

Community Renewable Energy Program Survey

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KEY FINDINGS

- We estimate a majority of Ogden residents are willing to pay 9.3% more for renewable energy above and beyond their current energy costs.
- ▶ If energy costs increase by 10%, about 20% of Ogden residents are likely to opt out of CREP.
- ➤ Of Ogden residents, about 45% think Ogden City should join CREP, 46.0% were unsure, and only 8.9% of residents think Ogden City should not join CREP.
- Lower income respondents tend to have a lower willingness to pay for renewable electricity than higher income respondents.
- A majority of respondents in District 3 are willing to pay 13.1% more than what they pay now, while a majority of respondents in District 4 are willing to pay 10.3% more. A majority of respondents in District 1 are willing to pay 10.0% more and respondents in District 2 are willing to pay 8.3% more than they pay now.
- A large majority (70%+) of residents think businesses, residents and local governments should be doing more to seek out renewable energy.
- We estimate that a majority of businesses are willing to pay 6.9% more for renewable energy, but this is not statistically different from zero. A majority of businesses (61.3%) think Ogden should join CREP.



ACKNOWLEDGEMENTS

The Community Renewable Energy Program (CREP) survey project was the result of the collaborative efforts of various institutions. Weber State University - Community Research Extension (CRE) would like to thank Ogden City Council staff for guidance and consultations throughout the project. We would also like to thank the Ogden City Council, Ogden City Sustainability Commission, and Ogden City Diversity Commission as well as Weber State University (WSU) students for their feedback on survey questions and design. In addition to CRE staff, WSU's Moving Company students and director volunteered to help mail out 8600 postcards by affixing 8600 individual QR codes to those postcards. Finally, the CRE would like to thank Weber State University's Wildcat Scholars program. To ensure we received equal responses from different municipal districts, roughly 25 student volunteers from WSU's Wildcat Scholars program spent three days helping to knock on doors, including on some of the coldest days of the year.

Four CRE staff worked on the project. Dr. Jenny Gnagey spearheaded survey sampling, methodology, analysis, and report writing. Cassandra Backman designed the survey and survey questions and did the data visualizations. Yesenia Quintana consulted on survey methodology, sampling, design, and analysis. Dr. Katharine French-Fuller contributed to survey methodology, sampling, design, analysis, and writing of the report as well as providing project management support.



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PROJECT BACKGROUND

The CRE agreed to conduct the survey after being introduced to Ogden City Council staff by WSU's Sustainability Center. Council staff informed the CRE that they wanted a survey that could gauge public opinion about whether residents would want to participate in the Community Renewable Energy Program (CREP) before deciding whether the city should sign on to the program. In addition, the city wanted to know how much more residents would be willing to pay for renewable energy. The city emphasized it was important to make every effort to get a representative sample across all four municipal districts and from low-income residents of Ogden.

A draft of the survey was presented to Ogden City Council on January 4, 2022 as well as the Sustainability and Diversity Commissions on January 13, 2022 for feedback and questions. The survey introduction and content were revised based on that feedback and resubmitted to Ogden City Council for written approval, which was received on January 28, 2022.



AN INTRODUCTION TO THE COMMUNITY RENEWABLE ENERGY PROGRAM

The Community Renewable Energy Program (CREP) was created through The Community Renewable Energy Act (HB411), which passed the Utah Legislature in 2019. The bill created a way for communities to obtain renewable energy from larger utility companies already used by residents and businesses. Renewable energy is energy that is generated from natural processes (e.g. solar and wind) that are continuously replenished. To be part of CREP, Ogden City would agree to have 100% of its annual electricity supply be from net renewable sources by 2030. Participating in the program would mean:

- The program would provide more renewable energy options to all customers in participating communities.
- Participating communities and the agency that regulates Rocky Mountain Power will share the cost and determine the projected renewable rates.
- Once communities agree on projected rates, local governments would adopt ordinances to provide renewable energy to all Rocky Mountain Power customers.
- Within participating communities, individual customers must opt out of the program within the selected timeframe in order to remain on standard rate.

Once the program is implemented and the renewable resources are on-line, Rocky Mountain Power customers would purchase electricity from Rocky Mountain Power as they were before, but rates will be adjusted to reflect the costs associated with using renewable sources. Customer costs could be higher, lower, or the same depending on market conditions.



SURVEY DESIGN

This section discusses the flow of the survey, how the questions were developed and why the questions were chosen.

Introduction to CREP

The survey started with an explanation of the Community Renewable Energy Program (CREP) (Appendices C&D). The introduction to CREP was based on information found on the Utah100communities' website and board meeting PowerPoint [July 13, 2021], the Proposed Interlocal Cooperation Agreement proposed to Ogden City Council, an Ogden City Council Podcast, and Salt Lake City's 100% Renewable Energy Community Goal webpage. Based on feedback from Ogden City Council, Sustainability and Diversity Commission, and Weber State University students, the CRE edited the introduction to make the information more concise and easier to understand.

The CRE received WSU IRB approval to conduct the survey. All participants needed to consent to the survey and respond that they are residents of Ogden, Utah to proceed with the survey.

Solar Panels

Residents and businesses who have solar panels with net-metering would not be impacted by CREP and any possible rate changes. Therefore, we screened residents and businesses who had solar panels with net metering out of the survey.

Does your primary residence have solar panels with net-metering installed? (Yes/No)

Schedule 32 or 34

Businesses on schedule 32 or 34 are on a different rate schedule than other businesses. Therefore, we wanted to capture how many businesses were on schedule 32 and 34 since they may be impacted differently by CREP.

Are you currently on schedule 32 or 34 for your business? (Yes/No)





How Residents Paid for Electricity

To ensure we accurately calculated willingness to pay for both homeowners and renters, we asked whether respondents paid for electricity directly to the energy company or whether it was included in their rent.

At your primary residence, how do you pay for electricity?

Municipal Districts

To ensure we had accurate representation from all districts, the survey provided a district map (Appendices C&D) where residents identified what district they lived in (1,2,3, or 4) and businesses identified where their primary offices/workspaces were located (1,2,3, and/or 4).

In which municipal district is your residence/business(es) located?

Willingness to Pay

The survey was informed by consulting current willingness to pay (WTP) research and renewable energy research (Lehmann et al., 2022; Nemet & Johnson, 2007; Soon & Ahmad, 2015; Sundt & Rehdanz, 2016; Wilden et al., 2018; Wiser et al., 2007). The CRE team decided to utilize the contingent value method where participants are asked to report the value they attach to a non-use or nonmarket good. This is the most widely used and accurate method among WTP for renewable energy research (Murphy et al., 2005; Oerlemans et al., 2016; Pleeging et al., 2021; Schmidt & Bijmolt, 2020). Using this method, the residents and businesses were asked:

CREP aims to convert the community of Ogden to net-renewable energy by 2030. As a result, this could affect the electric bills of all Rocky Mountain Power customers who participate in the program (or effect the rent for those whose electricity is included in their rent): If your electric bill (or rent) increases, how much more would you be willing to pay each month?

The residents chose from pre-selected dollar amounts from \$0 to \$50. They had the option to write-in any amount above \$50. Businesses have a larger range for electricity and we asked them to write-in rather than choose from pre-selected amounts.





To assess how likely, they would be to opt out of CREP, the CRE asked the following question using a 5point scale from very unlikely to very likely:

If your electric bill increased above the amount you selected, how likely would you be to opt-out of CREP?

In order to calculate the WTP in percentages, we added a question asking how much they are currently paying for electricity (*On average, how much do you pay for electricity each month?*) before we asked what they are willing to pay for renewable energy.

Other Contributing Factors

Based on feedback from the Ogden City Council and the Sustainability and Diversity Commissions, we believed it was important to know what contributed to residents and businesses' decision to opt out or participate in CREP. In order to help gauge that, the CRE asked the following question:

To what extent do these other factors contribute to your decision to participate in or opt-out of CREP?

Respondents had to choose using a four-point scale question (not at all, only a little, a moderate amount, a great deal) developed from the Yale Program on Climate Change Communication's (YPCCC) Climate Change in the American Mind Survey (Ballew et al., 2019). The CRE developed possible answers based on value-belief research regarding renewable energy policies and programs (Irfan et al., 2020, Kalkbrenner & Roosen, 2016; Leiserowitz et al., 2018; Olson-Hazboun et al., 2016; Walker et al., 2007) and a community engagement review of CREP in Salt Lake City, Park City and Moab (Skill et al., 2020). Respondents were asked to choose amongst the following factors:

- ✤ Hesitations about renewable energy sources
- ▶ Not knowing how CREP will benefit the community
- Being able to choose where my energy is sourced
- ✤ Participation of other residents
- Having to opt out of the program, instead of opting in
- 👞 Lack of information I have on CREP
- \star Timeline is unclear





- ▶ Negative impacts on the coal and natural gas industry
- 🔺 Other:_____

In addition, the Sustainability and Diversity Commissions wanted to find out which stakeholders (local governmental officials, residents, or businesses) residents and businesses think should be doing more to bring renewable energy to Ogden. Three survey questions asked:

Beyond CREP, do you think local governmental officials should be doing more to bring renewable energy options to the area?

Beyond CREP, do you think residents should be doing more to seek out more renewable energy options?

Beyond CREP, do you think businesses should be doing more to seek out more renewable energy options?

A 5-point Likert scale (much less, less, currently the right amount, more, much more) from YPCCC's Climate Change in the American Mind Survey was used (Ballew et al., 2019).

Should Ogden City Join?

In addition, the city needed to know whether residents and businesses support the city moving forward with CREP regardless of whether they would personally choose to opt out or not. A question regarding whether Ogden City should join CREP was added:

Do you think Ogden City should join CREP?

Residents could answer yes, no, and unsure, but businesses could only answer yes and no.

Demographics:

All demographic information asked was to ensure we had a representative sample of Ogden residents and businesses and was used to understand the trends of sub-populations. We asked for the following demographic information from residents:

- ✤ Household tenure (renter or homeowner)
- ✤ Home type (single family home, apartment, etc.)



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- The number of people in their household
- 🗻 Annual household income
- ▶ Whether they were enrolled in a utility assistance program
- 👞 Educational level
- 👞 Gender
- 👞 Race/ethnicity

Household income, race/ethnicity, and educational level were important to Ogden City since there was concern that CREP could impact specific communities more than others. We asked for the following demographic information from businesses:

- ✤ Respondent's role or title at the business
- 🔺 The business' industry
- ✤ Own or rent their office or workspace
- Number of employees



SURVEY SAMPLING AND DISTRIBUTION

This section discusses the methods the CRE used to sample and distribute the CREP survey to Ogden residents. Methods for the business survey are discussed in the Business Survey section.

Resident Survey: Sampling

We distributed the resident survey to a random sample of Ogden households using address-based sampling methods. We used data from the Utah Address Points database for Ogden City as our sampling frame.¹ The Utah Address Points database is a statewide initiative that compiles a complete list of US Postal Services residential and commercial addresses. The primary goals are to make sure that all state entities are using the same verified accurate county and municipal address information and to improve efficiency for 911 dispatch. Each county designates an individual to maintain and update the county's address information within the database. The CRE spoke with Brett Badley, the designated individual in Weber County, to ensure the address data was up-to-date and high quality. Data is updated monthly. We downloaded the address data used for our sampling frame on December 15, 2021.

Starting with a total of 40,932 addresses listed for Ogden City, we retained all addresses for which the Property Type (pttype) was coded as Residential (33,232). We also noticed that a small number (453) of the addresses designated as Property Type = Commercial had a Unit Type (unittype) listed as APT. Upon closer examination, all 453 of these addresses were recognized as residential units in large apartment complexes and were also retained in the sample. This gave us an initial sample of 33,685 residential Ogden addresses. After removing duplicate entries, our final sampling frame consisted of 32,676 residential addresses.

Before using this sampling frame to draw the random sample, we appended email addresses to the Utah Address Points data where possible. Email addresses were provided by Ogden City for all Ogden City utility (municipal water) customers with an email address on file. In total, 7,610 residential service addresses had an email on file. In Ogden, the water account and its associated contact information (e.g. email addresses) must be held in the name of the property owner, regardless of who is living at



¹ See https://gis.utah.gov/data/location/address-data/

the property. In order to target residents and avoid emailing landlords, we excluded all cases where the service address differed from the billing address. We also excluded all undeveloped lots and eliminated duplicate observations. This left us with a total of 5,071 email addresses linked to physical service addresses.

Next, we merged the list of emails together with the Utah Address Points data. Of the 5,071 service addresses linked to emails, 4,751 were successfully matched with addresses in the Utah Address Points data. The match rate of 93.7% is quite good and speaks to the high quality of data across both data sources.

Returning to our original sampling frame of 32,676 addresses from the Utah Address Points database (of which 4,751 now have an email address appended) we then geocoded the addresses according to their latitude, longitude, and 2020 Census Tract. Finally, we used a random number generator to draw a random sample of 10,000 addresses.

Resident Survey: Distribution

The CRE distributed the survey to those living at these 10,000 addresses by email when possible (1,430 cases) or by postal mail when no email address was available (8,570 cases). As an incentive to complete the survey, Ogden City provided respondents the opportunity to enter a drawing for one of 15 \$100 gift cards. All participants could choose to take the survey in English or Spanish.

Households with an email address on file were sent an invitation to take the survey by email. The invitation briefly explained the purpose of the survey and the gift card incentive, and included a link that recipients could follow to take the survey online. A copy of the email can be found in Appendix F. All recipients received a unique link, and each link could only be used to take the survey once. This helps to ensure the integrity of the original random sample and avoid "snowball sampling" among friends or via social media. All initial email invitations were sent out on Tuesday February 22, 2022. Three reminders were also sent on March 2, March 8, and March 30, 2022, respectively. Each reminder was only sent to those who had not yet completed the survey.

Households without an email address on file were sent an invitation to take the survey by postal mail. The postcard briefly explained the purpose of the survey and the gift card incentive in both English and Spanish. The postcard also included a QR code that recipients could scan in order to complete the



survey online. As with the email distribution, all recipients received a unique QR code, and each QR code could only be used once. The postcard also stated the recipient could request a paper copy of the survey by emailing our research team if the QR code did not work for them or they did not want to take the survey via the QR code. The postcard provided a contact email.² The initial mailing first hit residents' mailboxes on Tuesday, February 22, coinciding perfectly with the launch of the email survey.

Additionally, the CRE recruited college student volunteers to follow up door-to-door in municipal districts and census tracts with low response rates and/or low median incomes. Early responses showed that lower income households were responding to the survey at a disproportionately low rate. Census tracts with low median incomes were targeted in an effort to reduce the disparity in response rates across income levels. All students received training detailing the purpose of the survey and how to maintain a neutral approach when asking residents to take the survey. Students worked in pairs and were given a list of addresses in a particular census tract to which a survey invitation had been sent (either by email or postal mail) but from which a response had not yet been received. As such, students only knocked on doors at addresses that were included in the original random sample. Again, this helps ensure the integrity of the original random sample.

The first group of volunteer door knockers went out on Saturday, February 26 from 9am-4pm. The second group of door-knockers went out on Tuesday, March 1 from 1-7pm, and the final group of door knockers went out on Thursday, March 3 from 9am-4pm. Those who decided to take the survey after speaking with a student had the option to take the survey on paper or electronically on a tablet. Those who wished to take it later were given another postcard with a QR code as a reminder to take the survey. Finally, toward the end of each day, students were told that if they had extra postcards, they should leave them in the mailboxes of homes that did not answer their door.

Finally, due to an initial over-printing of postcards, after the final day of door knocking, we still had 851 leftover postcards which had neither been sent out in the initial mailing nor distributed via knocking. We decided to re-print a selected sample of QR codes and re-send a second (reminder) mailing to a targeted sub-sample of addresses in low income census tracts in Districts 1 (340 postcards), District 2 (340 postcards) and District 3 (171 postcards). To be clear, this was a second mailing to 851 addresses

² Twenty people followed up by email. Some requested a paper copy, while others spontaneously requested an electronic web link. We accommodated both requests. All electronic links provided were unique and could only be used to take the survey once.



within our original sample of 10,000 who had not responded after the initial mailing and all three days of door knocking. This second mailing was sent on Friday March 25, 2022. The survey was closed on Friday April 1, 2022.

Resident Results: Response Rate

The survey was sent out to 10,000 residents of Ogden and 803 of them consented to take the survey. This means they opened the survey, read the introductory information, and said they wanted to take the survey and were over the age of 18 years. As such, the CREP survey had a response rate of 8.03%, which is within the typical range for mail surveys (Grubert, 2017; Sinclair et. al., 2012; Smith et. al., 2019). Because residents with solar panels would not have the option of participating in CREP, they were excluded from taking the survey. Of those 803 respondents, 92 indicated they had solar panels. This reduced the sample to 711. Of those 711, 42 did not answer key questions such as what their average electricity bill was or what their willingness to pay for renewable energy was. Therefore, the CRE excluded them from our analysis. The final sample was 669, of which 653 were derived from the English version of the survey and 16 were derived from the Spanish version.



RESIDENT SURVEY RESULTS

Willingness to Pay

This section presents results on residents' willingness to pay for electricity from renewable energy sources. First, we explain how we measure willingness to pay and why we have chosen to focus on median (rather than average) willingness to pay. Second, we present results without applying any sample weights. Third, we use the results from this unweighted sample to motivate our application of sample weights. Fourth, we provide an explanation of sample weighting and how we apply it to the CREP sample. Finally, we present results from the weighted sample. The weighted-sample results provide our best estimate of the actual willingness to pay for renewable electricity across the overall population of Ogden.

The survey asked residents how much more per month they would be willing to pay for renewable energy on top of their current monthly electricity costs. The survey provided response options as dollar amounts between \$1 and \$50 at varying increments (see survey question 6 in Appendices C and D). Respondents could also specify an amount not listed with the "Other, please specify" option. If implemented, CREP would increase electricity rates as a percentage increase, not a flat dollar amount increase. However, the CRE research team intentionally wrote the survey to ask respondents about their willingness to pay as a dollar amount because research shows that asking about percent changes increases complexity which can reduce accuracy (Gunatilake et. al., 2007). In order to align survey results with CREP's program design, the research team converted all reported willingness to pay amounts from dollars into a percent increase on top of current electricity costs. This was done by dividing respondents' reported willingness to pay amount by their reported typical monthly electricity costs. ³ As such, all willingness to pay results presented in this report describe how much more residents are willing to pay as a *percent increase* above and beyond current electricity costs, not as a dollar amount.

³ For residents who reported that their electricity costs are included in their monthly rent, their typical monthly electricity costs were imputed as the median monthly electricity cost among the other respondents.



Willingness to pay as a percentage



Figure 1. Willingness to pay among residents

As indicated in Figure 1 above, 72.8% of respondents reported a willingness to pay more than 0%. This means that 72.8% were willing to pay some increase in their monthly electricity costs in order to obtain electricity from renewable sources. This also means that 27.2% of all respondents reported a willingness to pay of 0%. In other words, 27.2% would not be willing to pay any increase in their electricity bill for renewable energy.

Figure 1 also shows some important features of the range and frequencies of different willingness to pay. As noted above, there is a cluster (27.2%) of responses at 0%, and then a long range of responses to the right of 0% going up to 253%. In statistical terms, the distribution of willingness to pay is not symmetrical and has a strong right skew.

Under these circumstances, the median willingness to pay does a better job than the average (aka mean) willingness to pay of summarizing the willingness to pay across all respondents. The median is



where half of respondents are willing to pay more and half are willing to pay less. Median willingness to pay represents the highest percent increase in electricity costs that a majority of respondents would be willing to pay.

Using the median, instead of the average, is standard practice when measuring certain other population characteristics like household income. The use of the median in the context of household income is grounded in exactly the same reasons we choose to focus on median willingness to pay: the distribution of household income is not symmetrical and has a strong right skew. As such, the median



Willingness to pay as a percentage

Figure 2. Median willingness to pay among residents (unweighted)

is preferred to the average. For these reasons, this analysis focuses on median willingness to pay. Among survey respondents, the median willingness to pay for renewable electricity is 10.5% (see Figure 2).⁴ This means a majority of survey respondents are willing to pay 10.5% more per month in

⁴ Note the average (aka mean) willingness to pay (19.1%) is significantly higher than the median willingness to pay (10.5%). Again, this discrepancy between mean and median is due to the asymmetry and strong right skew of distribution of willingness to pay responses. This supports our reasoning for focusing on median willingness to pay.





order to obtain their electricity from renewable sources. The 95% confidence interval calculated for the median willingness to pay is between 10.0% and 12.5%.

Below is information on the willingness to pay of different demographic groups. For a breakdown of respondents by district and other demographic groups, please see the appendix starting on page 42. Broken down by district, respondents in district 3 had the highest median WTP at 13.1%, followed by respondents in

Median willingness to pay more by ethnicity



Figure 4. Median willingness to pay more by ethnicity of residents

District 4

10.0%

13.1%

8.3%

Figure 3. Median willingness to pay more by municipal districts

district 4 (10.3%), district 1 (10.0%), and district 2 (8.3%) (Figure 3). In other words, a majority of respondents in district 3 would be willing to pay 13.1% more for renewable electricity, a majority of those in district 4 would pay 10.4% more, a majority in district 1 would pay 10.0% more, and a majority of respondents in district 2 would be willing to pay 8.3% more for renewable electricity.



Median willingness to pay more by muncipal districts

District 1

District 2

District 3

Cle

Respondents who identified as White Not Hispanic/Latino had a median WTP of 12.5%, while those

who identified as Hispanic/Latino had a median WTP of 10.0% (Figure 4). As a reminder, this means a majority of White residents are willing to pay 12.5% more for renewable energy while a majority of Hispanic/Latino residents are willing to pay 10.0% more. The CRE did not analyze data for other ethnic or racial groups because of small sample size.

Among survey respondents, a majority of renters were willing



Figure 5. Median willingness to pay more by housing tenure



Figure 6. Median willingness to pay more by gender

to pay 12.1% more for renewable energy whereas a majority of homeowners were willing to pay 10.8% more (Figure 5).

A majority of residents who identified as female were willing to pay 10.0% more and a majority of those who identified as male were willing to pay 12.5% more (Figure 6). The sample was too small to analyze those who identify as non-binary.



Respondents with lower household incomes usually indicated they were willing to pay less for renewable energy than those making higher incomes (Figure 7). The income group with the highest reported willingness to pay made between \$80-\$89,000/year and reported a median willingness to pay of 17.4% more for renewable electricity. Those earning between \$10-\$19,000/year reported the lowest median willingness to pay (4.9% more).



Median willingness to pay more by household income

Figure 7. Median willingness to pay more by household income





For the most part, respondents with more formal education were willing to pay more for renewable energy than those with less formal education (Figure 8). A majority of those with less than a high school diploma were willing to pay 5.9% more for renewable energy, while a majority of those with a bachelor's degree were willing to pay 15% more.

Weighting the Sample

As noted above, respondents with lower incomes tended to have a lower median willingness to pay



Median willingness to pay by education

Less than a

Figure 8. Median willingness to pay more by education

than respondents with higher incomes. Additionally, lower-income residents were underrepresented in our sample. This means the proportion of low-income residents who answered the survey was lower than the proportion of residents with low-incomes who live in Ogden. This discrepancy is shown in Table 1. For example, households with incomes between \$10,000 and \$49,999 made up only 27.3% of survey respondents, but they make up 38.3% of all households in Ogden. This indicates that those in this lower income bracket are under-represented (negative difference) in the survey while those in the higher income brackets (those \$50,000 and over) are over-represented (positive difference).



Household Income	Proportion in CREP Survey Sample	Proportion in Ogden Overall	Difference
\$0-\$9,999	4.60%	4.60%	0.00%
\$10,000-\$49,999	27.30%	38.30%	-11.00%
\$50,000-\$99,999	42.70%	38.30%	4.40%
\$100,000 or more	25.40%	18.70%	6.70%

Table 1. Proportion of different income levels in the CREP sample and the Ogden population

Notes: Ogden proportions from the 2019 ACS 1-year estimates.

Income brackets reported were chosen to match those reported in the ACS.

The same is true for respondents with less formal education: they have a lower median willingness to pay and were also underrepresented in the sample (Table 2). For example, only 3.2% of all survey respondents had less than a high school diploma, yet 13.4% of Ogden adults 18 years and older do not have a high school diploma. This means those with less than a high school diploma are underrepresented in our sample. On the other hand, 23.7% of all survey respondents had a graduate degree, while only 5.8% of total adults in Ogden have a graduate degree. This means those with graduate degrees are over-represented in our sample.

Highest Education	% in CREP Survey Sample	% in Ogden	Difference
Less than a high school diploma	3.20%	13.40%	-10.30%
High school diploma or GED	15.80%	31.80%	-16.00%
Some college	19.00%	29.30%	-10.40%
Associate degree or certificate	10.10%	7.20%	2.80%
Bachelor's degree	28.40%	12.30%	16.00%
Graduate degree	23.70%	5.80%	17.80%

Table 2. Proportion of different education levels in the CREP sample and the Ogden Population

Notes: Ogden proportions from the 2019 ACS 1-year estimates.





When those with lower incomes and less formal education have lower median willingness to pay and are under-represented in the survey sample, this will cause a specific discrepancy between the median willingness to pay within our survey sample and the median willingness to pay within the actual Ogden population. Specifically, the median willingness to pay within our survey sample will be too high (because we do not have enough representation from groups with lower median willingness to pay). While the only "cure" for an unrepresentative sample is to add more responses from under-represented groups, there are other "treatments" that, while they don't change the representative sample. One such treatment is sample weighting. In principle, sample weighting gives more weight to under-represented respondents in order to increase the impact of their voices within the sample up to their actual proportion in the population. We applied a weighting algorithm to weight our sample by both income and education.⁵ The sections that follow discuss results based on this weighted sample. We believe these weighted results provide the best estimates of the perceptions and behavior of the overall population of Ogden. As such, going forward we report results for the weighted sample, unless otherwise specified.

⁵ Specifically, we generated sample weights through a statistical process known as raking. We used the 'anesrake' command in the R package of the same name. This command implements rake-weighting to match the specifications of the American National Election Studies. See https://cran.r-project.org/web/packages/anesrake/anesrake for details.



Weighted Willingness to Pay



After the sample had been weighted to help correct for under-representation of those with lowincomes and less formal education, the median willingness to pay decreased from 10.5% to 9.3%. With a 95% confidence interval, this means that the weighted median WTP is between 6.7% and 10.0%. In other words, we are 95% confident that the actual median willingness to pay for renewable electricity among the Ogden population is between 6.7% and 10.0% above current monthly electricity costs.



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Table 3. Profile of respondents willing to pay more and not willing to pay more

	Not willing t	to pay more	Willing to pay more	
Demographics	Number	Percent	Number	Percent
Unweighted	182	27.20%	487	72.80%
Weighted	211	31.50%	458	68.50%
District				
1	43	29.90%	101	70.10%
2	48	32.20%	101	67.80%
3	40	24.70%	122	75.30%
4	51	23.80%	163	76.20%
Race/Ethnicity				
Hispanic/Latino (Not White)	20	26.70%	55	73.30%
White Alone	107	23.60%	347	76.40%
Tenure				
Owner-occupied	133	26.20%	374	73.80%
Renter-occupied	29	24.60%	89	75.40%
Gender				
Male	67	23.00%	224	77.00%
Female	74	27.10%	199	72.90%
Income				
0 to 29999	35	38.90%	55	61.10%
30000 to 6999	56	24.80%	170	75.20%
> 70000	63	21.40%	232	78.60%
Education				
Less than high school diploma	7	36.80%	12	63.20%
High school diploma/GED	34	36.20%	60	63.80%
Some college	38	33.60%	75	66.40%
Associate degree/certificate	16	26.70%	44	73.30%
Bachelor's degree	33	19.50%	136	80.50%



We also find it is insightful to examine the characteristics of those who reported they were not willing to pay anything for renewable energy (WTP=0%). Table 3 shows the percentage of those across different demographic groups who were not willing to pay as well as the overall percentage for the weighted sample.⁶ Overall, we estimate 31.5% of Ogden residents are not willing to pay anything for renewable energy. Conversely, this means 68.5% of residents are willing to pay some amount for renewable electricity. Groups with the highest percentage of those not willing to pay anything include those with household incomes in the range of \$0-\$29,999 (38.9% not willing to pay anything) and

those whose highest level of formal education is a high school diploma (36.2% not willing to pay anything) or less than a high school diploma (32.8% not willing to pay anything). The groups with the lowest percentage of those not willing to pay anything are those with a graduate degree (18.4% not willing to pay anything) and those with a Bachelor's degree (19.5% not willing to pay anything).

How likely is a resident to opt-out of CREP?



Opt out Behavior

Figure 10. The likelihood a resident would opt-out, if their bill went above what they are willing to pay.

Cities who join CREP must give

residents the option to opt out of the program and remain on standard energy rates. To gauge opting out behavior, after residents reported their willingness to pay for renewable electricity, the survey followed up with a question about opting out. Specifically, respondents were asked if their electricity

⁶ Note that weighting can only be applied when the income and education levels of the population are known. Through the American Community Survey, we know these levels for the Ogden population as a whole, but we do not know these levels for specific demographic groups. Therefore, weighted results are only presented for the overall sample and not for specific demographic groups.



bill were to increase by **more** than their reported willingness to pay, how likely would they be to opt out of the program? Results for this question are presented in Figure 10.

Notably, only 29.7% of respondents stated they are likely to opt out of the CREP program if electricity cost increases exceed their willingness to pay. The largest group, 47.7%, are not sure if they would opt out, and 22.6% said they are likely to opt out. Note, this is somewhat non-intuitive: it suggests that either some residents did not actually report their maximum willingness to pay for renewable electricity or some respondents did not fully understand the opt out decision. Regardless, it is interesting that a minority of residents (only 29.7%) report they are likely to opt out of CREP if energy cost increases exceed their willingness to pay.

Increase in energy costs	Percent of total Ogden residents likely to opt out
1%	14.10%
5%	16.90%
10%	20.30%
15%	20.90%
25%	24.20%

Table 4. How likely are residents to opt out?

Responses to this question can also be used to estimate the percentage of Ogden residents who are likely to opt out of the CREP program for any given increase in electricity costs. Such results are presented in Table 4.

As energy costs increase, more residents would be likely to opt out. If energy costs increased by 1% with CREP, the CRE estimates only 14.1% of residents would be likely to opt out. If energy costs increased by 10%, then 20.3% of residents would likely opt out. If energy costs increased 25% then 24.2% of residents would be likely to opt out.



Contributing Factors

The survey also asked respondents about the extent to which nine other factors contributed to their decisions to participate in or opt-out of CREP. Results for this question are presented in Figure 11.

To what extent do these other factors contribute to your decision to participate in or opt-out of CREP?

■ Not at all	Only a little	A moderate amount		■ A great deal	
Being able to choose where	my energy comes from	16.8%	25.2%	29.6%	28.3%
Lack of info	ormation I have on CREP	15.0%	27.6%	27.9%	29.4%
	Timeline is unclear	18.9%	30.5%	31.3%	19.2%
Not knowing how CREP wil	benefit the community	26.2%	30.7%	28.6%	14.4%
Having to opt out of the pro in	ogram, instead of opting	27.2%	30.0%	23.0%	19.9%
Negative impacts on ind	the coal and natural gas ustries	41.3%	18.1%	17.9% 2	2.7%
Particip	ation of other residents	36.3%	27.7%	25.1% 3	10.9%
Hestitations a	about renewable energy	46.9%	24.5%	16.3% 12.3	%

Figure 11. To what extent do these other factors contribute to your decision to participate in or opt-out of CREP?

Residents' ability to choose where their energy comes from and/or the lack of information they have on the program contributed the most to residents' decisions about participating in CREP. Residents said that hesitations about renewable energy, the participation of other residents, and/or negative



impacts on the coal and natural gas industries did not contribute much or at all to their decision making.

Should Ogden City Join CREP?

In addition to asking about individual willingness to pay and individual opting out behavior, the survey also asked respondents if they think Ogden City should join CREP. This question is distinct from

residents' individual decisions on whether or not to participate in CREP. It refers to the decision the Ogden City government will make about whether or not to offer the CREP program to residents. If Ogden joins CREP, residents will have the option to participate or opt out. If Ogden does not join CREP, all Ogden residents will remain on standard energy rates for standard energy sources without the option to choose renewable energy. Results are displayed in Figure 12.





Essentially an equal number of Ogden residents think Ogden City should join CREP (45.0%) as those who are unsure whether the City should join (46%). Only a small minority (8.9%) do not think the City should join.





Perceptions on responsibility for obtaining renewable energy

Finally, taking a step back from the specifics of the CREP program, the survey asks three questions about the extent to which Ogden residents think businesses, residents themselves, and local government officials should be doing more to seek out and bring renewable energy options to the area. Results are presented in Figure 13.



Who should be doing more to seek out renewable energy?

Figure 13. Beyond CREP, do you think *local government officials/residents/businesses* should be doing more to seek out more renewable energy options?

The vast majority of residents (over 70.0%) thought businesses, local government, and residents themselves should do more to seek out renewable energy.



BUSINESS SURVEY RESULTS

The CRE emailed 1,702 businesses. Of those, 133 Ogden business owners consented to take the survey. This gave the business survey a response rate of 7.8%. Of these, 28 businesses, or 21%, had solar panels installed and they could not participate in the survey. This reduced the sample to 105 eligible businesses. Of those, 19 businesses did not answer what their average monthly electricity costs were or what their willingness to pay for renewable energy was. This means that the final business sample was 86.

The median willingness to pay for renewable energy among Ogden businesses was 6.9%, however this was not statistically different from 0%. Among businesses, 61.3% thought Ogden should join CREP whereas only 38.7% thought the city should not join.



LIMITATIONS

There were several limitations to this survey. In regards to sampling, the CRE requested customer emails from Rocky Mountain Power to ensure a more accurate and complete sampling universe. This would also mean that the vast majority of respondents would be able to respond online, which usually results in a higher response rate. Rocky Mountain Power was unable to provide these emails, so the CRE pivoted to using utility customer emails from the city and mailing addresses found in the Utah Address Points database. This meant that the CREP survey essentially became a mail survey with 8,570 of the 10,000 possible respondents receiving postcards. The response rate we received was in line with other mail surveys but we surmise would have been higher with a primarily email based survey.

Second, respondents receiving postcards needed to scan a QR code affixed to the postcard in order to take the survey. This might mean that those unfamiliar or uncomfortable with QR codes would be less likely to take the survey even though the postcard gave instructions on how to request a paper survey.

Third, we received lower response rates from the Hispanic/Latinx population, low-income residents, renters, and those with less education. Receiving low response rates from these demographic groups is also typical for surveys. Those limitations are mitigated by the fact that responses by Hispanic/Latinx and renters were essentially the same as the entire sample. We mitigated the other limitations (those with lower income and education levels) by weighting the sample.

The survey was available to be taken online or on paper and in Spanish or English. Volunteers who knocked on doors were also bilingual or had a partner who was bilingual. However, because of an oversight, the first three emails inviting email recipients to take the survey were only written in English without a Spanish translation available. The fourth email reminder contained both English and Spanish.

Finally, the survey asks respondents to state how much more they are willing to pay for renewable energy, but the research team was not able to observe actual behavior in the context of real financial costs in the way that, say, a pilot program could provide. Some economic research indicates that individuals tend to overstate their willingness to pay. A recent meta-analysis suggest this "hypothetical bias" tends to be in the range of 20% (Schmidt and Mijmolt, 2019).



REFERENCES

Ballew, M. T., Leiserowitz, A., Roser-Renouf, C., Rosenthal, S. A., Kotcher, J. E., Marlon, J. R., ...
& Maibach, E. W. (2019). Climate change in the American mind: Data, tools, and trends. *Environment: Science and Policy for Sustainable Development*, *61*(3), 4-18.

Grubert, E. (2017). How to do mail surveys in the digital age: a practical guide. *Survey Practice* 10(1).

- Gunatilake, H., Yang, J., Pattanayak, S., & Choe, K.A. (2007). Good practices for estimating reliable willingness to pay values in the water supply and sanitation sector. Asian Development Bank. ERD Technical Note Series no. 23.
- Irfan, M., Zhao, Z. Y., Li, H., & Rehman, A. (2020). The influence of consumers' intention factors on willingness to pay for renewable energy: a structural equation modeling approach. *Environmental Science and Pollution Research*, *27*(17), 21747-21761.
- Kalkbrenner, B. J., & Roosen, J. (2016). Citizens' willingness to participate in local renewable
 projects: The role of community and trust in Germany. *Energy Research & Social Science*, 13, 60-70.
- Lehmann, N., Sloot, D., Ardone, A., & Fichtner, W. (2022). Willingness to pay for regional electricity generation–A question of green values and regional product beliefs?. *Energy Economics*, *110*, 106003.
- Leiserowitz, A., Maibach, E., Rosenthal, S., Kotcher, J., Gustafson, A., Bergquist, P., Ballew, M.,
 & Goldberg, M. (2018). Energy in the American Mind, December 2018. Yale University and
 George Mason University. New Haven, CT: Yale Program on Climate Change Communication.
 DOI: 10.17605/OSF.IO/BDQ25
- Murphy, J. J., Allen, P. G., Stevens, T. H., & Weatherhead, D. (2005). A meta-analysis of hypothetical bias in stated preference valuation. *Environmental and Resource Economics*, *30*(3), 313-325.




Nemet, G. F., & Johnson, E. (2010). Willingness to pay for climate policy: a review of estimates.

- Oerlemans, L. A., Chan, K. Y., & Volschenk, J. (2016). Willingness to pay for green electricity: A review of the contingent valuation literature and its sources of error. *Renewable and Sustainable Energy Reviews*, *66*, 875-885
- Olson-Hazboun, S. K., Krannich, R. S., & Robertson, P. G. (2016). Public views on renewable energy in the Rocky Mountain region of the United States: Distinct attitudes, exposure, and other key predictors of wind energy. *Energy Research & Social Science*, *21*, 167-179
- Pleeging, E., van Exel, J., Burger, M. J., & Stavropoulos, S. (2021). Hope for the future and willingness to pay for sustainable energy. *Ecological Economics*, *181*, 106900.
- Schmidt, J., & Bijmolt, T. H. (2020). Accurately measuring willingness to pay for consumer goods:
 a meta-analysis of the hypothetical bias. *Journal of the Academy of Marketing Science*, 48(3), 499-518.
- Sinclair, M., O'Toole, J., Malawaraarachch, M., & Leder, K. (2012). Comparison of response rates and cost-effectiveness for a community-based survey: postal, internet and telephone modes with generic or personalised recruitment approaches. *BMC Medical Research Methodology*. 12(132), 1-8.
- Skill, E. E., Stafford, E. R., & Brain McCann, R. G. (2020). Community engagement strategies to achieve 100 percent net-renewable electricity resolutions. *Sustainability: The Journal of Record*, 13(5), 225-241.
- Smith, M., Witte, M., Roca, S. & Basner, M. (2019). Effectiveness of incentives and follow-up on increasing survey response rates and participation in field studies. *BMC Medical Research Methodology*. 19(230), 1-13.
- Soon, J. J., & Ahmad, S. A. (2015). Willingly or grudgingly? A meta-analysis on the willingness-to-pay for renewable energy use. *Renewable and Sustainable Energy Reviews*, 44, 877-887.
- Sundt, S., & Rehdanz, K. (2015). Consumers' willingness to pay for green electricity: A meta-analysis of the literature. *Energy Economics*, *51*, 1-8.



- Walker, G., Hunter, S., Devine-Wright, P., Evans, B., & Fay, H. (2007). Harnessing community energies: explaining and evaluating community-based localism in renewable energy policy in the UK. *Global Environmental Politics*, *7*(2), 64-82.
- Winden, M., Jamelske, E., & Tvinnereim, E. (2018). A contingent valuation study comparing citizen's willingness-to-pay for climate change Mitigation in China and the United States. *Environmental Economics and Policy Studies*, 20(2), 451-475.
- Wiser, R. H. (2007). Using contingent valuation to explore willingness to pay for renewable energy:
 a comparison of collective and voluntary payment vehicles. *Ecological economics*, 62(3-4), 419-432.



APPENDIX A - RAW SURVEY RESULTS – RESIDENTS

Screening questions

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Language				
Spanish	25	3.7%	16	2.4%
English	644	96.3%	653	97.6%
How do you pay for electricity?				
I/someone in my household pays the electric bill directly to the electricity company	626	93.6%	640	95.7%
My electricity is included in my monthly rent	43	6.4%	29	4.3%

Median in dollar amounts

	W	eighted	Unv	veighted	Min	Max
Median monthly electricity costs	\$	90.00	\$	88.00	\$ 10.00	\$ 7,089.00
How much more would you be willing to pay for electricity? (median)	\$	10.00	\$	10.00	\$ 0.00	\$ 250.00

How likely would you be to opt-out of CREP?

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Very Unlikely	55	8.8%	56	8.8%
Unlikely	88	13.8%	99	15.6%
Unsure	302	47.7%	292	46.0%
Likely	75	11.8%	85	13.4%
Very Likely	113	17.8%	103	16.2%



To what extent do these other factors contribute to your decision to participate in or opt-out of CREP?

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Hesitations about renewable energy				
Not at all	293	46.9%	349	55.5%
Only a little	153	24.5%	138	21.9%
A moderate amount	102	16.3%	78	12.4%
A great deal	77	12.3%	64	10.2%
Participation of other residents				
Not at all	223	36.3%	251	40.4%
Only a little	170	27.7%	176	28.3%
A moderate amount	154	25.1%	137	22.1%
A great deal	67	10.9%	57	9.2%
Not knowing how CREP will benefit the community				
Not at all	162	26.2%	188	30.2%
Only a little	190	30.7%	186	29.9%
A moderate amount	177	28.6%	169	27.2%
A great deal	89	14.4%	79	12.7%
Timeline is unclear				
Not at all	116	18.9%	132	21.2%
Only a little	187	30.5%	204	32.8%
A moderate amount	192	31.3%	175	28.1%
A great deal	118	19.2%	111	17.8%
Having to opt out of the program, instead of opting in				
Not at all	167	27.2%	210	33.8%
Only a little	184	30.0%	170	27.4%
A moderate amount	141	23.0%	127	20.5%
A great deal	122	19.9%	114	18.4%



Negative impacts on the coal and natural gas industries				
Not at all	253	41.3%	299	48.3%
Only a little	111	18.1%	104	16.8%
A moderate amount	110	17.9%	93	15.0%
A great deal	139	22.7%	123	19.9%
Being able to choose where my energy comes from				
Not at all	104	16.8%	119	19.1%
Only a little	156	25.2%	149	23.9%
A moderate amount	183	29.6%	183	29.4%
A great deal	175	28.3%	172	27.6%
Lack of information I have on CREP				
Not at all	93	15.0%	100	16.0%
Only a little	171	27.6%	167	26.8%
A moderate amount	173	27.9%	196	31.4%
A great deal	182	29.4%	161	25.8%

Should Ogden City join CREP?

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Yes	282	45.1%	324	51.5%
Not Sure	288	46.0%	243	9.9%
No	56	9.0%	62	38.6%



Beyond CREP, do you think ______should be doing more to seek out renewable energy options?

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Local Government				
Much Less	29	4.7%	28	4.5%
Less	33	5.3%	28	4.5%
Currently doing the right amount	91	14.6%	94	14.9%
More	234	37.4%	234	37.2%
Much More	238	38.0%	245	39.0%
Residents				
Much Less	9	1.4%	13	2.1%
Less	23	3.7%	21	3.3%
Currently doing the right amount	148	23.6%	152	24.2%
More	289	46.2%	281	44.7%
Much More	157	25.1%	162	25.8%
Businesses				
Much Less	9	1.4%	12	1.9%
Less	20	3.2%	18	2.9%
Currently doing the right amount	102	16.3%	98	15.6%
More	259	41.4%	245	39.0%
Much More	236	37.7%	256	40.7%

Municipal Districts

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
1	155	23.2%	144	21.5%
2	171	25.6%	149	22.3%
3	194	29.0%	162	24.2%
4	149	22.2%	214	32.0%



Household Tenure

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Rent	157	25.2%	118	18.8%
Own free and clear	105	16.8%	116	18.5%
Own with a mortgage	343	55.0%	380	60.6%
Own a mobile home or rent a lot	16	2.6%	11	1.8%
Other	2	0.4%	2	0.3%

Household Type

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
A single-family house	457	73.6%	485	77.6%
A duplex or multifamily house	56	9.0%	53	8.5%
An apartment building (3-9 units)	33	5.3%	27	4.3%
An apartment building (10+ units)	42	6.8%	35	5.6%
A mobile home	11	1.8%	9	1.4%
Other	22	3.5%	16	2.6%

Family Size

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
1 person	113	18.1%	100	16.0%
2 people	215	34.5%	236	37.7%
3 people	95	15.3%	107	17.1%
4 people	110	17.7%	103	16.5%
5 people	50	8.0%	39	6.2%
6 people	33	5.3%	31	5.0%
7 people	4	0.7%	6	1.0%
8 + people	3	0.5%	4	0.6%



Household Income

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Less than \$10,000/year	29	4.7%	28	4.6%
\$10,000-\$19,999/year	52	8.6%	28	4.6%
\$20,000-\$29,999/year	51	8.4%	34	5.6%
\$30,000-\$39,999/year	59	9.6%	48	7.9%
\$40,000-\$49,999/year	71	11.7%	57	9.3%
\$50,000-\$59,999/year	62	10.2%	52	8.5%
\$60,000-\$69,999/year	70	11.5%	69	11.3%
\$70,000-\$79,999/year	38	6.2%	48	7.9%
\$80,000-\$89,999/year	40	6.6%	53	8.7%
\$90,000-99,999/year	23	3.8%	39	6.4%
\$100,000 or more/year	114	18.7%	155	25.4%

Have you received utility payment assistance?

Assistance Programs	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Home Energy Assistance (HEAT) Program Target	36	6.2%	20	3.4%
HELP bill discount	7	1.1%	4	0.7%
Rocky Mountain Power's bill assistance and payment plans	2	0.4%	3	0.5%
Lend A Hand	35	6.0%	24	4.0%
Place of worship	5	0.8%	1	0.2%
Utah Department of Workforce Services' Utah weatherization program	5	0.8%	1	0.2%
Other	12	2.1%	10	1.7%
Not Applicable	493	84.0%	541	90.6%

Respondents could select one or more programs.



Education Level

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Less than a high school degree/GED	80	12.9%	19	3.0%
High school/GED	190	30.5%	94	15.1%
Some college	175	28.2%	113	18.1%
Associate degree/degree certificate	43	7.0%	60	9.6%
Bachelor's degree	74	11.8%	169	27.1%
Graduate degree	35	5.6%	141	22.6%
Prefer not to answer	25	4.0%	28	4.5%

Race/Ethnicity

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Hispanic/Latino	123	19.9%	75	12.0%
White alone	411	66.6%	454	72.9%
Black alone	13	2.1%	9	1.4%
Native American/Alaskan alone	5	0.8%	4	0.6%
Asian alone	4	0.6%	10	1.6%
Hawaiian/Pacific Islander alone	0	0.1%	1	0.2%
Another race alone	8	1.4%	12	1.9%
More than one race	5	0.8%	9	1.4%
Prefer not to answer	48	7.7%	49	7.9%

Respondents could select one or more races that they identified with.



Gender

	Weighted Number	Weighted Percent	Unweighted Number	Unweighted Percent
Non-binary	9	1.5%	8	1.3%
Male	293	47.4%	291	46.7%
Female	271	43.7%	273	43.8%
Self-identify	3	0.5%	5	0.8%
Prefer not to answer	42	6.8%	46	7.4%



APPENDIX B - RAW SURVEY RESULTS – BUSINESSES

Median in dollar amounts

	M	1edian	Min	Max
Median monthly electricity costs	\$	217.50	\$ 20.00	\$ 9,500.00
How much more would you be willing to pay for electricity?	\$	10.00	\$ 0.00	\$ 1,500.00

How likely would you be to opt-out of CREP?

	Number	Percent
Very Unlikely	8	10.3%
Unlikely	8	10.3%
Unsure	24	30.8%
Likely	10	12.8%
Very Likely	28	35.9%



	Number	Percent
Hesitations about renewable energy		
Not at all	32	42.7%
Only a little	13	17.3%
A moderate amount	18	24.0%
A great deal	12	16.0%
Participation of other businesses		
Not at all	33	42.9%
Only a little	16	20.8%
A moderate amount	20	26.0%
A great deal	8	10.4%
Not knowing how CREP will benefit the community		
Not at all	23	29.9%
Only a little	19	24.7%
A moderate amount	21	27.3%
A great deal	14	18.2%
Timeline is unclear		
Not at all	14	18.9%
Only a little	31	41.9%
A moderate amount	22	29.7%
A great deal	7	9.5%
Having to opt out of the program, instead of opting in		
Not at all	20	26.0%
Only a little	23	29.9%
A moderate amount	18	23.4%
A great deal	16	20.8%

To what extent do these other factors contribute to your decision to participate in or opt-out of CREP?



Negative impacts on the coal and natural gas industries		
Not at all	31	40.3%
Only a little	16	20.8%
A moderate amount	12	15.6%
A great deal	18	23.4%
Being able to choose where my energy comes from		
Not at all	15	19.7%
Only a little	13	17.1%
A moderate amount	24	31.6%
A great deal	24	31.6%
Lack of information I have on CREP		
Not at all	16	21.1%
Only a little	26	34.2%
A moderate amount	17	22.4%
A great deal	17	22.4%

Should Ogden City join CREP?

	Number	Percent
Yes	46	61.3%
No	29	38.7%



Beyond CREP, do you think _____should be doing more to seek out renewable energy options?

	Number	Percent
Local Government		
Much Less	14	18.4%
Less	9	11.8%
Currently doing the right amount	15	19.7%
More	13	17.1%
Much More	25	32.9%
Residents		
Much Less	7	9.2%
Less	7	9.2%
Currently doing the right amount	21	27.6%
More	17	22.4%
Much More	24	31.6%
Businesses		
Much Less	5	6.6%
Less	7	9.2%
Currently doing the right amount	21	27.6%
More	22	28.9%
Much More	21	27.6%

Municipal Districts

	Number	Percent
1	62	72.1%
2	5	5.8%
3	10	11.6%
4	10	11.6%

Businesses could choose more than one district.



Current role or title at the business

	Number	Percent
Owner/Executive	72	94.7%
Administrative Services	2	2.6%
Property/Store/Site Manager	2	2.6%
Accounting and Billing Services	0	0.0%
Other	0	0.0%

Business Industry

	Weighted Number	Weighted Percent
Construction	4	5.3%
Arts, Entertainment, and Recreation	5	6.6%
Healthcare and Social Assistance	9	11.8%
Accommodation and Food Service	5	6.6%
Manufacturing	16	21.1%
Retail Trade	9	11.8%
Finance and Insurance	2	2.6%
Real Estate and Rental and Leasing	1	1.3%
Professional, Scientific, and Technical Services	10	13.2%
Educational Services	1	1.3%
Wholesale Trade	2	2.6%
Other Services	12	15.8%



Office Space or Workspace Tenure

	Number	Percent
Rent	45	59.2%
Own Free and clear	15	19.7%
Own with a mortgage	14	18.4%
Not applicable	2	2.6%
Other	3	4.0%

Number of employees

	Number	Percent
0-14	61	80.3%
15-30	8	10.5%
31-44	0	0.0%
45-60	2	2.6%
61-74	0	0.0%
75-99	1	1.3%
100 or more	4	5.3%



APPENDIX C - PAPER SURVEY IN ENGLISH

Introduction Page for Resident and Business Survey



Would you like to choose where your energy comes from?

Ogden has the opportunity to join the Community Renewable Energy Program (CREP)--a program that could effect where your energy comes from and how much you pay. CREP can provide Ogden residents and businesses with more renewable energy options and help the city become net-renewable by 2030. Netrenewable energy will provide the community with the same amount of reliable energy but from renewable energy sources. Later this year, the City of Ogden will decide whether to join the CREP Program. If Ogden joins CREP, you will be able to decide whether to participate or opt out (see flow chart.)



Today	Community Renewable Energy Program	
How is energy co	st determined?	
Standard rate change depends on market conditions and	Ogden, other participating communities, and Rocky	
the availability of energy sources. Residents and	Mountain Power will share the cost and determine the	
businesses may pay an upfront cost or invest to obtain	projected renewable rates. Rate changes depend on market	
more power from renewable energy sources.	conditions.	
How do residents and businesses	use more renewable energy sources?	
Residents and businesses must work privately with the utility company to opt-in to these programs, which include Blue-Sky Renewable Energy Program, Subscriber Solar Program, and Rooftop Solar.	Customers would purchase electricity from Rocky Mountain Power as they have previously. Residents and businesses must opt-out to remain on standard rates.	

Refer to these links for further information on the CREP:

- Community Renewable Energy Act: (https://le.utah.gov/~2019/bills/static/HB0411.html)
- Ogden City Website: (https://www.ogdencity.com/1605/House-Bill-411)

Before the City makes a final decision about whether or not to join CREP, they need your input. **The survey will only take 5-10 minutes and your responses are confidential and will not be linked to your personal information.** At the end of the survey, you may enter a drawing to receive **one of fifteen \$100 gift cards** to a business of your choice. In order to enter the drawing, you must complete a separate form at the end of the survey and add your contact information. The drawing will NOT be linked to your survey responses.

Weber State University – Community Research Extension is administering this survey on behalf of Ogden City. For questions about the study, contact **Katharine French-Fuller**, **PhD**, at <u>kfrenchfuller@weber.edu</u>.

Do you agree to take this survey and confirm you are 18 years or older?

○ Yes

 \circ No

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Resident Survey



1. I am...

○ Yes

- A resident of Ogden, Utah Not a resident of Ogden, Utah
- 2. At your primary residence, how do you pay for electricity?
 - I/someone in my household pays the electric bill directly to the electricity
 My electricity is included in my monthly rent company

3. Does your primary residence have <u>solar panels on net-metering</u> installed?

- **No**
- 4. In which municipal district is your residence located? [Use the map provided below]



O 1	O 3	
° 2	O 4	



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5. On average, how much do you pay for electricity each month? (If your electricity is included in your rent, enter your monthly rent payment below):

\$_

6. CREP aims to convert the community of Ogden to net-renewable energy by 2030. As a result, this could affect the electric bills of all Rocky Mountain Power customers who participate in the program (or effect the rent for those whose electricity is included in their rent).



If your electric bill (or rent) increase, how much more would you be willing to pay each month?

○ \$0.00	○ \$15.00
○ \$1.00	○ \$20.00
○ \$2.00	○ \$25.00
○ \$3.00	○ \$30.00
○ \$4.00	○ \$40.00
○ \$5.00	○ \$50.00
○ \$10.00	○ Other: \$:

7. CREP allows residents to opt-out of the program if they don't want to join. There is no penalty for opting out within the first three billing cycles after the program starts.

If your electric bill increased above the amount you selected, how likely would you be to opt-out of CREP?

Very Unlikely	Unlikely	Unsure	Likely	Very Likely	
0	0	0	0	0	
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8. To what extent do these other factors contribute to your decision to participate in or opt-out of CREP?

	Not at all	Only a little	A moderate amount	A great deal
Hesitations about renewable energy sources	0	0	0	0
Not knowing how CREP will benefit the community	0	0	0	0
Being able to choose where my energy is sourced	0	0	0	0
Participation of other residents	0	0	0	0
Having to opt out of the program, instead of opting in	0	0	0	0
Lack of information I have on CREP	0	0	0	0
Timeline is unclear	0	0	0	0
Negative impacts on the coal and natural gas industry	0	0	0	0
Other:	0	0	0	0

9. Do you think Ogden City should join CREP?

○ Yes	○ No	 Unsure

10. Beyond CREP, do you think <u>local governmental officials</u> should be doing more to bring renewable energy options to the area?

Much Less	Less	Currently doing the right amount	More	Much More
0	0	0	0	0

11. Beyond CREP, do you think residents should be doing more to seek out more renewable energy options?

Much Less	Less	Currently doing the right amount	More	Much More
0	0	0	0	0

12. Beyond CREP, do you think <u>businesses</u> should be doing more to seek out renewable energy options?

Much Less	Less	Currently doing the right amount	More	Much More
0	0	0	0	0



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The following questions help us understand who is responding to the survey. All responses are confidential and will not be linked to your personal information.

13. I _____ my primary residence.

○ Rent	\odot Own with a mortgage
○ Own free and clear	\odot Own a mobile home or rent a lot
○ Other:	

14. My primary residence is_____:

\odot A single-family house	$^{ m O}$ An apartment building (10+ units)
\odot A duplex or multi-family house	$^{ m O}$ A mobile home
\odot An apartment building (3-9 units)	○ Other:

15. How many people live in your household (including yourself)?

○ 1 person	○ 5 people
○ 2 people	○ 6 people
○ 3 people	○ 7 people
○ 4 people	○ 8+ people

16. Based on the past year, what is your current annual household income?

\odot Less than \$10,000/year	○ \$60,000-\$69,999/year
○ \$10,000-\$19,999/year	○ \$70,000-\$79,999/year
○ \$20,000-\$29,999/year	○ \$80,000-89,999/year
○ \$30,000-\$39,999/year	○ \$90,000-\$99,999/year
○ \$40,000-\$49,999/year	○ \$100,000 or more/year
○ \$50,000-\$59,999/year	



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17. In the past 12 months, have you received utility payment assistance from any of the following: [Choose all that apply]

 Home Energy Assistance Target (HEAT) Program 	 Rocky Mountain Power's bill assistance and payment plans
HELP bill discount	🗆 Lend A Hand
 Utah Department of Workforce Services' Utah weatherization program 	□ Place of worship
Other programs:	□ Not applicable

18. What is the highest degree or level of school you have completed?

$^{\odot}$ Less than a high school degree	\odot Bachelor's degree
○ High school/GED	○Graduate degree (MS, PhD, Doctorate, JD, etc.)
\odot Some college	\odot Prefer not to answer

○ Associate degree/degree certificate

19. I identify as...

\odot Non-binary	○ Self-identify:
○ Female	○ Prefer not to answer

 $\circ \, {\rm Male}$

20. Do you identify as Hispanic/Latinx?

○ Yes	○ No
\circ Prefer not to answer	

21. I identify as... [Choose all that apply]

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	□ Prefer not to answer		
	🗆 Asian	□ Other:	
	□ White	🗆 American Indian/Alaska native	
	🗆 Black/African American	🗆 Native Hawaiian/Other Pacific Islander	





Do you want to be entered into a drawing to win **one of fifteen \$100 gift cards**?

Yes
No

If yes, please provide the following contact information:
First Name: ______ Last Name: ______

Email or Phone Number: ______



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- 1. I am...
- $\, \odot \,$ A business in Ogden, Utah

 \odot Not a business in Ogden, Utah

2. Are you currently on <u>schedule 32 or 34</u> for your business?

○ Yes ○ No

3. Does your business have solar panels on net-metering installed?

4. In which municipal district is your business(es) located? [Use the map provided below] [Choose all that apply]



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- 5. On average, how much do you pay for electricity each month?
- 6. CREP aims to convert the community of Ogden to net renewable energy by 2030. As a result, this could affect the electric bills of all Rocky Mountain Power customers who participate in the program.



If your electric bill increased, how much more would you be willing to pay each month?

\$____.

\$_

7. CREP allows businesses to opt-out of the program if they don't want to join. There is no penalty for opting out within the first three billing cycles after the program starts.

If your electric bill increased above the amount you selected, how likely would you be to opt-out of CREP?

Very Unlikely	Unlikely	Unsure	Likely	Very Likely
0	0	0	0	0



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8. To what extent do these other factors contribute to your decision to participate in or opt-out of CREP?

	Not at all	Only a little	A moderate amount	A great deal
Hesitations about renewable energy sources	0	0	0	0
Not knowing how CREP will benefit the community	0	0	0	0
Being able to choose where my energy is sourced	0	0	0	0
Participation of other businesses	0	0	0	0
Having to opt out of the program, instead of opting in	0	0	0	0
Lack of information I have on CREP	0	0	0	0
The timeline is unclear	0	0	0	0
Negative impacts on the coal and natural gas industry	0	0	0	0
Other:	0	0	0	0

9. Do you think Ogden City should join CREP?

\circ Yes	○ No	\circ Unsure
-------------	------	----------------

10. Beyond CREP, do you think <u>local governmental officials</u> should be doing more to bring renewable energy options to the area?

Much Less	Less	Currently doing the right amount	More	Much More
0	0	0	0	0

11. Beyond CREP, do you think residents should be doing more to seek out more renewable energy options?

Much Less	Less	Currently doing the right amount	More	Much More
0	0	0	0	0

12. Beyond CREP, do you think <u>businesses</u> should be doing more to seek out renewable energy options?

Much Less	Less	Currently doing the right amount	More	Much More
0	0	0	0	0



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The following questions help us understand who is responding to the survey.

All responses are confidential and will not be linked to your personal information.

13. At your business location(s), what is your current role/title?

○ Owner/Executive	 Property/Store/Site Manager
• Administrative Services	$^{\odot}$ Accounting and Billing Services

Other: _____

14. Which of the following categories best <u>describes</u> your business's industry?

$^{ m O}$ Agriculture, Forestry, Fishing and Hunting	\odot Retail Trade
\circ Mining, Quarrying, and Oil and Gas Extraction	\odot Transportation and Warehousing
○ Utilities	\circ Information
○ Construction	\circ Finance and Insurance
\circ Computer and Electronics Manufacturing	\odot Real Estate and Rental and Leasing
○ Manufacturing	 Professional, Scientific, and Technical Services
\circ Wholesale Trade	$^{\odot}$ Management of Companies and Enterprise
 Administrative and Support and Waste Management and Remediation Services 	○ Educational Services
\odot Healthcare and Social Assistance	\odot Arts, Entertainment, and Recreation
\odot Accommodation and Food Services	\odot Public Administration
○ Other Services:	

15. Do you _____ your office space(s) or building(s)? [Choose all that apply]

○ Rent	\odot Own with a mortgage
\odot Own free and clear	\odot Not applicable

○ Other: _____



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16. As of today, how many employees do you employ (full- and part-time)?

○ 0-14	○ 61-74
○ 15-30	○ 75-99
O 31-44	\circ 100 or more
○ 45-60	



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APPENDIX D - PAPER SURVEY IN SPANISH

Introduction Page for Resident and Business Survey



¿Le gustaría elegir de dónde viene su energía?

Ogden tiene la oportunidad de unirse al programa comunitario de energía renovable (conocido como CREP por sus siglas en inglés) – un programa que podría afectar de donde viene su energía y cuanto pagaría. CREP podría proporcionarles a los residentes y negocios de Ogden más opciones de energía renovable y ayudar que la ciudad se convierta en energía renovable neta para el año 2030. La energía renovable neta le proporcionará a la comunidad la misma cantidad de energía confiable, pero de fuentes de energía renovable. Más adelante este año, la ciudad de Ogden decidirá si se une a CREP. Si Ogden se une a CREP, usted tendrá la oportunidad de decidir si desea participar u optar por no participar.



Ноу	Programa Comunitario de Energía Renovable		
¿Cómo se determina	el costo de energía?		
El cambio de tarifa estándar depende de las condiciones del mercado y la disponibilidad de fuentes de energía. Los residentes y negocios pueden pagar un costo inicial o invertir para obtener más energía de fuentes de energía renovable.	Ogden, otras comunidades participantes y Rocky Mountain Power compartirían el costo y determinarían las tarifas renovables proyectadas. Los cambios de tarifas dependerían de las condiciones del mercado.		
¿Cómo usan residentes y negocio:	s más fuentes de energía renovable?		
Los residentes y negocios deben de trabajar de forma privada con la compañía suministradora para participar en estos programas, que incluyen los programas de energías renovables Blue-Sky, Subscriber Solar y Rooftop Solar.	Los clientes comprarían electricidad de Rocky Mountain Power como lo hacían anteriormente. Los residentes y negocios deberán optar por no participar para permanecer en las tarifas estándar.		

Favor de consultar los siguientes enlaces para más información sobre CREP:

- Ley comunitaria de energías renovables: (https://le.utah.gov/~2019/bills/static/HB0411.html)
- Sitio web de la ciudad de Ogden: (https://www.ogdencity.com/1605/House-Bill-411)

Antes de que la ciudad tome una decisión final sobre unirse a CREP, la ciudad necesita su opinión. La encuesta tomará solamente entre 5-10 minutos, sus respuestas serán confidenciales y no se vincularán con su información personal. Al final de la encuesta, usted puede participar en un sorteo para ganarse una de las 15 tarjetas de regalo de \$100 para un negocio de su preferencia. Para participar en el sorteo, usted será dirigido a un formulario diferente al final de la encuesta. El sorteo NO estará vinculado a las respuestas de la encuesta. Weber State University – Community Research Extension está administrando esta encuesta por parte de la ciudad de Ogden. Si tiene preguntas sobre esta encuesta, comuníquese con Katharine French-Fuller, PhD al kfrenchfuller@weber.edu.

¿Está usted de acuerdo en tomar esta encuesta y constata que tiene 18 años o más?



○ No

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1. Soy ...

○ Sí

 \odot Un residente de Ogden, Utah

 $\,\circ\,$ Un residente fuera de Ogden, Utah

- 2. En su residencia principal, ¿cómo paga usted su electricidad?
 - Yo/alguien en mi hogar paga la factura eléctrica directamente a la compañía de electricidad
 Mi ele mensure
 - Mi electricidad está incluida en mi renta mensual
- 3. ¿Tiene su residencia principal paneles solares instalados con medición neta?
 - \circ No
- 4. ¿En qué distrito municipal se ubica su residencia? [Use el mapa proporcionado a continuación]



01	03
O 2	O 4



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5. En promedio, <u>¿cuánto</u> paga usted por electricidad cada mes? (<u>Si su electricidad está incluida en su</u> renta, ingrese su renta mensual a continuación.):

\$____.

6. CREP tiene como objetivo convertir a la comunidad de Ogden a ser energía renovable neta para el 2030. Como resultado, esto podría afectar las facturas eléctricas de todos los clientes de Rocky Mountain Power que participen en el programa (o afectar la renta de aquellos cuales la electricidad está incluida en la renta).



Si su factura eléctrica (o renta) aumenta, ¿cuánto más estaría dispuesto a pagar cada mes?

○ \$0.00	○ \$15.00
○ \$1.00	○ \$20.00
○ \$2.00	○ \$25.00
○ \$3.00	○ \$30.00
○ \$4.00	○ \$40.00
○ \$5.00	○ \$50.00
○ \$10.00	• Otro: \$:



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7. CREP permite a los residentes el optar el no participar en el programa si no quieren unirse. No hay penalidad al optar por no participar dentro de los primeros tres ciclos de facturación después de que comience el programa.

Si su factura eléctrica aumentara <u>más de la cantidad que usted indicó</u>, ¿qué tan <u>probable</u> es que usted opte por no participar en CREP?

Muy Improbable	Improbable	Inseguro	Probable	Muy Probable
0	0	0	0	0

¿A qué medida contribuyen estos <u>otros factores</u> en su decisión de <u>participar o no participar</u> en CREP?

	Para nada	Solo un poco	Más o menos	Bastante
Dudas sobre fuentes de energía renovable	0	0	0	0
No saber cómo CREP beneficiaría a la comunidad	0	0	0	0
El poder elegir de donde proviene mi energía	0	0	0	0
La participación de otros residentes	0	0	0	0
Tener que optar por no participar en el programa, en lugar de optar por participar	0	0	0	0
La falta de información sobre CREP	0	0	0	0
La línea de tiempo no está clara para CREP	0	0	0	0
Impactos negativos en la industria de carbón y gas natural	0	0	0	0
Otro:	0	0	0	0

9. ¿Cree que la ciudad de Ogden se debería unir a CREP?

⊖ Sí	○ No	○ Inseguro/a
- 51	- 110	· msczuro/a

10. Más allá de CREP, ¿piensa que los <u>funcionarios gubernamentales locales</u> deberían hacer más para traer opciones de energía renovable al área?

Mucho Menos	Menos	Actualmente haciendo lo necesario	Más	Mucho Más
0	0	0	0	0



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11. Más allá de CREP, ¿piensa que los <u>residentes</u> deberían hacer más para traer opciones de energía renovable al área?

Mucho Menos	Menos	Actualmente haciendo lo necesario	Más	Mucho Más
0	0	0	0	0

12. Más allá de CREP, ¿piensa que los <u>negocios</u> locales deberían hacer más para traer opciones de energía renovable al área?

Mucho Menos	Menos	Actualmente haciendo lo necesario	Más	Mucho Más
0	0	0	0	0

Las siguientes preguntas nos ayudan a entender quien está respondiendo a la encuesta. Todas las respuestas son confidenciales y no serán vinculadas a su información personal.

13. Yo _____ mi residencia principal.

○ Rento	○ Soy dueño/a con una hipoteca
$^{\circ}$ Soy dueño/a (libre y claro)	 Soy dueño/a de una casa móvil o alquilo un lote
• Otro:	

14. Mi residencia principal es_____:

○ Una casa unifamiliar	\odot Un edificio de departamentos (10+ unidades)
○ Una casa dúplex o multifamiliar	○ Una casa móvil
○ Un edificio de departamentos (3-9 unidades)	• Otro:

15. ¿Cuántas personas viven en su hogar (incluyéndose usted)?

○ 1 persona	○ 5 personas
○ 2 personas	○ 6 personas
○ 3 personas	○ 7 personas
○ 4 personas	\circ 8+ personas

16. Basado en el año pasado, ¿cuál es su actual ingreso familiar anual?







$^{\bigcirc}$ Menos de \$10,000/año	○ \$60,000-\$69,999/año
○ \$10,000-\$19,999/año	○ \$70,000-\$79,999/año
○ \$20,000-\$29,999/año	○ \$80,000-89,999/año
○ \$30,000-\$39,999/año	○ \$90,000-\$99,999/año
○ \$40,000-\$49,999/año	○ \$100,000 o más/año
○ \$50,000-\$59,999/año	

17. En los últimos 12 meses, ¿ha recibido asistencia para el pago de servicios públicos de algunas de los siguientes recursos?: [Elija todo lo que aplique]

Programa de Home Energy Assistance Target (HEAT)	Plan de pago y asistencia de Rocky Mountain Power
Descuento de factura en el programa HELP	□ Lend A Hand
 Programa de climatización de Utah Department of Workforce Services 	🗆 Lugar de religión principal
□ Otros programas:	□ No aplica

18. ¿Cuál es el grado o nivel de estudios más alto que ha completado?

 Menos de un título de escuela secundaria/GED 	○ Licenciatura
O Título de escuela secundaria/GED	OTítulo de posgrado (MS, PhD, Doctorado, JD, etc.)
• Alguna educación superior	○ Prefiero no responder
O Titulo de asociado/certificado	

19. Me identifico como...

No binario/a	• Auto identificarse:
Masculino	• Prefiero no responder

○ Femenina

0

20. ¿Se identifica como Hispano/Latinx?







	○ Sí	○ No
	○ Prefiero no responder	
21	. Me identifico como <u>[Elija todo lo que ap</u>	lique]
	□ Negro/Afroamericano	□ Nativo de Hawái/Otra isla del Pacifico
	□ Blanco	□ Indígena/Nativo de Alaska
	□ Asiático	□ Otro:
	□ Prefiero no contestar	
¿Le gu	staría participar en un sorteo para ganar una d e	e 15 tarjeta de regalo con un valor de \$100?
	○ Sí	○ No
Si sí, p	or favor proporcione la siguiente información o	de contacto:
Nomb	re:	_Apellido:
Corre	o Electrónico <i>o</i> Número Telefónico:	



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○ Un negocio en Ogden, Utah ○ Un negocio fuera de Ogden, Utah

2. ¿Es usted actualmente en <u>Schedule 32 o 34</u> para su negocio?

○ Sí

3. ¿Su negocio tiene paneles solares con medición neta instalados?

○ Sí ○ No

4. ¿En qué distrito municipal se ubica su negocio? [<u>Use el mapa proporcionado a continuación</u>] [<u>Elija todo lo que aplique</u>]

○ No





5. En promedio, ¿cuánto paga usted por electricidad cada mes?



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6. CREP tiene como objetivo convertir a la comunidad de Ogden a energía renovable neta para el 2030. Como resultado, esto podría afectar las facturas eléctricas de todos los clientes de Rocky Mountain Power que participen en el programa.



Si su factura eléctrica aumenta, ¿cuánto más estaría dispuesto a pagar cada mes?

\$____

Ŵ

___•____

7. CREP permite a los negocios el optar el no participar en el programa si no quieren unirse. No hay penalidad al optar por no participar dentro de los primeros tres ciclos de facturación después de que comience el programa.

Si su factura eléctrica aumentara <u>más de la cantidad que usted indicó</u>, ¿qué tan <u>probable</u> es que usted opte por no participar en CREP?

Muy Improbable	Improbable	Inseguro	Probable	Muy Probable
0	0	0	0	0

8. ¿A qué medida contribuyen estos <u>otros factores</u> en su decisión de <u>participar o no participar</u> en CREP?

	Para nada	Solo un poco	Más o menos	Bastante
WEBER STATE UNIVERSITY CCEL - Community Research Extension				3 P a g e







Dudas sobre fuentes de energía renovable	0	0	0	0
No saber cómo CREP beneficiara a la comunidad	0	0	0	0
El poder elegir de donde proviene mi energía	0	0	0	0
La participación de otros negocios	0	0	0	0
Tener que optar por no participar en el programa, en lugar de optar por participar	0	0	0	0
La falta de información sobre CREP	0	0	0	0
La línea de tiempo no está clara para CREP	0	0	0	0
Impactos negativos en la industria de carbón y gas natural	0	0	0	0
Otro:	0	0	0	0

9. ¿Cree que la ciudad de Ogden se debería unir a CREP?

○ Sí ○ No	○ Inseguro/a
-----------	--------------

10. Más allá de CREP, ¿piensa que los <u>funcionarios gubernamentales locales</u> deberían hacer más para traer opciones de energía renovable al área?

Mucho Menos	Menos	Actualmente haciendo lo necesario	Más	Mucho Más
0	0	0	0	0

11. Más allá de CREP, ¿piensa que los <u>residentes</u> deberían hacer más para traer opciones de energía renovable al área?

Mucho Menos	Menos	Actualmente haciendo lo necesario	Más	Mucho Más
0	0	0	0	0

12. Más allá de CREP, ¿piensa que los <u>negocios</u> locales deberían hacer más para traer opciones de energía renovable al área?



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Mucho Menos	Menos	Actualmente haciendo lo necesario	Más	Mucho Más
0	0	0	0	0

Las siguientes preguntas nos ayudan a entender quien está respondiendo a la encuesta. Todas las respuestas son confidenciales y no serán vinculadas a su información personal.

13. En su(s) locación(es) de negocio(s), ¿cuál es su función/titulo actual?

○ Dueño(a)/ejecutivo(a)	○ Gerente de propiedad/tienda/sitio
○ Servicios administrativos	○ Servicios de contabilidad y facturación
○ Otro:	

14. ¿Cuál de las siguientes categorías mejor describen la industria de su negocio?

 Agricultura, Silvicultura, Pesca y Caza 	○ Comercio minorista
 Minería, explotación de canteras y extracción de petróleo y gas 	○ Transporte y almacenamiento
○ Utilidades	○ Información
○ Construcción	○ Finanzas y seguros
O Fabricación de computadoras y productos	O Bienes raíces y alquiler y arrendamiento
○ Manufactura	○ Servicios profesionales, científicos, y técnicos
• Comercio mayorista	○ Manejo de compañías y empresas
 Servicios administrativos y apoyo y reparación y manejo de desechos 	• Servicios educativos
• Atención medica u asistencia social	O Artes, Entretenimiento, y Recreación
O Servicios de alojamiento y alimentación	O Administración publica
• Otros servicios:	

15. ¿Usted ______ espacio de oficina(s) o edificio(s)? [Elija todo lo que aplique]

○ Renta

○ Es dueño con hipoteca

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 $^{\circ}$ Es dueño (libre y claro) $^{\circ}$ No aplica

• Otro: _____

16. ¿<u>A la fecha, cuantos empleados tiene (tiempo completo y tiempo parcial)</u>?

0 0-14	0 61-74
○ 15-30	0 75-99
O 31-44	○ 100 o mas
0 45-60	



WEBER STATE UNIVERSITY CCEL-Community Research Extension

6 | P a g e



Ogden City wants to find out what you think about **renewable energy!** Your participation in this survey will help determine future energy sources and costs in Ogden. Please scan the QR Code to take a short 5-10 minute survey and the chance to win one of 15 \$100 gift cards of your choice.

If the QR code does not work or you need a paper survey, please contact Katharine French-Fuller at kfrenchfuller@weber.edu.

¡La ciudad de Ogden quiere saber lo que Ud. piensa sobre la energía renovable! Su participación en esta encuesta ayudará a determinar el futuro de las fuentes de energía y sus costos en Ogden. Por favor escanee el código QR para tomar esta encuesta corta de 5-10 minutos. Ud. puede tener la oportunidad de ganar una de 15 tarjetas de regalo de \$100 dólares.

Si no funciona el código QR o si Ud. quiere llenar una encuesta en papel, por favor contáctese con Dr. Katharine French-Fuller al kfrenchfuller@weber.edu.





Non-Profit Org Permit No. 151 Ogden, UT 84408

Ogden City Resident!

Your participation in this survey will help determine future energy sources and costs in Ogden!

¡Su participación en esta encuesta ayudará a determinar el futuro de las fuentes de energía y sus costos en Ogden!



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APPENDIX F - RECRUITMENT EMAIL

First email

<u>Residents</u>

Ogden City wants to know if you would like to choose where your energy comes from. Your participation in this survey will help determine future energy sources and costs in Ogden. Please click on the link below to take a short survey (5-10 minutes) to tell us what you think about renewable energy. Completing the survey will give you a chance to win a \$100 gift card.

Follow this link to the Survey:

Take the Survey

Or copy and paste the URL below into your internet browser: <u>https://weber.co1.qualtrics.com/jfe/preview/SV_50ZGHtsfocvApoi?Q_CHL=preview</u>

Follow the link to opt out of future emails: <u>Click here to unsubscribe</u>

<u>Business</u>

Ogden City wants to know if your business would like to choose where its energy comes from. Your participation in this survey will help determine future energy sources and costs in Ogden. Please click on the link below to take a short survey (5-10 minutes) to tell us what your business thinks about renewable energy.

Follow this link to the Survey:

Take the Survey

Or copy and paste the URL below into your internet browser: https://weber.co1.qualtrics.com/jfe/preview/SV_eJVR1WCITGMs15Y?Q_CHL=preview

Follow the link to opt out of future emails: <u>Click here to unsubscribe</u>

Last Email

<u>Residents</u>

Ogden City wants to know if you would like to choose where your energy comes from. Your participation in this survey will help determine future energy sources and costs in Ogden. Please click on the link below to take a short survey (5-10 minutes) to tell us what you think about renewable energy. <u>Please note the survey will close on Friday April 1 at 5:00pm.</u> Completing the survey will give you a chance to win a \$100 gift card.





La ciudad de Ogden quiere saber si Ud. quiere elegir de donde viene su energía. Su participación en esta encuesta ayudará a determinar el futuro de las fuentes de energía y sus costos en Ogden. Por favor, haga clic en el enlace abajo para tomar una encuesta corta (de 5 - 10 minutos) para contarnos lo que opina sobre la energía renovable. La encuesta cerrará el viernes, 1 de abril a las 5 de la tarde. ¡Ud. puede tener la oportunidad de ganar una tarjeta de regalo de \$100!

Follow this link to the Survey:

Take the Survey

Or copy and paste the URL below into your internet browser: https://weber.co1.qualtrics.com/jfe/preview/SV_50ZGHtsfocvApoi?Q_CHL=preview_

Follow the link to opt out of future emails: <u>Click here to unsubscribe</u>

<u>Businesses</u>

Ogden City wants to know if your business would like to choose where its energy comes from. Your participation in this survey will help determine future energy sources and costs in Ogden. Please click on the link below to take a short survey (5-10 minutes) to tell us what your business thinks about renewable energy. <u>Please note this survey will close on Friday April 1 at 5:00pm.</u>

La ciudad de Ogden quiere saber si su negocio quiere elegir de donde viene su energía. Su participación en esta encuesta ayudará a determinar el futuro de las fuentes de energía y sus costos en Ogden. Por favor, haga clic en el enlace abajo para tomar una encuesta corta (de 5 - 10 minutos) para contarnos lo que su negocio opina sobre la energía renovable. La encuesta cerrará el viernes, 1 de abril a las 5 de la tarde. ¡Ud. Puede tener la oportunidad de ganar una tarjeta de regalo de \$100!

Follow this link to the Survey: Take the Survey

Or copy and paste the URL below into your internet browser: https://weber.co1.qualtrics.com/jfe/preview/SV_eJVR1WCITGMs15Y?Q_CHL=preview_

Follow the link to opt out of future emails: <u>Click here to unsubscribe</u>



APPENDIX G - DOOR KNOCKING SCRIPT

"Hi, my name is ______. I am a volunteer for Weber State University and Ogden City. Ogden City is asking residents of Ogden to take a survey about renewable energy. Your participation will help determine future energy sources and costs in Ogden. The survey takes about 5-10 minutes and is completely confidential. If you complete the survey, you can be entered in a drawing to win a \$100 gift card. Would you be willing to participate?"

