



Estes Park • Fort Collins • Longmont • Loveland

2018 Integrated Resource Plan Survey Results

Conducted by:



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2018 Integrated Resource Plan Survey





Scope and Methodology

During the fall of 2018, Platte River Power Authority, in coordination with Estes Park Light and Power, conducted an Integrated Resource Planning Survey to measure residential and commercial end user favorability toward Platte River, opinions about the importance of receiving non-carbon energy, economic elasticity of renewables, and to collect basic demographic and firmographic data.

Survey responses were received from 307 randomly-selected residential customers and 115 commercial customers. The results of the residential survey have a margin of error of +/-5.5 percent at a 95 percent degree of probability. That means for any given statistic, there is a 95 percent chance that the result does not vary by more than 5.5 percent in the actual total population. The results of the commercial survey have a margin of error of +/-8.8 percent.

Of the 307 residential survey completions, 173 (56 percent) were completed online by customers responding to a postcard mailing. Following the online completions, 134 (44 percent) surveys were completed by callers conducting phone interviews. In completing the 134 phone surveys there were 31 refusals or disconnects, for a refusal rate of 19 percent. Of the 115 commercial survey completions, 33 (29 percent) were completed online, and 82 (71 percent) were completed by phone. In completing the 82 phone surveys there were 8 refusals or disconnects, for a refusal rate of 9 percent.

The survey was conducted as part of a research project coordinated by Platte River Power Authority. Four municipalities served by Platte River participated in the project, including the Town of Estes Park, City of Fort Collins, City of Longmont and City of Loveland.

Several questions in this survey involve responses on a 10-point sliding scale. These responses are evaluated using "top box" analysis – that is, calculating the frequency percentage of respondents in the 8 to 10 ratings on the sliding scale. Along with top box analysis, weighted averages are also calculated for these questions. Due to rounding, response percentages may not always total 100 percent.

This survey was developed and conducted by Inside Information, Inc.®, Smithville, MO, as a research project commissioned by Platte River Power Authority, Fort Collins, CO.

Executive Summary

* ratings are on a 10-point scale, or the percentage of 8-10 responses (top box)



Platte River Power Authority

- Similar numbers of residential and commercial customers, nearly 60 percent, are aware Platte River provides electricity generation and transmission services to their utility
- 62 percent of residential and 48 percent of commercial customers rate Platte River Power Authority somewhat or very favorably
- Customers who are aware Platte River Power Authority provides G&T services to their utility rate Platte River Power Authority higher in overall favorability, showing concern for the environment, and offering adequate energy efficiency programs
- Generally lower awareness among commercial customers of the resources Platte River Power Authority uses to provide electricity - lowest awareness of solar power



Estes Park Light & Power

- 81 percent of residential customers and 80 percent of commercial customers rate Estes Park Light and Power somewhat or very favorably
- Slightly more than half of customers somewhat or strongly agree that Estes Park Light and Power shows concern for the environment – slightly fewer than half somewhat or strongly agree that it offers adequate energy efficiency programs



Renewable Resource Options

- Both groups place similar priority on service reliability, receiving electricity at the lowest possible cost and utilizing renewable resources
- About half of residential customers are willing to pay \$5 to \$20 per month more on their bill for electricity generated from renewable resources - more than 4 in 10 are not willing to pay more
- About 4 in 10 commercial customers are willing to pay 1 percent to 10 percent more per month for renewable energy - nearly half are not willing to pay more



Demographics

- Mostly older respondents, median age is 67 median length of service is 14 years
- Considerable income levels, about 3 in 10 respondents earn \$100,000 or more per year - median annual income is \$77,271 - nearly 8 in 10 have a college degree



Firmographics

- Median length of service for commercial customers is 21 years nearly 3 in 4 of the businesses have fewer than 10 employees
- More service businesses responding (69 percent) to the commercial survey, followed by retail sales (18 percent)
- 2 in 3 businesses have annual revenue of less than \$500,000, more than half report electric costs as 5 percent or more of their overall business expense





Integrated Resource Plan Survey Results

Overview

Integrated Resource Plan Survey 2018



Estes Park • Fort Collins • Longmont • Loveland



During the fall of 2018, Platte River Power Authority, in conjunction with Estes Park Light & Power, conducted an Integrated Resource Planning Survey to measure residential and commercial end user favorability toward Platte River Power Authority, opinions about the importance of receiving non-carbon energy, economic elasticity of renewables, and to collect basic demographic and firmographic data.

These results include online and phone survey replies from 307 residential end users and 115 commercial responses.



Highlights



- Similar numbers of residential and commercial customers, nearly 60 percent, are aware Platte River Power Authority provides electricity generation and transmission services to their utility
- 81 percent of residential customers and 80 percent of commercial customers rate Estes Park Light and Power somewhat or very favorably
- 62 percent of residential and 48 percent of commercial customers rate Platte River Power Authority somewhat or very favorably
- Customers who are aware Platte River Power Authority provides G&T services to their utility rate Platte River Power Authority higher in overall favorability, showing concern for the environment, and offering adequate energy efficiency programs
- Slightly more than half of customers somewhat or strongly agree that Estes Park Light and Power shows concern for the environment slightly fewer than half somewhat or strongly agree that it offers adequate energy efficiency programs
- Generally lower awareness among commercial customers of the resources Platte River Power Authority uses to provide electricity lowest awareness of solar power
- Both groups place similar priority on service reliability, receiving electricity at the lowest possible cost and utilizing renewable resources



Highlights

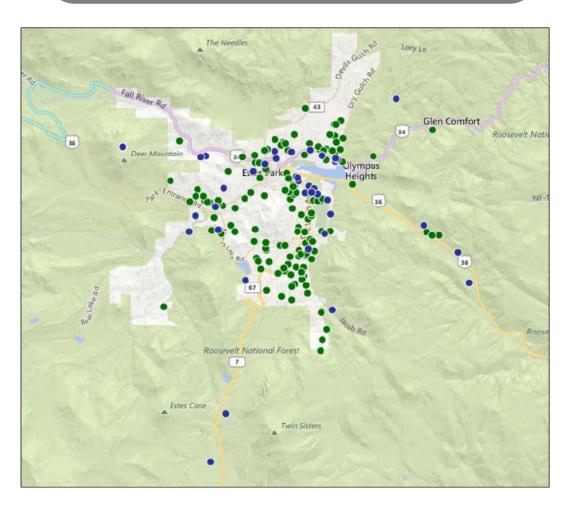


- About half of residential customers are willing to pay \$5 to \$20 per month more on their bill for electricity generated from renewable resources more than 4 in 10 are not willing to pay more
- About 4 in 10 commercial customers are willing to pay 1 percent to 10 percent more per month for renewable energy nearly half are not willing to pay more
- Mostly older respondents, median age is 67 median length of service is 14 years
- Considerable income levels, about 3 in 10 respondents earn \$100,000 or more per year median annual income is \$77,271 high education levels, nearly 8 in 10 have a college degree
- Median length of service for commercial customers is 21 years nearly 3 in 4 of the businesses have fewer than 10 employees
- More service businesses responding (69 percent) to the commercial survey, followed by retail sales (18 percent)
- 2 in 3 businesses have annual revenue of less than \$500,000, more than half report electric costs as 5 percent or more of their overall business expense



Respondents





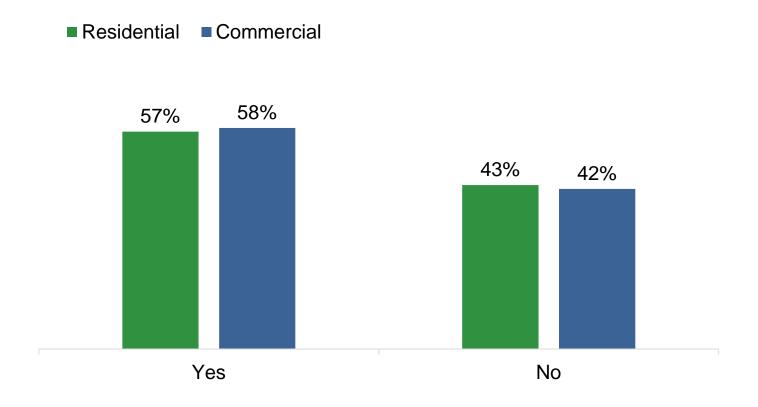
- Residential
- Commercial







Aware Platte River Power Authority provides generation

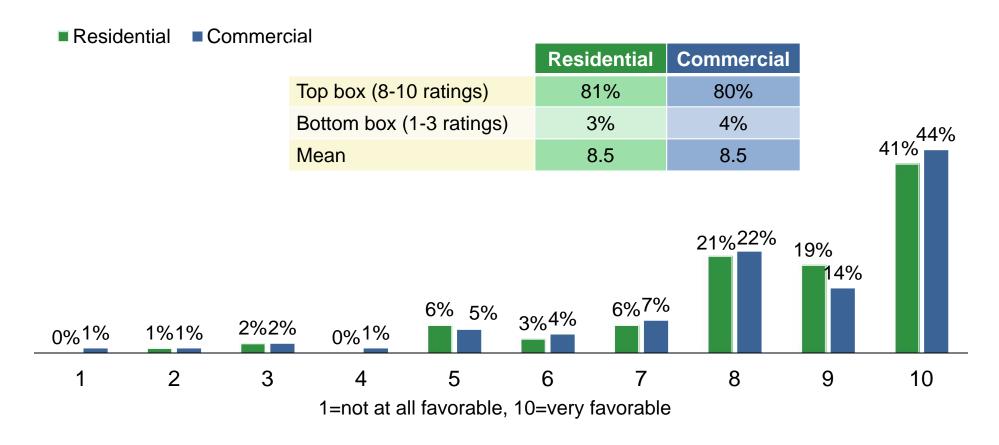




Estes Park Light & Power



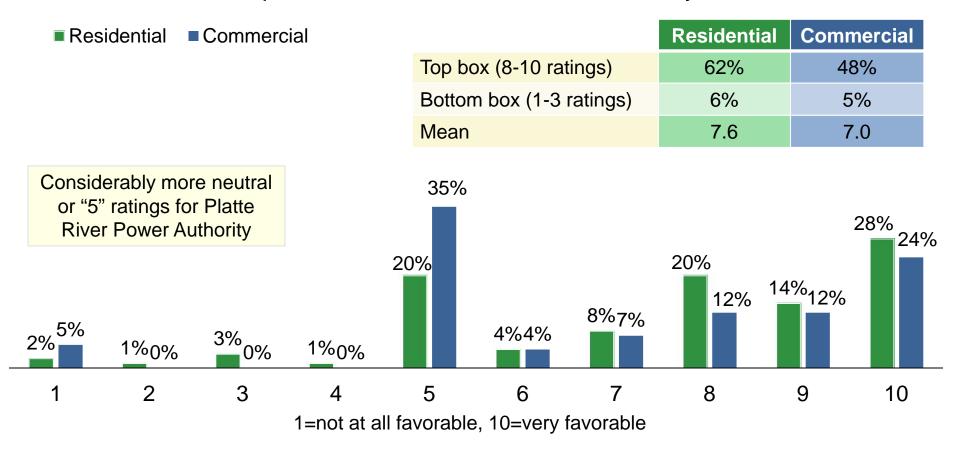
Opinion of Estes Park Light and Power







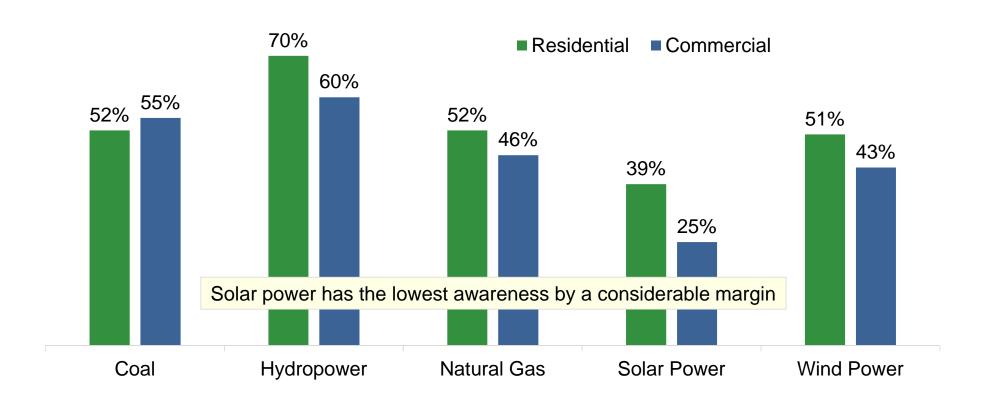
Opinion of Platte River Power Authority







Resources used by Platte River Power Authority

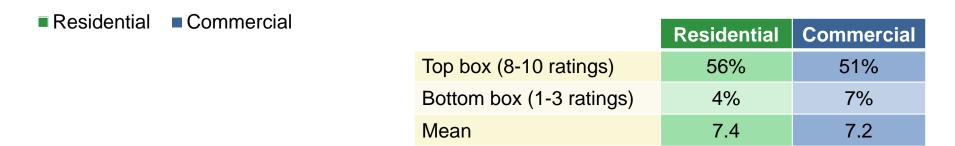


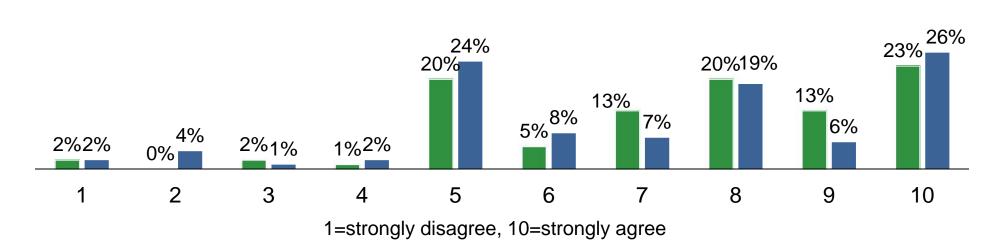


Estes Park Light & Power



Estes Park Light & Power shows concern for the environment



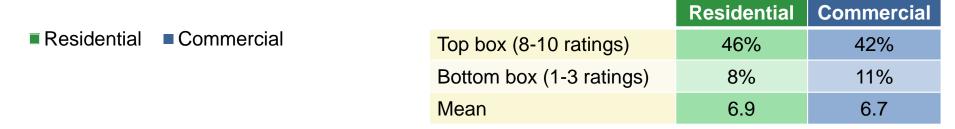


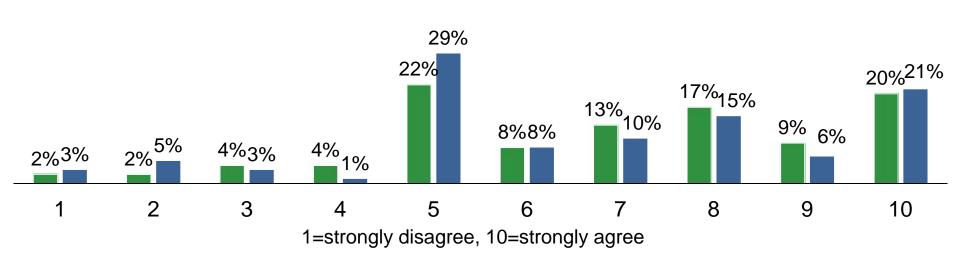


Estes Park Light & Power



Estes Park Light & Power offers adequate programs to help use energy efficiently

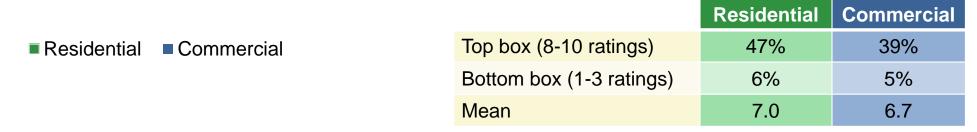


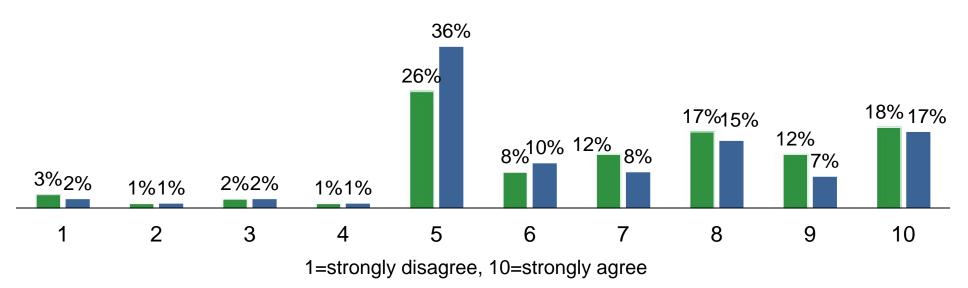






Platte River Power Authority shows concern for the environment



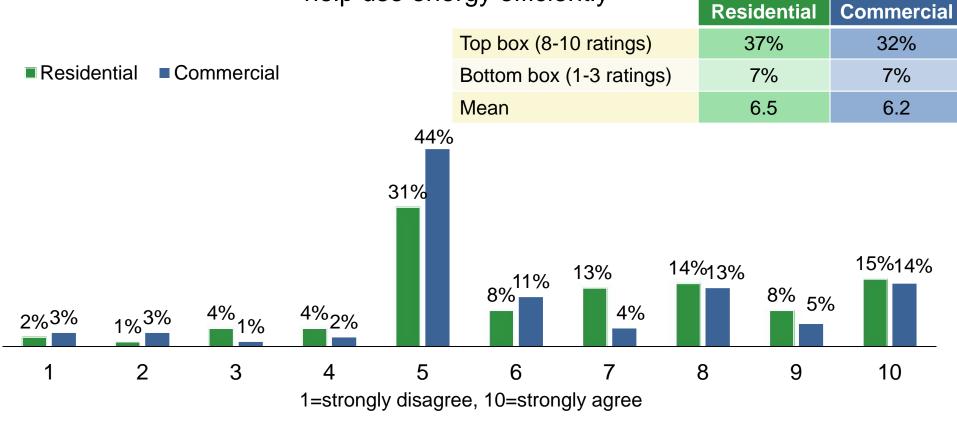






Platte River Power Authority offers adequate programs to

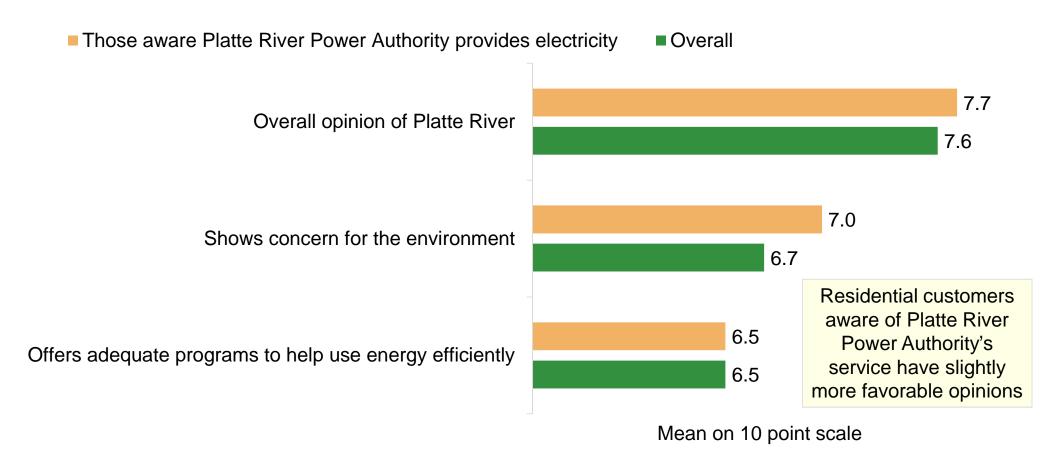
help use energy efficiently







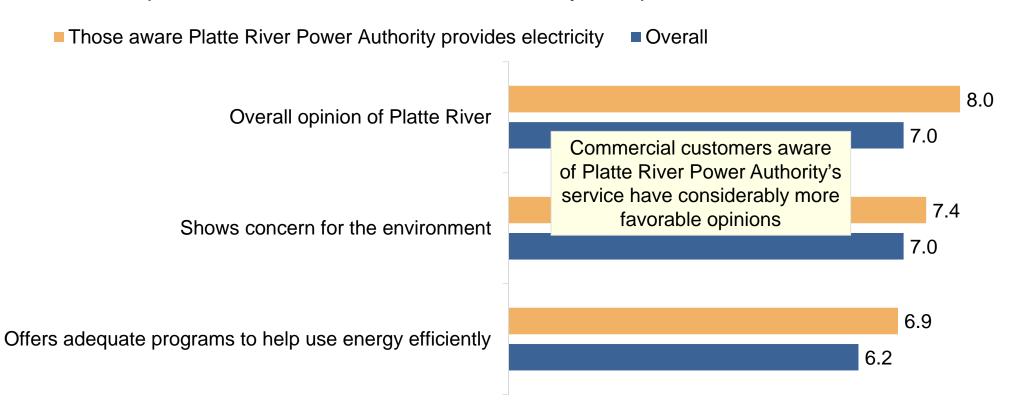
Opinion of Platte River Power Authority comparison - residential







Opinion of Platte River Power Authority comparison - commercial



Mean on 10 point scale

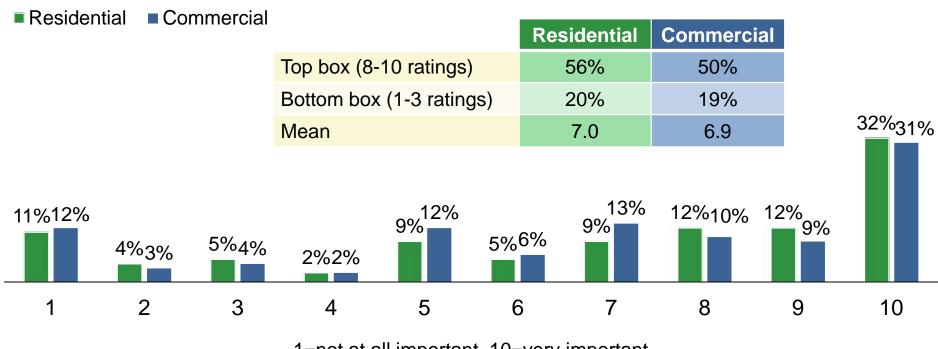


Renewable Resource Opinions





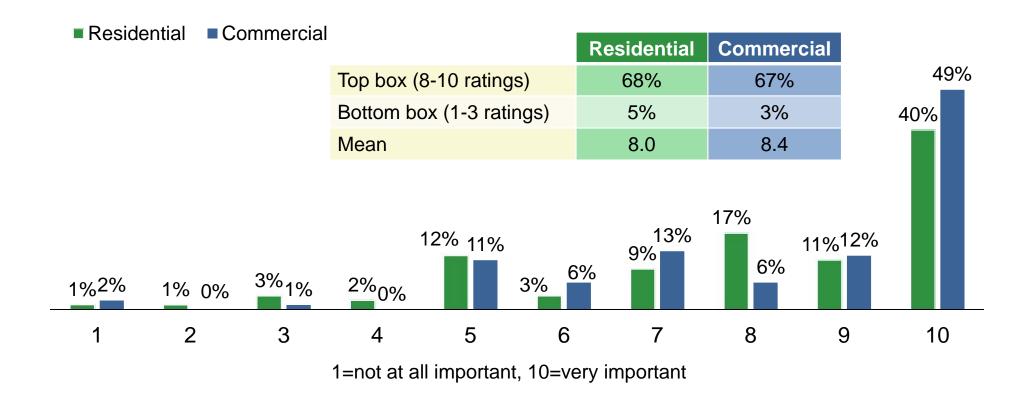
How important is it that 100 percent of the energy you receive comes from renewable resources?







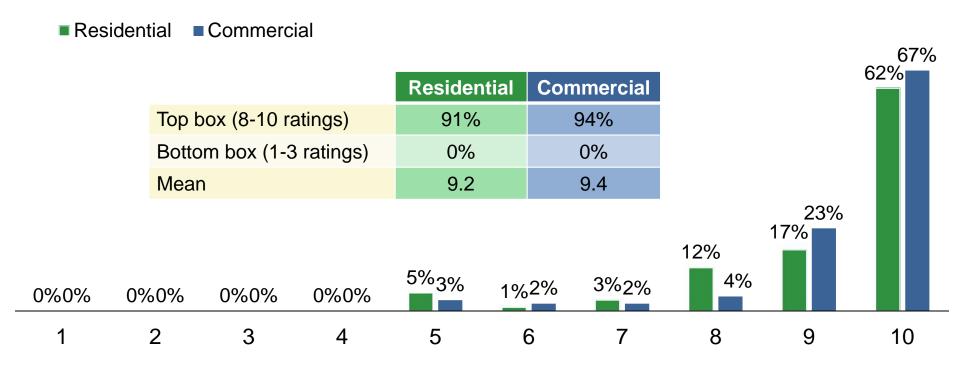
Importance of lowest possible cost







Importance of reliable service

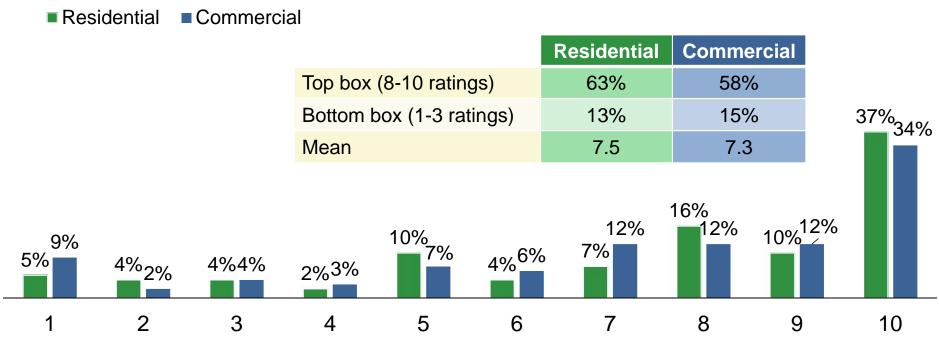


1=not at all important, 10=very important





Importance of renewable resources

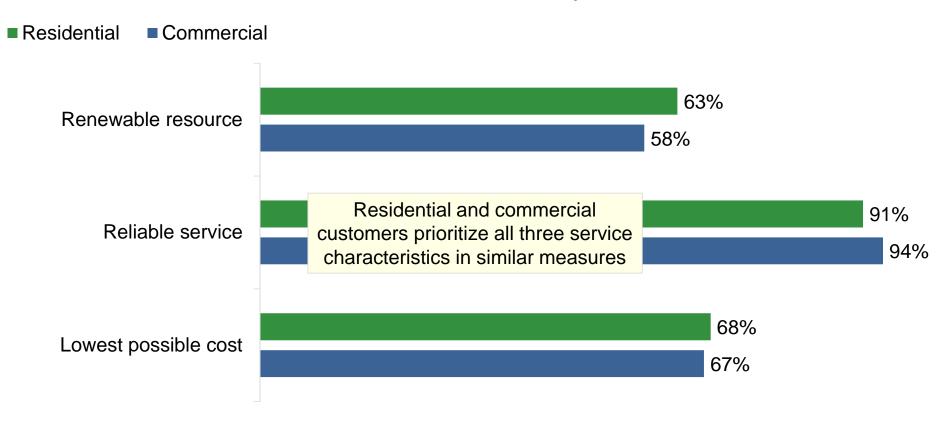


1=not at all important, 10=very important





Service characteristics importance

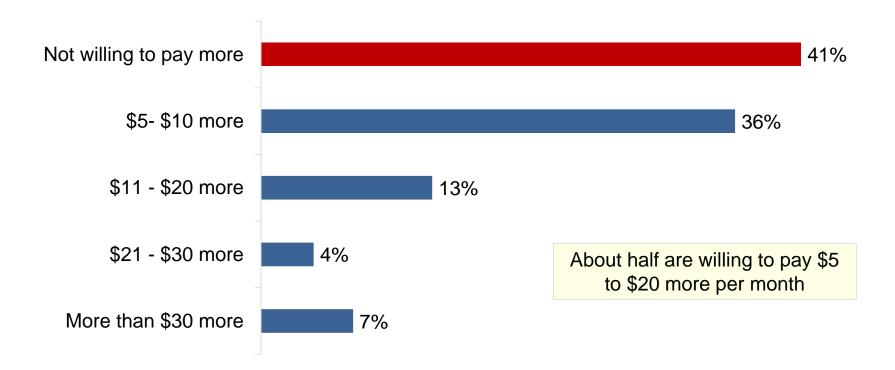


Somewhat or very important (8-10 ratings)





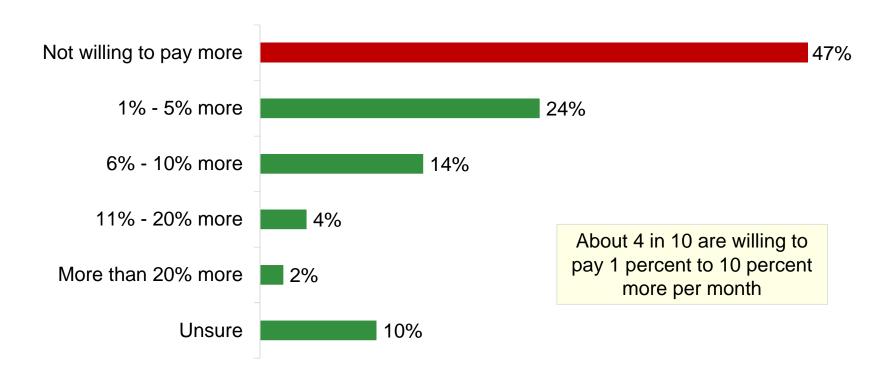
Additional monthly amount willing to pay for renewable energy - residential







Additional monthly amount willing to pay for renewable energy - commercial

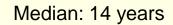


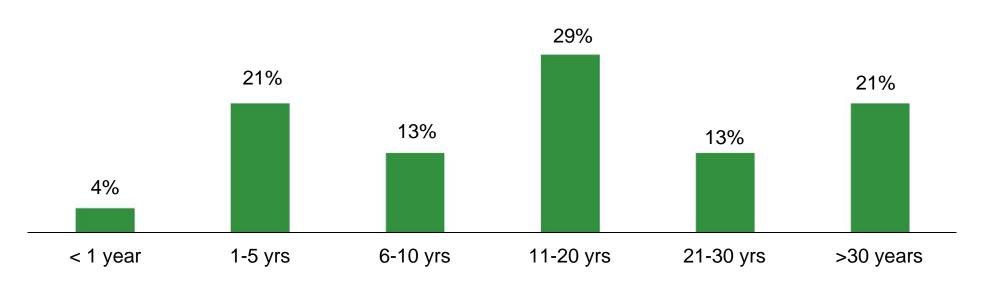






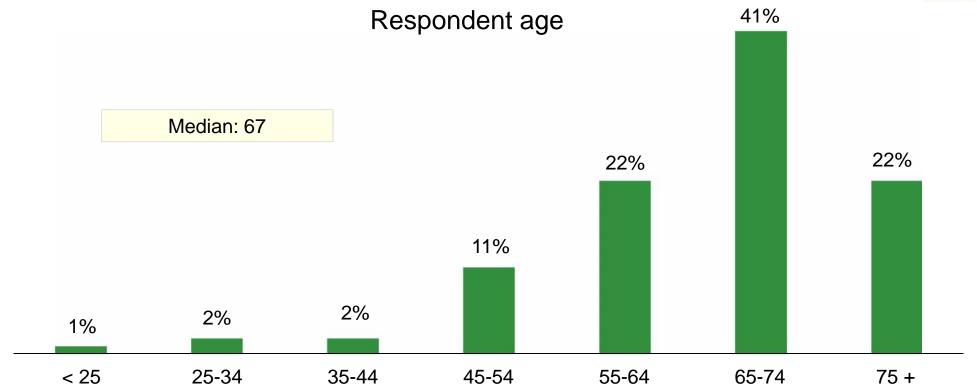
Length of service







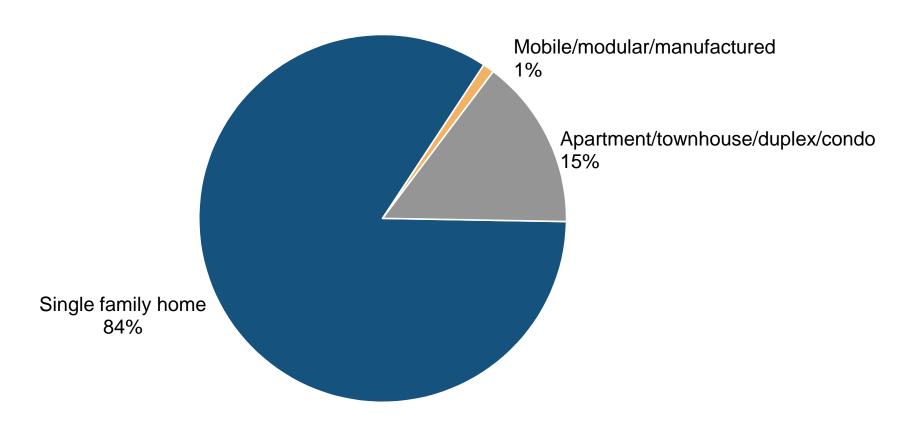








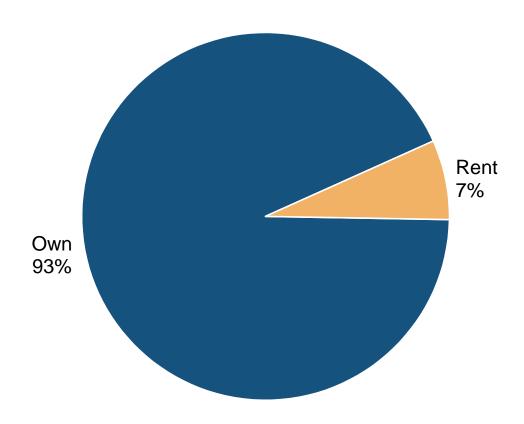
Type of residence







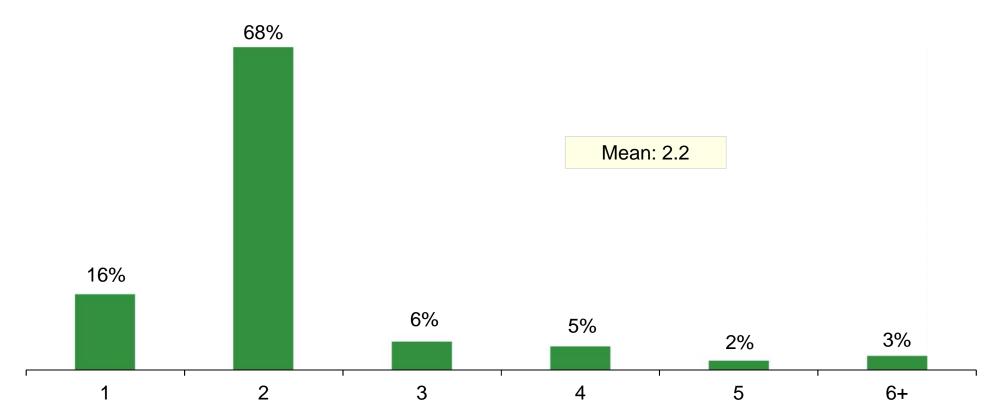
Home ownership







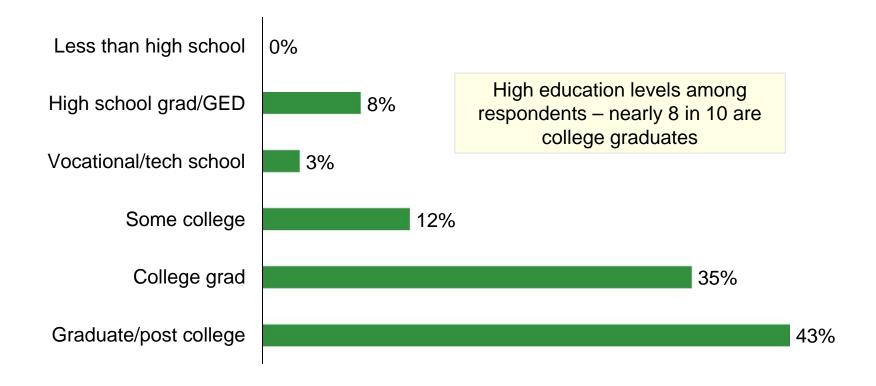
Number of residents per household







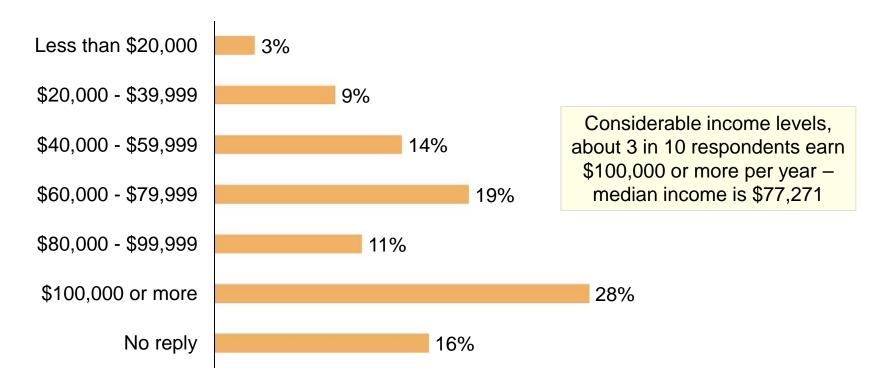
Education







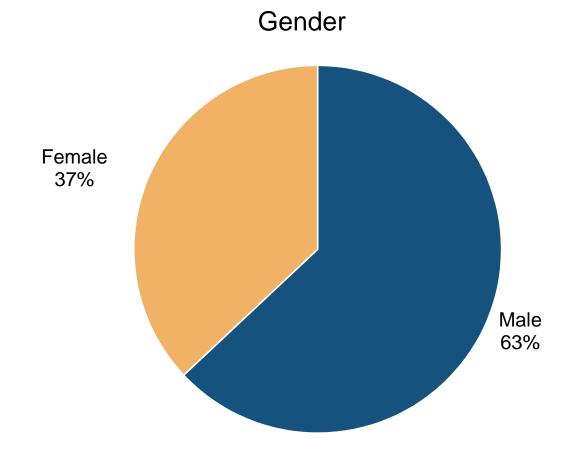
Income





Demographics



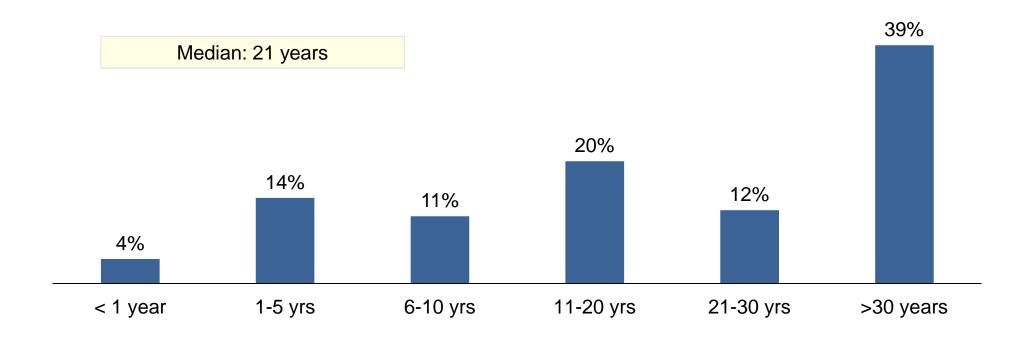








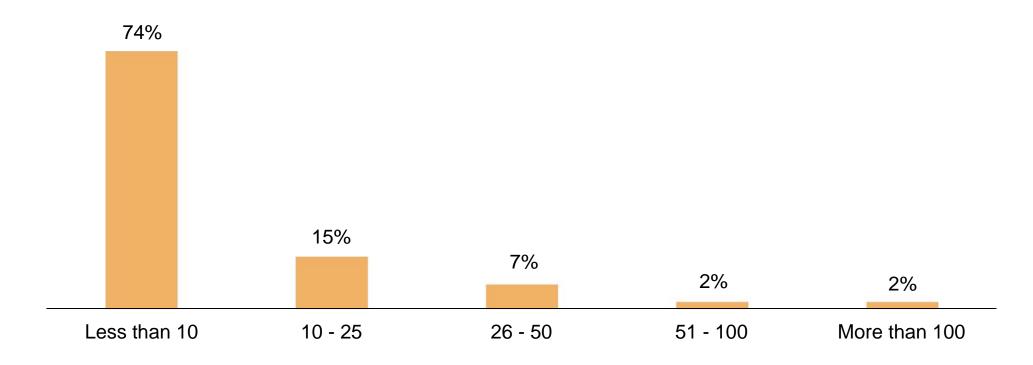
Length of service







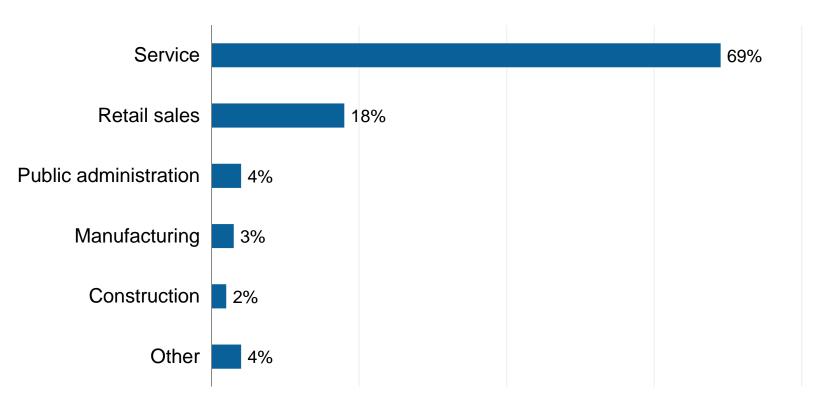
Number of employees







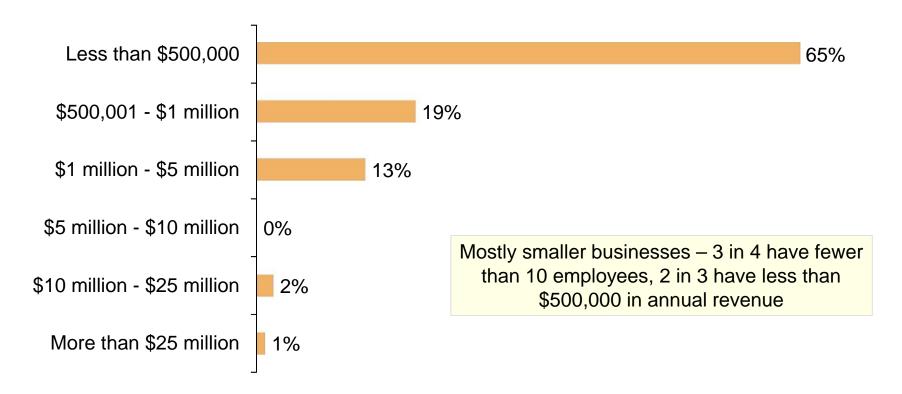
Business type







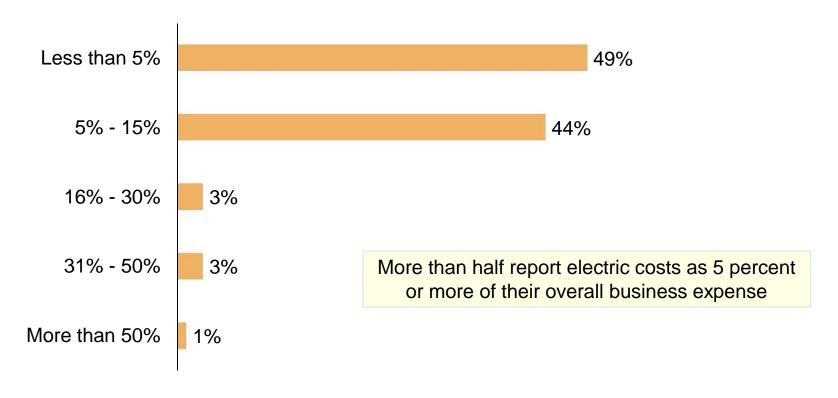
Annual revenue







Electric costs as percentage of overall expense





Customer Notification



Your Opinion Counts!

As the wholesale power provider to Estes Park Light & Power, Platte River Power Authority seeks your input to help shape northern Colorado's energy future.

You have been selected to take part in this survey project to provide feedback about the future energy resources you want to power your homes and businesses.

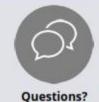
Complete the survey online anytime before November 12, 2018



Go to: www.bit.ly/eplpres18 and enter the survey ID shown at the top left on the reverse of this postcard



Customers who do not complete the survey online may receive a call inviting participation by phone



Call 970-577-3627



Survey Questions



- How long have you received electric service from Estes Park Light & Power?
- Are you aware that Platte River Power Authority provides wholesale electricity generation and transmission services to Estes Park Light & Power?
- > Based on what you know, what is your opinion of Estes Park Light & Power?
- > Based on what you know, what is your opinion of Platte River Power Authority?
- What resources do you think Platte River Power Authority uses to provide your municipality with electricity? (all that apply)
- Please rate your level of agreement with the following statements regarding Estes Park Light & Power.
 - Shows concern for the environment
 - Offers adequate programs to help you use energy efficiently
- Please rate your level of agreement with the following statements regarding Platte River Power Authority.
 - Shows concern for the environment
 - Offers adequate programs to help you use energy efficiently
- How important is it to you that 100 percent of the energy you receive comes from renewable resources, such as hydro, solar and wind?

- Please rate the importance of the following electric service characteristics:
 - Lowest possible cost
 - Reliable service
 - Renewable resource
- Are you willing to pay more on your monthly bill to receive energy from renewable resources, and if so, how much more?

Demographics (residential)

- > How old are you?
- > What type of residence do you live in?
- > Do you own or rent your home?
- > How many people live in your household?
- > What is the highest level of education you have completed?
- > What is your household income?
- > Respondent's gender

Firmographics (commercial)

- > How many employees does your business have?
- What type of business do you have?
- What is the annual revenue of your business?
- What is the percentage of electricity costs to your overall business costs?





	Online	Phone								1	T	
Residential: Results based on 307 responses	56%	44%										
Commercial: Results based on 115 responses	29%	71%										
Commercial. Results based on 115 responses	2970	1 1 70										
1. How long have you received electric service from Estes Park Light	& Power?											
	Residential	Commercial										
Less than 1 yea	4%	4%										
1 - 5 years	21%	14%										
6 - 10 years	13%	11%										
11 - 20 years	29%	20%										
21 - 30 years	13%	12%										
More than 30 years		39%										
Median length of service		21										
2. Are you aware that Platte River Power Authority provides wholesale			nsmission	services to	Estes Park	Light & Po	wer?					
		Commercial										
Yes		58%										
No	43%	42%										
		ı		1			1				_	
3. Based on what you know, what is your opinion of Estes Park Light	& Power?	N/-1	- 1 - 11 5	1.1.			. 1/					
				able				favorable				
Desidentis	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Residentia	0,70	1%	2%	0%	6%	3%	6%	21%	19%	41%	8.52	81% 80%
Commercia	1%	1%	2%	1%	5%	4%	7%	22%	14%	44%	8.47	80%
*Top Box = 8 - 10 ratings combined, or highest opinion.												
4. Based on what you know, what is your opinion of Platte River Power											1	
4. Based on what you know, what is your opinion of Platte River Powe	r Authority?	Not	at all favora	hlo			> 1/on	favorable				
			1	1	-			1	•	40	Averege	Тор Вох
Residentia	1 2%	2 1%	3	4 1%	5 20%	6 4%	7 8%	8 20%	9 14%	10 28%	Average	62%
Commercia				0%				12%			7.55 7.02	48%
*Top Box = 8 - 10 ratings combined, or highest opinion.	5%	0%	0%	U%	35%	4%	7%	1270	12%	24%	1.02	₩0 /0
TOP DOX - 0 - TO Tauriys combined, or mignest opinion.	1	1		1	1	1		1	1		1	
5. What resources do you think Platte River Power Authority uses to	rovido vous m	unicipality with	oloctricity'	2 (all that or	anha)							
o. What resources do you think Flatte River Fower Authority uses to			electricity i	י נמוו נוומנ מג	(עיקי)	1			1			
	Residential	Commercial			-	-			-			
Coa		55%										
		60%					1					-
Hydropowe												
Natural gas	52%	46%										
Natural gas Solar powe	52% 39%	46% 25%										
Natural gas	52% 39%	46%										





*Top Box = 8 - 10 ratings combined, or strongest level of agreement.		St	rongly disagr	ee			> Strong	alv agree				
Residential	1	2	3	4	5	6	7	8	9	10	Average	Тор Во
Shows concern for the environment	2%	0%	2%	1%	20%	5%	13%	20%	13%	23%	7.43	56%
Offers adequate programs to help you use energy efficiently	2%	2%	4%	4%	20%	8%	13%	17%	9%	20%	6.95	46%
Commercial	1	2 70	3	4	5	6	7	8	9	10	Average	Top Box
Shows concern for the environment	2%	4%	1%	2%	24%	8%	7%	19%	6%	26%	7.15	51%
Offers adequate programs to help you use energy efficiently	3%	5%	3%	1%	29%	8%	10%	15%	6%	21%	6.68	42%
	0,0	3 ,0	0,0	. , , ,	2070	0,0	.070	1070	0,0	2.70	0.00	
7. Please rate your level of agreement with the following statements	regarding Platte	River Power	Authority.									
*Top Box = 8 - 10 ratings combined, or strongest level of agreement.		St	rongly disagr	ee			> Strong	gly agree				
Residential	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Shows concern for the environment	3%	1%	2%	1%	26%	8%	12%	17%	12%	18%	7.01	47%
Offers adequate programs to help you use energy efficiently	2%	1%	4%	4%	31%	8%	13%	14%	8%	15%	6.54	37%
Commercial	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Shows concern for the environment	2%	1%	2%	1%	36%	10%	8%	15%	7%	17%	6.67	39%
Offers adequate programs to help you use energy efficiently	3%	3%	1%	2%	44%	11%	4%	13%	5%	14%	6.23	32%
Offers adequate programs to help you use energy efficiently	3%	3%	1%	2%	44%	11%	4%	13%	5%	14%	6.23	32%
Offers adequate programs to help you use energy efficiently 8. How important is it to you that 100% of the energy you receive con						11%	4%	13%	5%	14%	6.23	32%
		ble resources		dro, solar a		11%	4%		5%	14%	6.23	32%
		ble resources	, such as hy	dro, solar a		11%			9	14%	6.23 Average	
8. How important is it to you that 100% of the energy you receive con	nes from renewa	ble resources	, such as hy Not at all impo	dro, solar a	nd wind?		> Very im	portant				
8. How important is it to you that 100% of the energy you receive con	nes from renewa	ible resources	, such as hy Not at all impo	dro, solar a ortant	nd wind?	6	> Very im	portant 8	9	10	Average	Top Box
8. How important is it to you that 100% of the energy you receive con	nes from renewa	ble resources 2 4%	s, such as hy Not at all impo	ortant 4 2%	nd wind? 5 9%	6 5%	> Very im 7 9%	portant 8 12%	9 12%	10 32%	Average 6.99	Top Bo
8. How important is it to you that 100% of the energy you receive con Residential Commercial	nes from renewa	ble resources 2 4%	s, such as hy Not at all impo	ortant 4 2%	nd wind? 5 9%	6 5%	> Very im 7 9%	portant 8 12%	9 12%	10 32%	Average 6.99	Top Bo
8. How important is it to you that 100% of the energy you receive con Residential Commercial	1 11% 12%	ble resources 2 4%	s, such as hy Not at all impo	ortant 4 2%	nd wind? 5 9%	6 5%	> Very im 7 9%	portant 8 12%	9 12%	10 32%	Average 6.99	Top Box 56%
8. How important is it to you that 100% of the energy you receive con Residential Commercial *Top Box = 8 - 10 ratings combined, or highest importance.	1 11% 12%	2 4% 3%	s, such as hy Not at all impo	dro, solar a pritant	5 9% 12%	6 5%	> Very im 7 9%	portant 8 12% 10%	9 12%	10 32%	Average 6.99	Top Box 56%
8. How important is it to you that 100% of the energy you receive con Residential Commercial *Top Box = 8 - 10 ratings combined, or highest importance. 9. Please rate the importance of the following electric service charace	1 11% 12%	2 4% 3%	such as hy Not at all impo	dro, solar a pritant	5 9% 12%	6 5%	> Very im 7 9% 13%	portant 8 12% 10%	9 12%	10 32%	Average 6.99	Top Box 56% 50%
8. How important is it to you that 100% of the energy you receive con Residential Commercial *Top Box = 8 - 10 ratings combined, or highest importance. 9. Please rate the importance of the following electric service charac *Top Box = 8 - 10 ratings combined, or most important.	nes from renewa 1 11% 12% teristics:	2 4% 3%	such as hy Not at all impo	dro, solar a pritant	5 9% 12%	6 5% 6%	> Very im 7 9% 13%	portant 8 12% 10%	9 12% 9%	10 32% 31%	Average 6.99 6.89	Top Bos 56% 50%
8. How important is it to you that 100% of the energy you receive con Residential Commercial *Top Box = 8 - 10 ratings combined, or highest importance. 9. Please rate the importance of the following electric service charace *Top Box = 8 - 10 ratings combined, or most important. Residential Lowest possible cost	nes from renewa 1 11% 12% teristics:	2 4% 3%	such as hy Not at all impo	dro, solar a pritant	5 9% 12%	6 5% 6%	7 9% 13%	portant	9 12% 9%	10 32% 31%	Average 6.99 6.89 Average	Top Box 56% 50%
8. How important is it to you that 100% of the energy you receive con Residential Commercial *Top Box = 8 - 10 ratings combined, or highest importance. 9. Please rate the importance of the following electric service charac *Top Box = 8 - 10 ratings combined, or most important. Residential	nes from renewa 1 11% 12% teristics: 1 1%	2 4% 3%	such as hy Not at all impo	dro, solar a pritant	5 9% 12% 5 12%	6 5% 6% 6 6 3%	> Very im 7 9% 13%> Very im 7 9%	portant 8 12% 10% portant portant 8 17%	9 12% 9%	10 32% 31% 10 40%	Average 6.99 6.89 Average 8.04	Top Box 56% 50% Top Box 68%
8. How important is it to you that 100% of the energy you receive con Residential Commercial *Top Box = 8 - 10 ratings combined, or highest importance. 9. Please rate the importance of the following electric service charace *Top Box = 8 - 10 ratings combined, or most important. Residential Lowest possible cost Reliable service Renewable resource	1 11% 12% teristics: 1 1% 0%	2 4% 3% 2 1% 0%	such as hy Not at all impo 5% 4% Not at all impo 3 3 3% 0%	cdro, solar a cortant	5 9% 12% 5 12% 5 12%	6 5% 6% 6 6 3% 1%	> Very im	portant 8 12% 10% portant 8 17% 12%	9 12% 9% 9 11% 17%	10 32% 31% 10 40% 62%	Average 6.99 6.89 Average 8.04 9.22	Top Bo: 56% 50% Top Bo: 68% 91% 63%
8. How important is it to you that 100% of the energy you receive con Residential Commercial *Top Box = 8 - 10 ratings combined, or highest importance. 9. Please rate the importance of the following electric service charace *Top Box = 8 - 10 ratings combined, or most important. Residential Lowest possible cost Reliable service Renewable resource Commercial	1 11% 12% teristics: 1 1% 0% 5%	2 4% 3% 2 1% 0% 4%	3 5% 4% Not at all impo	ortant	5 9% 12% 5 12% 5 12% 5% 10%	6 5% 6% 6 3% 1% 4%	> Very im	portant 8 12% 10% portant 8 17% 12% 16%	9 12% 9% 9 11% 17% 10%	10 32% 31% 10 40% 62% 37%	Average 6.99 6.89 Average 8.04 9.22 7.49	Top Bo: 56% 50% Top Bo: 68% 91% 63%
8. How important is it to you that 100% of the energy you receive con Residential Commercial *Top Box = 8 - 10 ratings combined, or highest importance. 9. Please rate the importance of the following electric service charac *Top Box = 8 - 10 ratings combined, or most important. Residential Lowest possible cost Reliable service	1 11% 12% teristics: 1 1% 0% 5% 1	2 4% 3% 2 1% 0% 4% 2	3 5% 4% Not at all impo	ortant 4 2% 2% ortant ortant 4 2% 0% 2% 4	5 9% 12% 5 12% 5 12% 5% 10% 5	6 5% 6% 6 3% 1% 4% 6	> Very im	portant 8 12% 10% 10% portant 8 17% 12% 16% 8	9 12% 9% 9 11% 17% 10% 9	10 32% 31% 10 40% 62% 37% 10	Average 6.99 6.89 Average 8.04 9.22 7.49 Average	Top Box 56% 50% Top Box 68% 91% 63% Top Box





10. Are you willing to pay more on your monthly bill to receive energy f	rom renewable	resources, ar	nd if so, how	v much more	?					
	Residential				Commerc	cial				
Not willing to pay more	41%		Not willing	to pay more	47%					
\$5 to \$10 per month	36%		24%							
\$11 to \$20 per month	13%		14%							
\$21 to \$30 per month	4%		11% to 20%	6 per month	4%					
More than \$30 per month	7%	М	ore than 20%	6 per month	2%					
			Unsu	re/unknown	10%					
	<u> </u>	D	emograph	nics	·	·				
D1. How old are you?										
Under 25	1%		45 - 54	11%		75+	22%			
25 - 34	2%		55 - 64	22%						
35 - 44	2%		65 - 74	41%						
			Median age:	67						
D2. What type of residence do you live in?										
Single-family home	84%									
Mobile, modular or manufactured home	1%									
Apartment, townhouse, duplex or condominium	15%									
D3. Do you own or rent your home?	Own	93.0%		Rent	7.0%					
D4. How many people live in your household?										
	1	2	3	4	5	6+				
	16%	68%	6%	5%	2%	3%		Average:	2.18	





D5. What is the highest level of education you have completed?							
Less than high school	0%			Some college	12%		
High school graduate/GED	8%			College graduate	35%		
Vocational-technical school	3%			Graduate or post-college school	43%		
D6. What is your household income?							
Less than \$20,000	3%			\$80,000 to \$99,999	11%		
\$20,000 to \$39,999	9%			\$100,000 or more	28%		
\$40,000 to \$59,999	14%			No response	16%		
\$60,000 to \$79,999	19%						
	·	Medi	an income: \$	77,271		·	
D7. Respondent's gender	Male	63%		Female 37%			





	,	Firmograp	hics				'	
1. How many employees does your business have?								1
Less than 10	74%							
10 to 25	15%							
26 to 50	7%							
51 to 100	2%							
More than 100	2%							
2. What type of business do you have?								
Service	69%			Agriculture	0%			
Retail sales	18%			Mining or refining	0%			
Wholesale sales	0%			Transportation	0%			
Manufacturing	3%			Public administration	4%			
Construction	2%			Other	4%			
3. What is the annual revenue of your business?								
Less than \$500,000	65%							
\$500,001 to \$1 million	19%							
\$1 million to \$5 million	13%							
\$5 million to \$10 million	0%							
\$10 million to \$25 million	2%							
More than \$25 million	1%							
			1		ı			4
4. What is the percentage of electricity costs to your overall business of								
Less than 5%	49%							
5% to 15%	44%							
16% to 30%	3%							
31% to 50%	3%							
More than 50%	1%		1					