

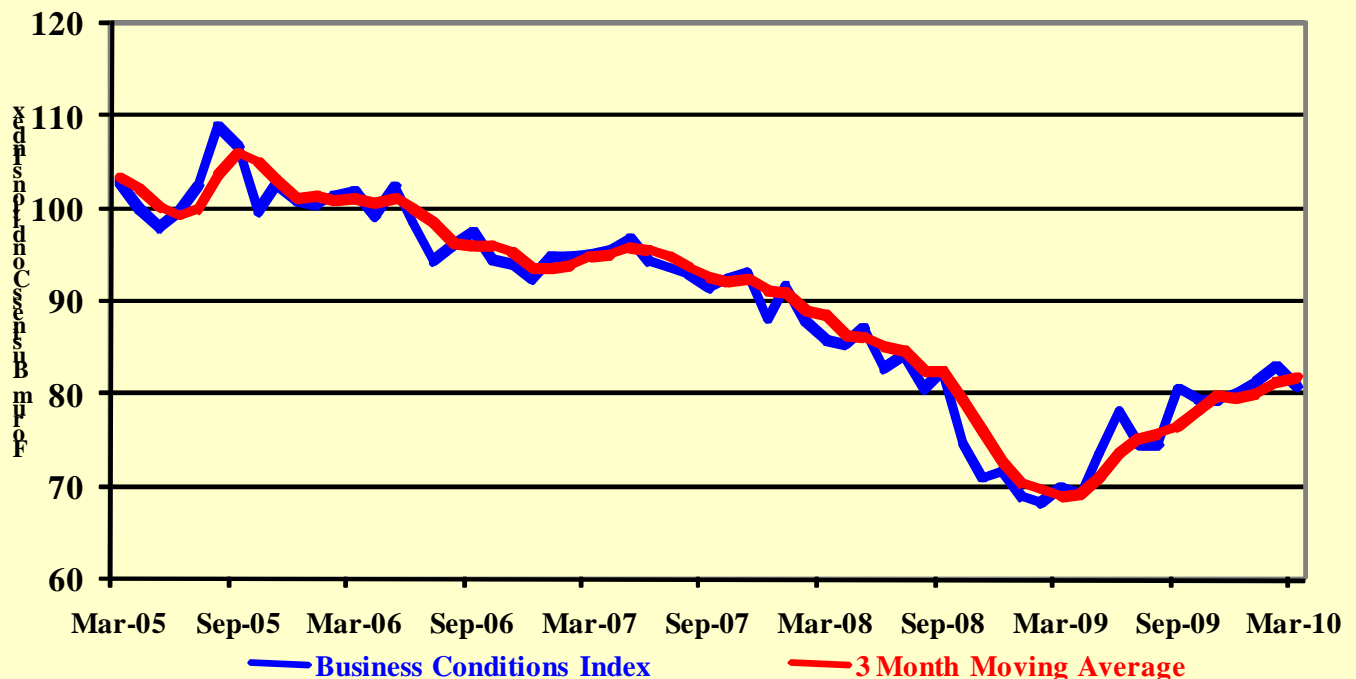
Quarterly Updates and Estimates

Volume 8, Number 4, 2010
 Fred Crowley - Senior Economist

Update on the El Paso County Economy

The January 2010 *QUE* reported that the local economy was growing and had been expanding since February 2009. As anticipated, the Business Conditions Index (BCI) remained in the low 80's during the first quarter of 2010. The BCI now stands at 80.90. This is up 15.7 percent from March 2009 when the BCI was 69.90. An easing in the growth following the initial months of recovery in a business cycle is not unusual. The current flow of information suggests the second quarter of 2010 will see modest gains in the BCI. The BCI is expected to be in the 82-85 range in the second quarter of 2010. All indications point to a local economy that is out of the recession. The indicators also point to a local economy that will be slow to recover from the recession.

**Business Conditions Index
 El Paso County (March 2001 = 100)**



¹ The Business Conditions Index (BCI) is a geometric index of ten seasonally adjusted data series. The El Paso County data are single family and town home permits, new car sales, employment rate, foreclosures, ES202 employment and ES202 wages and salaries. Colorado Springs data are sales and use tax collections and airport enplanements. University of Michigan's Consumer Sentiment and the Federal Reserve Bank of Kansas City Manufacturing Index are non-local indicator in the BCI. The BCI is indexed to March 2001 = 100. All raw series are seasonally adjusted by UCCS Southern Colorado Economic Forum using the Department of Commerce X12 adjustment process.

Table 1: Business Conditions Index Components - All Values Indexed to Mar 2001 = 100

	COS Enplanements	El Paso County SF & TH Permits	U Of Mich Con Sent	Kansas City Fed Mfg Index	El Paso <u>Employment</u> Rate	CoSpgs 2% Sales & Use Tax	County New Car Registrations	El Paso County Fore- closures	El Paso County Employed	El Paso County Real Wages	BCI
Dec-08	79.57	16.87	66.14	76.98	96.33	91.51	54.39	98.26	107.59	102.44	71.62
Jan-09	79.02	17.92	65.64	62.78	95.93	89.24	47.62	98.17	107.00	97.16	68.95
Feb-09	78.56	17.71	61.71	59.79	95.42	90.86	49.06	97.78	106.68	96.60	68.27
Mar-09	87.83	17.50	62.31	64.65	95.23	98.11	48.37	97.94	106.14	95.78	69.90
Apr-09	87.24	12.44	71.50	78.10	95.22	92.01	47.46	97.74	107.69	93.66	69.11
May-09	80.54	25.94	75.30	90.06	95.20	87.36	39.86	97.83	106.37	93.30	73.43
Jun-09	80.15	32.26	75.93	106.13	95.37	94.46	47.81	98.18	104.00	92.33	78.12
Jul-09	77.96	24.25	71.27	101.27	95.22	92.14	46.62	96.91	103.97	93.15	74.46
Aug-09	81.52	23.83	71.94	100.52	95.42	96.00	44.01	97.65	103.46	92.67	74.55
Sep-09	84.89	29.73	81.95	127.80	95.46	91.27	54.03	97.55	103.30	92.24	80.60
Oct-09	84.00	26.78	80.77	125.19	95.42	90.71	51.02	98.04	102.80	98.83	79.44
Nov-09	83.00	22.35	74.85	141.63	95.55	99.15	52.83	97.87	103.87	97.68	79.25
Dec-09	77.08	27.20	79.78	128.92	95.33	92.67	58.68	97.46	102.89	96.38	80.05
Jan-10	77.73	25.94	79.79	139.76	95.21	95.96	65.22	98.13	103.50	91.82	81.22
Feb-10	74.94	39.64	80.67	143.12	95.02	101.20	48.92	100.79	103.72	91.04	82.91
Mar-10	71.83	33.32	80.03	146.11	94.89	100.50	47.59	100.79	104.06	90.12	80.90
March 2010 Compared to:											
Feb-10	-4.2%	-16.0%	-0.8%	2.1%	-0.1%	-0.7%	-2.7%	0.0%	0.3%	-1.0%	-2.4%
Dec-09	-6.8%	22.5%	0.3%	13.3%	-0.5%	8.5%	-18.9%	3.4%	1.1%	-6.5%	1.1%
Sep-09	-15.4%	12.1%	-2.3%	14.3%	-0.6%	10.1%	-11.9%	3.3%	0.7%	-2.3%	0.4%
Mar-09	-18.2%	90.4%	28.4%	126.0%	-0.4%	2.4%	-1.6%	2.9%	-2.0%	-5.9%	15.7%

Real wages in El Paso County are estimated by the Forum for the period Oct '09 through Mar '10

Activity at the airport has been hindered by two factors. First, U.S. Airways discontinued service. U.S. Airways had represented 10 percent of all enplanements in March 2009. Second, business and tourism activity have not rebounded. Some improvement is expected later in 2010. Residential construction benefited from first time and trade-up home buyer tax credits. Permit activity suggests there is support for the beginnings of a slow recovery in new residential construction. This is supported to a modest degree with the decline in the number of foreclosures in the local economy. Improvement in consumer sentiment stabilized and is 28.4 percent higher than a year ago. Slow job growth will keep consumer sentiment from strong gains in the coming months. Manufacturing activity has shown exceptionally strong activity. This is expected to slow down in the coming months, partly because of the reduced effects of a lower amount of stimulus funds to be spent in the coming months. New vehicle registration activity dropped from the winter months. Some improvement is expected as employment and incomes rise in the coming months. Sales tax collection have rebounded nicely since a year ago. Additional gains are expected in the coming months as employment and incomes continue their gradual improvement.

Employment and income trends are among the last indicators to show recovery from a recession. The latest employment numbers for April 2010 indicate employment conditions began improving in January 2010. Since January, employment increased by 4,545 while the number of unemployed decreased by 1,341. At the same time, optimism about the economy apparently contributed to an increase in the labor force by 3,204. Modest gains in employment and wages are expected through the second quarter.



Renewable Energy Study

Many of you took the time to complete a survey on renewable energy in April. The results of the survey are included with this issue of the *QUE*. The complete study, *Assessing Domestic Renewable Energy Markets* by the Ad Rem Project is available to download at:

<http://www.uccs.edu/~business/media/assets/Ad%20Rem%20Project%20-%20Final%20Report%20C.pdf>

The Ad Rem Project examined solar and wind energy for the local economy. It covered legal, environmental, tax credits, economic impact and financial feasibility.

7: Renewable Energy Survey

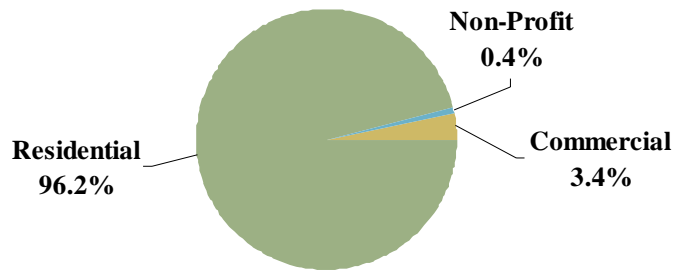
7.0 Introduction

The Ad Rem Project conducted an internet-based survey among several thousand individuals in the Colorado Springs region and Colorado. While not a statistically designed survey, the number of responses is believed to be a reliable measure of consumer sentiment about renewable energy. A total of 740 responses were received. Of these, 710 responses were found to be complete. The survey asked for general demographic measures and preferences opinions about renewable energy. This chapter presents the results of the survey.

7.1 Descriptive Statistics

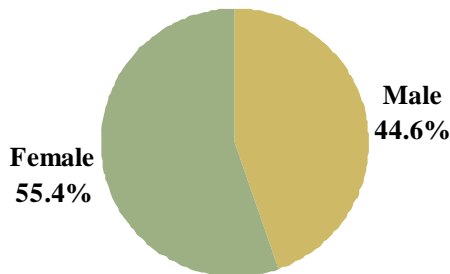
A large majority of the respondents were residential customers (96.2%)

What Type of Utility Customer Are You?



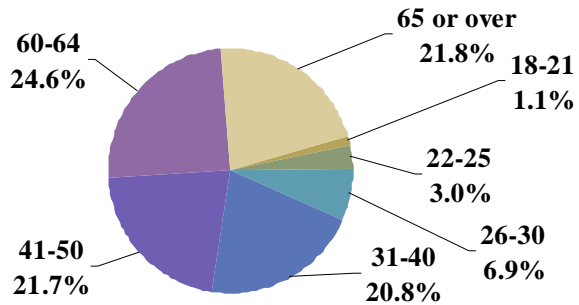
Significantly more respondents were women (55.4%) than were from men (44.6%).

What Is Your Gender?



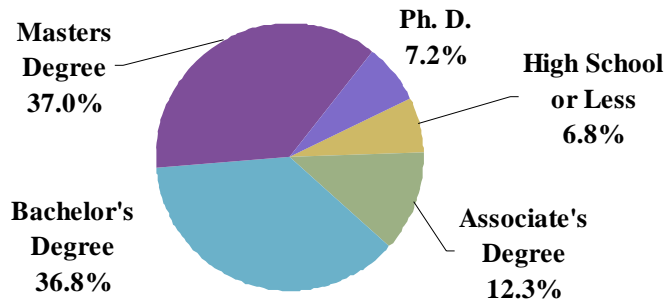
The greatest proportion of responses were obtained from people who are over age 60 (60-64, 24.6% and 65 or older 21.8%). Young adults were not part of the target audience. Homeowners were targeted.

What Is Your Age?



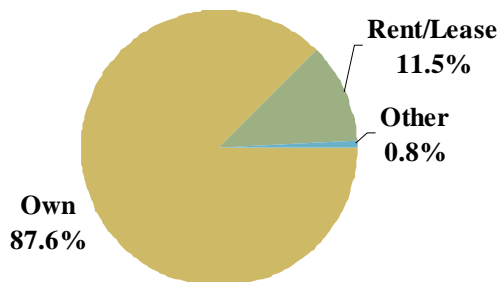
The respondents are well educated. Approximately 81 percent hold a BA or higher degree.

What Is Your Educational Attainment?



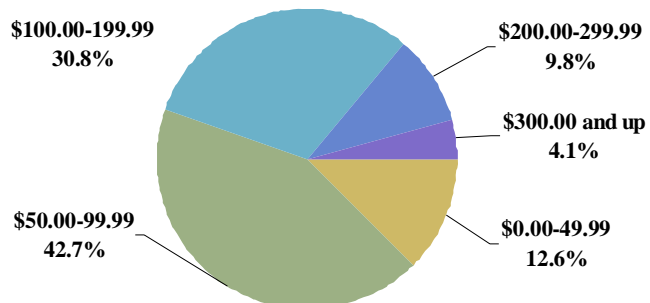
The Ad Rem Project sought to have the input of homeowners to the survey. The great majority of respondents own a home (87.6%).

What Is Your Type of Residence?



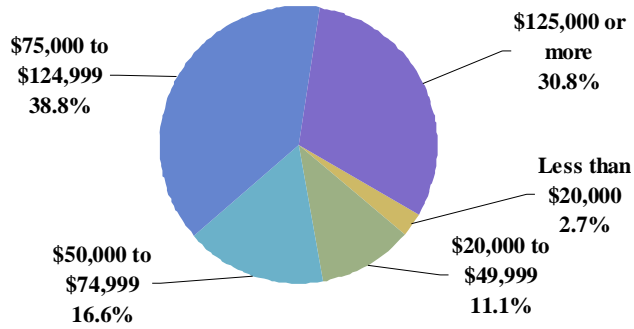
The average monthly bill among all respondents was found to be \$122.

What is Your Monthly Electric Bill?



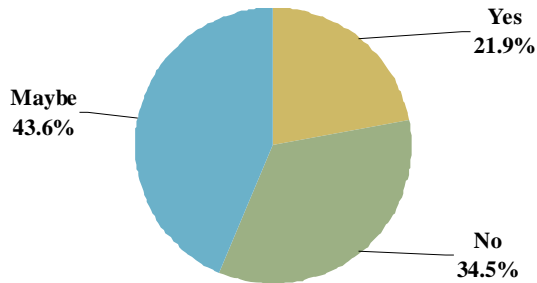
Given that most respondents were age 55 or older, higher household incomes were expected. Approximately 69.6 percent have annual household incomes of \$125,000 or more.

What is Your Household Income?



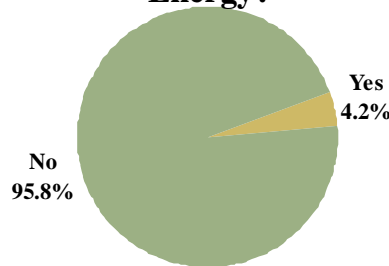
A naïve expectation suggested well-educated, high-income homeowners would be willing to pay more for renewable energy. Approximately 22 percent said they would pay a premium while 43.6 percent they might.

Are you Willing to Pay Higher Prices for Renewable Energy?



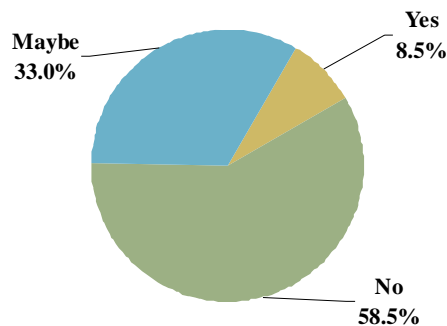
Renewable energy systems are in the formative stages of development. Very few respondents currently have renewable energy (4.2%).

Do You Currently Have Renewable Energy?



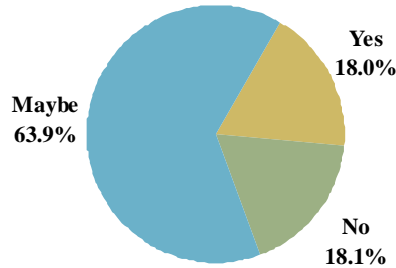
Of those respondents without renewable energy, 8.5 percent indicated they plan to install it. Another 33 percent indicated they might install renewable energy.

Do You Plan to Install Renewable Energy?



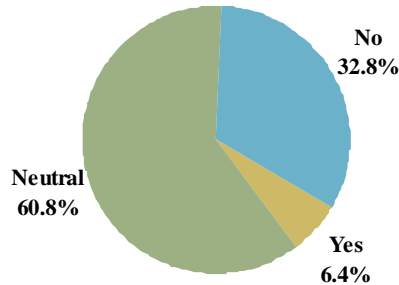
The respondents thought the value of a property might increase if it had a solar panel installed on it. Eighteen percent said yes while 63.9 percent said they might pay extra.

Would You Pay Extra for a Residence/Business with an Installed Renewable Energy?



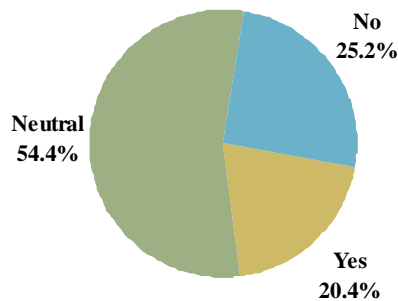
Of those stating a preference for the aesthetics of a solar panel system, an overwhelming proportion (5:1) thought they were unattractive. Approximately 60.8 percent were neutral on solar panel aesthetics.

Are Residential Solar Panels Attractive?



Respondents were more evenly split on the aesthetics of a wind farm. Approximately 54.4 percent were neutral, 20.4 percent thought they were attractive and 25.4 percent did not care for their appearance.

Are Wind Farms Attractive?

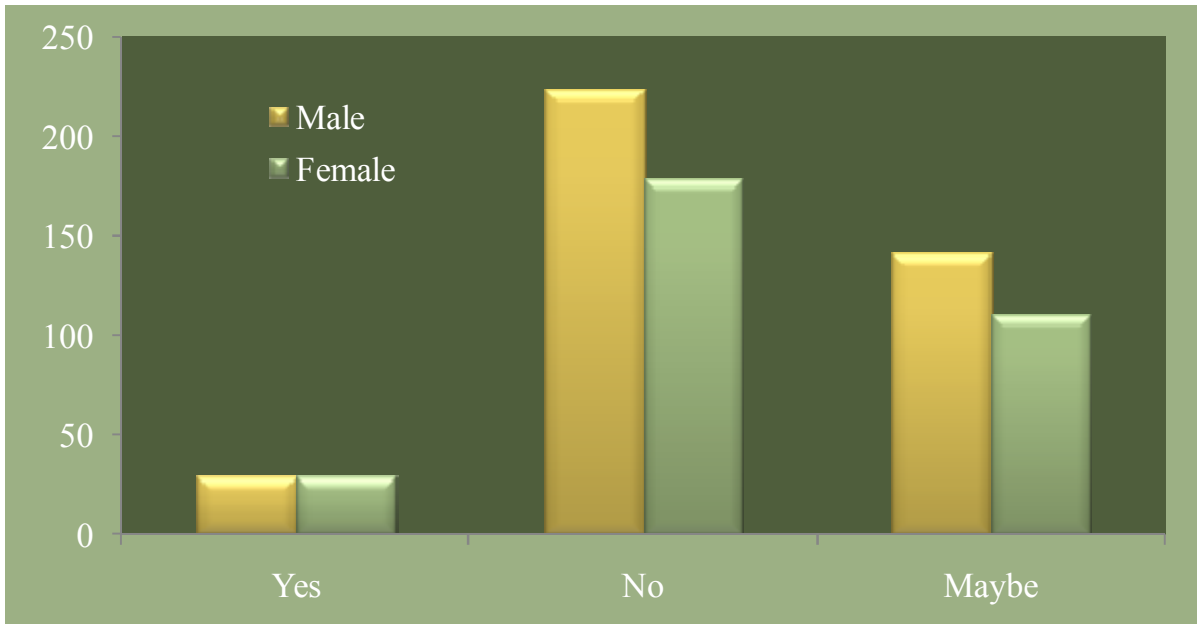


7.2 Controlling for Demographics

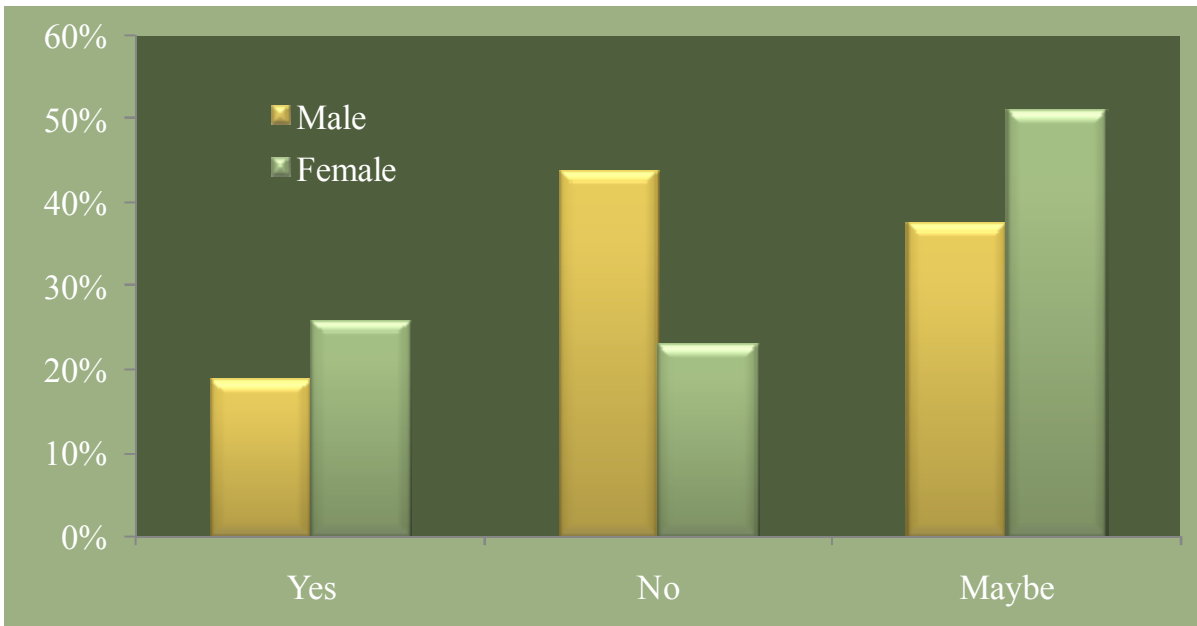
Additional insight about consumer perception of wind and solar power can be gained by controlling for demographic characteristics among the respondents. For example, does income influence renewable energy preferences? Is there a preference for renewable energy by gender? Time limitations of the study restricted analysis of responses to a limited number of questions.

7.2.1 Gender and Willingness to Pay More for Electricity from Renewable Energy

Men indicated a strong dislike of higher electricity prices from renewable energy. Proportionately, men disliked higher electricity price by a 2.3:1 ratio. Women were more willing to pay higher electricity prices by a small margin.



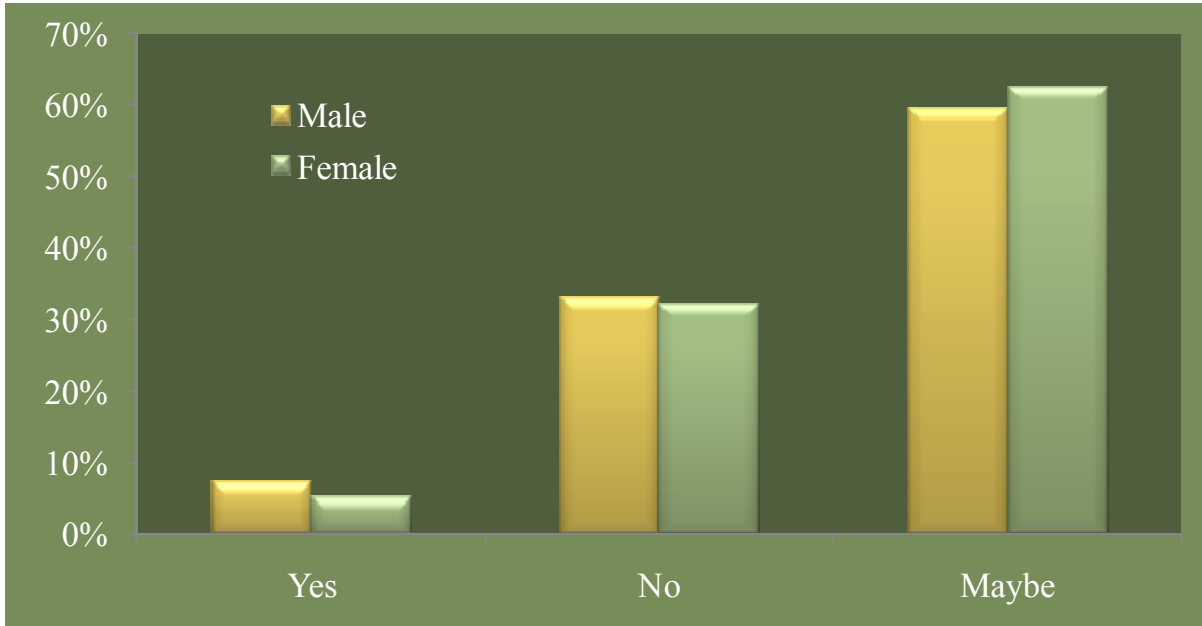
Total Responses by Gender



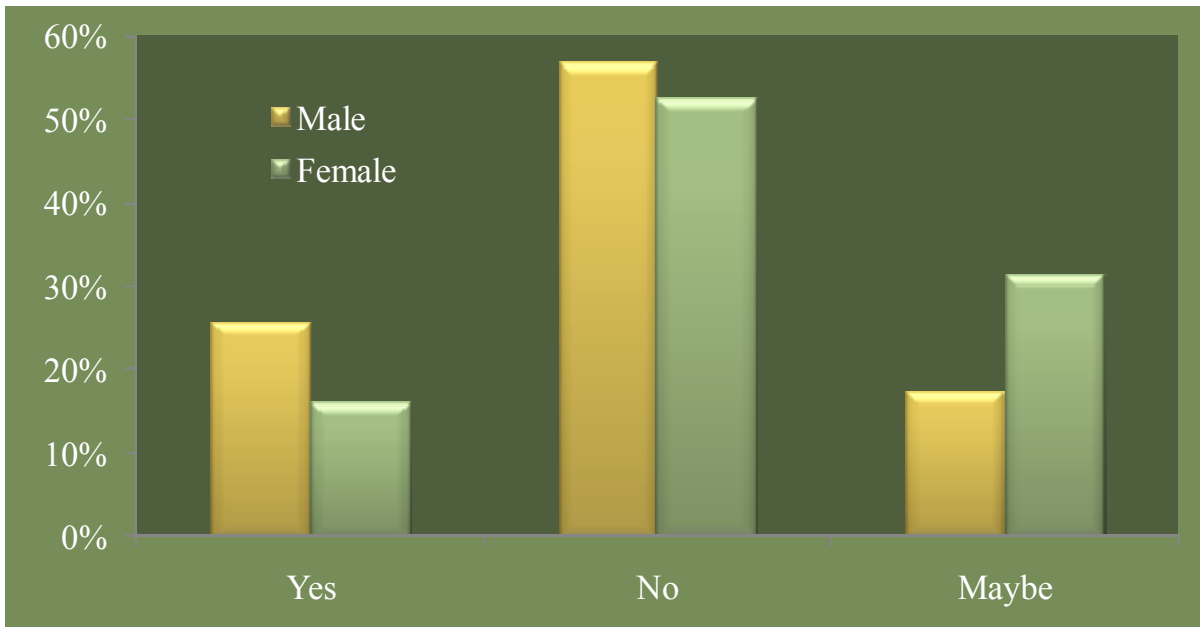
Response Proportions by Gender

7.2.2 Are Solar Panels and Wind Farms Attractive?

Neither men nor women thought the appearance of solar panels were attractive. While both thought wind farms were not attractive, both men and women found them more appealing than solar panels on a roof. Men appeared to be more tolerant of their visual impact than women were.



Response Proportions by Gender – Are Solar Panels Attractive?



Response Proportions by Gender – Are Wind Farms Attractive?

7.2.3 Income and Willingness to Pay Higher Prices for Renewable Energy

The number of respondents whose household income fell into lower categories was limited. When the responses were viewed as proportions, there appeared to be an inverse relation between income and willingness to pay more for renewable energy. A larger, stratified random sample would help to verify if this relationship exists.



Total Response By Household Income – Are You Willing to Pay Higher Prices for Renewable Energy?

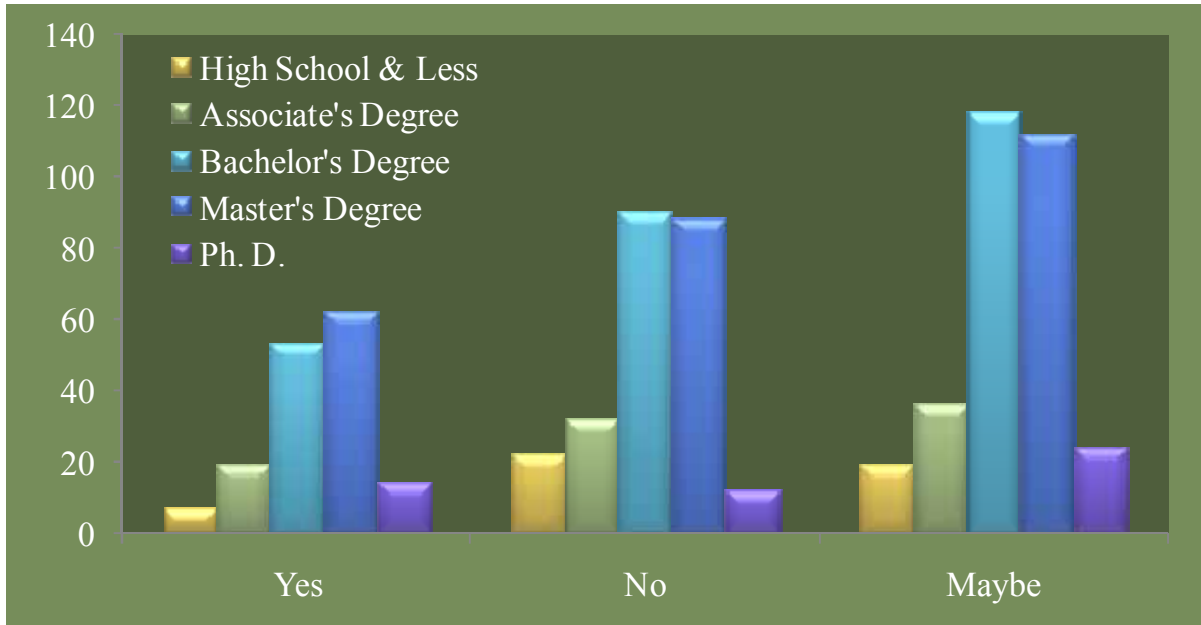


Proportional Response By Household Income – Are You Willing to Pay Higher Prices for Renewable Energy?

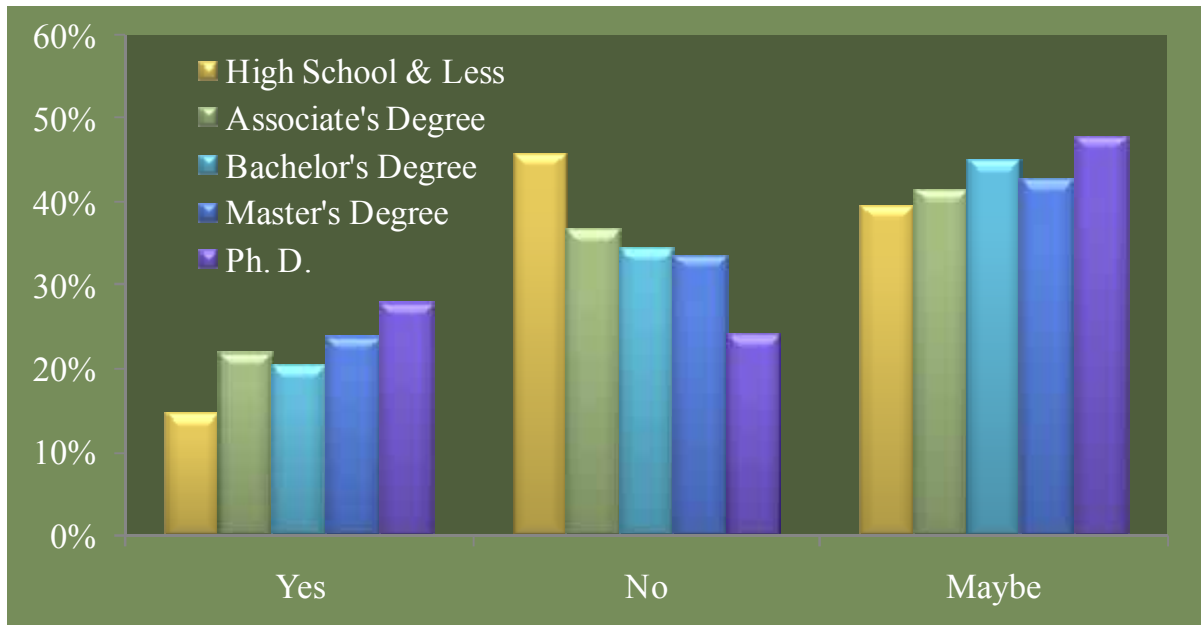
7.2.4 Education and Willingness to Pay Higher Prices for Renewable Energy

The last measure reported in the Ad Rem Project for which a control measure was used is household income and willingness to pay higher prices for renewable energy.

Respondents with higher educational attainment are more likely to be willing to pay higher prices for renewable energy than those with less education. The large number of responses in the maybe category suggests the respondents might want to know how much more renewable energy will cost



Total Responses by Educational Attainment – Are You Willing to Pay Higher Prices for Renewable Energy?



Proportion of Responses by Educational Attainment – Are You Willing to Pay Higher Prices for Renewable Energy?

7.3 Summary

The Ad Rem Project conducted a survey to determine the perception that electricity consumers had about the use of renewable energy if it increased utility rates. Seven hundred and ten valid responses were gathered through the survey. The Ad Rem Project found that 21.9 percent of the respondents were willing to pay a higher price for electricity to use renewable energy. Another 43.6 percent indicated they might be willing to pay higher prices. The question did not give a range for how much higher the price of electricity might be if renewable energy was the source of electricity. The Ad Rem Project did not believe it had sufficient information to provide incremental cost estimates for renewable energy's impact on electricity rates.

The survey pointed out that very few respondents (6.4%) think solar panels are attractive. On average, 20.4 percent of the respondents thought wind farms are attractive. By gender, the survey indicated 25.7 percent of men thought wind farms are attractive vs. 16.1 percent of women.

There was a bit of a surprise among respondents by income. Lower income groups were more willing to pay higher prices for electricity from renewable energy than higher income groups.

Educational attainment did influence the willingness to pay higher prices for electricity from renewable energy. There were about the same number of respondents who indicated a high school or lower level of education (48) as those who indicated they had a Ph.D. (50). Respondents with a Ph.D. were twice as willing to pay higher electricity prices as those with a high school or less level of education. In general, higher levels of educational attainment meant a greater willingness to pay higher electricity prices from renewable energy.



About the Forum

The Southern Colorado Economic Forum (SCEF) is part of the College of Business outreach to the Colorado Springs Community. The Forum gathers, analyzes and disseminates information relevant to the economic health of the region. Through its efforts, the Forum has gathered a number of unique data sets. The Forum and its staff are available for fee-for-service work to analyze business situations, develop forecasts, conduct and analyze surveys and develop solutions to other business problems you may have. Examples of prior work include Small Area Forecast for the Pikes Peak Area Council of Governments, Colorado Springs Airport Passenger Survey, exit survey for La-Z-Boy, a Community Audit for the Pikes Peak Workforce Center and the Data Mining Project for the Colorado Workforce Centers. If you would like additional information about how the Forum can assist you, contact Fred Crowley at (719) 255-3531 or e-mail at fcrowley@uccs.edu.

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