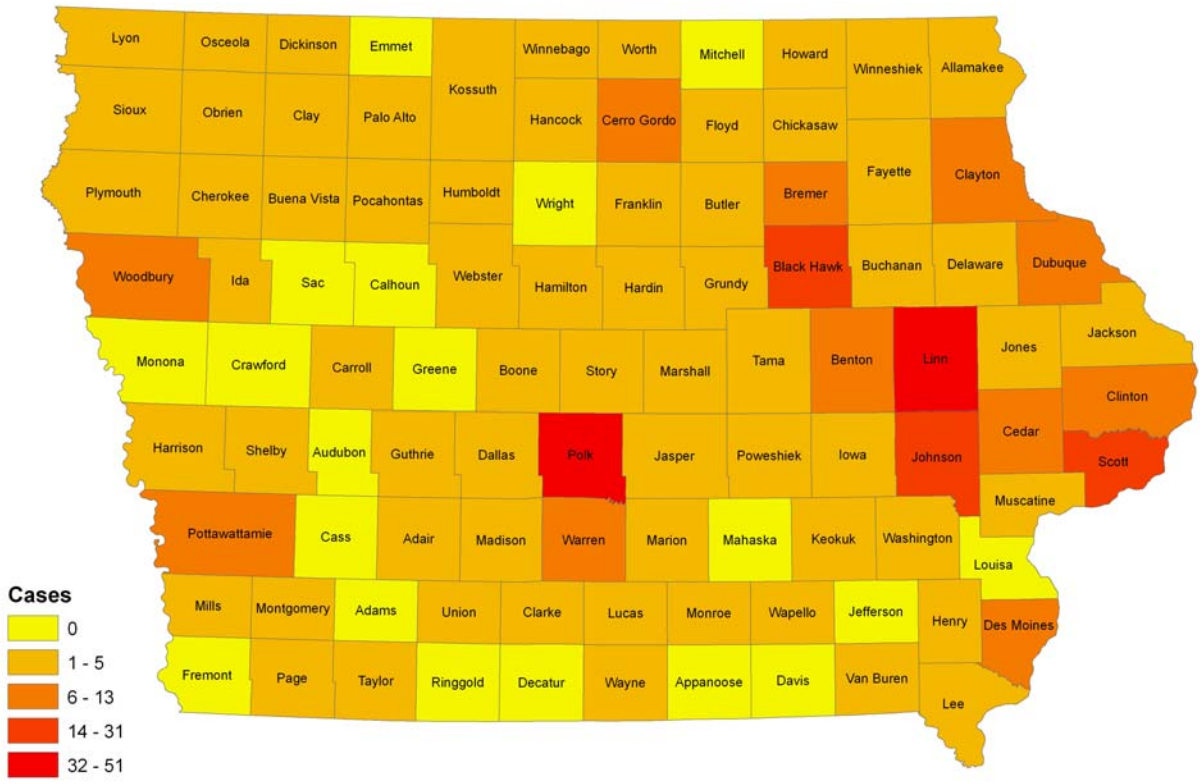


The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *By the mile + percentage – 1*
- *Stock Funds - 1*

H) What is your zip code?

As shown in the map below and the table on the following page, higher concentrations of respondents were from counties where larger cities are located.

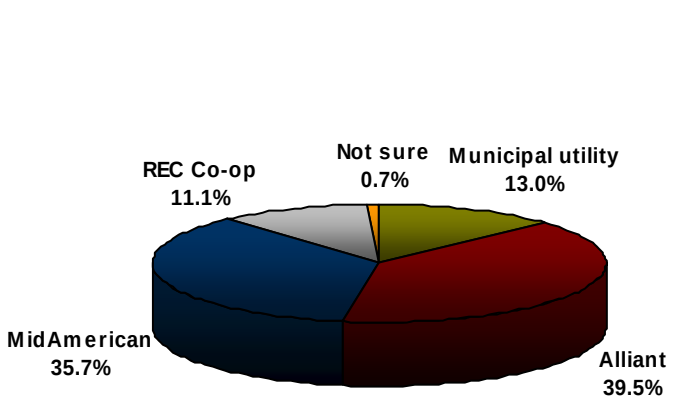


The following table shows the number of respondents from each county.

	Frequency		Frequency		Frequency
Adair	5	Hamilton	1	Osceola	3
Allamakee	4	Hancock	2	Page	1
Benton	10	Hardin	3	Palo Alto	1
Black Hawk	25	Harrison	1	Plymouth	1
Boone	3	Henry	2	Pocahontas	1
Bremer	9	Howard	4	Polk	57
Buchanan	8	Humboldt	1	Pottawattamie	7
Buena Vista	2	Ida	1	Poweshiek	1
Butler	3	Iowa	3	Scott	19
Carroll	4	Jackson	2	Shelby	1
Cedar	5	Jasper	3	Sioux	1
Cerro Gordo	8	Johnson	21	Story	4
Cherokee	2	Jones	4	Tama	2
Chickasaw	1	Keokuk	2	Taylor	2
Clarke	1	Kossuth	1	Union	2
Clay	4	Lee	5	Van Buren	1
Clayton	6	Linn	55	Wapello	3
Clinton	6	Lucas	1	Warren	6
Dallas	5	Lyon	1	Washington	4
Delaware	2	Madison	1	Wayne	2
Des Moines	7	Marion	5	Webster	2
Dubuque	16	Marshall	3	Winnebago	4
Fayette	5	Mills	3	Winneshiek	4
Floyd	1	Monroe	1	Woodbury	7
Franklin	1	Montgomery	4	Worth	1
Grundy	4	Muscatine	4		
Guthrie	2	O’Brien	3		

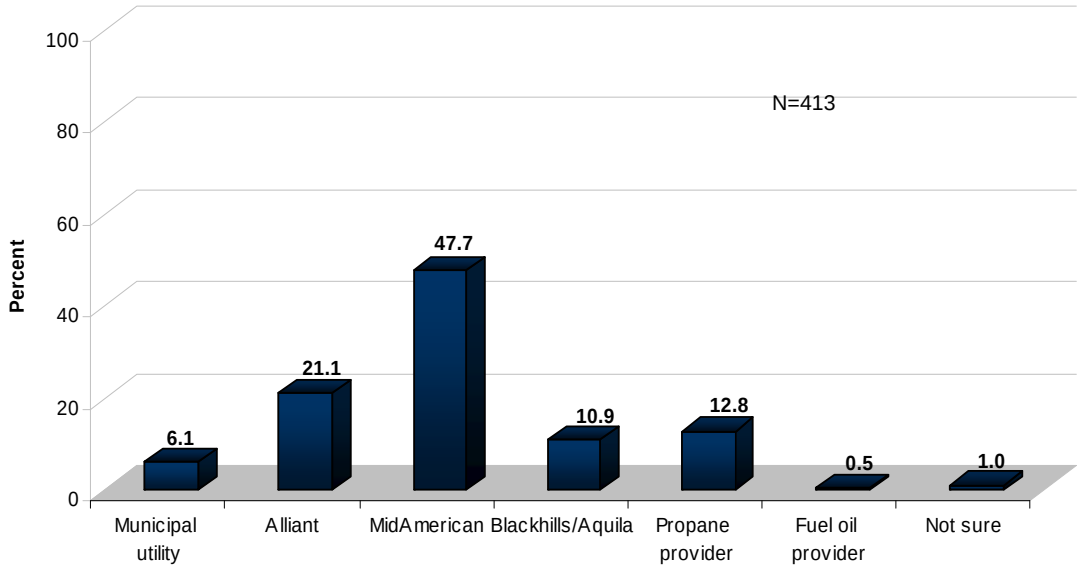
I) Who is your current electric provider?

MidAmerican and *Alliant* were the top two providers of electricity, servicing 35.7% and 39.5% of the respondent group respectively. Less than 15% had a *Municipal Utility*, while about 11% had *REC Co-op*. Less than 1% was *Not sure* of their current electric provider.



J) Who is your current heat energy provider?

Roughly half of the respondent group listed *MidAmerican* as their heat energy provider. *Alliant* was reported by roughly 20% of the group, while 13% of the group had a *Propane provider* and 11% used *Blackhills/Aquilla*. Very few, only 6.1% used a *Municipal Utility* and almost no one reported *Fuel Oil*.



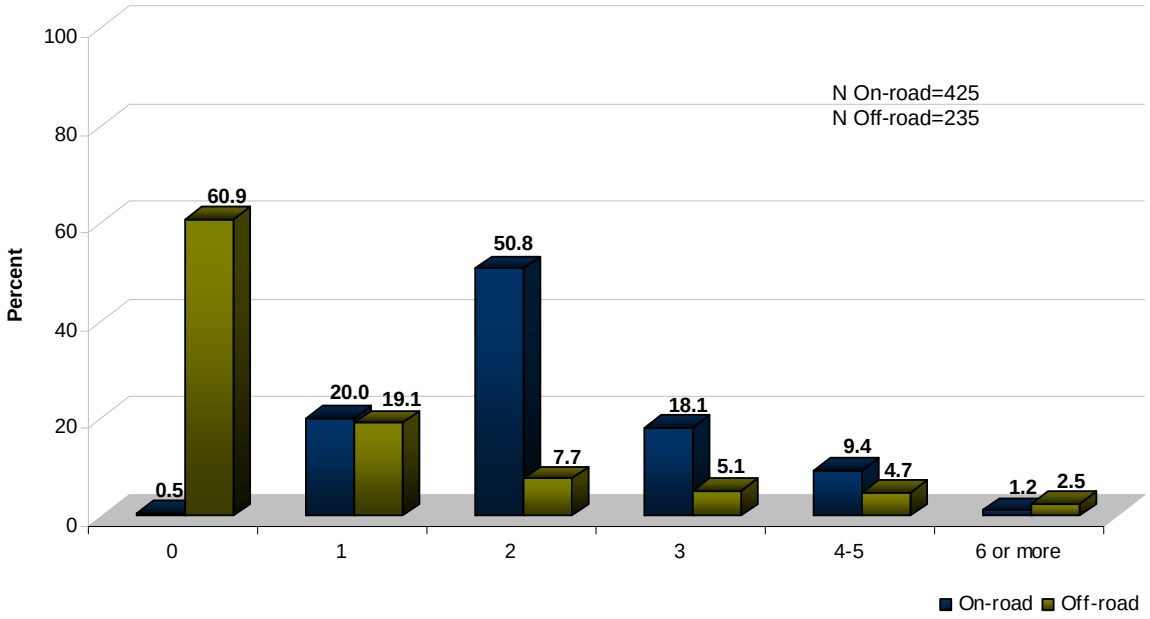
1) How knowledgeable are you about each of the following?

Overall respondents had little knowledge regarding alternative fueled vehicles with none of the means scoring above the midpoint of two on the zero to four scale. They showed the most knowledge regarding *Flex fuel vehicles* and *Hybrid vehicles* with means of 1.98 and 1.84, respectively. They held the least amount of knowledge regarding *Propane* and *Hydrogen powered vehicles* at 0.78 and 0.87, respectively.

	Mean
Hybrid vehicles (gas – electric)	1.84
Electric powered vehicles	1.45
Flex fuel vehicles (use gasoline or E85)	1.98
Natural gas powered vehicles	1.02
Hydrogen powered vehicles	0.78
Propane powered vehicles	0.87

2) How many of each of the following does your household have?

Almost 90% of the respondent group had between one and three On-road vehicles. Most of the remaining participants owned more than four on-road vehicles. Off-road vehicles were far less popular as indicated by the 61% of respondents who owned none. Of the 39% remaining, 32% owned between one and three Off-road vehicles in addition to their on-road vehicles.



3) Please answer the following set of questions based on your family's primary and secondary on-road sources of transportation.

Primary On-road vehicle

Three-fourths of the respondent group had a primary vehicle from 2000 or later. Roughly 20% had a vehicle manufactured in the 90's, while under 2% relied on a vehicle from 1989 or before as their primary vehicle. The following tables detail average highway MPG's reported by respondents, the number of miles driven annually and the length of time the vehicles have been owned. All three factors have been broken down according to the decade in which the vehicle was manufactured.

Year	N	%
1980s or before	8	1.9
1990s	83	20.1
2000s	321	77.9

Average highway MPG

Year	<20	20-24	25-29	30-34	35-39	40+
1980s or before	40.0	40.0	0.0	20.0	0.0	0.0
1990s	20.3	31.6	30.4	13.9	2.5	1.3
2000s	18.1	33.0	28.5	14.9	4.2	1.3

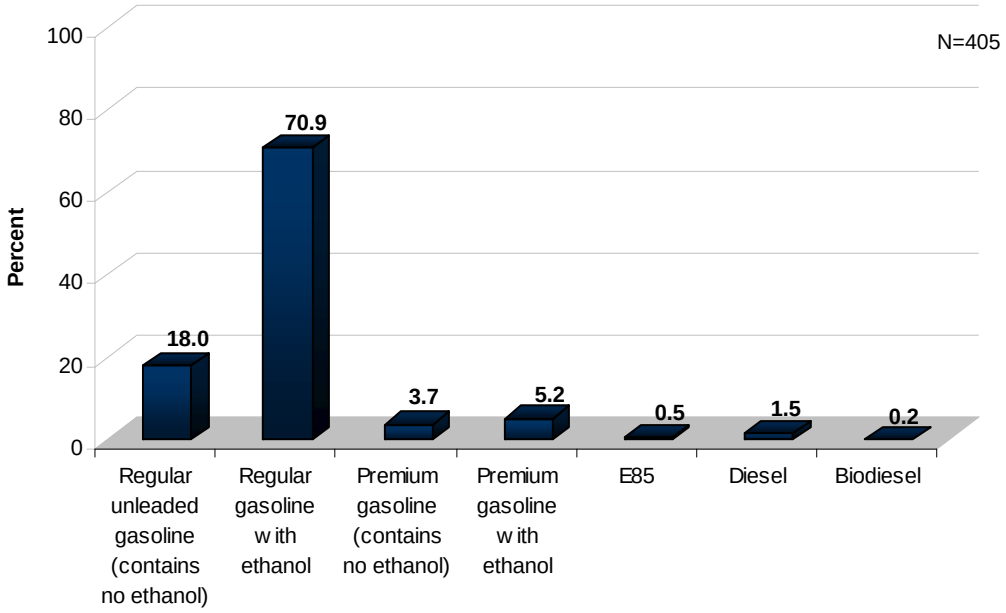
Number of miles driven per year (in thousands)

Year	<5.0	5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0+
1980s or before	25.0	0.0	0.0	0.0	50.0	25.0
1990s	14.7	21.3	42.7	9.3	4.0	8.0
2000s	5.5	15.6	35.7	23.7	10.1	9.4

Length of time owned (years)

Year	<1 yr	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10+
1980s or before	12.5	25.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	50.0
1990s	2.4	3.6	12.0	12.0	8.4	7.2	4.8	8.4	8.4	9.6	22.8
2000s	17.3	19.3	15.9	12.7	12.4	7.8	5.3	4.6	4.0	0.3	0.0

Roughly 71% of the respondent group reported typically purchasing Regular gasoline with ethanol for their primary vehicle, while 18% purchased regular unleaded gasoline. Premium gasoline with or without ethanol was typically purchased by 9% of the respondent group. Less than 3.5% combined purchased E85, Diesel or Biodiesel.



Overall respondents were highly satisfied with their primary vehicle as indicated by the mean score of 3.24 on a zero to four scale. They reported placing a somewhat high importance on fuel mileage when deciding to buy the primary vehicle (2.83) and are somewhat satisfied with the fuel efficiency of the vehicle (2.70). Most would also be likely to purchase the same make/model if they needed a replacement as indicated by a mean of 2.68.

	Mean
Importance of fuel mileage when deciding to buy vehicle 1	2.83
Satisfaction with fuel efficiency of vehicle 1	2.70
Overall satisfaction with vehicle 1	3.24
Likelihood to purchase same make/model if needing to be replaced	2.68

Secondary On-road vehicle

Just under 65% of respondents have a secondary vehicle that is 2000 or later. Roughly 30% had a secondary vehicle manufactured in the 90's. The remaining 5.2% had a secondary vehicle from 1989 or before. The following tables detail average highway MPG's reported by respondents, the number of miles driven annually and the length of time the vehicles have been owned. All three factors have been broken down according to the decade in which the vehicle was manufactured.

Year	N	%
1980s or before	17	5.2
1990s	99	30.5
2000s	209	64.3

Average highway MPG

Year	<20	20-24	25-29	30-34	35-39	40+
1980s or before	26.7	26.7	20.0	26.7	0.0	0.0
1990s	38.8	28.6	21.4	9.2	1.0	1.0
2000s	33.5	34.0	17.5	11.2	1.5	2.4

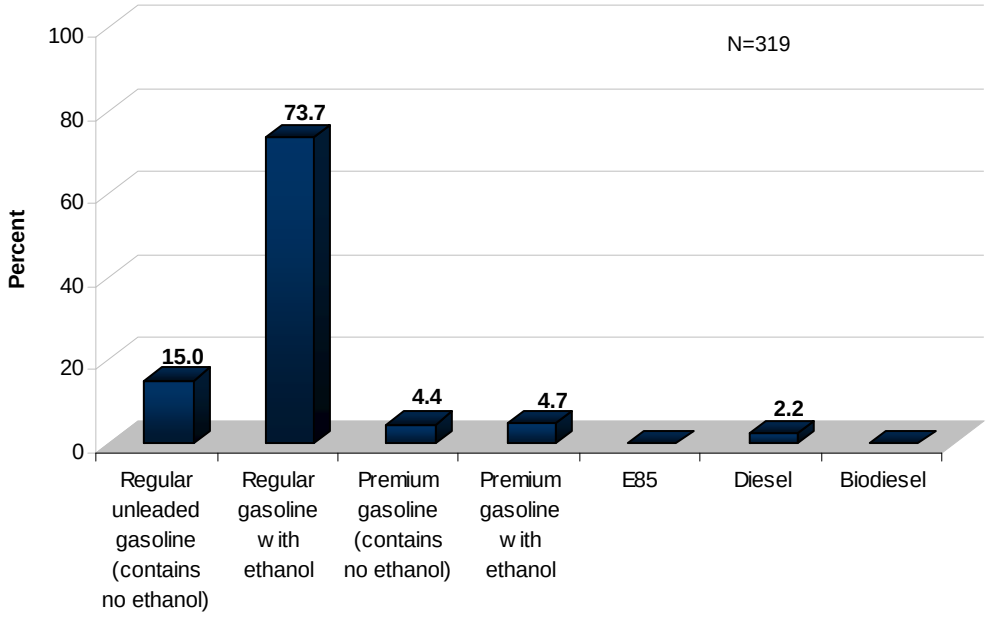
Number of miles driven per year (in thousands)

Year	<5.0	5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0+
1980s or before	60.0	40.0	0.0	0.0	0.0	0.0
1990s	23.1	33.0	28.6	8.8	2.2	4.4
2000s	9.4	30.0	32.5	15.3	6.4	6.4

Length of time owned (years)

Year	<1 yr	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10+
1980s or before	0.0	11.8	5.9	5.9	11.8	0.0	0.0	0.0	0.0	0.0	64.8
1990s	6.0	13.1	13.1	8.1	10.0	7.1	6.0	3.0	9.1	4.0	20.1
2000s	16.4	18.7	20.1	10.6	11.0	7.7	6.2	6.2	2.9	0.5	0.0

Roughly 74% of the respondent group reported typically purchasing Regular gasoline with ethanol for their secondary vehicle, while 15% purchased regular unleaded gasoline. Premium gasoline with or without ethanol was typically purchased by 9% of the respondent group. Less than 2.5% combined purchased E85, Diesel or Biodiesel.



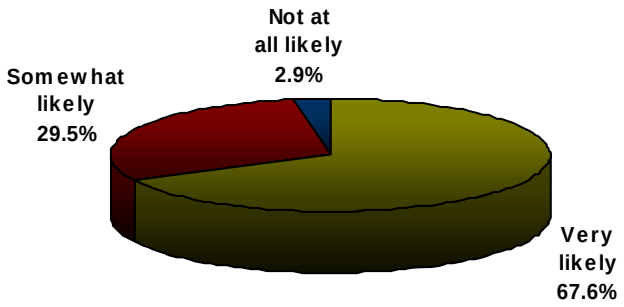
Overall respondents were somewhat satisfied with their primary vehicle as indicated by the mean score of 3.02 on a zero to four scale. They reported placing a somewhat high importance on fuel mileage when deciding to buy the primary vehicle (2.38) and are somewhat satisfied with the fuel efficiency of the vehicle (2.46). Over half would also be likely to purchase the same make/model if they needed a replacement as indicated by a mean of 2.42.

	Mean
Importance of fuel mileage when deciding to buy vehicle 2	2.38
Satisfaction with fuel efficiency of vehicle 2	2.46
Overall satisfaction with vehicle 2	3.02
Likelihood to purchase same make/model if needing to be replaced	2.42

4) When purchasing your next vehicle, how likely would it be that fuel mileage would impact your decision?

Nearly all respondents, roughly 97%, felt fuel mileage would be a factor when considering their next vehicle. Almost 68% stated that it was *Very likely* to be taken into consideration, with an additional 30% who thought it was *Somewhat likely*. Only 3% felt it would not be a factor at all.

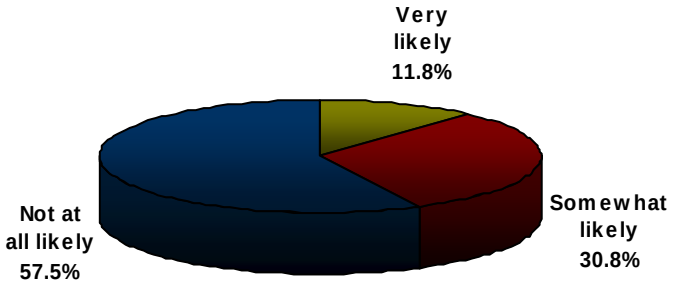
N=414



5) How likely is it that rising fuel prices alone will cause you to trade one or more of your current primary vehicles for a more fuel-efficient vehicle?

A strong majority, 57.5%, felt fuel prices alone would not cause them to trade in one or more of their vehicles. However, almost 31% thought they were *Somewhat likely* to consider trading in a vehicle due to rising fuel prices alone and 12% felt they were *Very likely*.

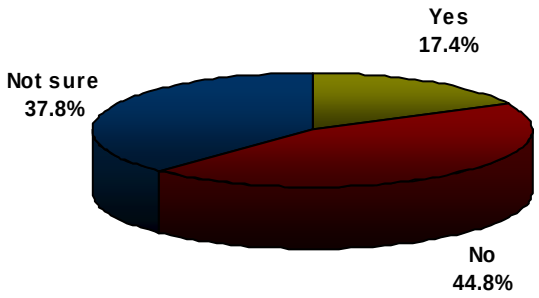
N=416



6) In your opinion, does the use of ethanol (E10 & E85) or Biodiesel fuel improve the fuel efficiency of automobiles?

Almost half the respondents felt the use of ethanol or Biodiesel did nothing to improve the fuel efficiency of automobiles. Only 17.4% felt that ethanol or Biodiesel fuel improves fuel efficiency. The remaining 38% were *Not sure*.

N=413



7) When considering your next vehicle purchase for on-road use, how likely are you to consider each of the following?

Although *Flex fuel vehicles* and *hybrid vehicles* were the most likely type to be considered, with means of 1.90 and 1.76, respectively, they were still below the mid-point of two on a zero to four scale. *Hydrogen/fuel cell*, *Natural gas* and *Propane powered vehicles* were the least likely to be considered with means of 0.85, 0.83 and 0.61, respectively.

	Mean
Electric powered vehicles	0.97
Hybrid vehicles that use gas and electric motors	1.76
Plug-in hybrid vehicles	1.09
Flex fuel vehicles (use gasoline of E82)	1.90
Diesel/22iodiesel vehicles	1.04
Natural gas powered vehicles	0.83
Hydrogen/fuel cell powered vehicles	0.85
Propane powered vehicles	0.61

8) Please rank order the three most important priorities when selecting your next automobile.

Cost was the most important factor when selecting vehicles as indicated by the high number of people who ranked *Cost* as one of their top three factors and by the number of participants who placed the most importance on this factor as well. *Size of vehicle* and *Comfort* were important to a relatively high number of participants and were very important to roughly half of those. Although *Gas mileage rating* and *Reliability* were important factors to a large number of people, they were only ranked the most important factor by roughly a third of each group.

N		# of times ranked 1st	Mean
100	Size of vehicle	51	1.69
116	Comfort	42	1.97
23	Fuel type	7	2.04
54	Looks/style	13	2.15
55	Brand of vehicle	21	2.05
46	Features	6	2.28
64	Safety rating	13	2.16
217	Gas mileage rating	53	2.13
240	Cost	115	1.80
173	Reliability	46	2.08
24	Highly rated by auto reviews	4	2.25

9) Please rate your level of agreement with the following statements regarding hybrid and electric vehicles.

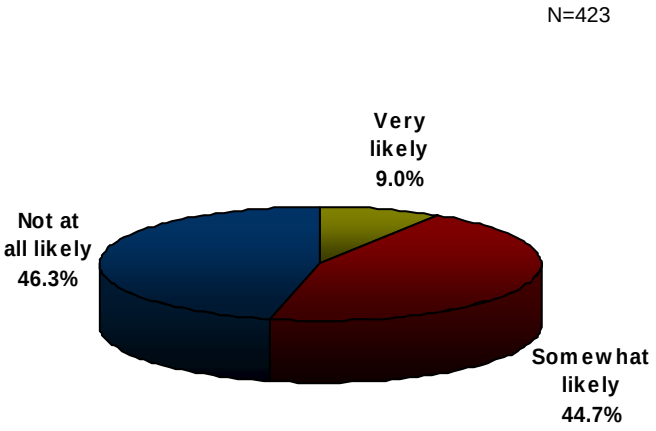
Respondents showed the most agreement with the statement *The cost and useful life of batteries would be a major concern when considering the purchase of electric vehicles* (3.11/4.0). Followed by the statements *Hybrid and electric vehicles cost more than traditional gasoline or diesel powered vehicles* (2.89), *Hybrid and electric vehicles are generally smaller in size than gasoline or diesel powered vehicles* (2.56), and *Over the long term, hybrid and electric vehicles cost less to own and operate than gasoline powered vehicles* (2.12).

The participants showed the least agreement, at means below the midpoint of two, with the statements *Hybrid and electric vehicles are not as safe as gasoline or diesel powered vehicles* (1.39), *Hybrid and electric vehicles do not offer the same amount of comfort as gasoline or diesel powered vehicles* (1.68), *Hybrid and electric vehicles do not offer as many features as gasoline or diesel powered vehicles* (1.74) and *Hybrid and electric vehicles are less reliable than gasoline or diesel powered vehicles* (1.75).

	Mean
Hybrid/electric vehicles cost more than traditional gasoline/diesel powered vehicles.	2.89
Hybrid/electric vehicles are less reliable than gasoline/diesel powered vehicles.	1.75
Hybrid/electric vehicles are generally smaller in size than gasoline/diesel powered vehicles.	2.56
Hybrid/electric vehicles do not offer as many features as gasoline/diesel powered vehicles.	1.74
Hybrid/electric vehicles require more maintenance than gasoline/diesel powered vehicles.	1.88
Hybrid/electric vehicles do not offer the same amount of comfort as gasoline/diesel powered vehicles.	1.68
Hybrid/electric vehicles are not as safe as gasoline/diesel powered vehicles.	1.39
Over the long term, hybrid/electric vehicles cost less to own and operate than gasoline powered vehicles.	2.12
The cost/useful life of batteries would be a major concern when considering the purchase of electric vehicles.	3.11

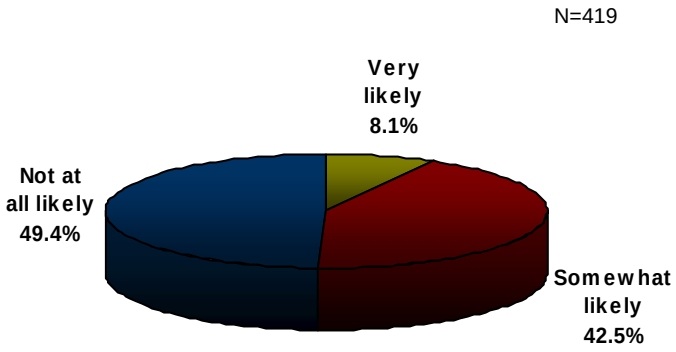
10) How likely would you be to purchase a hybrid or electric vehicle in the next three years if the initial cost is 5% to 10% higher than a gasoline powered vehicle.

Roughly 47% of the respondent group was *Not at all likely* to purchase a hybrid or electric vehicle in the next three years if the initial cost was 5-10% higher than a gasoline powered vehicle. However, 45% were *Somewhat likely* to purchase a hybrid or electric vehicle in the next three years; an additional 9% were *Very likely*.



11) How likely would you be to purchase a flex-fuel vehicle in the next three years if the initial cost is 5% to 10% higher than a gasoline powered vehicle?

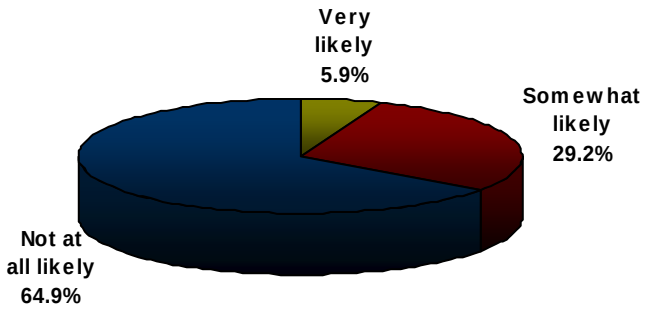
Roughly half of the respondent group was *Not at all likely* to purchase a flex-fuel vehicle in the next three years if the initial cost was 5-10% higher than a gasoline powered vehicle. However, 43% were *Somewhat likely* to purchase a flex-fuel vehicle in the next three years; an additional 8% were *Very likely*.



12) Considering that an electric vehicle runs on batteries that must be charged from an electrical outlet (when the batteries run down there is no backup source of power), how likely would you be to buy an electric vehicle for short trips and errands?

Roughly two-thirds of the respondent group was *Not at all likely* to purchase an electric vehicle for short trips and errands. Just under 30% were *Somewhat likely*; an additional 6% were *Very likely*.

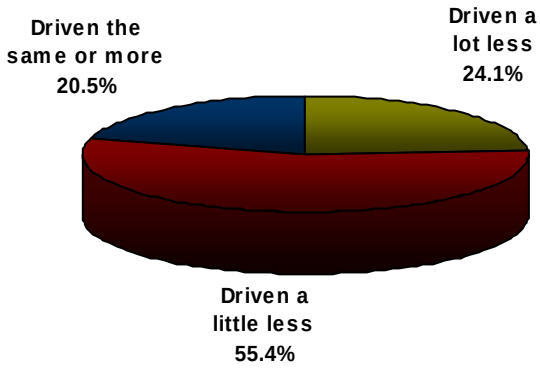
N=424



13) What kind of impact has the recent price of gasoline had on your family's vehicle utilization?

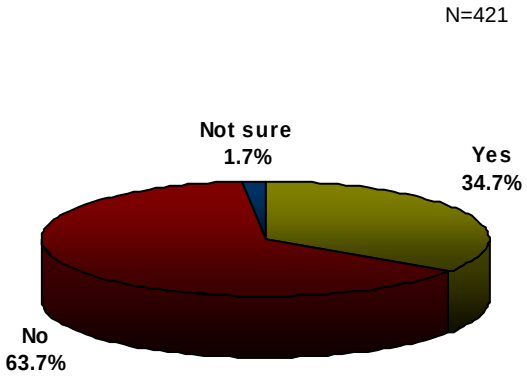
Approximately 80% of the respondent group reduced their driving in some capacity due to the recent price of gasoline. About one-fourth reported *Driving a lot less*; about 55% had *Driven a little less*, leaving 20% *Driving the same amount or more*.

N=424



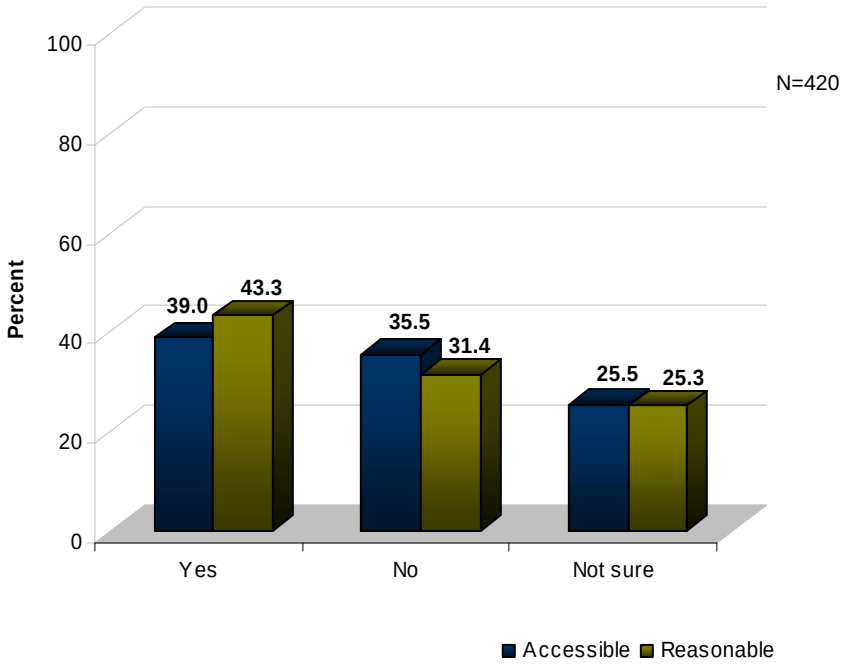
14) Is public transportation available to you?

Almost two-thirds of the respondent group reported public transportation was not available to them. Only 34.7% knowingly had access, while 1.7% were *Not sure*.



15) Would you be willing to use public transportation for your daily commuting needs if it were accessible and reasonably priced?

Just under 40% of respondents would be willing to use public transportation if it were accessible; roughly 43% would be willing to use it if it were reasonably priced. A large portion of the respondent group, approximately 26%, was *Not sure* of their willingness regardless of accessibility or price.



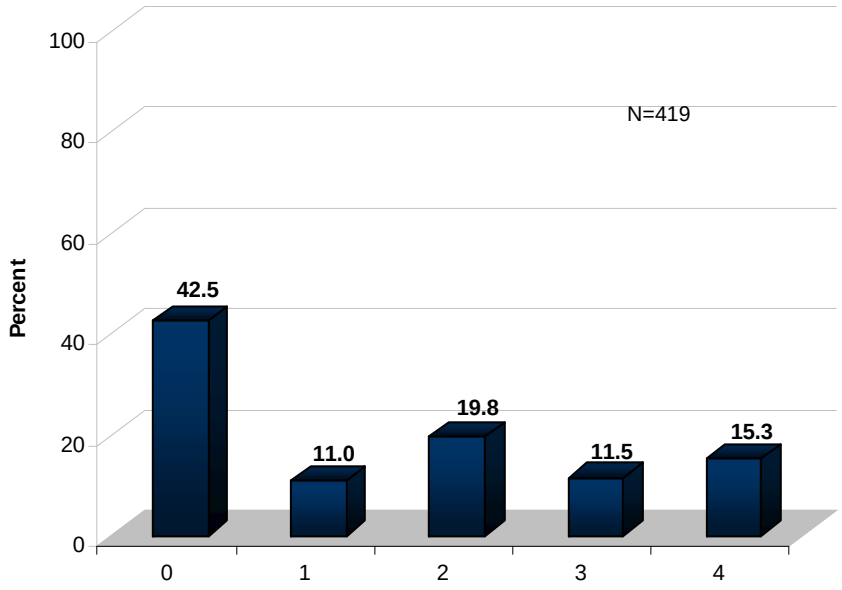
16) As a result of the rising fuel prices, how frequently have you done each of the following over the past year?

Over the past year fuel prices had the most affect on the number of shopping trips being made. With a mean of 2.21, on a zero to four scale, respondents reported often trying to *Reduce the number of shopping trips they made*. Respondents were much less likely to *Carpool to work/shopping*, *Walk or ride a bicycle to work/shopping* or *Take public transportation to work*, with means well below one on the zero to four scale.

	Mean
Carpooled to work or shopping	0.77
Walked or rode a bicycle to work or shopping	0.55
Reduced your number of shopping trips	2.21
Took public transportation to work or shopping	0.12

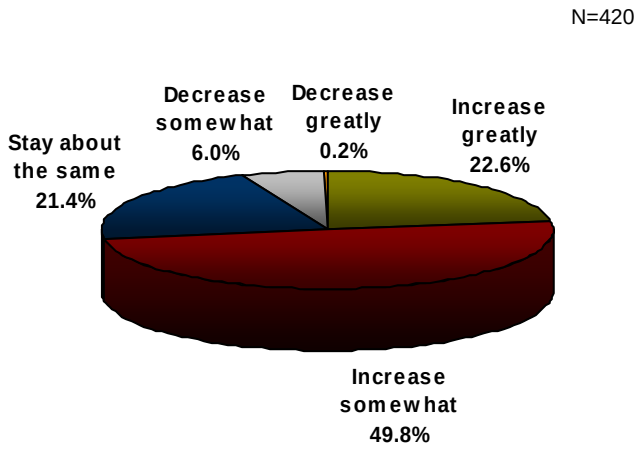
17) How supportive would you be of basing license and registration fees on the number of miles a vehicle is driven each year?

Overall the respondent group was unsupportive of the idea to figure license and registration fees based upon number of miles driven per year as indicated by a mean of 1.46, on a zero to four scale. Over half were very unsupportive as indicated by responses of *0* and *1*. Roughly 20% were neutral rating their level of support at *2*. Only 27% were somewhat or very supportive with responses of *3* and *4*.



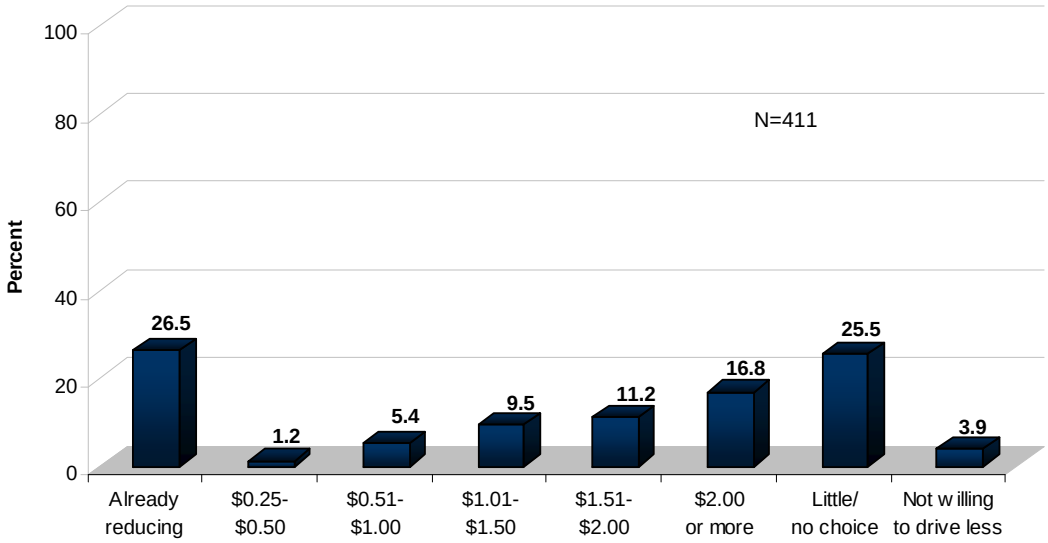
18) In your opinion, what do you think is going to happen to gasoline prices over the next two to five years? Do you think they will…

Almost three-fourths of the respondent group felt gasoline prices would increase over the next two to five years; roughly half believed it would *Increase somewhat*. Slightly more than 20% expected prices to *Stay at about the same level*. Less than 6.5% thought prices would *Decrease somewhat* or *Greatly* in the near future.



19) How much would gas prices have to increase beyond today's price to cause you to significantly reduce the amount of driving you/your family does?

A large portion, approximately 30%, stated they had *Little or no choice in the amount they drive* or are *Not willing to drive less*. Another significant amount, roughly 27% were *Already reducing the amount they drive* due to recent gas prices. Of the 45% remaining, 28% would need to see prices increase another $1.50 or more before they would significantly reduce the amount of driving they do.



20) About which of the following would you like to know more?

Approximately half of the respondent group would like to know more about *Hybrid vehicles* and *Ways to save fuel*. *Fuel-flex vehicles* interested approximately 37% of the group while interest for *Electric*, *Natural gas* and *Hydrogen powered vehicles* ranged from 20.7% to 28.2%. *Propane powered vehicles* had the least response with only 14% who were interested in learning more.

N=425	%
Hybrid vehicles (gas – electric)	48.2
Fuel-flex vehicles	36.7
Electric powered vehicles	22.6
Natural gas powered vehicles	20.7
Hydrogen powered vehicles	28.2
Propane powered vehicles	13.9
Ways to save fuel	52.0

21) Where would you go to get information about vehicle efficiency?

Two-thirds of respondents would use the *Internet* to get information on vehicle efficiency. Roughly half the group would look to *Consumer reports* and one-third would simply look at the *Local auto dealers window sticker on the car*. *Manufacturer's websites* and *auto magazines* were less popular sources of vehicle efficiency with responses of 19.3% and 15.1% respectively.

N=425	%
Local auto dealer/window sticker on the car	30.4
Internet sites	66.1
Consumer reports	50.1
Auto magazines	15.1
Auto manufacturer's website	19.3
Other	6.1
Don't know	10.6

The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Word of Mouth – 6*
  - Brother
  - Friends - 2
  - Other drivers
  - Other people
- *Persons in auto industry - 6*
  - Automotive expert
  - Honda employee
  - Mechanic – 4
- *Other written sources - 5*
  - Library
  - Newspaper - 3
  - Read and hear
- *Blogs of owners*
- *Classes offered by GM*
- *Commercial claims mileage ratings*

22) Where would you go to get information about carpooling?

Approximately half the respondents were *Not interested in carpooling*. Roughly one-third would *Ask people they know* to gather carpooling information. *City websites* would only be used by 8.2%, while almost 10% *Didn't know* where to get carpooling information.

N=425	%
Ask friends/people you know	35.5
City website	8.2
Don't know	9.6
Not interested in carpooling	48.9
Other	7.1

The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Does not apply/not an option – 15*
  - Live extremely close to work
  - Varied schedules
- *Already carpool – 4*
- *Work – 4*
- *Newspaper – 2*
- *DART*
- *Know enough*
- *MTA website*

23) Where would you go to get information about public transportation routes/schedules in your community?

For roughly one-third of the respondents *Public transportation is not an option where they live*; another one-third is *Not interested in using public transportation*. Of those remaining who were interested, approximately 22% would use the *City website*, 17% would consider using the *Transportation company's website* and 6% would turn to the *Local newspaper* for information.

N=425	%
Transportation company website	16.7
City website	21.6
Phone call to transportation company	12.9
Local newspaper	6.1
Not interested in using public transportation	32.7
Public transportation not available where I live	32.5
Other	3.8

The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Does not apply/not an option – 7*
  - Country
  - Small city
  - Increased time
- *DART*
- *Have Schedule*
- *HyVee*
- *Library*
- *Other people*
- *WA*

Executive Summary: General Energy

The age and gender distribution of respondents was matched closely to the 2000 Census information for the state of Iowa. A majority of the population, around 57%, had 1-2 residents living in their household, with 3-4 residents being the next highest percentage at 36.1%.One-fourth of the respondent group had no one working outside the home full-time. Roughly one-third indicated 1 full-time worker, with an additional 40% who reported 2 full-time workers outside the home. The majority, almost three-fourths of the respondent group, completed at least some college level education and over 56% of the overall group received a degree. This leaves only one-fourth of the respondent group with the educational level of a High School/GED or less.

Almost 90% of the respondent group owned their home. Of the 11.1% who rent their home, 97% pay their own utility bill. Roughly 45% of the respondent group reported annual household income of $50,000 or less. An additional 37% fell between $50,000 and $100,000. Less than 20% reported an annual household income of over $100,000. Roughly two-thirds of respondents' income is generated by an annual salary or hourly wage. Social Security/retirement plans were reported by roughly 21% of the group. Less than 10% of the group generated their income through self-employment, while commission, government sources other than Social Security and other was responsible for approximately 5% of the populations' primary income.

MidAmerican and Alliant were the top two providers of electricity, servicing 42.4% and 30% of the respondent group respectively. Just under 13% had a municipal utility, while about 14% had REC co-op. Roughly half the respondent group listed MidAmerican as their heat energy provider. Alliant was reported by roughly 19% of the group, while 13% had a propane provider and 12% used Blackhills/Aquilla. Very few only 5.8% used a municipal utility and almost no one reported fuel oil.

Respondents indicated they had little knowledge regarding overall energy issues/topics including their rights as energy consumers, how electric and natural gas prices in Iowa are set, the impact of energy production on Iowa air and water quality, global warming, and how their personal energy use impacts climate change. Most respondents, 93%, were either very concerned or somewhat concerned that their best interests as an Iowa energy consumer were not being adequately protected. Almost half the respondent group didn't know who regulates electricity and natural gas prices in Iowa, but 43% identified the Iowa Utilities Board. When asked who respondents depend on to protect their interests when it comes to pricing, reliability and supply of energy in Iowa, 37% said no one or they did not know, followed by 22.6% who said their utility provider. Only 14% said state government agencies. College/university centers and utility companies were selected as the most trustworthy sources of energy information, but college/university centers were among the least utilized by the respondents when looking for energy efficiency resources.

About 92% of respondents were either very concerned or somewhat concerned that Iowa will face energy shortages in the future. Iowans are supportive or moderately supportive of increasing wind and solar power capacity; encouraging more energy efficiency/conservation practices and investing in development of new or alternative sources of energy. Developing new or alternative sources of energy within the state was selected by 71% of respondents as the one thing that will have the greatest impact on ensuring that Iowa's energy needs are meet over the long term, however, almost half of the respondent group was unwilling to pay more for energy produced from renewable sources. Furthermore, 46% believed that energy from renewable or green sources cost more than sources currently used. Roughly 23% thought it costs about the same; 12.6% thought it costs less. When asked to rank order the importance among the following three choices, respondents said the most important was keeping energy costs as low as possible, followed by ensuring reliable sources of energy and lastly protecting the environment/preventing climate change.

When asked who should pay the cost of programs to reduce energy costs in Iowa, 36% said the costs should be borne equally by all Iowans. Just over 20% said those using the most energy should pay, 14.5% said utility companies should pay and 10% had no opinion. Over 70% of respondents believed that individuals who use less energy should be rewarded through state sponsored incentives or tax rebates. Respondents were moderately supportive of adopting higher energy standards for new home construction and adopting higher energy standards for vehicles sold in Iowa. Energy rebates and incentives greatly influenced 60% of participants' decisions to buy more energy efficient products.

Respondents were moderately to highly concerned about their ability to pay their utility bills in the future, the health effects of more coal-fired power plants and future gasoline shortages in Iowa. When given several choices to select from as to why respondents try to use less energy, the overwhelming choice was to save money. A distant second was to protect the environment. Much less important was to ensure that Iowa has enough energy when needed, to reduce the amount of energy imported from outside the state and to improve Iowa's overall economy.

Respondents showed moderate agreement with a series of statements such as: Iowans need to take more personal responsibility to reduce their energy use; my personal efforts to use less energy will have a positive impact on Iowa's total annual energy use; state government should do more to educate Iowans about how to use energy more efficiently; and my personal efforts to use less energy will have a positive impact on Iowa's environment. When asked to select the top three most important issues that must be addressed to ensure a positive future for Iowa, respondents selected funding for education, followed by economic development and reductions of state government spending.

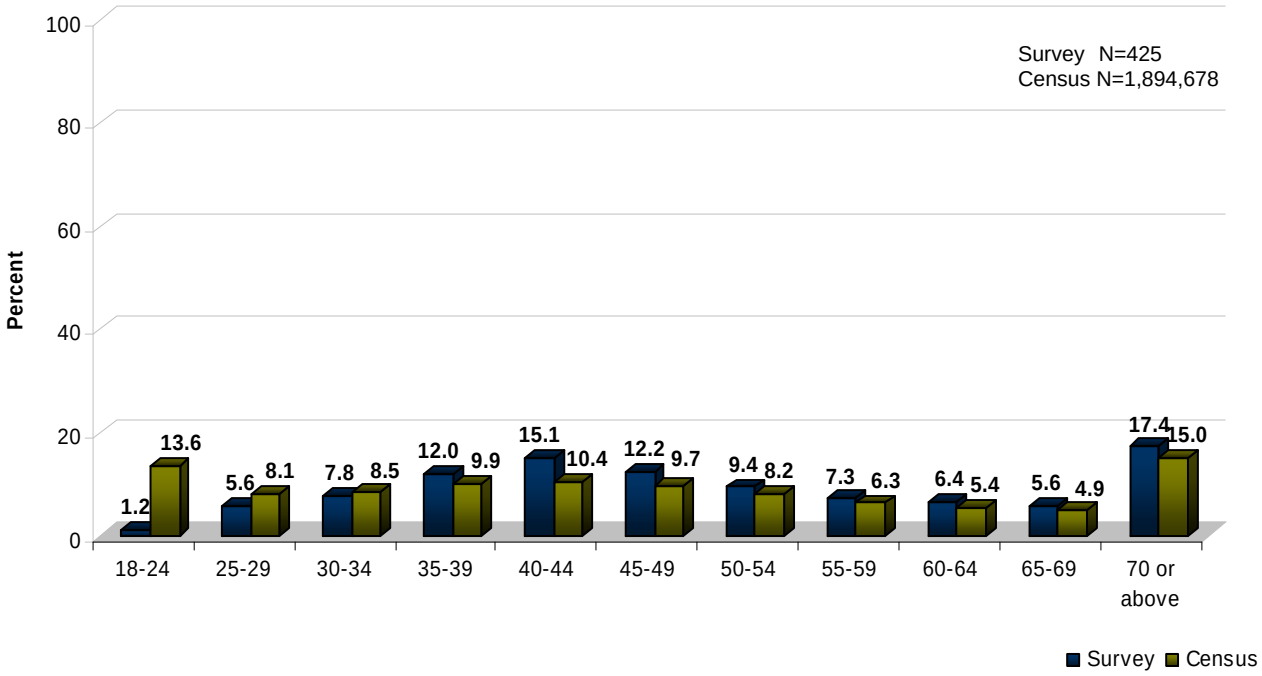
When it comes to nuclear energy, respondents strongly agreed with the statement nuclear power plants pollute less than coal-fired power plants. They tended to believe nuclear energy is safe, and for the most part, thought more nuclear energy plants in Iowa would help keep the cost of electricity down. Although there was some agreement that coal-fired power plants are safe, the vast majority of respondents do not support the idea that more coal-fired plants in Iowa will keep electricity costs down and do not think coal-fired power plants are a good way to meet Iowa's future electricity need. Respondents preferred to build more nuclear power plants than coal-fired power plants.

Overall, respondents were only slightly likely to agree with the following statements as indicated by the means which were all lower than 2.77 on a zero to four scale. They agreed most with the statements Burning fossil fuels contributes to greenhouse gasses and global warming (2.77) and Global climate change is a serious problem (2.73). The least agreement was seen with the statement Global climate change is a naturally occurring even on which people have little impact (1.63). Over half the participants thought that Iowa has already started to experience the effects of human-influenced global warming.

Results: General Energy

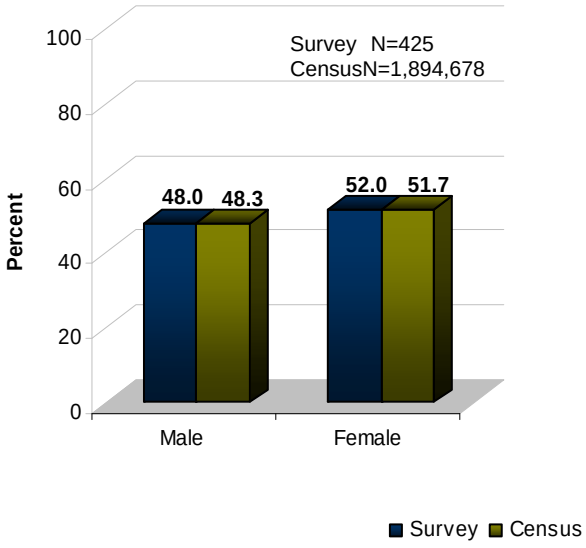
A) To which of the following age groups do you belong?

The age distribution of respondents was matched closely to the 2000 Census information for the state of Iowa.



B) What is your gender?

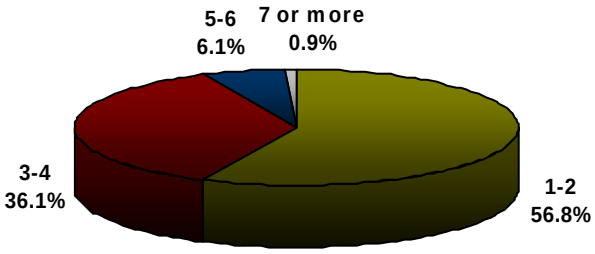
The gender also follows the 2000 Census information for the state of Iowa.



C) How many people live in your household?

A majority of the population, around 57%, had *1-2* residents living in their household, with *3-4* residents being the next highest percentage at 36.1%. Those respondents stating five and above was around 7% of the survey population.

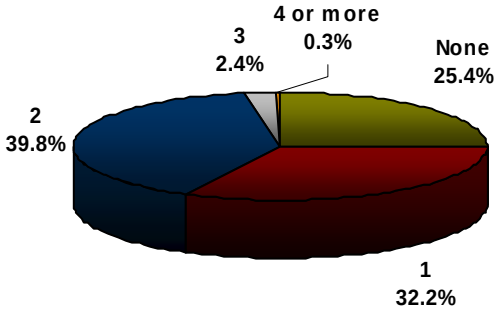
N=424



D) If two or more live in the household, how many work full-time outside the home?

One-fourth of the respondent group had no one working outside the home full-time. Roughly one-third indicated *1* full-time worker, with an additional 40% who reported *2* full-time workers outside the home. Less than 3% had more than two full-time workers in their household.

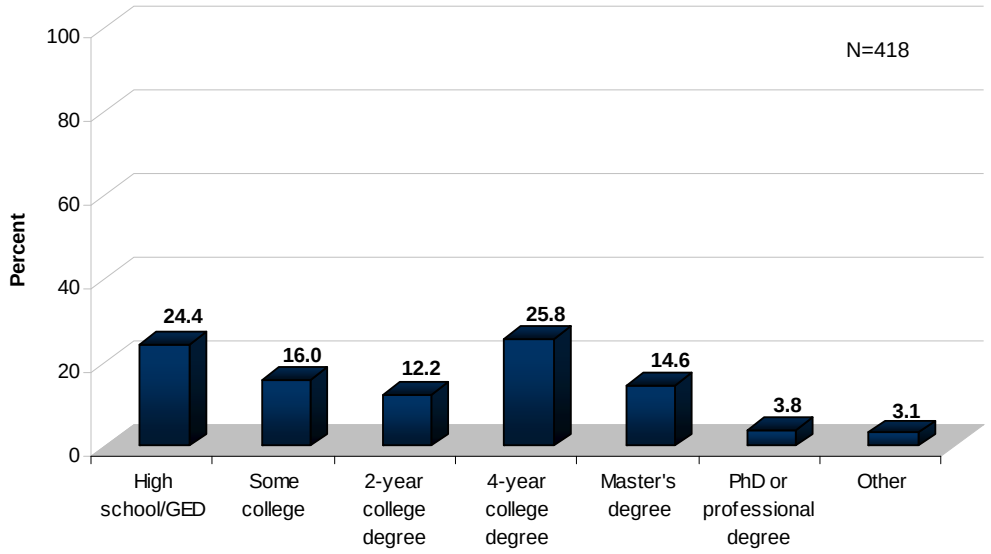
N=382



E) What is the education level of the primary household income generator?

The majority, almost three-fourths of the respondent group, completed at least some college level education. Over 56% of the overall group received a degree, with roughly 19% of those who earned

an advanced degree. This leaves only one-fourth of the respondent group with the educational level of a *High School/GED* or less.

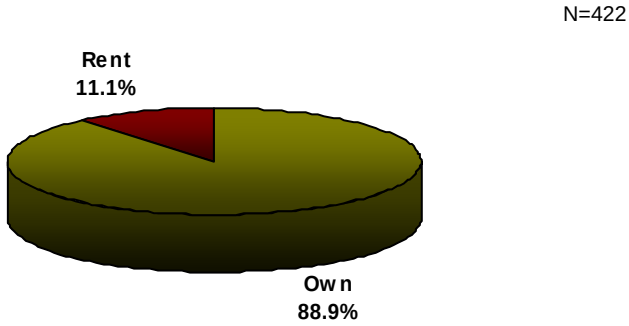


The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *8th Grade – 3*
- *Diploma RN 3 year program – 3*
- *Trade School Graduate – 2*
- *7th Grade – 1*
- *9th Grade – 1*
- *10th Grade – 1*

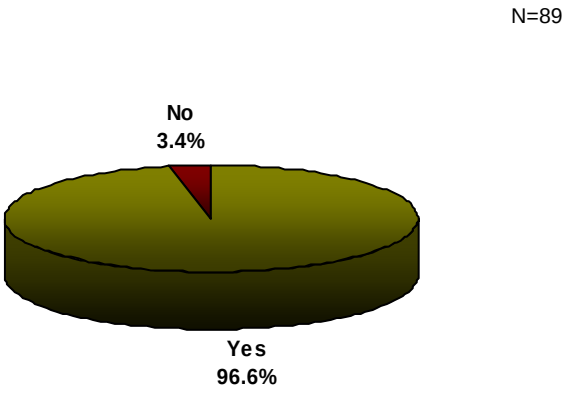
F) Do you own or rent your home?

Almost 90% of the respondent group owned their home.



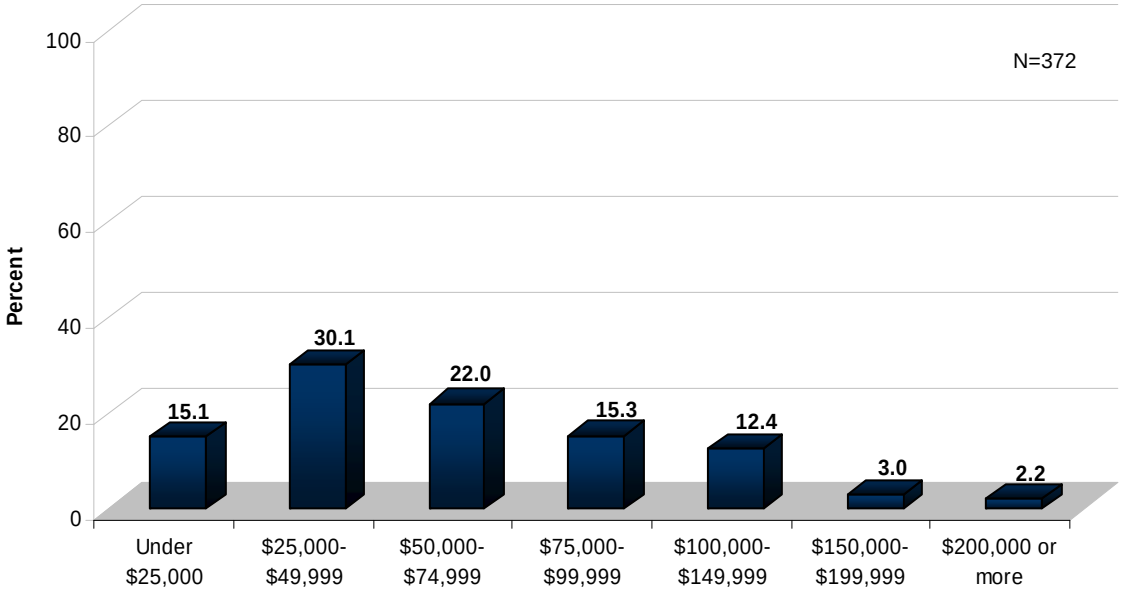
If rent, do you pay your own utility bill?

Of the 11.1% who rent their home, 97% paid their own utility bill.



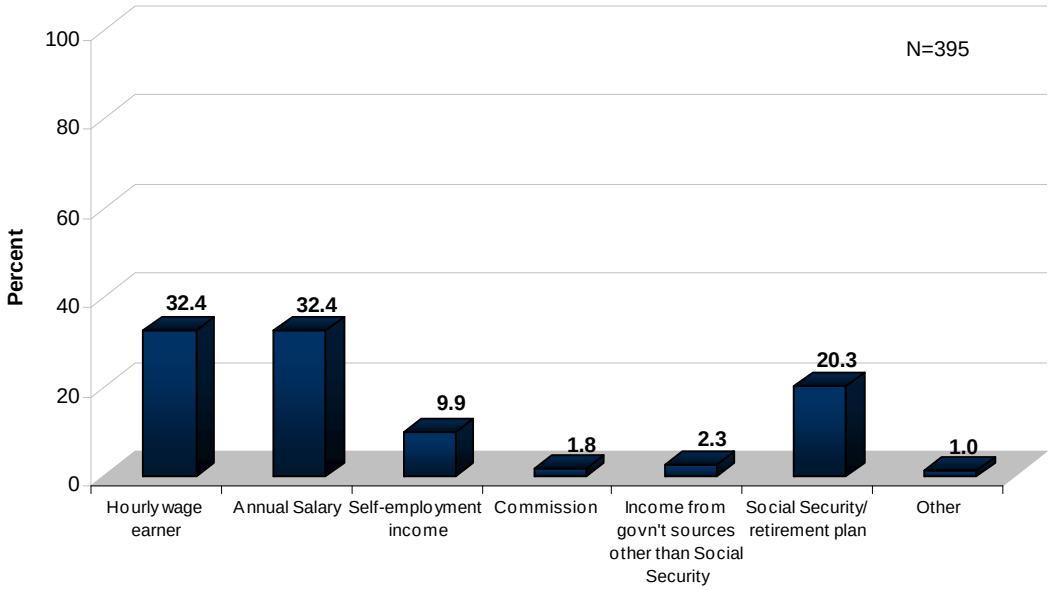
G) What is your annual household income?

Roughly 45% of the respondent group reported an annual household income of $50,000 or less. An additional 37% fell between $50,000 and $100,000. Less than 20% reported an annual household income of over $100,000.



H) How is your household's primary income generated?

Roughly two-thirds of respondents' income is generated by an *Annual salary* or *Hourly wage*. *Social Security/retirement plans* were reported by roughly 21% of the group. Less than 10% of the group generated income through *Self-employment*, while *Commission*, *Government sources other than Social Security* and *Other* were responsible for approximately 5% of the populations' primary income.

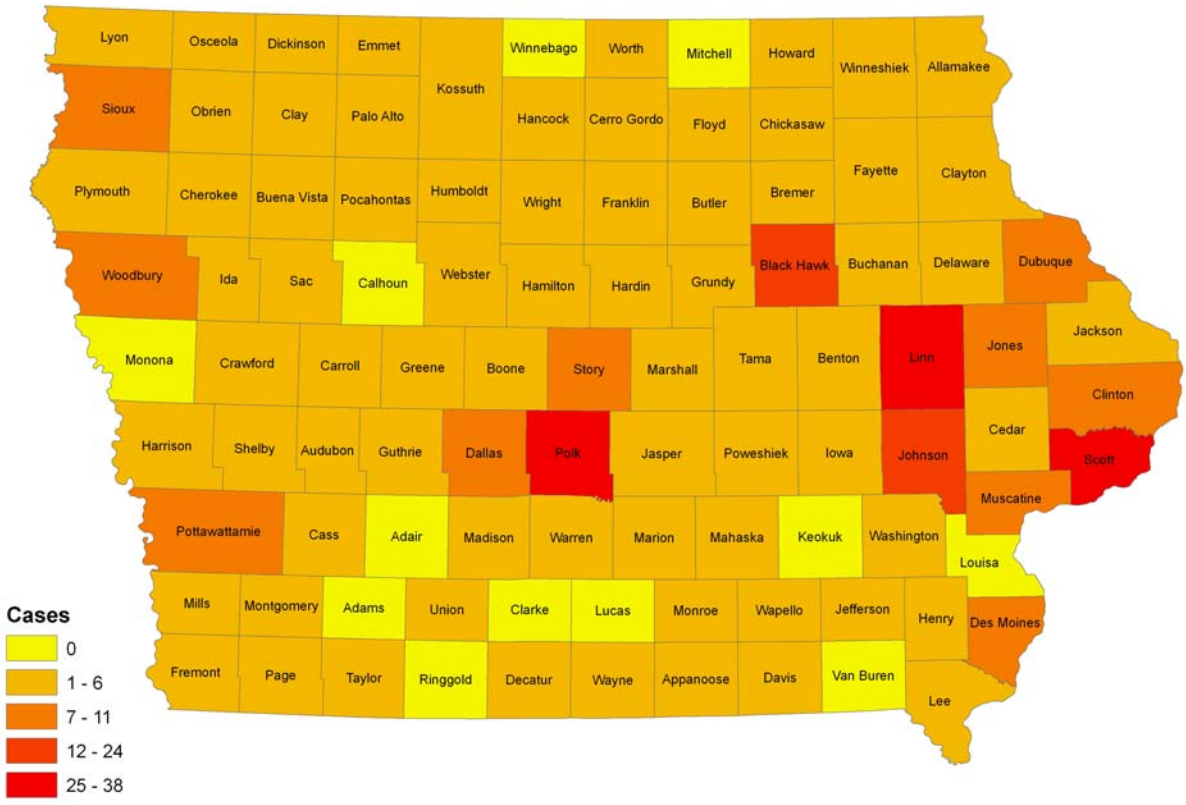


The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Child Support – 1*
- *Retired – 1*
- *Retired Farmer – 1*

I) What is your zip code?

As shown in the map below and the table on the following page, higher concentrations of respondents were from counties where larger cities are located.

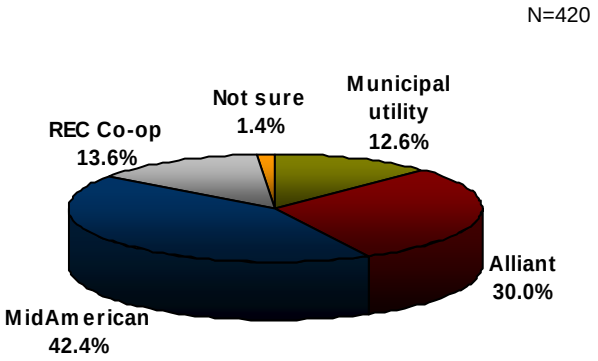


The following table shows the number of respondents from each county.

	Frequency		Frequency		Frequency
Allamakee	2	Fremont	3	Muscatine	8
Audubon	1	Greene	1	O'Brien	3
Benton	2	Grundy	2	Osceola	2
Black Hawk	23	Guthrie	1	Page	3
Boone	4	Hamilton	3	Palo Alto	1
Bremer	3	Hancock	2	Plymouth	2
Buchanan	5	Hardin	4	Pocahontas	2
Buena Vista	2	Harrison	2	Polk	45
Butler	3	Henry	2	Pottawattamie	9
Carroll	3	Howard	1	Poweshiek	1
Cass	1	Humboldt	2	Sac	3
Cedar	3	Ida	1	Scott	39
Cerro Gordo	3	Iowa	2	Shelby	1
Cherokee	2	Jackson	3	Sioux	6
Chickasaw	1	Jasper	4	Story	11
Clay	1	Jefferson	3	Tama	5
Clayton	5	Johnson	17	Taylor	1
Clinton	8	Jones	9	Union	2
Crawford	1	Kossuth	3	Wapello	5
Dallas	10	Lee	6	Warren	4
Davis	2	Linn	31	Washington	5
Decatur	2	Lyon	1	Wayne	1
Delaware	4	Madison	1	Webster	3
Des Moines	10	Mahaska	1	Winneshiek	3
Dickinson	4	Marion	3	Woodbury	8
Dubuque	12	Marshall	3	Worth	2
Emmet	4	Mills	1	Wright	1
Fayette	1	Monroe	1		
Floyd	4	Montgomery	4		

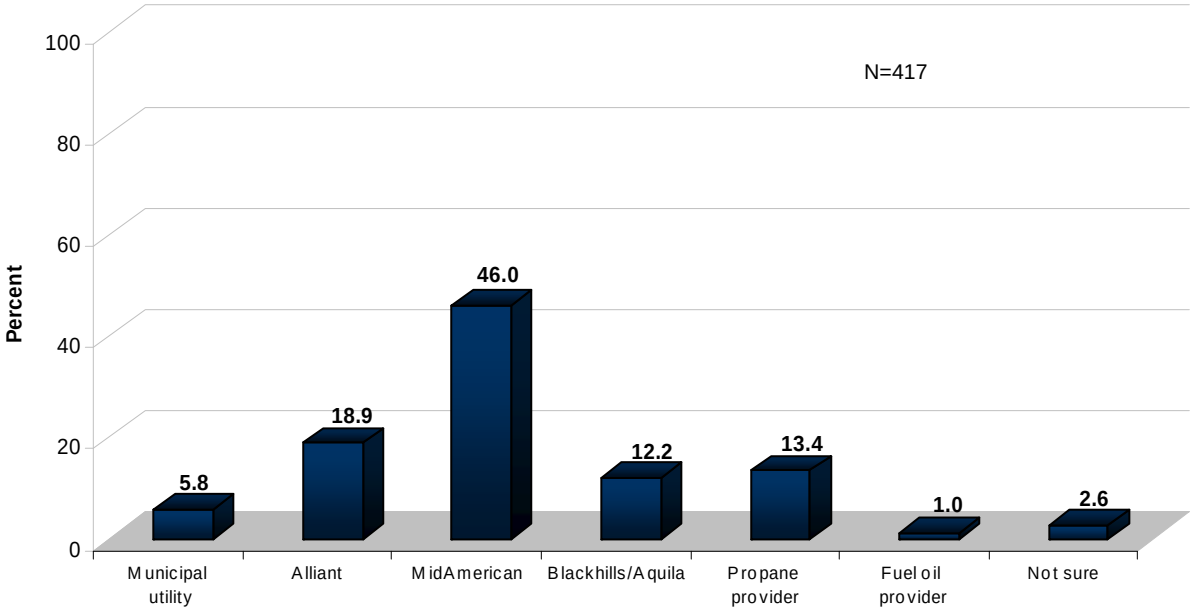
J) Who is your current electric provider?

MidAmerican and *Alliant* were the top two providers of electricity, servicing 42.4% and 30% of the respondent group, respectively. Just under 13% had a *Municipal Utility*, while about 14% had a *REC Co-op*. Less than 1.5% was *Not sure* of their current electric provider.



K) Who is your current heat energy provider?

Roughly half the respondent group listed *MidAmerican* as their heat energy provider. *Alliant* was reported by roughly 19% of the group, while 13% had a *Propane provider* and 12% used *Blackhills/Aquilla*. Very few, only 5.8%, used a *Municipal Utility* and almost no one reported *Fuel Oil*.



1) How knowledgeable would you say you are about each of the following issues/topics?

Overall respondents had little knowledge regarding the following energy issues/topics with none of the means scoring much above the midpoint of two on the zero to four scale. They showed the most knowledge regarding *Global warming* and *Ethanol production in Iowa* with means of 2.12 and 2.04, respectively. They held the least amount of knowledge regarding *Small scale biomass production* and *Fuel cells* at 0.95 and 1.03, respectively.

	Mean
Your rights as an energy consumer	1.72
How electric and natural gas prices in Iowa are set	1.36
Overall energy issues	1.95
Ethanol production in Iowa	2.04
Biodiesel production in Iowa	1.60
Small scale biomass production	0.95
Wind farms that generate electricity	1.81
Impact of energy production on Iowa air and water quality	1.68
Global warming	2.12
Effects of ethanol and biodiesel production in Iowa	1.70
Coal-fired production of electricity	1.52
Nuclear energy	1.38
Fuel cells (e.g., hydrogen)	1.03
How your personal energy use is purported to impact climate change	1.73

2) As an Iowan, how concerned are you with each of the following issues?

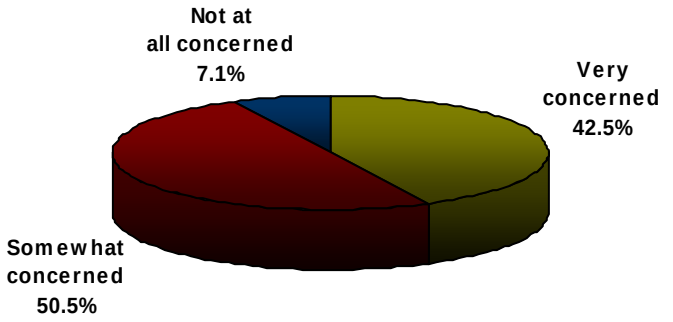
Overall respondents were moderately concerned with the following energy issues as indicated by means of 1.45 to 3.37 on a zero to four scale. They showed the most concern with the *Price of fuel for your automobile* and the *Supply of fuel for your automobile* with means of 3.37 and 3.22, respectively.

	Mean
Overall energy issues	2.99
Effects of coal-fired production of electricity on the environment	2.45
Visual impact of large wind farms for generating electricity	1.45
Natural gas shortages	2.48
Propane shortages	2.17
Natural gas prices	2.90
Propane prices	2.40
Impact of energy production on air and water quality	2.85
How energy prices in Iowa are set and regulated	2.81
Impact of ethanol/biodesel/E85 production on food prices	2.74
Price of fuel for your automobiles	3.37
Supply of fuel for your automobiles	3.22

3) How concerned are you that your best interests as an Iowa energy consumer are not being adequately protected?

Most respondents, 93%, were concerned their best interests as an Iowa energy consumer were not being adequately protected. Almost 43% said they were *Very concerned*, with an additional 50.5% who were *Somewhat concerned*. Only 7% were *Not at all concerned*.

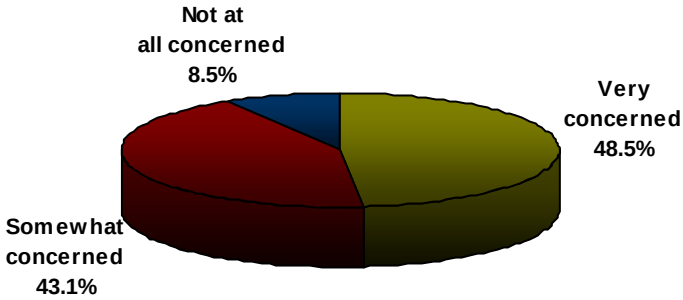
N=413



4) How concerned are you that Iowa will face energy shortages in the future?

Very few respondents, 8.5%, were *Not at all concerned* about Iowa facing energy shortages in the future. Almost half were *Very concerned* and 43% were *Somewhat concerned*.

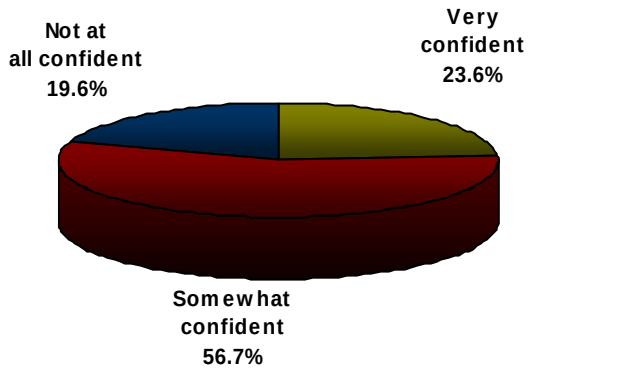
N=413



5) How confident are you that your electric utility provider truly wants to help you use less energy?

Almost one-fifth of the respondent group was *Not at all confident* that their electric utility provider truly wanted to help them use less energy. Approximately 57% were *Somewhat confident*, while only 23.6% were *Very confident*.

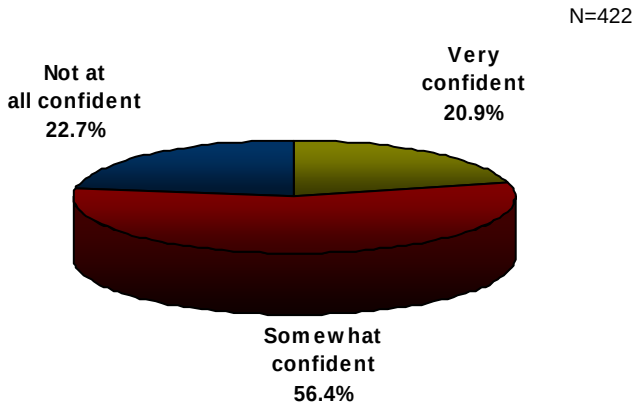
N=423



6) How confident are you that your heat source provider truly wants to help you use less energy?

Almost 23% of the respondent group was *Not at all confident* that their heat source provider truly wanted to help them use less energy. Approximately 57% were *Somewhat confident*, while only 21% were *Very confident*.

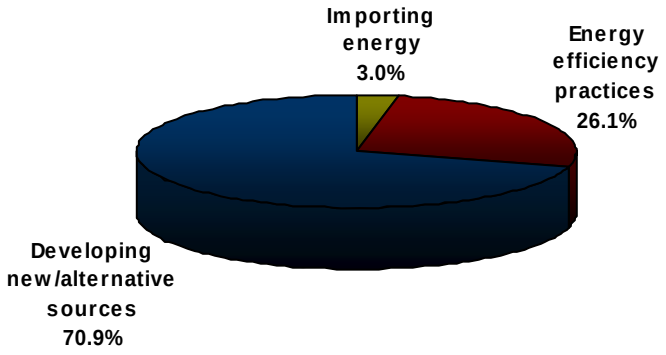
N=422



7) Which of the following will have the greatest impact on ensuring that Iowa's energy needs are met over the long term?

Developing new or alternative sources of energy within the state was selected by 71% of respondents as the one thing that will have the greatest impact on ensuring Iowa's energy needs are meet over the long term. One-fourth of the group thought *Implementing more energy efficiency/conservation practices to reduce demand* would have the greatest impact. The remaining 3% thought the greatest impact would be made by *Importing energy into the state*.

N=406



8) Please rank the following priorities in order of their importance to you.

Keeping energy costs as low as possible was the most important factor followed by *Ensuring reliable sources of energy* with means of 1.93 and 1.96, respectively. *Protecting environment/preventing climate change* was the least important factor for respondents at 2.08.

N		# of times ranked 1st	Mean
401	Protecting environment/preventing climate change	132	2.08
403	Keeping your energy costs as low as possible	161	1.93
403	Ensuring reliable sources of energy	118	1.96

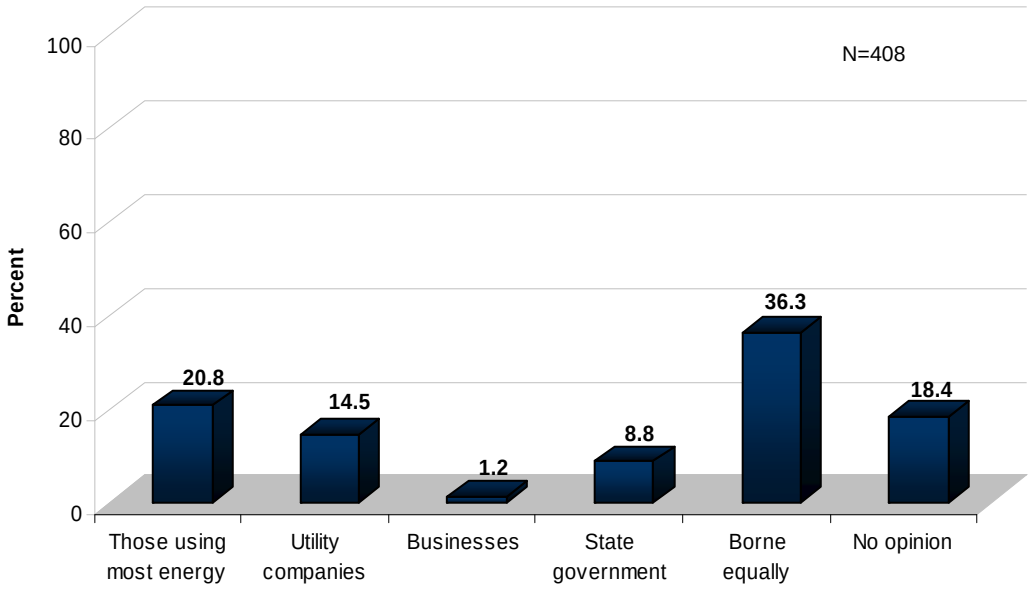
9) Do you believe…

Over 70% of respondents believed *Individuals who use less energy should be rewarded through state sponsored incentives or tax rebates* and that *Iowa should offer lower registration fees for fuel-efficient vehicles*. Only 33.2% thought *Iowa should raise registration fees for vehicles that are not designated as fuel-efficient*, while 17% thought *City governments should reduce parking fees for fuel-efficient vehicles*. Less than 9% thought the *City governments should designate parking spots for fuel-efficient vehicles*.

	Percent
Individuals who use less energy should be rewarded through state-sponsored incentives or tax rebates?	74.6
Iowa should offer lower registration fees for fuel-efficient vehicles?	70.0
Iowa should raise registration fees for vehicles that are not designated as fuel-efficient?	33.2
City governments should reduce parking fees for fuel-efficient vehicles?	17.1
City governments should designate parking spots for fuel-efficient vehicles similar to those reserved for the handicapped?	8.8

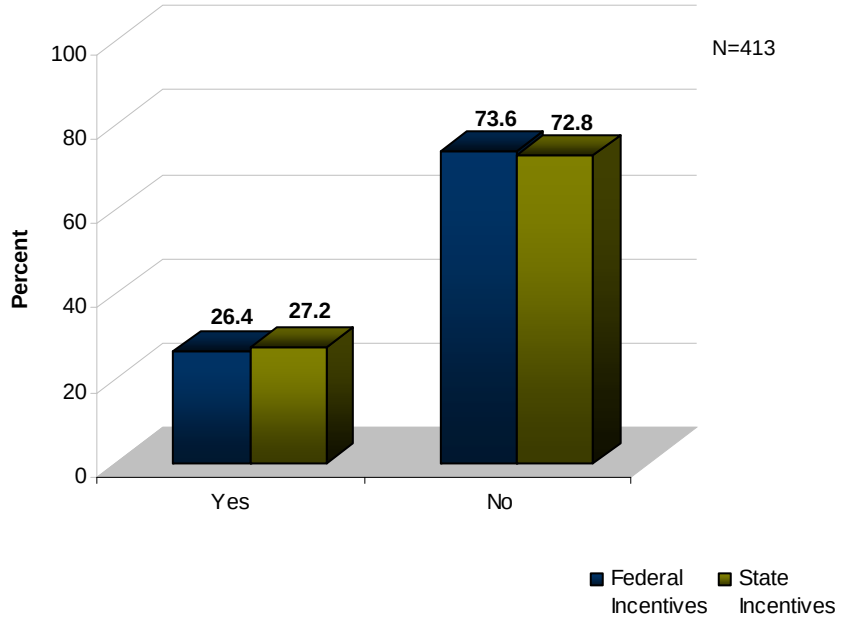
10) Who should be most responsible for paying the cost of programs to reduce energy use in Iowa?

The largest group, 36.3% of respondents, thought the cost of programs to reduce energy use in Iowa should be *Borne equally by all Iowans*. Roughly one-fifth believed *Those that use the most energy* should be responsible, 15% think *Utility companies* should bear the responsibility, and only 9% voted for the *State government through tax revenues*. Less than 1.5% felt *Businesses* should pay the cost of these programs.



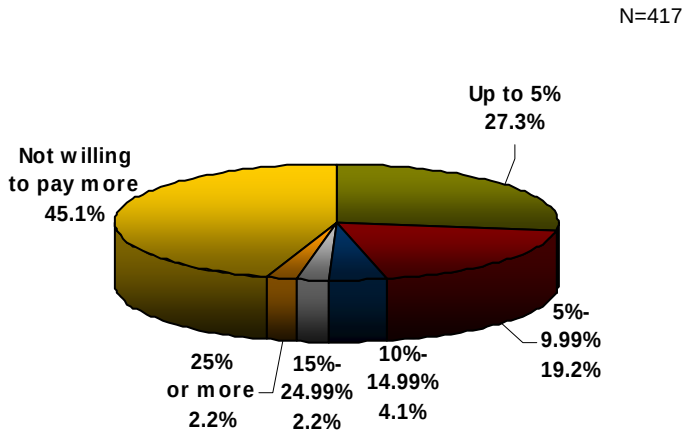
11) Are you familiar with any federal or state income tax incentives available to consumers who install energy efficient products, buy alternative fuel vehicles or use energy efficient technologies?

Only one-fourth of the respondent group was aware of any federal or state income tax incentives available to help consumers when installing energy efficient products, buying alternative fuel vehicles or using energy efficient technologies.



12) How much more would you be willing to pay for energy produced from renewable sources such as wind and solar?

Almost half the respondent group was unwilling to pay more for energy produced from renewable sources. Of the remaining, one-fourth was willing to pay *Up to 5%* more and 19.2% was willing to pay *5-9.99%* more. Any increase of more than 10% was supported by only 8.5% of the respondent group.



13) How supportive are you of the following ways to encourage Iowans to use less energy?

Respondents were moderately supportive of *Adopting higher energy standards for new home construction* and *Adopting higher energy standards for vehicles sold in Iowa* with means of 3.05 and 2.79, respectively. They were slightly less supportive of *Adopting higher energy standards for energy consuming appliances and equipment sold in Iowa* (2.71), *Providing state subsidies and tax incentives to those developing renewable or alternative energy sources in Iowa* (2.62) and *Providing state income tax incentives to promote energy efficiency* (2.59). They were least supportive of *Letting energy prices determine use* and *Keeping state government out of issues related to Iowa's energy use* with means of 1.85 and 1.80, respectively.

	Mean
Providing state income tax incentives to promote energy efficiency	2.59
Adopting higher energy standards for energy consuming appliances and equipment sold in Iowa	2.71
Adopting higher energy standards for new home construction	3.05
Adopting higher energy standards for vehicles sold in Iowa	2.79
Letting energy prices determine use	1.85
Keeping state government out of issues related to Iowa's energy use	1.80
Providing state subsidies and tax incentives to those developing renewable or alternative energy sources in Iowa	2.62

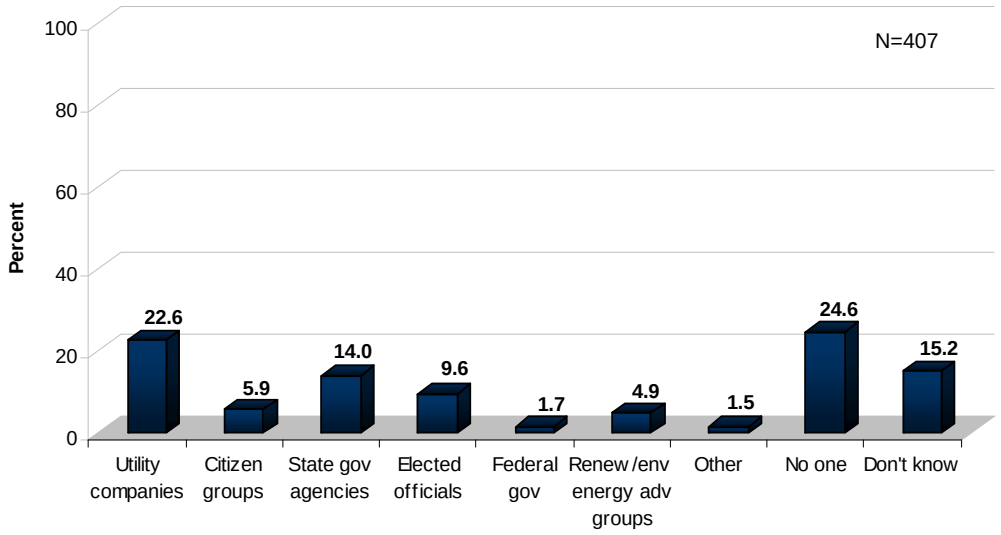
14) How supportive are you of the following concepts?

With means above 2.75 on a zero to four scale, respondents were moderately supportive of the following: *Increasing wind power capacity, Increasing solar power capacity, Encouraging more energy efficiency/conservation practices* and *Investing in development of new or alternative sources of energy*. With means between 1.75 and 2.75, respondents were only slightly supportive of *Offering tax incentives for residential geothermal systems*, *Net metering for self-generated electricity* and *Developing more biomass technology*, *Creating more regulations on energy use*, *Building more nuclear power plants*, *Letting supply and demand determine prices*. Less support was shown for *Building more coal-fired generating plants*, *Importing more energy from outside the state* and *Increasing prices to reduce demand* with means below 1.75.

	Mean
Encouraging more energy efficiency/conservation practices	3.33
Investing in development of new or alternative sources of energy	3.26
Creating more regulations on energy use	1.94
Importing more energy from outside the state	1.28
Increasing prices to reduce demand	0.90
Letting supply and demand determine prices	1.92
Building more nuclear power plants	1.93
Building more coal-fired generating plants	1.53
Increasing wind power capacity	3.36
Increasing solar power capacity	3.33
Developing more biomass technology	2.56
Offering tax incentives for residential geothermal systems (geothermal uses heat from the ground)	2.74
Net metering for self-generated electricity	2.57

15) Who do you most depend on to protect your interests when it comes to pricing, reliability and supply of energy in Iowa?

Roughly one-fourth of the respondent group depended on No one with an additional 15% who didn't know who they most depended on to protect their interests in terms of pricing, reliability and the supply of energy in Iowa. Almost 23% depended on *Utility companies* and 14% depended on *State government agencies*. Less than 10% relied on *Elected officials, Citizen groups, Renewable/environmental energy advocacy groups* or the *Federal government*.

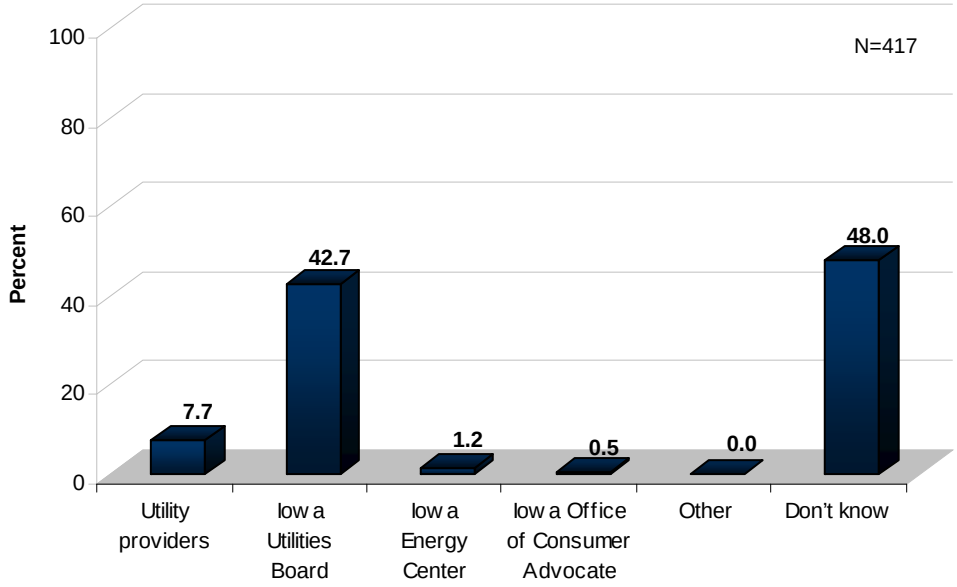


The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Myself – 2*
- *Chamber of Commerce – 1*
- *Consumer – 1*
- *Free market/capitalism/democracy – 1*
- *Let market drive – 1*

16) Who regulates electricity and natural gas prices in Iowa?

Almost half the respondent group didn't know who regulates electricity and natural gas prices in Iowa. Just under 43% thought it was the *Iowa Utilities Board*. Less than 8% believed *Utility providers* regulate prices in Iowa, and less than 2% believed it was the *Iowa Energy Center*, the *Iowa Office of Consumer Advocate* or *Other*.



17) How concerned are you about each of the following?

Respondents were moderately to highly concerned about all of the following topics with means that were all above 3.27 on a zero to four scale. They showed the most concern with their *Ability to pay their utility bills in the future*, *The health effects of more coal-fired power plants* and *Future gasoline shortages in Iowa* with means of 3.81, 3.77 and 3.77, respectively. They were least concerned with the *Ability to transmit electricity across the state to where it is needed* and *The impact ethanol/biodiesel production will have on the environment* with means of 3.31 and 3.27, respectively.

	Mean
Impact ethanol/biodiesel production will have on the environment	3.27
Impact ethanol/biodiesel production will have on food prices	3.59
Impact energy production will have on global warming/climate change	3.54
Safety of nuclear power plants	3.66
Safety of coal-fired power plants	3.47
Health effects of more coal-fired power plants	3.77
Ability to pay my utility bills in the future	3.81
Future gasoline shortages in Iowa	3.77
Future electricity shortages in Iowa	3.68
Ability to transmit electricity across the state to where it is needed	3.31

18) In order of their importance to you, please rank the top three reasons you try to use less energy.

Only five respondents selected the box stating they *Usually don't do things to reduce energy use*. By far the top reason why respondents try to use less energy was *To save money*, with a mean on 1.22 out of three. Following in a distant second place was *To protect the environment* with a mean of 2.01. Much less importance was placed on the remaining three factors of *To ensure that Iowa has enough energy when needed, To reduce the amount of energy imported from outside the state* and *To improve Iowa's overall economy* with means of 2.61, 2.49 and 2.56, respectively.

N		# of times ranked 1st	Mean
381	To save money	310	1.22
294	To protect the environment	64	2.01
198	To ensure that Iowa has enough energy when needed	9	2.61
106	To reduce the amount of energy imported from outside the state	4	2.49
156	To improve Iowa's overall economy	8	2.56

19) Please rate your level of agreement with the following statements.

Respondents showed moderate agreement with the statement *Iowans need to take more personal responsibility to reduce their energy use* (3.23/4.00). Followed by the statements *My personal efforts to use less energy will have a positive impact on Iowa's total annual energy use* (2.78), *State government should do more to educate Iowans about how to use energy more efficiently* (2.78), *My personal efforts to use less energy will have a positive impact on Iowa's environment* (2.75). They showed the least agreement with the statements *People should be free to use as much energy as they are willing to pay for* (1.91) and *Biodiesel, ethanol, E85 will eventually replace gasoline/diesel fuel as the main fuel for automobiles in Iowa* (1.68).

	Mean
My personal efforts to use less energy will have a positive impact on Iowa's total annual energy use.	2.78
My personal efforts to use less energy will have a positive impact on Iowa's environment.	2.75
My personal efforts to use less energy will have a positive impact on Iowa's economy.	2.46
My personal efforts to use less energy will have a positive impact on global warming/climate change.	2.41
Generally Iowans use too much energy.	2.33
Increased ethanol/biodiesel production in Iowa is good for the economy of the state.	2.55
Increased ethanol/biodiesel production in Iowa will result in lower fuel prices for Iowans.	2.09
Biodiesel, ethanol, E85 will eventually replace gasoline/diesel fuel as the main fuel for automobiles in Iowa.	1.68
Energy efficiency is the quickest, cheapest and cleanest solution to Iowa's energy needs.	2.56
Alternative and renewable sources of energy can solve Iowa's future energy needs.	2.65
Iowa can eventually become energy independent by supplying all of the state's energy needs from sources within the state.	2.32
Iowans need to take more personal responsibility to reduce their energy use.	3.23
State government should do more to control energy use in the state.	2.00
People should be free to use as much energy as they are willing to pay for.	1.91
State government should do more to educate Iowans about how to use energy more efficiently.	2.78
State government should invest more tax dollars to research and develop alternative sources of energy.	2.60
Solar energy can provide 100% of a home's energy use in the future.	2.19

20) Please rank order the three most important issues that must be addressed to ensure a positive future for Iowa.

Funding for education was the most important issue needing to be addressed to ensure a positive future for Iowa according to the respondent group, as indicated by the mean of 1.74 out of 3. Other important factors included *Economic development* and *Reductions of state government spending* as both had a great number of people ranking them in their top three choices and also a large number of people who ranked them as the most important issues. *State income tax reduction* and *Ensuring a safe, clean environment* were factors that were important to fewer people, but ranked as the most important factor for a significant portion of that group, as indicated by their low means.

N		# of times ranked 1st	Mean
194	Funding for education	98	1.74
77	State income tax reduction	25	1.96
185	Economic development	69	1.99
92	Ensuring a safe, clean environment	33	1.96
55	Crime/drugs/corrections	14	2.22
145	Reductions of state government spending	55	1.97
70	Property tax reform	12	2.20
62	Agricultural issues	11	2.23
120	Energy issues	23	2.15
206	Health care issues	62	2.01

21) Assuming Iowa is able to significantly reduce the total amount of energy used statewide during the next five years, how much of a positive impact do you think it would have on the following areas?

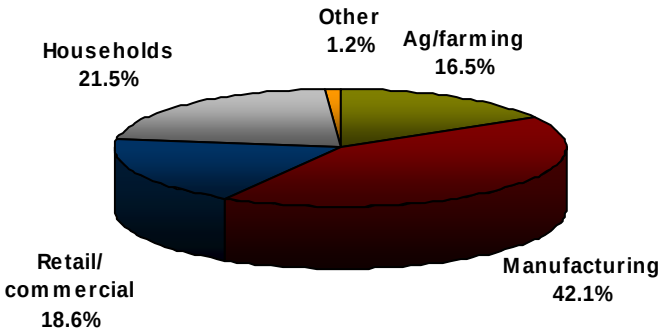
Most respondents felt that if Iowa was able to significantly reduce the total amount of energy used statewide in the next five years it would have a moderate impact on *Iowa's economy*, *Pollution in Iowa* and *Energy affordability for Iowans*, with means between 2.67 and 2.81. They thought it would have slightly less impact on *Global warming/climate changes* with a mean of 2.32.

	Mean
Iowa's economy	2.81
Global warming/climate changes	2.32
Pollution in Iowa	2.73
Energy affordability for Iowans	2.67

22) In your opinion, which of the following annually consumes the most energy in Iowa?

Over 40% of the respondent group thought *Manufacturing* consumed the most energy in Iowa annually. Around 20% thought *Households* and *Retail/commercial* were the two top consuming groups; 16.5% believed the most energy went into *Ag/farming*. *Other* was selected by only 1.2% of respondents.

N=413



The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Government cars, mansions, parties entertaining guests, etc. – 1*
- *Hospitals – 1*
- *Quite Possibly Government! – 1*
- *State of Iowa – 1*

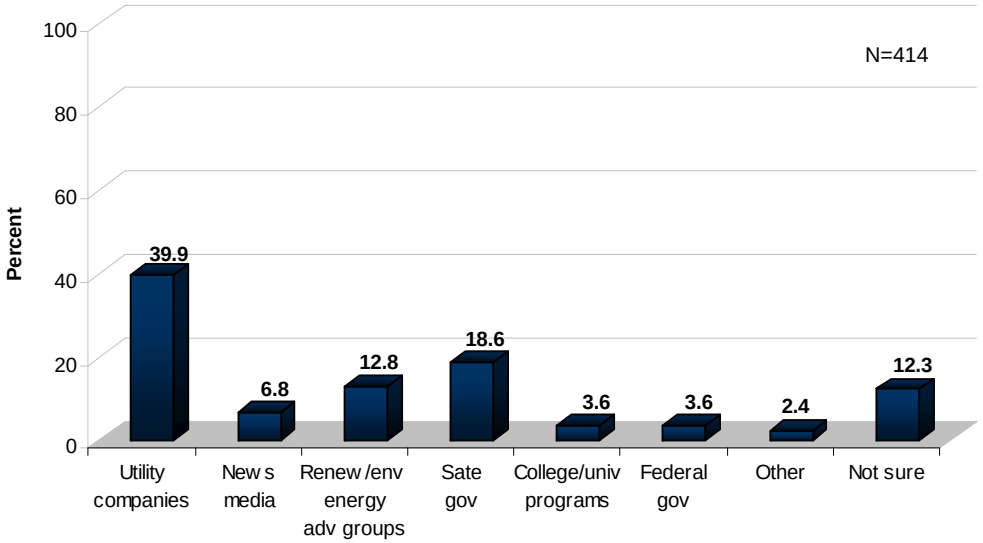
23) Please rate your level of agreement with each of the following statements regarding nuclear energy.

Respondents strongly agreed with the statement *Nuclear power plants pollute less than coal-fired power plants* with a mean of 3.63 on a zero to four scale. They tended to believe *Nuclear energy is safe* (3.29) and for the most part thought *More nuclear energy plants in Iowa would help keep the cost of electricity down* (3.18). The group was in moderate agreement with the statement *I'd prefer to build more nuclear power plants than coal-fired power plants*. Overall, they were less likely to agree, as indicated by a mean of 2.07, that the *Disposal of nuclear waste is not a problem*.

	Mean
Nuclear energy is safe.	3.29
Nuclear power plants pollute less than coal-fired power plants.	3.63
Disposal of nuclear waste is not a problem.	2.07
I'd prefer building more nuclear power plants than building more coal-fired power plats in Iowa.	3.16
More nuclear energy plants in Iowa will help keep the cost of electricity down.	3.18
More nuclear energy plants in Iowa is a good way to meet Iowa's future needs for electricity.	3.06

24) Who should be most responsible for providing education and information to Iowans on how to use energy more efficiently?

Roughly 40% of respondents thought *Utility companies* should be most responsible for providing education and information to Iowans. Just under 19% thought the *State government* should be responsible and 13% thought *Renewable/environmental energy advocacy groups* should be. Less than 4% thought that both *College and University programs* should be responsible and it should be up to the *Federal government*. Just over 12% were *Not sure*.



The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *All of the above – 5*
- *Consumers should seek info – 1*
- *DIY shows – 1*
- *Primary Schools – teach them early – 1*
- *Self – 1*
- *TV – 1*

25) Rate your level of agreement with each of the following statements regarding modern coal-fired power plants.

Respondents were less supportive of statements regarding coal fired power plants as indicated by means of 1.28 to 2.28 on the zero to four scale. They showed most agreement with the statement *Coal-fired plants are safe*, 2.28. All other statements did not score more than the midpoint of two. The least agreement was seen with the statements *Coal-fired power plants pollute less than nuclear power plants* (1.32) and *Emissions from coal-fired power plants is not a problem* (1.28).

	Mean
Coal-fired power plants are safe.	2.28
Coal-fired power plants pollute less than nuclear power plants.	1.32
Emissions from coal-fired power plants is not a problem.	1.28
More coal-fired power plants in Iowa will help keep the costs of electricity down.	1.96
More coal-fired power plants in Iowa is a good way to meet Iowa's future need for electricity.	1.60

26) Please rate your level of agreement with each of the following statements regarding wind generation/wind farms in Iowa.

Respondents were moderately supportive of all statements regarding wind generation/wind farms as indicated by means of 3.09 to 3.52. They showed the most support of the statement *Wind farms are a safe, non-polluting way to generate electricity in Iowa*. The least agreement was show with the statement *More wind farms in Iowa will help keep the costs of electricity down*.

	Mean
More wind farms in Iowa will help keep the costs of electricity down.	3.09
Wind farms are a safe, non-polluting way to generate electricity in Iowa.	3.52
More wind farms in Iowa is a good way to meet Iowa's future needs for electricity.	3.31

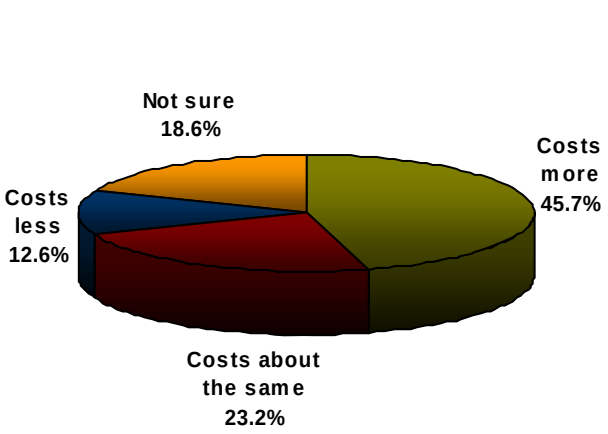
27) Which of the following do you consider to be renewable energy and which are fossil fuels?

Roughly 90% or more of the respondent group felt that *Coal, Oil, Propane* and *Natural gas* were fossil fuels and that *Solar energy, Wind energy, Hydropower* and *Geothermal energy* were renewable energy sources. Respondents were less sure about *Ethanol, Biomass, Biodiesel, Nuclear Power* and *Wood*, but the majority thought these were renewable.

N	Renewable	%
375	Biodiesel	73.1
354	Biomass	78.5
377	Ethanol	79.8
380	Geothermal energy	90.0
382	Hydropower	94.0
357	Nuclear power	66.9
398	Solar energy	98.7
400	Wind energy	98.5
382	Wood	55.2
	Fossil Fuels	**%**
391	Coal	97.2
376	Natural gas	88.0
384	Oil	96.1
373	Propane	93.0

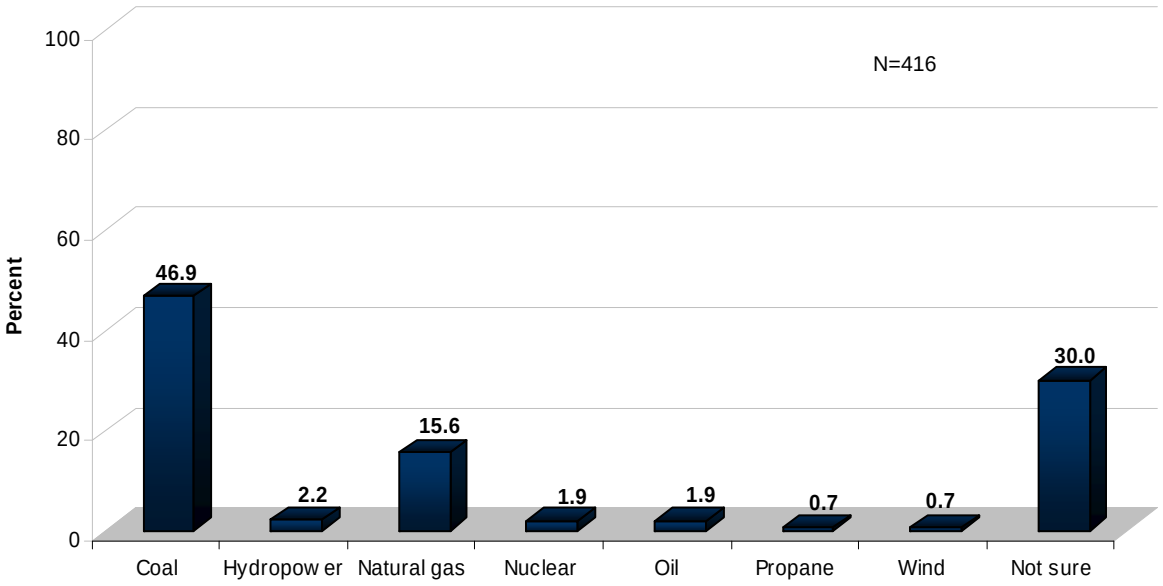
28) Do you believe that energy from renewable or green sources costs less, about the same or more than the sources you currently use?

Almost 46% believed that energy from renewable or green sources *Cost more* than sources currently used. Roughly 23% thought it *Costs about the same*; 12.6% thought it *Costs less*. About 19% were *Not sure*.



29) Which of the following is currently the number one source of electricity in Iowa?

Almost 47% of the respondent group thought *Coal* was the number one source of electricity in Iowa. Only 15.6% stated *Natural Gas*, while less than 7.5% voted for *Hydropower, Nuclear, Oil, Propane* and *Wind* combined. Roughly one-third of the group was *Not sure*.



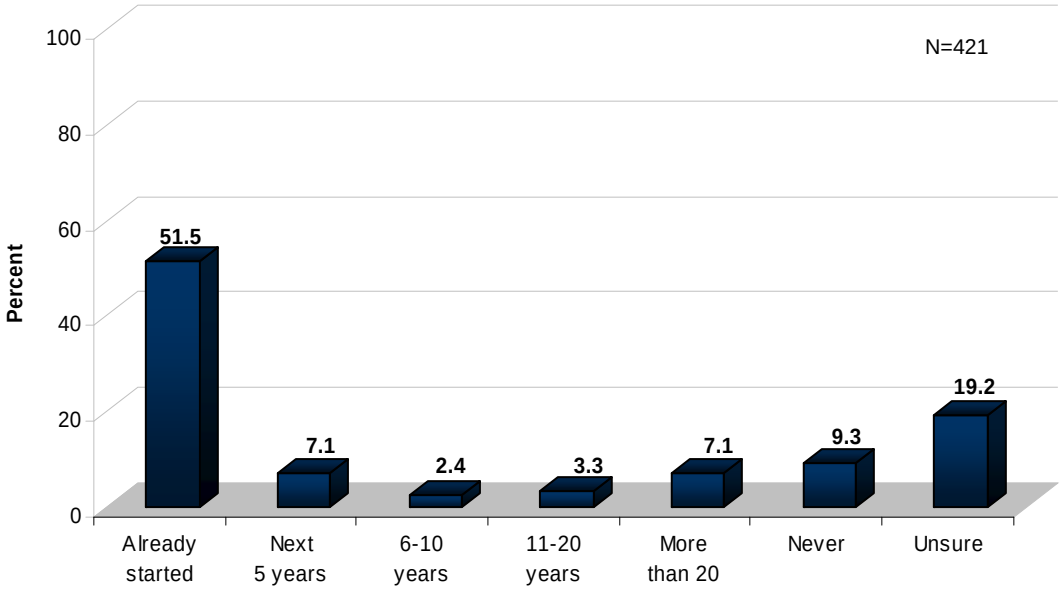
30) Please rate your level of agreement with the following statements.

Overall, respondents were only slightly likely to agree with the following statements as indicated by the means which were all lower than 2.77 on a zero to four scale. They agreed most with the statements *Burning fossil fuels contributes to greenhouse gasses and global warming* (2.77) and *Global climate change is a serious problem* (2.73). The least agreement was seen with the statement *Global climate change is a naturally occurring event on which people have little impact* (1.63).

	Mean
Global climate change is a serious problem.	2.73
Global climate change is a naturally occurring event on which people have little impact.	1.63
Burning fossil fuels contributes to greenhouse gasses and global warming.	2.77
Producing energy from renewable sources will slow global warming/climate change.	2.56

31) When do you think Iowa will start to experience the effects of human-influenced global warming?

Over half the participants thought that Iowa has *Already started* to experience the effects of human-influenced global warming. Roughly 7% felt it will happen in the *Next 5 years* and another 6% who thought it will happen between 6 and 20 years. Over 9% do not believe Iowa will ever start to experience the effects, while almost 20% were *Unsure*.



32) Have you recently used any energy efficiency resource offered by the following organizations?

Half of the group had used energy efficiency resources from their *Local utility provider* and 20% had turned to the *World Wide Web*. Less than 5% had used the *Iowa State University Extension*, the *Iowa Energy Center*, the *Local library* and *UNI's Center for Energy and Environmental Education*.

N=425	%
Iowa Energy Center	2.4
Your local utility provider	49.9
Your local library	2.4
Iowa State University Extension	4.5
University of Northern Iowa's Center for Energy and Environmental Education	0.2
World Wide Web	17.2
Other	5.6

The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *None – 11*
- *Magazines/Newspapers – 3*
- *Changed all light bulbs – purchased by MC – 1*
- *Corporate sponsored website – 1*
- *Energy Star – 1*
- *Plumber – 1*
- *Recycle a lot – 1*
- *Wind Power Dealers – 1*

33) In your opinion, how trustworthy is each of the following sources of information?

Respondents felt *College/university centers/services* and their *Utility providers* were the most trustworthy sources with means of 2.71 and 2.55, respectively. They were least likely to believe the *News media,* as indicated by a mean of 1.98.

	Mean
State government agencies	2.24
Federal government agencies	2.09
Your utility provider	2.55
News media (radio, television, newspapers, magazines)	1.98
Local contractor(s)	2.08
College/university centers/services	2.71

34) When looking for information on energy topics, which of the following are your three most preferred sources?

Around 60% of respondents turned to their *Utility provider* and the *Internet* for information on energy topics. Around 40% turned *to Booklets/brochures, TV* and *Newspapers*. Less than 20% used *Magazines* or the *Radio*.

N=425	Percent
TV	40.7
Magazines	17.6
Internet	58.8
Your utility provider	61.6
Radio	13.2
Newspapers	36.5
Booklets/brochures	43.3
Other	5.6

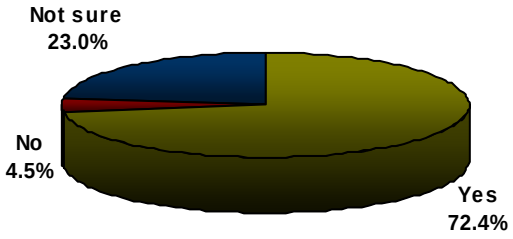
The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Library – 4*
- *Word of Mouth – 2*
- *Books – 1*
- *Environmental Organizations – 1*
- *Extension Services – 1*
- *Government Agencies – 1*
- *Home improvement center – 1*
- *ISU Extension – 1*
- *Local IBEW – 1*
- *Natural Resource Defense Council – 1*
- *Professional Publications and Engineers – 1*
- *Public Television and Radio – 1*
- *Research Journals – 1*
- *Wind-Solar dealers – 1*

35) Does your utility provider offer rebates or incentives on the purchase of energy efficient products?

Three-fourths of the respondents said their utility provider offered rebates or incentives for the purchase of energy efficient products. While 4.5% said *No*, 23% were *Not sure*.

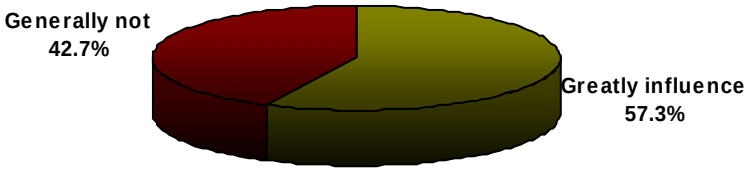
N=421



36) Which one of the following statements about energy incentives and rebates best describes your situation?

Energy rebates and incentives *Greatly influenced* 60% of participants' decisions to buy more energy efficient products.

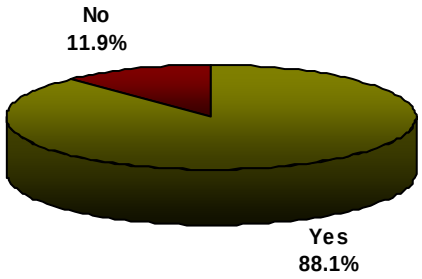
N=412



37) Are you familiar with Energy Guide or Energy Star labels (the stickers that help consumers identify which products are more energy efficient)?

Almost 90% of the respondent group was familiar with Energy Guide or Energy Star labels.

N=421



38) Which of the following do you believe to be mostly true or mostly false?

Over 80% of participants believed the following statements to be mostly true. *Products with a high Energy Star or Energy Guide rating perform as well as, or better than, those with a lower rating, I believe a product with Energy Star/Energy Guide labels may cost more initially, but over the life of the product I'll come out ahead due to the savings on operating costs* and *Buying Energy Star and Energy Guide products makes me feel like I'm positively impacting the environment*. Over 70% believed the statements *The Energy Guide Rating or Energy Star label greatly influences my purchase decisions* and *High Energy Star and Energy Guide rated products offer more value than low Energy Star, Energy Guide products* were mostly true. Less than 30% were *Concerned they may not own higher priced energy efficient appliances long enough to recover the additional cost through energy savings* and only 11% believed the statement *Products with high Energy Star or Energy Guide ratings usually require more maintenance* was true.

	% Mostly True
The Energy Guide Rating or Energy Star label greatly influences my purchase decisions.	75.1
Initial product cost is more important that the Energy Star or Energy Guide rating.	42.6
Product features are more important than the Energy Star or Energy Guide rating.	46.6
High Energy Star and Energy Guide rated products offer more value than low Energy Star, Energy Guide products.	74.6
Products with a high Energy Star or Energy Guide rating usually cost more.	66.6
Products with a high Energy Star or Energy Guide rating usually require more maintenance.	11.2
Products with a high Energy Star or Energy Guide rating perform as well as, or better than, those with a lower rating.	85.8
It costs more to manufacture a product with a higher Energy Star or Energy Guide rating.	47.9
Buying Energy Star and Energy Guide products makes me feel like I'm positively impacting the environment.	83.1
I believe a product with Energy Star/Energy Guide labels may cost more initially, but over the life of the product I'll come out ahead due to the savings on operating costs.	85.0
I'm concerned that I may not own higher priced energy efficient appliances long enough to recover the additional cost through energy savings.	29.1

Executive Summary: Housing

The housing survey was mailed to individual homeowners and does not reflect results of individuals who rent or lease their primary residence. The age and gender distribution of respondents to this survey closely reflects the 2000 Iowa Census information from the U.S. Census Bureau. A majority of the population, around 57%, had 1-2 residents currently living in their household. Almost 32% of the group reported 3-4 residents, with an additional 11% reporting 5-6 people in their household. About 61% of the respondent group had no children living in their household. About 30% reported 1-2 children, with an additional 9% who had 3-4 children. Three-fourths of the respondent group reported at least some college education and about 57% had received a degree. Just over 22% of the respondent group had the educational level of a High School/GED or less.

Approximately 40% of the respondent group reported annual household incomes of $50,000 or less. Roughly 46% reported between $50,000 and $100,000 and only 16% reported annual incomes of over $100,000. The majority of respondents, 91.7%, lived in a single-family home. Approximately 7% had a condo/townhouse/duplex, while 1.4% lived in a mobile home. Almost all participants, 96%, reported living in Iowa 12 months a year.

A large majority of the surveyed population reported natural gas as their primary source of heat with 69.3%, followed by propane and electricity with 26% combined. Secondary heat sources showed more of a spread with electricity at 21.6%, followed by wood with 9.9%, and natural gas and propane with 3.3% each. MidAmerican and Alliant Energy were the top two providers of electricity, serving 35.5% and 36.3% of the respondent group respectively. About 15% had REC co-op while less than 13% had a municipal utility. Almost 43% of the respondent group listed MidAmerican as their heat energy provider. Alliant Energy was reported by roughly 20% of the group, while 16% had a propane provider and 12.5% used Blackhills/Aquilla. Very few, only 8.4% used a municipal utility and almost no one reported fuel oil.

Participants felt most knowledgeable about energy efficiency practices, Energy Star ratings for appliances and local utility incentives or rebates. They felt less knowledgeable about energy audits, wind generation of electricity, geothermal/ground source heating and cooling, solar heating, solar hot water heating and insulated concrete form construction. The group, as a whole, had very little knowledge related to structural insulated panels, heat recovery ventilation systems and photovoltaic cells to produce electricity.

Overall, respondents believed they had a somewhat reasonable chance at reducing their household energy use. Almost all respondents, 97%, believed being more energy efficient in the home would actually reduce the amount paid for utilities each month. They also felt somewhat confident that their electricity supplier and natural gas/propane supplier would be able to deliver the electricity, natural gas or propane they need now and in the future. However, they were less likely to believe that electricity, natural gas and propane pricing will be affordable for them in the future. Overall, respondents believed they received the fair value compared to the price paid for electricity for their home. They placed less fair value on natural gas and significantly less fair value on propane for the home. Almost all respondents, 96.9%, believed household energy costs are going to increase over the next two to five years.

Most respondents would be willing to live near solar and wind farms as compared to nuclear power plants and coal-fired power plants. The majority, 61.2% of respondents, was unwilling to live within 10 miles of a nuclear power plant and 55.4% were unwilling to live within 10 miles of a coal-fired power plant.

Two-thirds of the respondent group believed a highly energy efficient house would cost more to build but would bring a higher selling price than a less efficient house. Almost all respondents, 93%, said they would be willing to pay 10% more for a home with a high-energy efficiency rating. Only 6.2% of the respondent group actually planned to build or buy a home within the next year. When respondents were asked to rank order criteria that would be important to them if they were to buy or build a home, the most important criteria were location, followed by price and quality of construction. Respondents would pay the least attention to energy efficiency, cost of property taxes and amenities. Almost all respondents, 97.6%, reported energy efficiency was important when remodeling their home. Over half thought it was very important, with an additional 42% who thought it was somewhat important.

Almost 45% of respondents reported always making conscious decisions or intentionally taking action to reduce energy use in their home, with an additional 50.5% in the sometimes category. Of the participants who reported always and sometimes making conscious decisions or intentionally taking action to reduce energy use in their home, three-fourths did so primarily to save money. A much smaller percentage, 16.2%, did so because it was the right thing to do. Less than 5% were worried about global warming/climate changes; only 2.3% were concerned about importing too much fuel.

The most common energy saving action of respondents with over 90% regularly turn off lights and appliances when not in use. Over 80% almost always take showers instead of baths, plan to purchase high efficiency appliances when current appliances need to be replaced and keep the house cooler in the winter and warmer in the summer to save energy. About 70% use compact fluorescent bulbs and a setback thermostat for heating. About 60% use a setback thermostat for cooling and turn off their home computer when not in use. About 50% only heat/cool occupied rooms in the house and have made energy improvements to their house without having an energy audit completed. Less than one-third of respondents have investigated alternative ways to heat and cool the home, had an energy audit performed or have made improvements based on an energy audit.

Slightly over 85%, of the respondent group said they research appliances/products before they shop. Two-thirds believed energy efficient appliances cost more to purchase than less efficient appliances. About 63% said they always use the Energy Star Rating to make their decision on which appliance to buy, however initial cost and reliability/quality were the two factors that had the most impact on purchase decisions. About 42% said they relied on the salesman’s recommendation as to which appliance/product is best.

About 60% of respondents indicated they would consider powering their homes with energy produced from solar panels if the panels and installation cost $10,000 and would reduce their annual energy bill by $1,000. Offering a 10% rebate on the purchase of solar panels did not increase the number of respondents willing to invest in solar panels, but a $10,000 income tax deduction did increase the percentage of interest to about 73%.

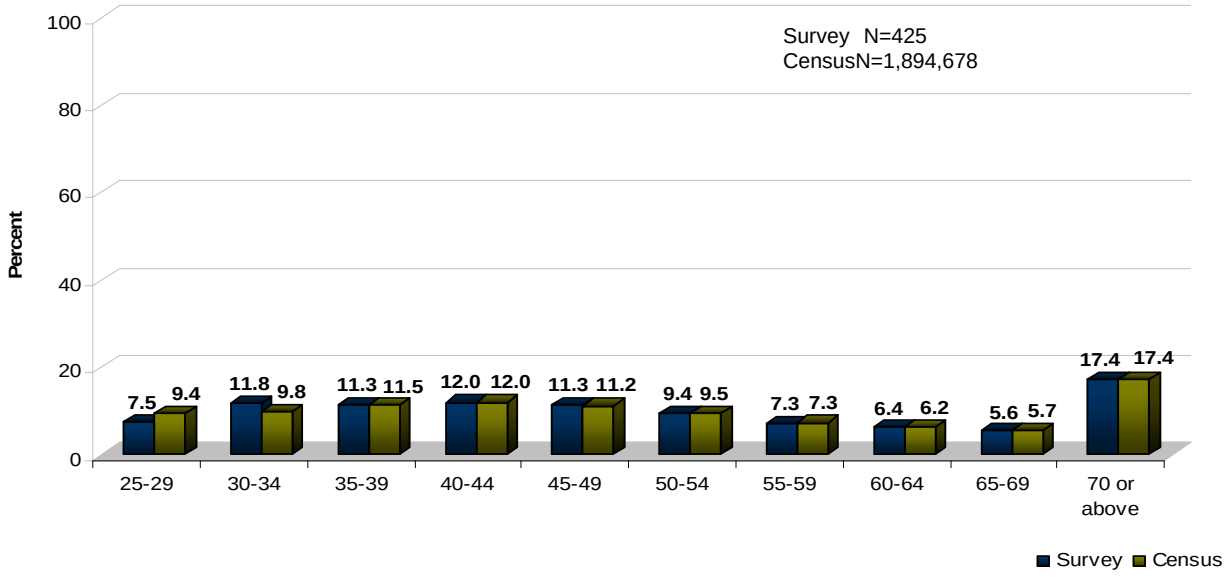
Less than one-third of respondents was likely to power their homes with a wind generator costing $12,000 to $15,000 resulting in an annual reduction in energy costs of $400. Between 50% and 60% were concerned about overall cost, maintenance costs and concerned that a wind generator would not pay for itself through energy savings. A 10% rebate did not significantly increase respondents’ willingness to purchase a wind generator, however a $12,000 - $15,000 tax deduction almost doubled the number of respondents wiling to purchase a wind generator.

Almost 64% would consider equipping their homes with a solar hot water heater if it cost $1,500 and would save them $30 a month on their utility bill. A 10% rebate did not increase the percentage of people interested in purchasing a solar water heater and a $1,500 tax rebate only slightly increased the percentage of people interested in a solar water heater.

Results: Housing

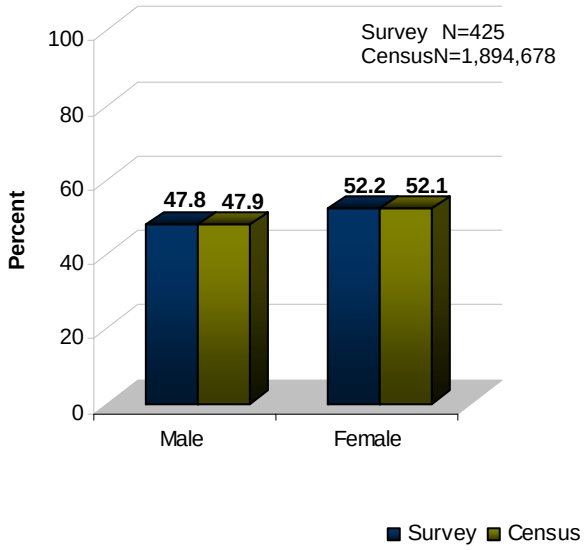
A) To which of the following age groups do you belong?

The age distribution of respondents was matched closely to the 2000 Census information for the state of Iowa.



B) What is your gender?

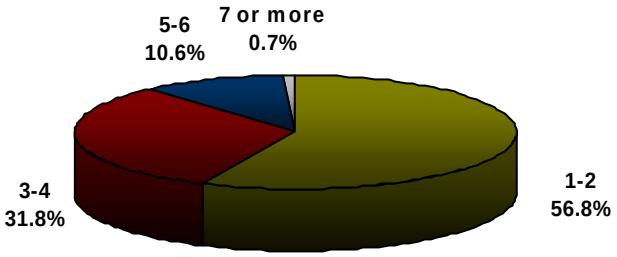
The gender also follows the 2000 Census information for the state of Iowa.



C) How many people live in your household?

A majority of the population, around 57%, had *1*-2 residents living in their household. Almost 32% of the group reported *3-4* residents, with an additional 11% who had *5-6* people in their household. Less than 1% had *7 or more*.

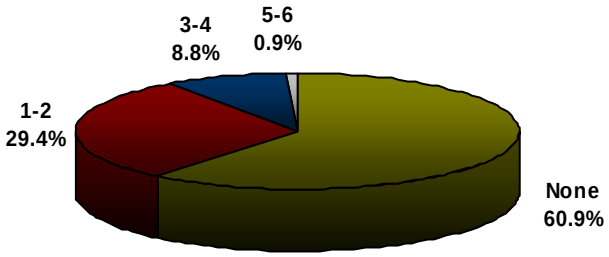
N=424



D) How many people in your household are under the age of 18?

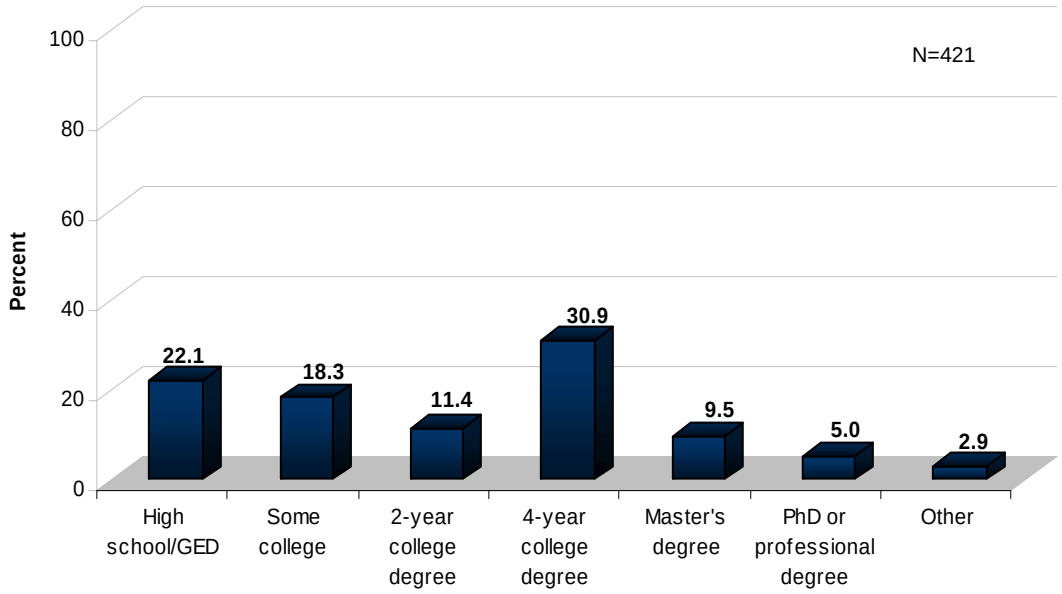
Just over 60% of the respondent group had no children living in their household. About 30% reported *1-2* children and an additional 9% who had *3-4*. Less than 1% had 5 or more children.

N=422



E) What is the education level of the primary income generator?

Three-fourths of the respondent group reported at least some college level education. Just over 60% of the group received a degree, with roughly 15% of those who earned an advanced degree. This leaves only one-fourth with the educational level of a *High School/GED* or less.

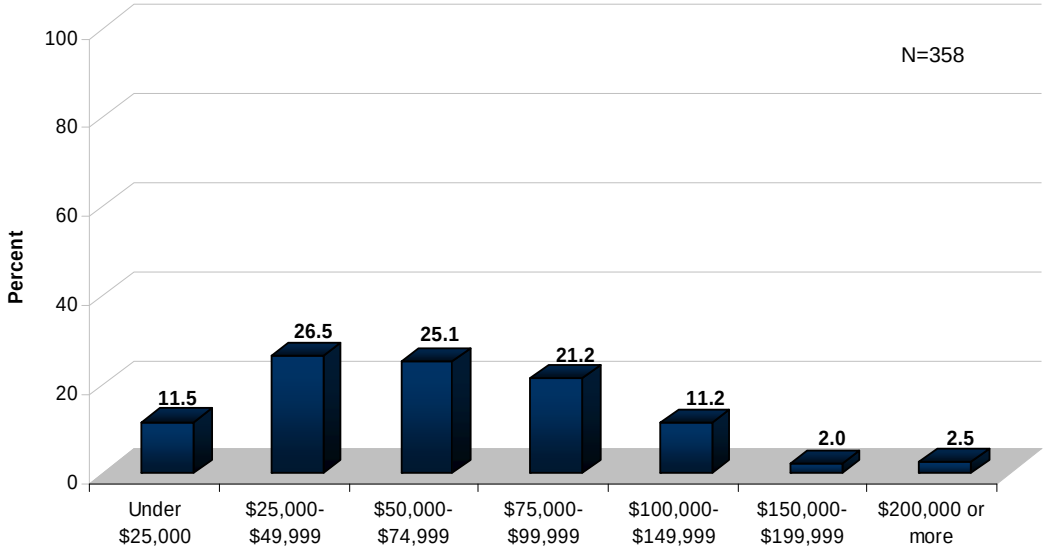


The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Below high school - 6*
  - 8th Grade - 3
  - Some high school
  - 10th grade
  - 11th grade
- *Trade school – 2*
  - 3 yr school
  - Special trade certificates
- *Journeyman lineman*
- *Business College - 2*

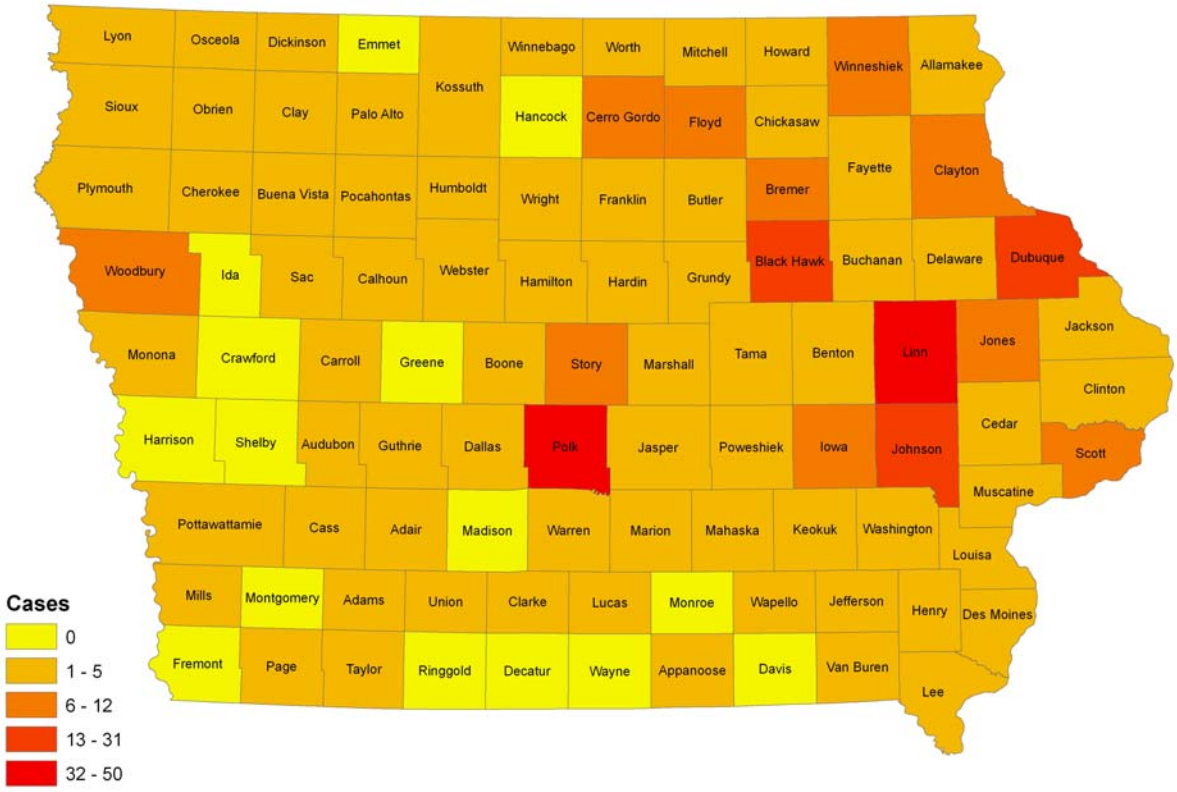
F) What is your annual household income?

Roughly 40% of the respondent group reported annual household incomes of $50,000 or less. An additional 46% fell between $50,000 and $100,000. Less than 16% reported an annual household income of over $100,000.



G) What is your zip code?

As shown in the map below and the table on the following page, higher concentrations of respondents were from counties where larger cities are located.

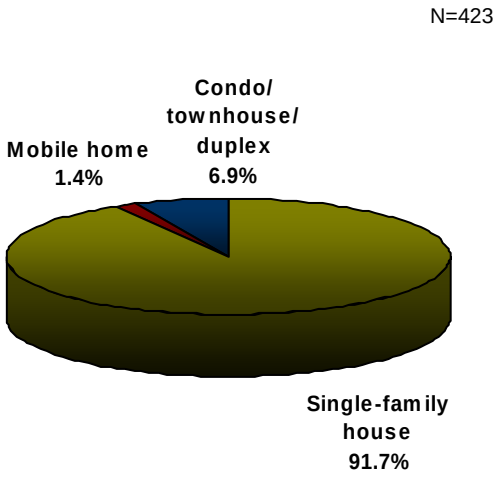


The following table shows the number of respondents from each county.

	Frequency		Frequency		Frequency
Adair	2	Fayette	3	Muscatine	4
Adams	2	Floyd	7	O”Brien	2
Allamakee	5	Franklin	2	Osceola	2
Appanoose	2	Grundy	4	Page	2
Audubon	1	Guthrie	1	Palo Alto	1
Benton	3	Hamilton	3	Plymouth	2
Black Hawk	28	Hardin	3	Pocahontas	1
Boone	3	Henry	2	Polk	60
Bremer	7	Howard	5	Pottawattamie	2
Buchanan	4	Humboldt	3	Poweshiek	3
Buena Vista	3	Iowa	6	Sac	4
Butler	2	Jackson	4	Scott	12
Calhoun	4	Jasper	5	Sioux	5
Carroll	1	Jefferson	1	Story	10
Cass	2	Johnson	16	Tama	5
Cedar	4	Jones	5	Taylor	2
Cerro Gordo	6	Keokuk	2	Union	2
Cherokee	1	Kossuth	3	Van Buren	1
Chickasaw	2	Lee	3	Wapello	4
Clarke	1	Linn	44	Warren	2
Clay	2	Louisa	1	Washington	2
Clayton	6	Lucas	1	Webster	4
Clinton	6	Lyon	1	Winnebago	1
Dallas	2	Mahaska	2	Winneshiek	5
Delaware	1	Marion	1	Woodbury	10
Des Moines	3	Marshall	4	Worth	3
Dickinson	1	Mills	1	Wright	5
Dubuque	25	Mitchell	2		

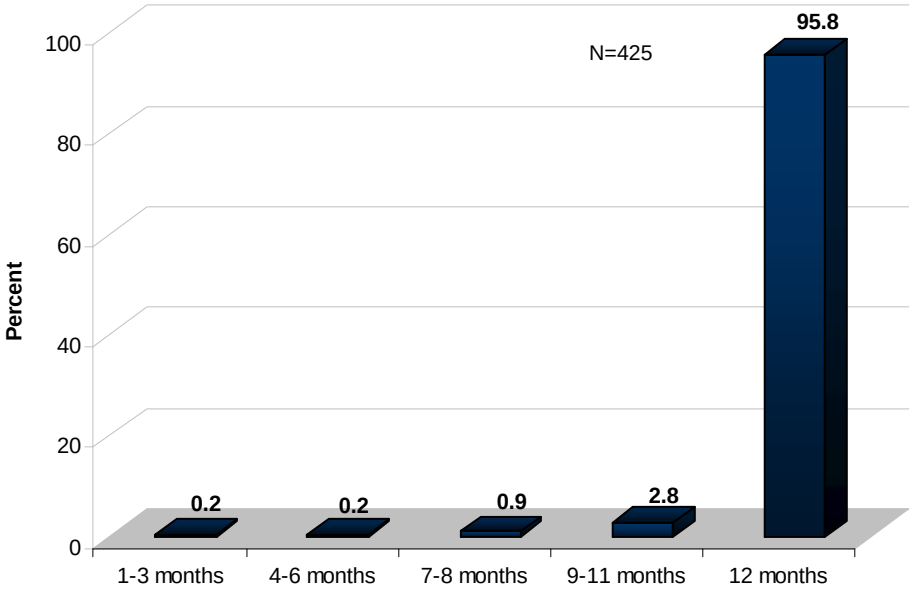
H) Which best describes your current home?

The vast majority of respondents, 91.7%, lived in a *Single-family home*. Approximately 7% had a *Condo/townhouse/duplex*; 1.4% lived in a *Mobile home*.



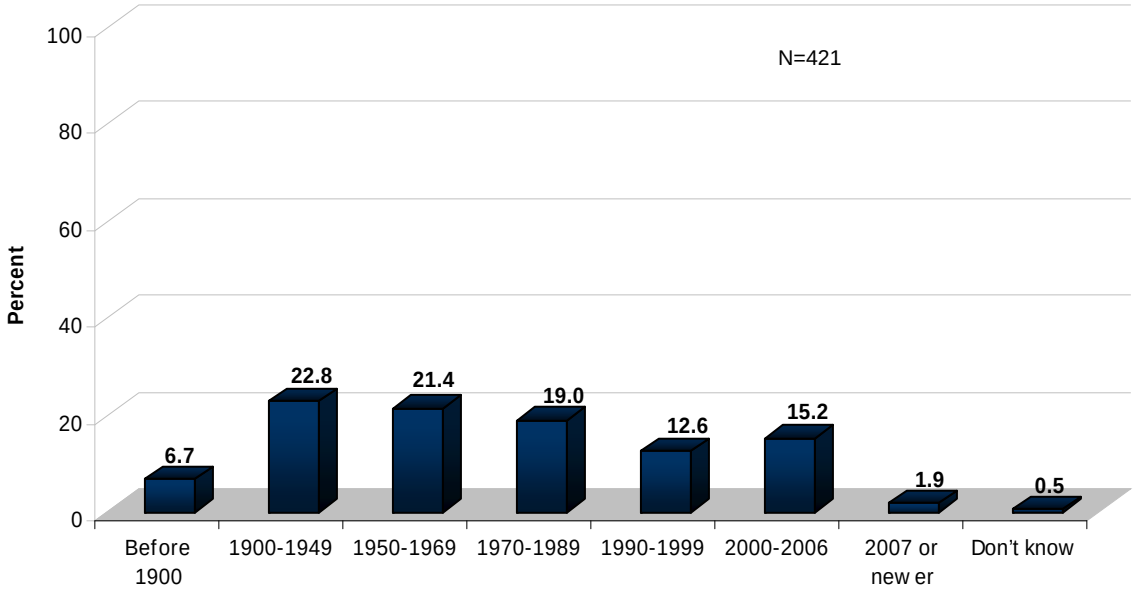
I) How many months do you live in Iowa each year?

Almost all participants, 96%, reported living in Iowa year round. Of those remaining, the majority said they live in Iowa *9-11 months* each year. Less than 1.5% were in Iowa less than 9 months each year.



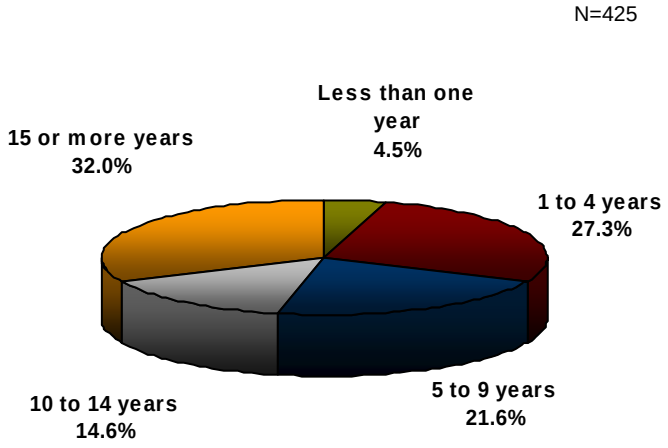
J) Approximately when was your home built?

Very few homes, less than 7%, were built before 1900. Roughly 45% were built between 1900 and 1969 and an additional 32% were built between 1970 and 1999. Almost 20% were built after 2000.



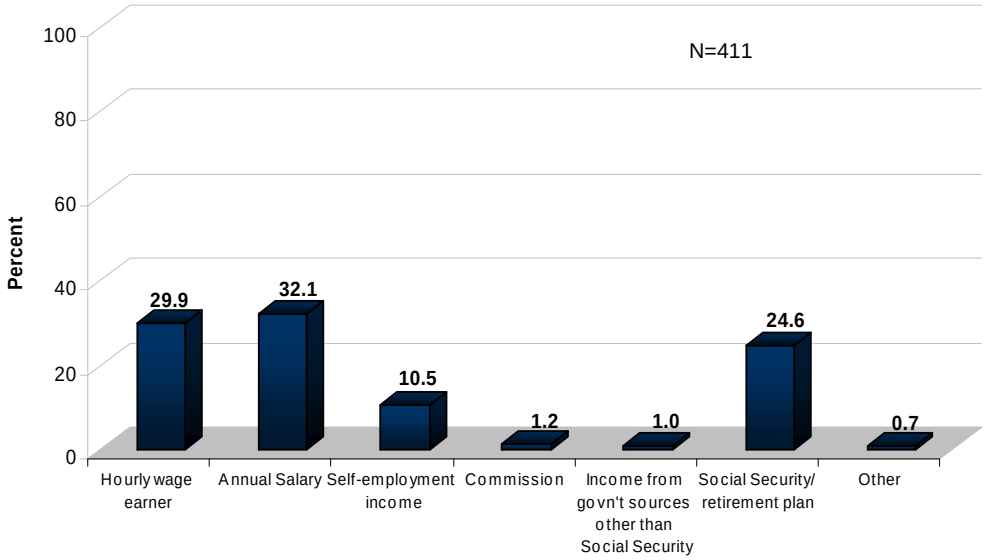
K) How long have you lived in your current home?

Approximately one-third of the respondent group lived in their current home less than five years. Roughly 22% had their home between 5 and 9 years, with an additional 15% who reported owning their home for 10 to 14 years. The remaining one-third had been in their current home for *15 years or more*.



L) How is your household's primary income generated?

Just over 60% of respondents' income was generated by an *Annual salary* or *Hourly wage*. *Social Security/retirement plans* were reported by about one-fourth of the group. Right at 10.5% of the group generated income through *Self-employment*; while *Commission*, *Government sources other than Social Security* and *Other* were responsible for less than 3% of the populations' primary income.

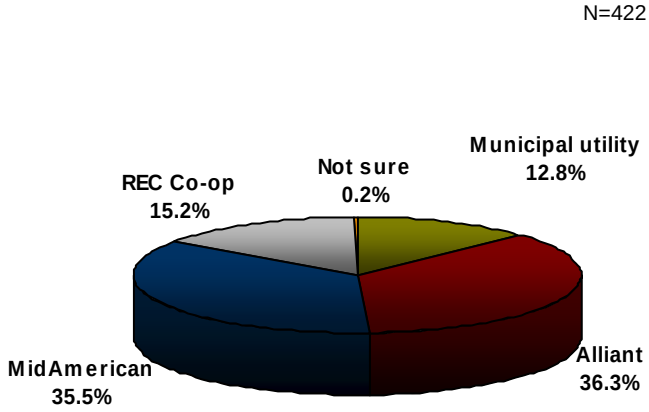


The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Multiple – 2*

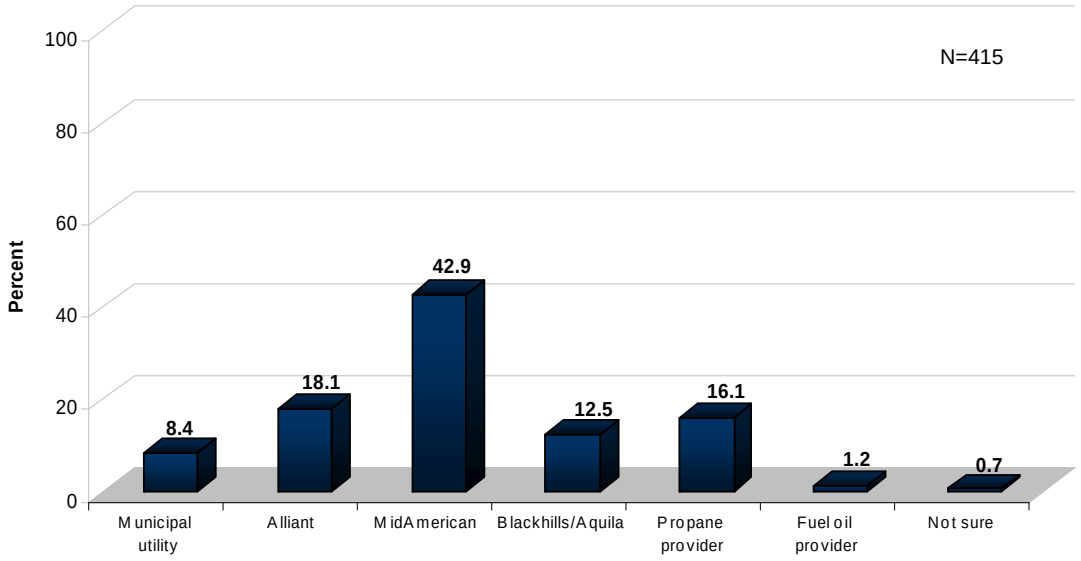
M) Who is your current electric provider?

MidAmerican and *Alliant* were the top two providers of electricity, servicing 35.5% and 36.3% of the respondent group, respectively. About 15% had *REC Co-op*, while less than 13% used a *Municipal Utility*. Less than 1% was *Not sure* of their current electric provider.



N) Who is your current heat energy provider?

Almost 43% of the respondent group listed *MidAmerican* as their heat energy provider. *Alliant* was reported by roughly 20% of the group, while 16% had a *Propane* provider and 12.5% used *Blackhills/Aquilla*. Very few, only 8.4%, used a *Municipal Utility* and almost no one reported *Fuel oil.*

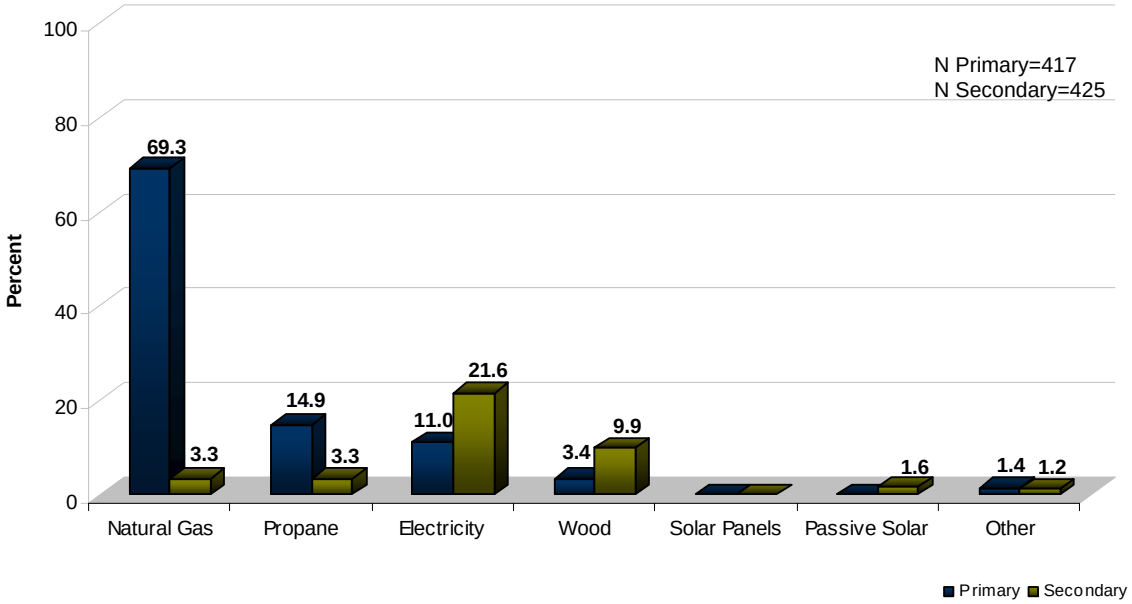


The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *CFU – 9*
- *Midland Electric – 2*
- *Access Energy – 1*
- *Ames – 1*
- *AMV – 1*
- *City of Waukee – 1*
- *Clidden REC Geothermal – 1*
- *Corning – 1*
- *Eastern Iowa REC – 1*
- *GMU – 1*
- *Linn County REC – 1*
- *People's National Gas – 1*
- *Preston – 1*
- *REC – 1*
- *Sanborn Utilities - 1*
- *Tipton – 1*
- *Woodbury REC Coop – 1*

1) Please check the one primary source of heat for your residence. Next, please check all of your secondary sources of heat.

A large majority of the survey population reported *Natural gas* as their primary source of heat with 69.3%. *Propane* and *Electricity* made up almost all the remaining responses with about 26% combined. Secondary sources showed more of a spread with *Electricity* at 21.6%, followed by *Wood* with 9.9%, and *Natural gas* and *Propane* with 3.3% each.



The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Fuel Oil – 3*
- *Corn – 3*
- *Boiler Heat – 1*
- *Electric Fireplace - 1*
- *Geothermal/Radiant Floor Heat – 1*
- *Ground source heat pump – 1*
- *Kerosene – 1*

2) How knowledgeable are you about the following as they relate to your home?

Participants felt most knowledgeable about *Energy efficiency practices*, *Energy Star ratings for appliances* and *Local utility incentives or rebates for the purchase of energy efficient appliances/products* with means above the midpoint of two on the zero to four scale. They felt less knowledgeable about *Energy audits*, *Wind generation of electricity*, *Geothermal/ground source heating and cooling*, *Solar heating*, *Solar hot water heating* and *Insulated concrete form construction*. The group as a whole had very little knowledge related to *Structural insulated panels*, *Heat recovery ventilation systems* and *Photovoltaic cells to produce electricity,* with means below one on the zero to four scale.

	Mean
Energy efficiency practices	2.71
Solar hot water heating	1.06
Energy Star ratings for appliances	2.61
Your local utilities' incentives or rebates for the purchase of energy efficient appliances/products	2.23
Wind generation of electricity	1.53
Energy audits	1.64
Solar heating	1.24
Geothermal/ground source heating and cooling	1.51
Photovoltaic cells to produce electricity	0.67
Insulated concrete form (ICF) construction	1.04
Heat recovery ventilation systems	0.74
Structural insulated panels (SIP)	0.80

3) Which of the following do you use or do on a regular basis at your home?

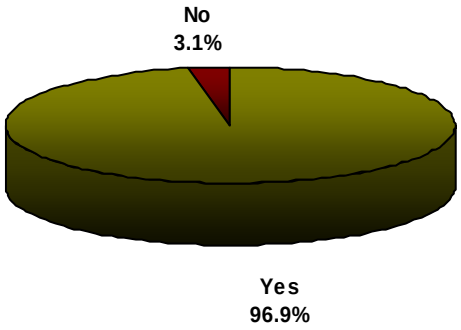
Over 83% of respondents *Open windows in the summer* and 62.4% use *Energy Star ratings to help make decisions when purchasing appliances/products*. A little less than half, 45%, use *Local utility incentives or rebates for the purchase of energy efficient appliances/products* while one-third of the respondent group uses *Passive solar heating*. The remaining alternative energy sources were used by less than 12% of the respondent group combined.

N=425	%
Wind generator	0.2
Biomass (wood or pellet) heat source	7.8
Solar hot water heating	0.0
Energy Star ratings to help make decisions on purchase of appliances/products	62.4
Your local utilities' incentives or rebates for the purchase of energy efficient appliances/products	44.9
Passive solar heat (intentionally opening and closing blinds/curtains to control the amount of sun entering your home)	30.4
Opening windows in the summer	83.1
Geothermal heating and cooling	3.5
Photovoltaic cells to produce electricity	0.0
Fuel cells (e.g., hydrogen)	0.0

4) Generally speaking, do you believe that being more energy efficient in your home will reduce the amount you pay for utilities each month?

Almost all respondents believed being more energy efficient in the home would reduce the amount of their utilities each month.

N=422



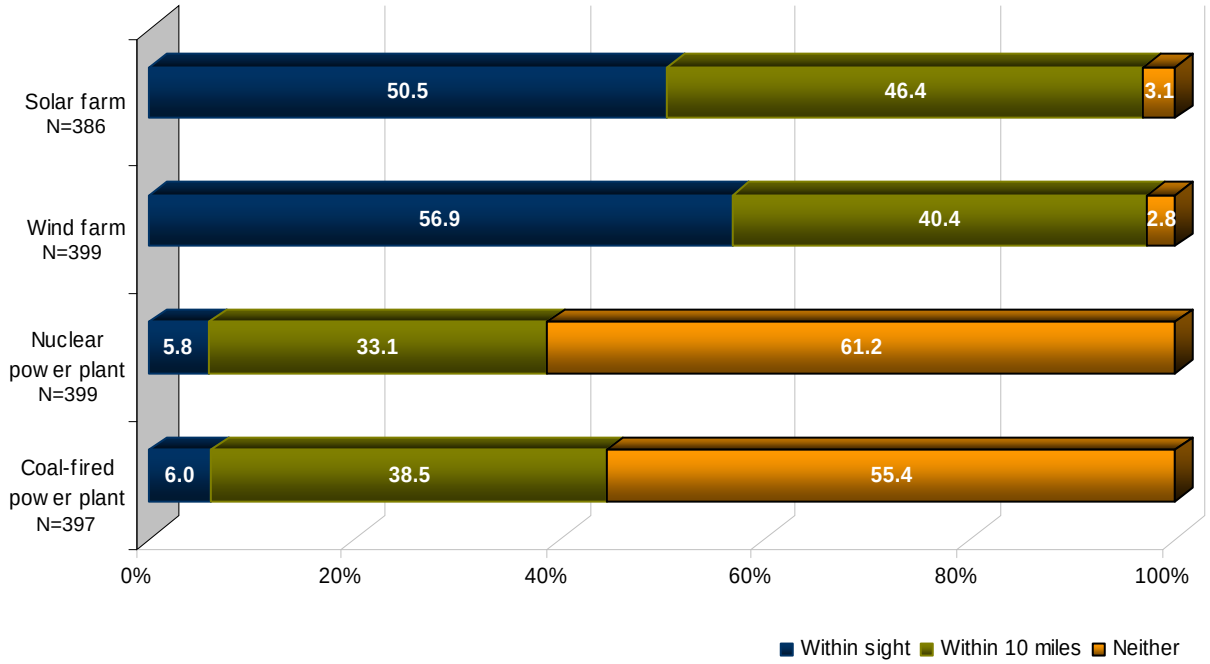
5) Please rate your level of agreement with the following statements.

Overall, respondents believed they had a somewhat reasonable chance at reducing their household energy use. They also felt somewhat confident that their *Electricity supplier* and *Natural gas/propane supplier would be able to deliver the electricity, natural gas or propane they need now and in the future* with means between 2.34 and 2.82 on a zero to four scale. However, they were less likely to believe that *Electricity, Natural gas and propane pricing will be affordable for them in the future* with means between 1.55 and 1.84.

	Mean
You have the ability to reasonably reduce your household energy use.	2.78
You are confident that your electricity supplier will be able to deliver the electricity you need now and in the future.	2.82
You are confident that electricity pricing will be affordable for you and your family in the future	1.84
You are confident that your natural gas/propane supplier will be able to deliver the natural gas/propane you need now and in the future.	2.34
You are confident that natural gas/propane pricing will be affordable for you and your family in the future.	1.55

6) Which of the following would you be willing to accept within sight of your home and which would you be willing to accept within 10 miles of your home?

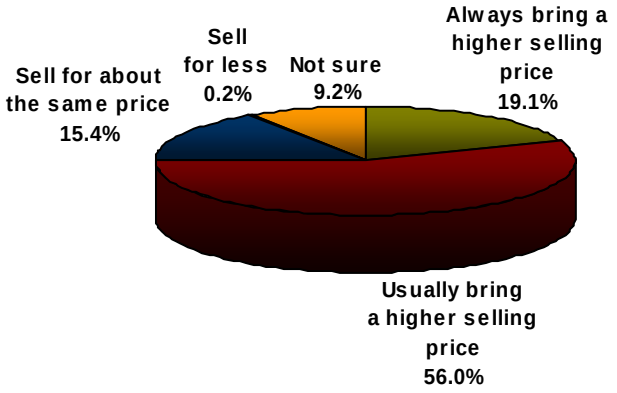
Most respondents appeared more tolerant of living near solar and wind farms as compared to nuclear power plants and coal-fired power plants. Only 3.1% and 2.8% of the group were unwilling to live within 10 miles of solar and wind farms respectively, compared to the 61.2% of respondents who were unwilling to live within 10 miles of a nuclear power plant and the 55.4% of respondents who were unwilling to live within 10 miles of a coal-fired power plant.



7) Complete the following statement: When comparing two houses of equal size and features, the one that is more energy efficient will…

Three-fourths believed a more energy efficient house would bring a higher selling price; of this group almost 20% believed it will *Always bring a higher selling price*. While roughly 15% thought the houses would *Sell for about the same price*, only 0.2% thought an energy efficient house would *Sell for less.* There was a large portion, almost 10%, who were *Not sure*.

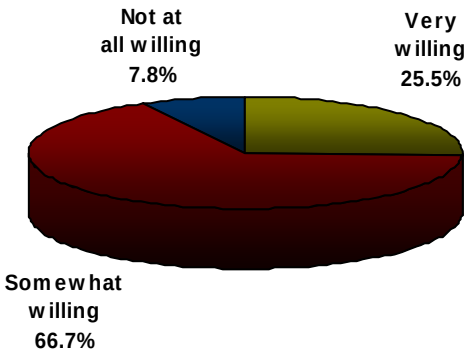
N=423



8) How willing would you be to pay 10% more for a home with a high energy efficiency rating?

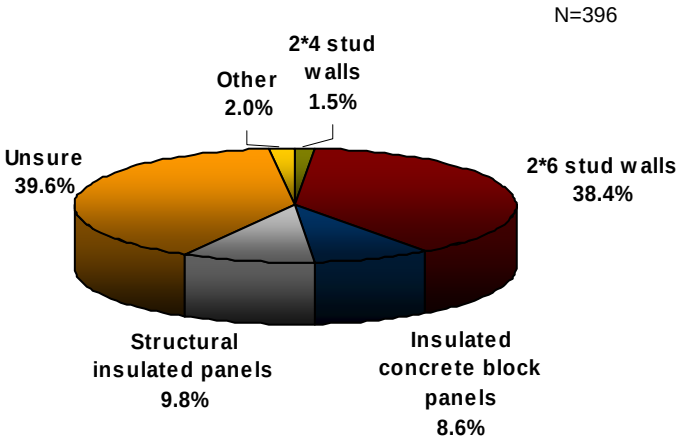
A majority of the population, almost 93%, would be willing to pay 10% more for a home with a high energy efficiency rating. Almost 26% were *Very willing* and an additional 67% where *Somewhat willing*. Only 7.8% were *Not at all willing* to pay 10% more for a higher efficiency home.

N=424



9) If you were going to build a new home, would your main living area most likely…

A large portion of the overall respondent group, approximately 40%, was *Unsure* of the type of construction they would use in the event they built a new home. Just under 40%, of the respondents who were able to answer, would use *2*6 stud walls*. Roughly 10% would use *Structural insulated panels* and about 9% would use *Insulated concrete block panels* even if the cost of these types of construction was 10% higher than more traditional types. Only 1.5% would use *2*4 stud walls* and there was a small percentage, 2%, that would use some *Other* type of construction.



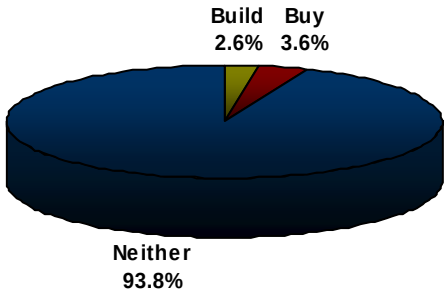
The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *2 x 10 Studs – 1*
- *Double Stud wall (9-10" cavity) Blown-in cellulose – 1*
- *Earth Sheltered home – 1*
- *I would have to research what was best before deciding – 1*
- *Install gas thermal – 1*
- *Reinforced concrete dome – 1*
- *Would investigate insulated block/panel options – 1*

10) Are you planning to…

Only a combined total of 6.2% of the respondent group planned to *Build* or *Buy* a home within the next year. An overwhelming majority of 93.8% reported *Neither*.

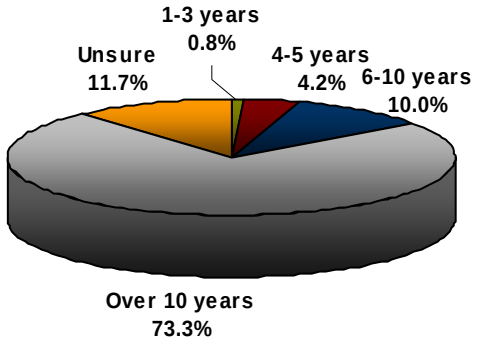
N=419



11) If you are planning to build a new house or buy another home in the next year, how long would you plan on owning it?

Of the 6.2% planning to build or buy a home in the next year, three-fourths planned to own that home for *Over 10 years*. An additional 10% planned to be in the home at least *6-10 years*, while 5% thought they would be in their next house less than 5 years. Almost 12% of the group was *Unsure*.

N=120



12) Assuming you were going to buy or build a home today, please rank order the top five following criteria in order of their importance to you.

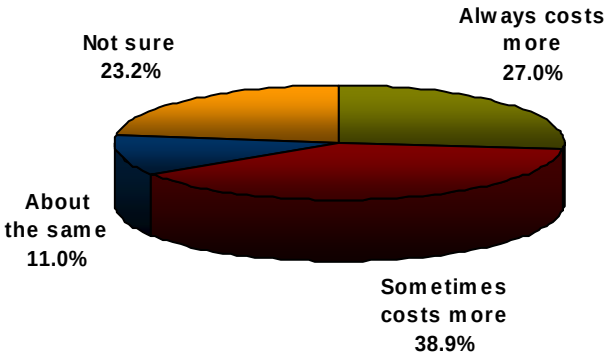
Overall, with means between 2.11 and 4.17, none of the factors were of extreme importance to participants. The most important criteria were *Location* with a mean of 2.11, followed by *Price* at 2.61 and *Quality* of construction at 2.95. Respondents paid the least attention to *Energy efficiency* (3.57), *Cost of property taxes* (3.68) and *Amenities* (4.17).

N		# of times ranked 1st	Mean
192	Looks/Style	17	3.45
353	Location	177	2.11
158	Cost of property taxes	9	3.68
320	Quality of construction	53	2.95
229	Size	21	3.12
346	Price	92	2.61
47	Amenities	2	4.17
264	Energy efficiency	19	3.57

13) Please complete the following statement: A high energy efficiency house…

Two-thirds of the respondent group believed a high energy efficiency house will cost more to build than a less efficient house. Right at 27% reported it would *Always cost more*; an additional 39% thought it would *Sometimes costs more*. Only 11% believed it would *Cost about the same* to build and 23% were *Not sure*.

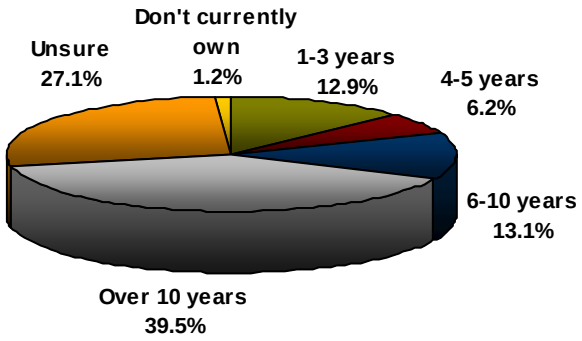
N=419



14) How much longer do you plan on owning your home?

A large percent, 39.5%, of the respondents said they plan to own their home for *Over 10 years*. Roughly 13% plan to stay between *6 and 10 years*, while almost 20% expected to own their home for 5 years or less. A significant amount, roughly 27%, was *Unsure*.

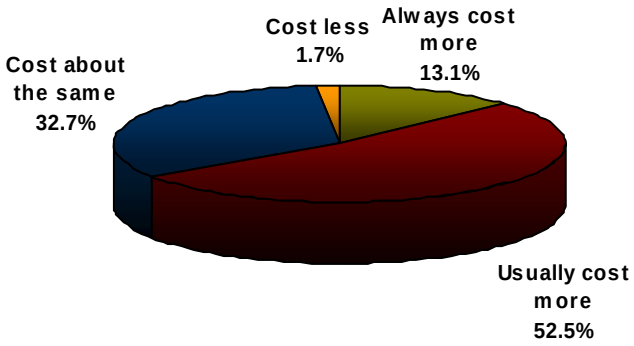
N=420



15) Complete the following statement: Energy efficient appliances…

Two-thirds of the group thought energy efficient appliances cost more than less efficient appliances; 13.1% of the group thought they *Always cost more* and 52.5% thought they *Usually cost more*. Just under one-third believed energy efficient appliances *Cost about the same* as less efficient appliances and 1.7% believed they *Cost less*.

N=413



16) Please rank order the top three factors that have the most impact on your decision when considering the purchase of new appliances for your home.

With means of 1.77 and 1.89 respectively, *Initial cost* and *Reliability/quality* were the two factors that had the most impact on participants' purchase decisions. The least important factor, with a mean of 2.30, and the factor selected by only 30 people as one of their top three, was *Amenities*.

N		# of times ranked 1st	Mean
335	Initial cost	167	1.77
157	Appearance/style	29	2.26
308	Energy Star rating (the operating cost over the life of the product)	65	2.19
346	Reliability/quality	128	1.89
30	Amenities	5	2.30

17) Concerning appliances for your home, please check the following statements as either mostly true or mostly false.

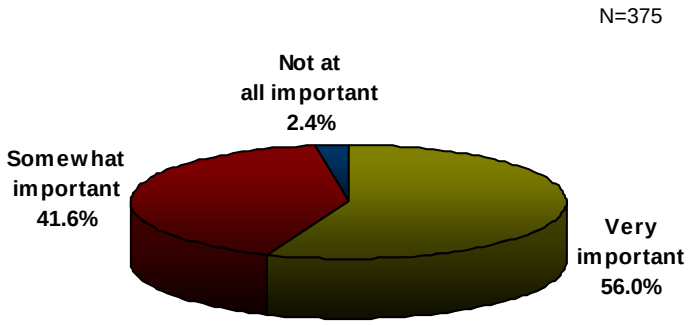
A large majority, just over 85%, of the respondent group *Researches the appliances/products before they shop*. Roughly 63% always use the *Energy Star Rating to make their decision on which appliance to buy*, while 42% said they *Relied on the salesman's recommendation as to which appliance/product is best*. Only 20% thought there was *A lack of selection of energy efficient appliances/products in their community*.

Just over 12% believe they *Won't own the appliance or product long enough to realize the savings from reduced energy use*, while 11% *Don't believe the energy savings are worth the additional initial cost*. A smaller portion, 9%, are *Not concerned whether or not an appliance is energy efficient when they are replacing an appliance*, 7.4% *Believe energy efficient products have limitations they are not willing to live with* and 5% *Believe they require more maintenance over the life of the product*.

	% Mostly True
There is a lack of selection of energy efficient appliances/products in my community.	17.7
I rely on the salesman's recommendation as to which appliance/product is best.	41.7
I do some research on appliances/products before shopping.	85.1
Energy efficient appliances/products require more maintenance over the life of the product.	5.0
Energy efficient products may have limitations I'm not willing to live with.	7.4
When an appliance needs replacing, I'm not concerned whether or not it is energy efficient.	9.0
The energy savings of energy efficient appliances/products are not worth the additional initial cost.	10.8
Typically, I won't own the appliance/product long enough to realize the savings from reduced energy use.	12.3
I always use the Energy Star Rating to make my decision on which appliance to buy.	62.8

18) If you have completed or plan to do any remodeling to your home, how important is/was energy efficiency in your remodeling plans?

Almost all respondents, 97.6%, reported energy efficiency was important when remodeling their home. Over half thought it was *Very important*, with an additional 42% who thought it was *Somewhat important*.



19) As they relate to your home, on which of the following would you like to have more information?

Over half the participants would like more information on *Energy efficiency practices* and *Local utility incentives or rebates for the purchase of energy efficient appliances/products*. Between one-fourth and one-half of the group would like information on *Using less natural gas or propane*, *Wind generation of electricity, Solar hot water heating*, *Energy audits*, *Energy Star ratings for appliances*, *Solar heating and geothermal heating and cooling*. The least amount of interest was seen in the topics *Photovoltaic cells to produce electricity*, *Using wood* and *Corn stoves for heat*.

N=425	%
Wind generation of electricity	36.7
Energy efficiency practices	52.2
Energy audits	32.0
Solar hot water heating	32.9
Energy Star ratings for appliances	31.1
Your local utilities' incentives or rebates for the purchase of energy efficient appliances/products	51.7
Solar heating	26.1
Geothermal heating and cooling	25.2
Photovoltaic cells to produce electricity	13.6
Using less natural gas or propane	40.0
Using wood for heat	12.2
Using corn stoves for heat	10.1

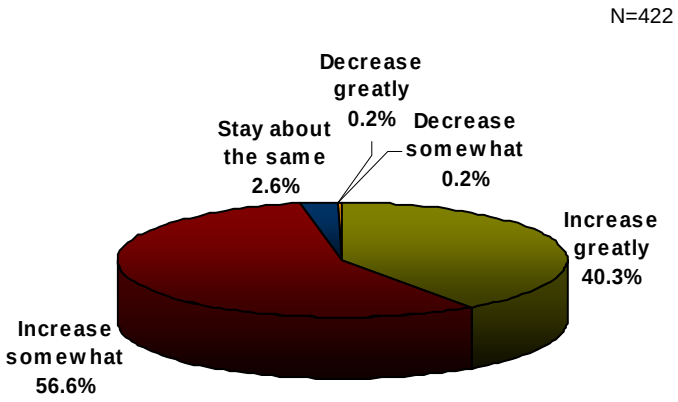
20) In your opinion, what is the value you receive from each of the following compared to the price you pay?

Overall, respondents felt they received the highest value compared to the price paid for *High energy rated appliances* and *Electricity for their home,* with means of 2.59 and 2.54, respectively. They placed less value on *Natural gas* for the home at 2.37 and significantly less value on *Propane for the home* at 1.65.

	Mean
Natural gas for your home	2.37
High energy rated appliances	2.59
Propane for your home	1.65
Electricity for your home	2.54

21) In your opinion, what do you think is going to happen to household energy costs (not including gasoline) over the next two to five years?

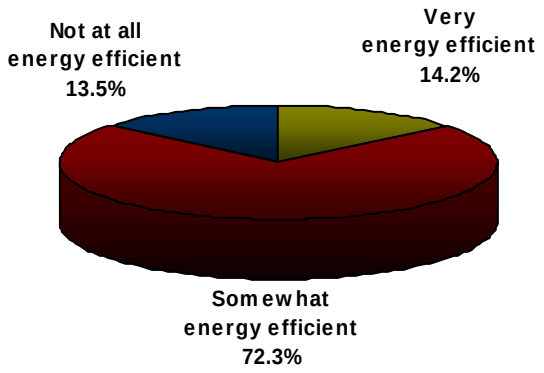
Almost all respondents, 96.9%, believed household energy costs are going to increase over the next two to five years. Of those, 40.3% believe they will *Increase greatly*, while 56.6% believe they will *Increase somewhat*. Roughly 2.5% believe the costs will *Stay about the same*. Less than 0.5% think costs will decrease to any degree.



22) I consider my house to be…

Approximately three-fourths of the respondent group believe their house is at least *Somewhat energy efficient*; an additional 14.2% reported owning a *Very energy* efficient house. The remaining 13.5% believed their home was *Not at all energy efficient*.

N=422



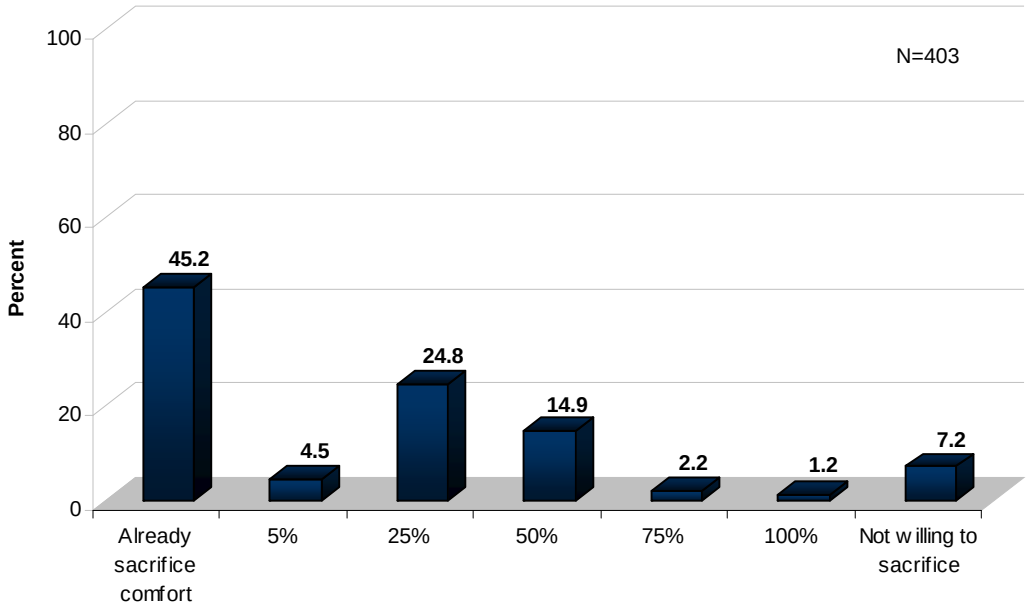
23) Do the following descriptions apply to your situation?

Roughly 60% reported currently owning a *High efficiency heating/cooling system*. Three-fourths of the group would only *Consider buying a high efficiency heating/cooling system to save energy costs when their old furnace stops working*, while roughly 34% said they *May consider buying a high efficiency heating/cooling system to save energy costs even if the old system is working*. Almost two-thirds would *Base their decision to purchase a high efficiency heating/cooling system on the payback period for the more efficient system*. Less than 9% reported *Not owning their house long enough to fully recover the extra initial cost of an energy efficient heating/cooling system*.

N		Yes
393	I currently have a high efficiency heating/cooling system.	61.3
202	I would consider buying a high efficiency heating/cooling system to save energy costs even if my old system is still working.	34.2
206	I would consider buying a high efficiency heating/cooling system to save energy costs only when my old furnace stops working.	74.3
197	My decision to buy a high efficiency heating/cooling system would be based on the payback period for the more efficient system.	64.0
190	I typically do not own a house long enough to fully recover the extra initial cost of an energy efficient heating/cooling system.	8.9

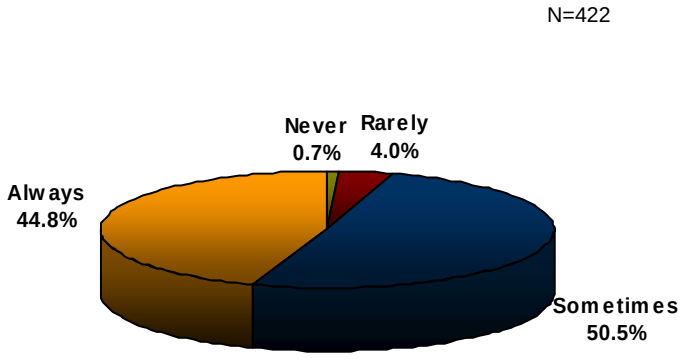
24) How much would your home heating and cooling costs have to increase in order for you to sacrifice your family's comfort to keep energy costs down?

A little less than half the group reported *Already sacrificing comfort* to keep energy costs down and roughly 7% were *Unwilling to sacrifice any comfort*. This left about 30% who thought increases of no more than 25% would force them to start sacrificing comfort. Just under 15% felt increases of 50% would force action, while 3.4% believed 75%-100% increases would force action.



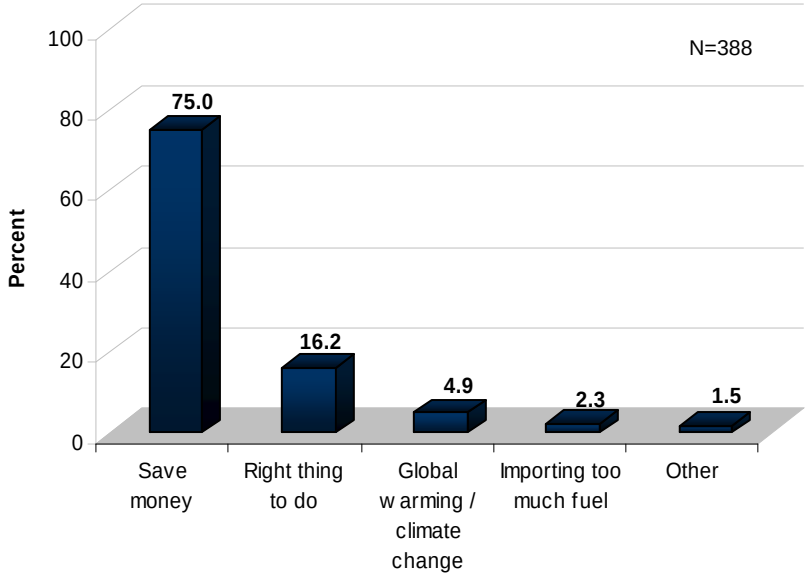
25) How often do you make conscious decisions or intentionally take actions to reduce energy use in your home?

Almost 45% reported *Always* making conscious decisions or intentionally taking action to reduce energy use in their home, with an additional 50.5% in the *Sometimes* category. Only 4% *Rarely* made these types of decisions, while less than 1% reported *Never*.



26) What is your primary reason for doing so?

Of the participants who reported always and sometimes making conscious decisions or intentionally taking action to reduce energy use in their home, three-fourths did so *To save money*. A much smaller percentage, 16.2%, did so because *It was the right thing to do*. Less than 5% were worried about *Global warming/climate changes*, 2.3% seemed concerned about *Importing too much fuel*, and a small group, 1.5%, reported *Other* reasons for their actions.



The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *All of the above – 5*
- *My wife makes me – 1*

27) Do the following descriptions apply to your home?

Over 80% reported *Central air conditioning* and *Good ceiling insulation* in their homes and over 70% reported *Good wall insulation* and *Well sealed/insulated doors and windows*. Less than 20% had *Window air conditioners* or *Heat recovery ventilation systems*. Less than 6% had *Air-to-air heat pumps* or *Ground source heat pumps*.

N		Yes
358	Has a ground source heat pump	4.7
351	Has an air-to-air heat pump	5.4
349	Has a heat recovery ventilation system	14.0
402	Has good ceiling insulation	81.1
400	Has good wall insulation	74.3
406	Has well sealed/insulated doors and windows	73.6
415	Has central air conditioning	86.7
361	Has window air conditioning	19.1

28) Do the following descriptions apply to your household practices?

Over 90% of respondents *Regularly turn off lights and appliances when not in use*. Over 80% *Almost always take showers instead of baths*, *Plan to purchase high efficiency appliances when current appliances need to be replaced even at a 10% higher cost* and *Keep the house cooler in the winter and warmer in the summer to save energy*. Over 70% use *Compact fluorescent bulbs* and *Use a setback thermostat for heating*. Over 60% *Use a setback thermostat for cooling* and *Turn off their home computer when not in use*. Over 50% *Only heat/cool occupied rooms in the house* and *Have made energy improvements to their house without having an energy audit completed*. Less than one-third of respondents have *Investigated alternative ways to heat and cool their home*, *Had an energy audit performed* or *Have made improvements based on an energy audit*.

N		Yes
387	Use a setback thermostat for heating.	70.3
380	Use a setback thermostat for cooling.	65.0
391	Use compact fluorescent bulbs.	76.7
416	Almost always take showers instead of baths.	89.9
418	Regularly turn off lights and appliances when not in use.	95.2
401	Only heat/cool occupied rooms in the house.	56.1
414	Keep the house cooler in the winter than we'd like and warmer in the summer to save energy.	80.9
403	An energy audit has been performed on my house.	23.1
389	Energy improvements have been made to my house based on an energy audit.	19.5
366	An energy audit has not been performed, but energy improvements have been made to the house.	53.6
383	Our home computer(s) is turned off when not in use.	62.7
411	High efficiency appliances will be purchased when current appliances need to be replaced even if they cost 10% more.	85.4
397	We have investigated alternative ways to heat and cool our home.	30.7

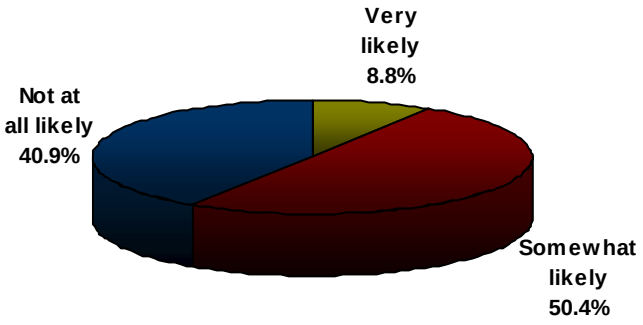
Setback temperatures for heating	N=205	%
Below 55	2	1.0
55-59	7	3.4
60-64	28	13.7
65-69	127	62.0
70-74	35	17.1
75+	6	2.9

Setback temperatures for cooling	N=184	%
Below 65	2	1.1
65-69	13	7.1
70-74	72	39.1
75-79	79	42.9
80+	18	9.8

29) For questions 29-32, assume the cost to equip your home with solar panels for heat and electricity would cost approximately $10,000 and would reduce your annual energy bill by $1,000. How likely would you be to power your home with solar energy produced from panels mounted on the roof or exterior walls of your house?

Just under 60% were at all likely to power their homes with solar energy produced from panels mounted on the roof or exterior walls of their house at a cost of $10,000 and an annual reduction in bills of $1,000. Only 8.8% were *Very likely*; 50.4% were *Somewhat likely*, leaving 40.9% who were *Not at all likely*.

N=421



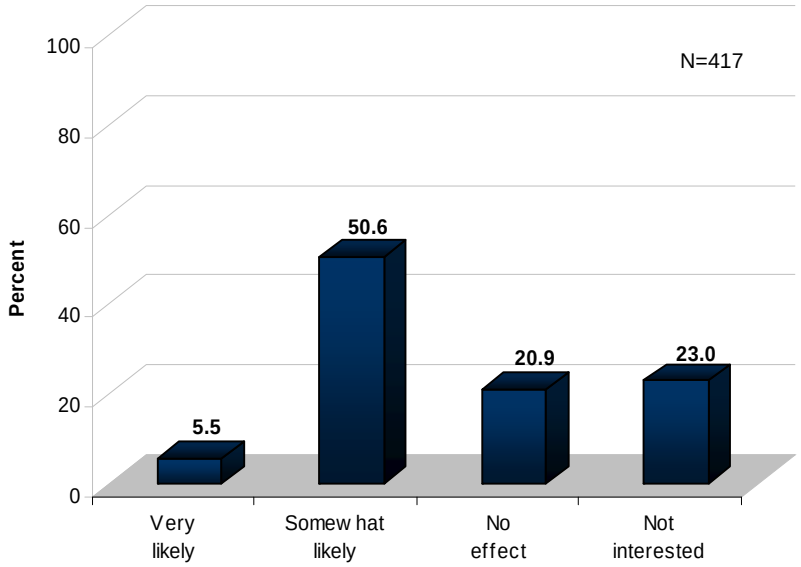
30) What concerns would you have about using solar panels on your house?

Just over 21% of the respondent group indicated *No interest in solar panels*. Almost 70% were *Concerned about initial installation costs* and roughly 60% were *Concerned about maintenance costs associated with solar panels*. Just under half were *Concerned about performance*. Respondents were least *Concerned about acceptance in the neighborhood*.

N=425	%
Concerned about how it would look	33.2
Concerned about maintenance costs	57.4
Concerned about convenience	21.2
Concerned about performance	47.8
Concerned about initial installation cost	67.2
Concerned about acceptance in my neighborhood	12.5
Not interested in solar panels	21.2

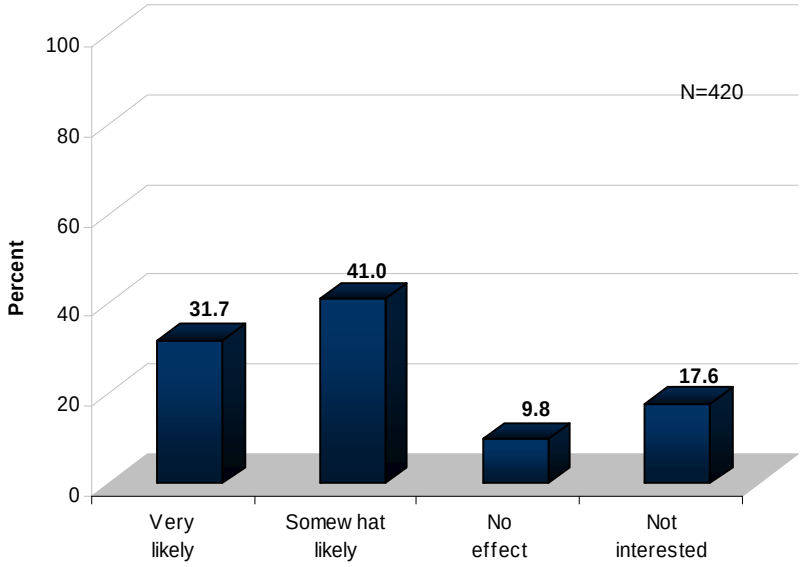
31) How would a 10% rebate equal to $1,000 affect your decision to spend $10,000 on solar panels for your home if it reduced your cost of electricity by $1,000 each year? Would it make you…

Overall 23% of the respondent group was *Not interested in solar panels*. However, 50.6% said a 10% rebate would make them *Somewhat likely* to purchase solar panels; an additional 5.5% said the rebate would make them *Very likely* to purchase. Just under 21% reported this type of incentive would have *No effect* on their purchase decision.



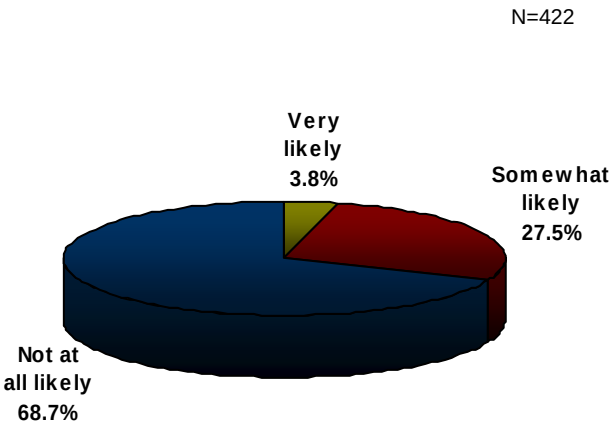
32) How would a $10,000 income tax deduction affect your decision to spend $10,000 on solar panels for your home? Would it make you…

Overall 17.6% of the respondent group was *Not interested in solar panels*. However, 41% said an income tax deduction of this size would make them *Somewhat likely* to purchase solar panels; an additional 31.7% said the incentive would make them *Very likely*. Less than 9% said the income tax deduction would have *No effect* on their purchase decision.



33) For questions 33-36, assume that the cost to equip your home with a wind generator for electricity would cost $12,000 to $15,000 installed and your annual utility bills would be reduced by $400. How likely would you be to install a wind generator on your property to power your home?

Less than one-third were at all likely to power their homes with a wind generator costing $12,000 to $15,000 and an annual reduction in bills of $400. Only 3.8% were *Very likely*; 27.5% were *Somewhat likely*, leaving 68.7% who were *Not at all likely*.



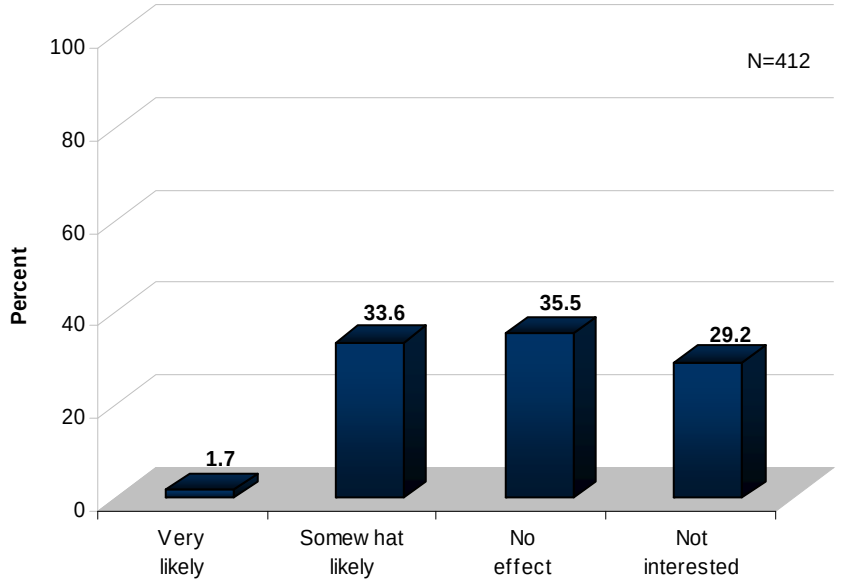
34) What concerns would you have about a wind generator on your property?

Just over 25% of the respondent group was *Not interested in a wind generator on their property*. Between 50% and 60% were *Concerned about overall cost*, *Maintenance costs* and *Concerned it wouldn't pay for itself through energy cost savings*. Respondents were least *Concerned about convenience*, *How it would look* or *Its acceptance in the neighborhood*.

N=425	%
Concerned about how it would look	27.3
Concerned about maintenance costs	54.4
Concerned about convenience	22.4
Concerned about performance	40.2
Concerned about overall cost	60.0
Concerned it won't pay for itself through energy cost savings	50.8
Concerned about acceptance in my neighborhood	25.2
Not interested in a wind generator	25.6

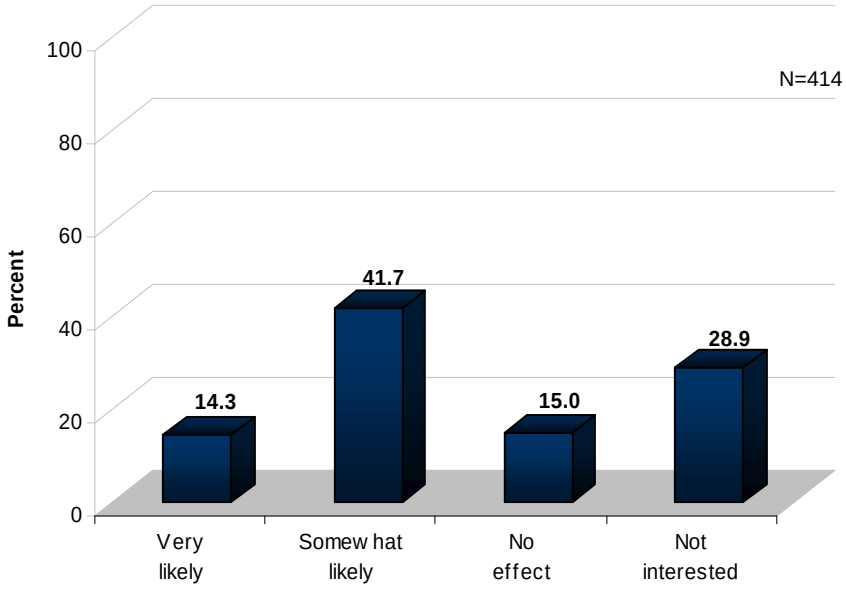
35) How would a 10% rebate equal to $1,200-$1,500 affect your decision to buy a wind generator to place on your property?

Overall 29.2% of the respondent group was *Not interested in buying a wind generator* to place on their property. However, 33.6% said a 10% rebate would make them *Somewhat likely* to purchase a wind generator; an additional 1.7% said the rebate would make them *Very likely* to purchase. Just under 36% said this type of incentive would have *No effect* on their purchase decision.



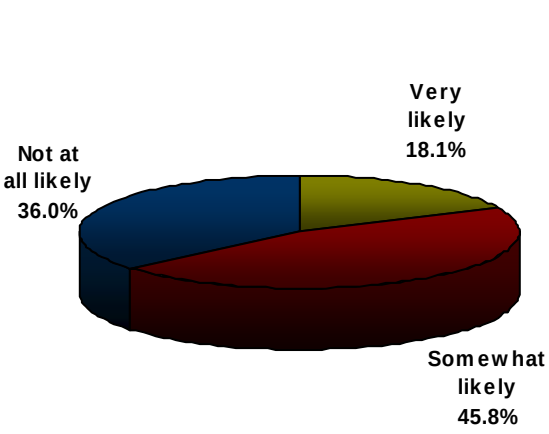
36) How would a $12,000-$15,000 income tax deduction affect your decision to buy a wind generator for your home? Would it make you…

Overall 29% of the respondent group indicated *No interest in wind generators*. However, 42% said an income tax deduction of this size would make them *Somewhat likely* to purchase a wind generator; an additional 14.3% said the incentive would make them *Very likely.* The remaining 15% said the income tax deduction would have *No effect* on their purchase decision.



37) For questions 37-39, assume it costs $1,500 to equip your home with a solar hot water heater and your annual water heating bill would be reduced by $30 a month. How likely would you be to install a solar hot water heater in your home?

Almost 64% were likely to equip their homes with a solar hot water heater costing $1,500 to and a reduction in bills of $30 monthly. Just over 18% were *Very likely*; 45.8% were *Somewhat likely*, leaving 36% who were *Not at all likely*.



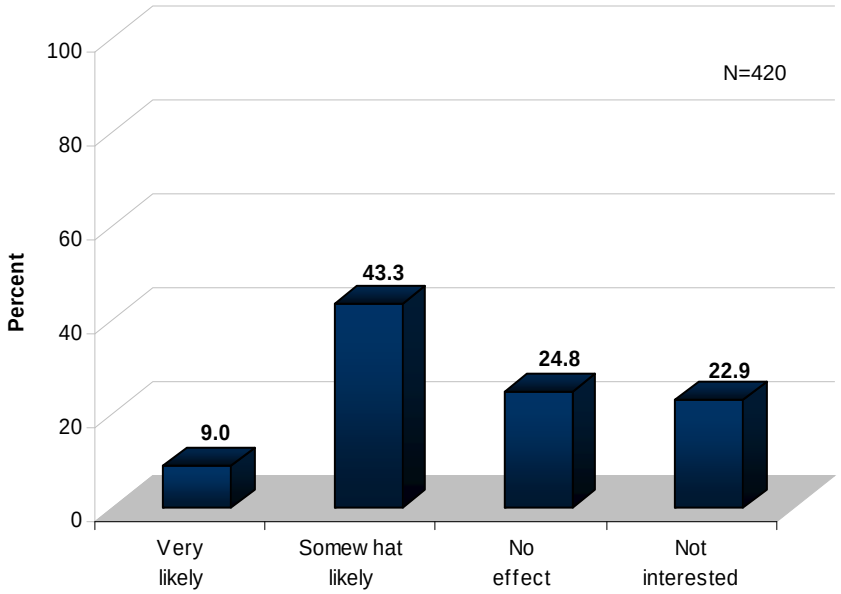
38) What concerns would you have about a solar hot water heater?

Just over 21% of the respondent group was *Not interested in solar hot water heaters*. Roughly 50% were *Concerned about performance*, *Initial installation cost* and *Maintenance costs*. Respondents were least *Concerned about acceptance in their neighborhood*.

N=425	%
Concerned about maintenance costs	49.4
Concerned about convenience	26.8
Concerned about performance	56.0
Concerned about initial installation cost	54.8
Concerned about acceptance in my neighborhood	8.0
Not interested in solar hot water heater	21.4

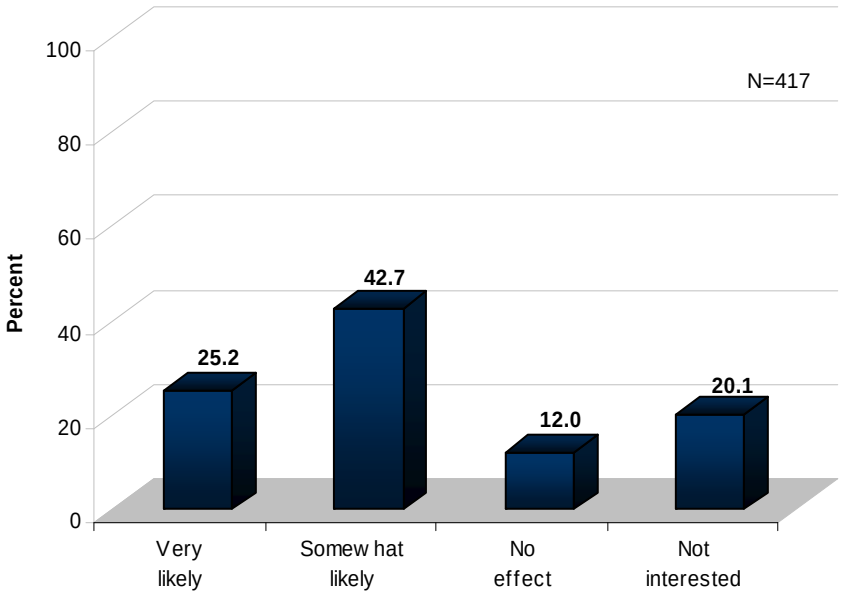
39) How would a 10% rebate equal to $150 affect your decision to spend $1,500 on a solar hot water heater for your home? Would it make you…

Overall 23% of the respondent group was *Not interested in solar hot water heaters*. However, 43.3% said a 10% rebate would make them *Somewhat likely* to purchase a solar hot water heater; an additional 9% said the rebate would make them *Very likely* to purchase. Just under 25% reported this type of incentive would have *No effect* on their purchase decision.



40) How would a $1,500 income tax deduction affect your decision to spend $1,500 on a solar hot water heater for your home? Would it make you…

Overall 20.1% of the respondent group indicated *No interest in a solar hot water heater*. However, 43% said an income tax deduction of this size would make them *Somewhat likely* to purchase a solar hot water heater; an additional 25.2% said the incentive would make them *Very likely*. Only 12% said the income tax deduction would have *No effect* on their purchase decision.



41) Where would you go for information on energy efficiency?

Just over 63% of the respondent group would go to their *Local utility provider* for information on energy efficiency and 59% would turn to the *World Wide Web*. Only 25% would go to the *Iowa State University Extension* office, while 17.2% would go to the *Iowa Energy Center* and 15.1% would go to *UNI's Center for Energy and Environmental Education*. The *Local library* was the least mentioned source at 11.1% and 4.7% of respondents listed *Other* sources.

N=425	%
Iowa Energy Center	17.2
Your local utility provider	63.5
Your local library	11.1
Iowa State University Extension	24.7
University of Northern Iowa's Center for Energy and Environmental Education	15.1
World Wide Web	59.3
Other	4.7

The "*Other*" answers provided by respondents are listed below in order of the frequency with which they occurred.

- *Brochures, magazines, newpaper, radio/TV shows – 6*
- *Employees/Employers – 6*
  - Local installers
  - Employed in industry
  - Local plumber
  - Contractor
- *Friends/Co-workers/Neighbors/Family – 3*
- *Anywhere I can get information – 1*
- *Bell Brothers heating and Cooling – 1*
- *Don't really know – 1*
- *Library – 1*
- *Word of mouth – 1*