



Platte River
Power Authority

Estes Park • Fort Collins • Longmont • Loveland

2018 Integrated Resource Plan Survey Results

Conducted by:



(a solutions company)



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2018 Integrated Resource Plan Survey



Scope and Methodology

During the fall of 2018, Platte River Power Authority, in coordination with Loveland Water 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 266 randomly-selected residential customers and 251 commercial customers. The results of the residential survey have a margin of error of ± 5.98 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 5.98 percent in the actual total population. The results of the commercial survey have a margin of error of ± 6.03 percent.

Of the 266 residential survey completions, 96 (36 percent) were completed online by customers responding to a postcard mailing. Following the online completions, 170 (64 percent) surveys were completed by callers conducting phone interviews. In completing the 170 phone surveys there were 31 refusals or disconnects, for a refusal rate of 15 percent. Of the 251 commercial survey completions, 45 (18 percent) were completed online, and 206 (82 percent) were completed by phone. In completing the 206 phone surveys there were 21 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

- About half of customers, residential and commercial, are aware Platte River Power Authority provides electricity generation and transmission services to their utility
- 56 percent of residential customers and 55 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 wind and solar power – fewer than half of residential and commercial customers are aware of the use of these two resources



Renewable Resource Options

- More residential customers (56 percent) than commercial customers (50 percent) say it is somewhat or very important that 100 percent of the electricity they receive comes from renewable resources
- Both groups place similar priority on service reliability, receiving electricity at the lowest possible cost and utilizing renewable resources
- Nearly 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
- Nearly half of commercial customers are willing to pay 1 percent to 10 percent more per month for renewable energy – half are not willing to pay more



Demographics

- Mix of ages responding to the residential survey – median age is 58, median length of service is 10 years
- Mix of income levels, median annual income is \$64,999 – approximately 6 in 10 have a college degree



Firmographics

- Median length of service for commercial customers is 9 years – 7 in 10 of the businesses have fewer than 10 employees
- More service businesses responding (56 percent) to the commercial survey, followed by retail sales (18 percent), manufacturing (9 percent), and construction (9 percent)
- More than half of businesses have annual revenue of less than \$500,000, 4 in 10 report electric costs as 5 percent or more of their overall business expense



Integrated Resource Plan Survey Results

2018

Overview

Integrated Resource Plan Survey 2018



During the fall of 2018, Platte River Power Authority, in conjunction with Loveland Water and 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 266 residential end users and 251 commercial responses.

Highlights

- About half of customers, residential and commercial, are aware Platte River Power Authority provides electricity generation and transmission services to their utility
- 56 percent of residential customers and 55 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 wind and solar power – fewer than half of residential and commercial customers are aware of the use of these two resources
- More residential customers (56 percent) than commercial customers (50 percent) say it is somewhat or very important that 100 percent of the electricity they receive comes from renewable resources
- Both groups place similar priority on service reliability, receiving electricity at the lowest possible cost and utilizing renewable resources

Highlights

Nearly 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

Nearly half of commercial customers are willing to pay 1 percent to 10 percent more per month for renewable energy – half are not willing to pay more

Mix of ages responding to the residential survey – median age is 58, median length of service is 10 years

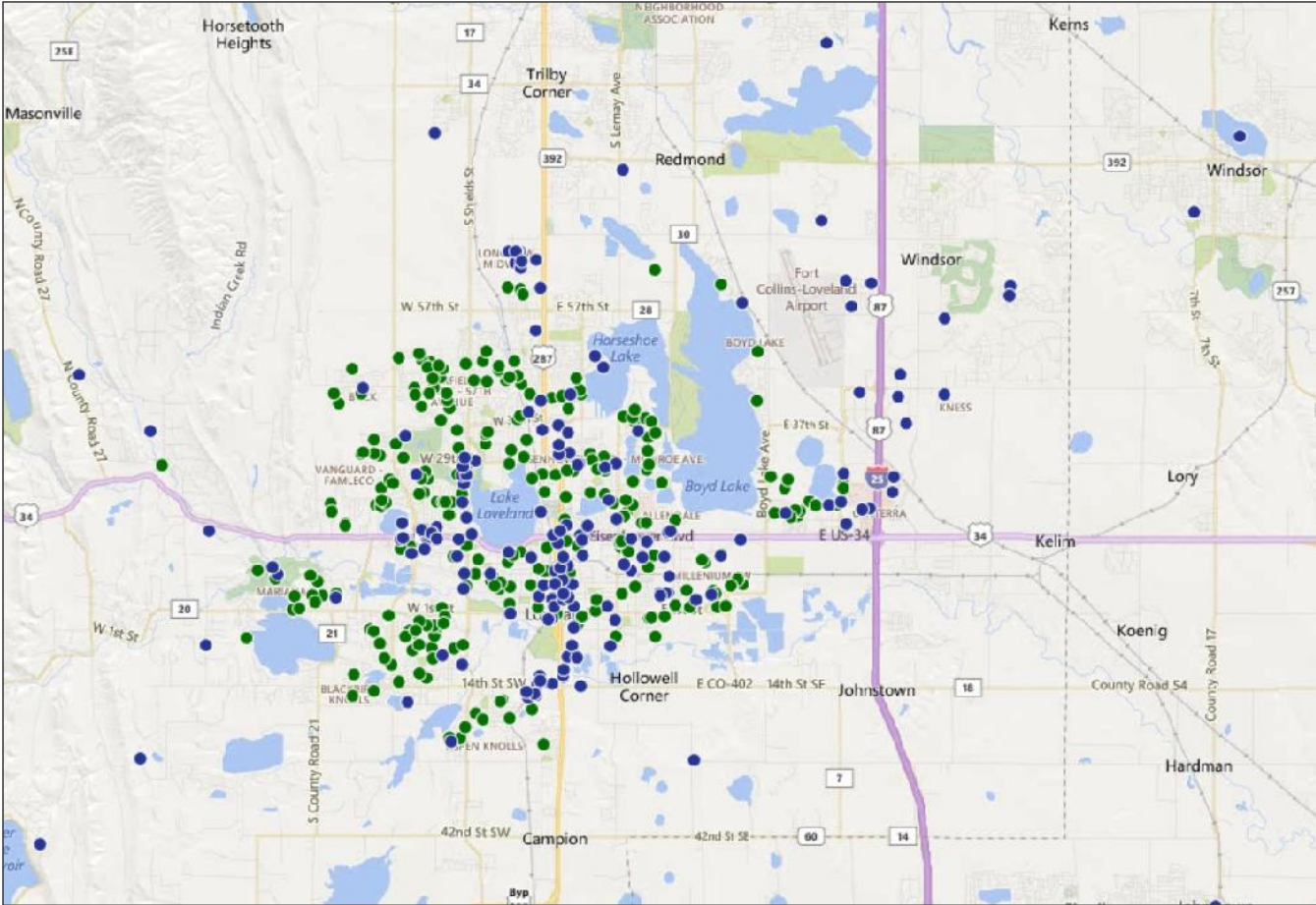
Mix of income levels, median annual income is \$64,999 – approximately 6 in 10 have a college degree

Median length of service for commercial customers is 9 years – 7 in 10 of the businesses have fewer than 10 employees

More service businesses responding (56 percent) to the commercial survey, followed by retail sales (18 percent), manufacturing (9 percent), and construction (9 percent)

More than half of businesses have annual revenue of less than \$500,000, 4 in 10 report electric costs as 5 percent or more of their overall business expense

Respondents

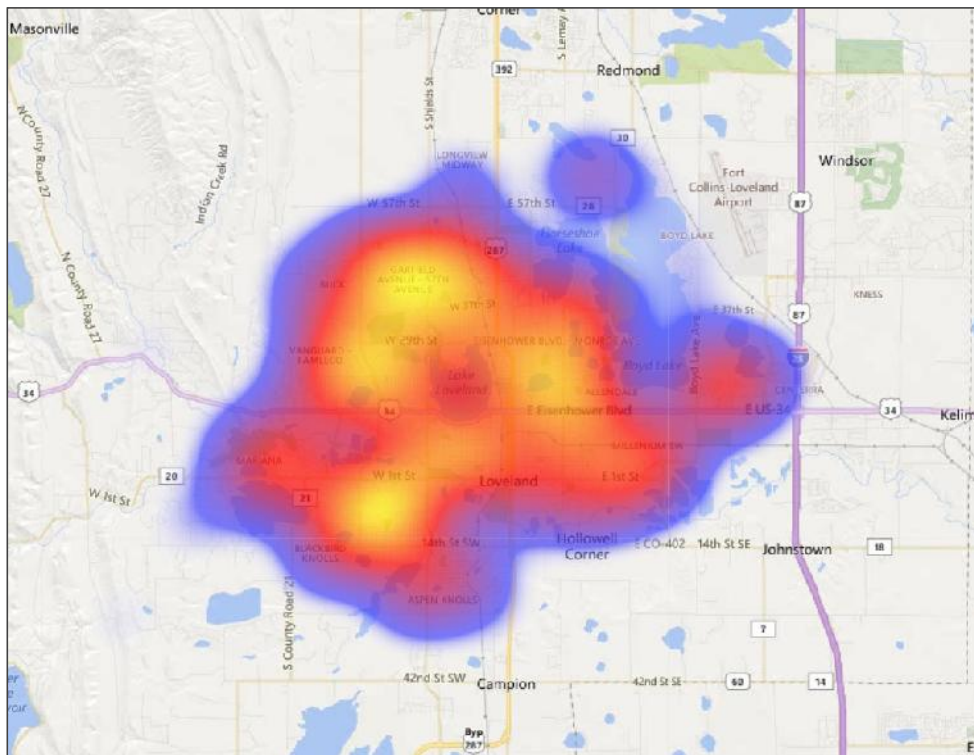


- Residential
- Commercial

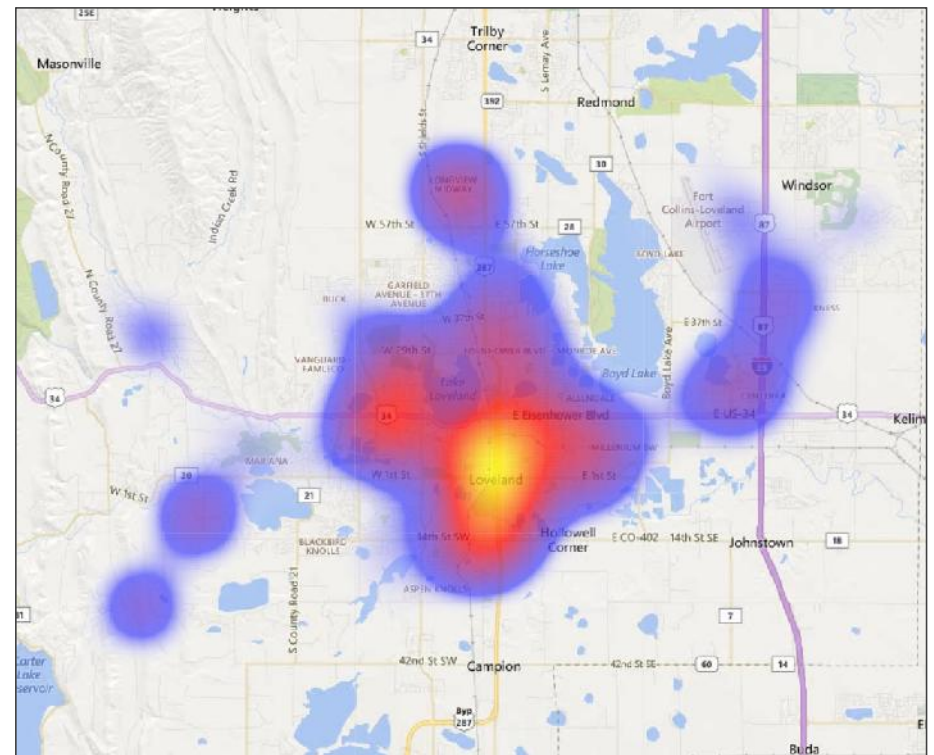
Respondents

Response density

Residential



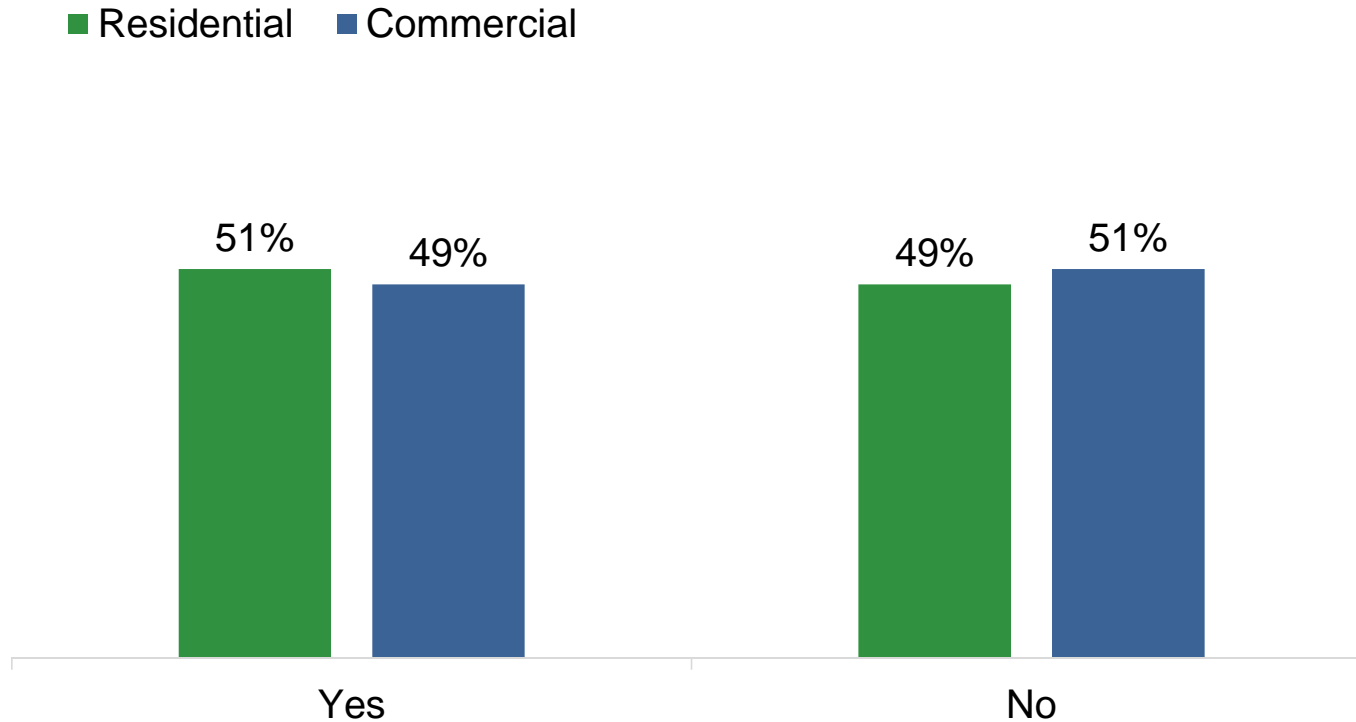
Commercial





Platte River Power Authority

Aware Platte River Power Authority provides generation

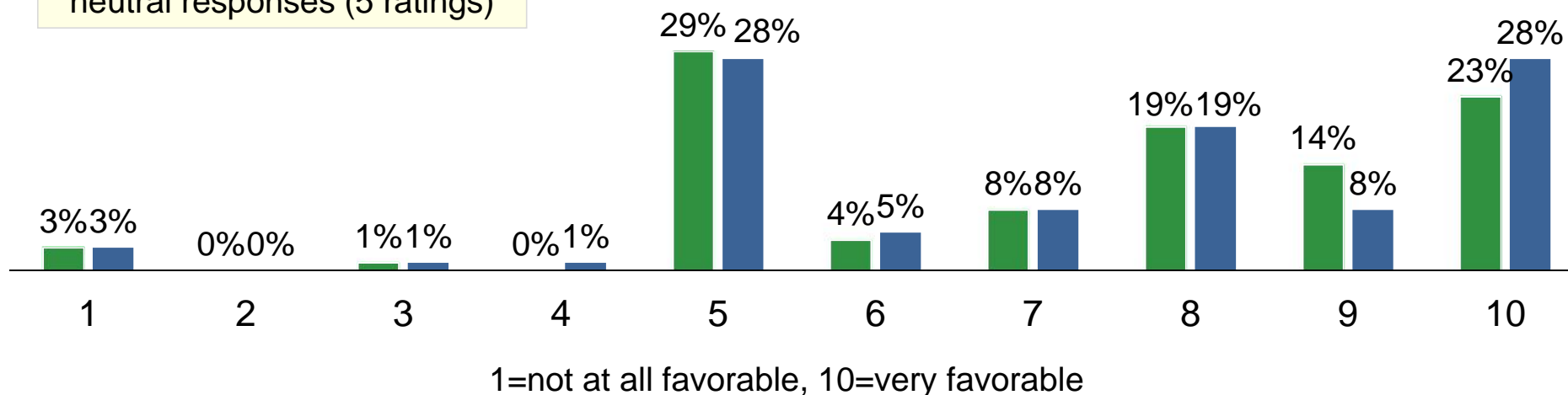


Opinion of Platte River Power Authority

■ Residential ■ Commercial

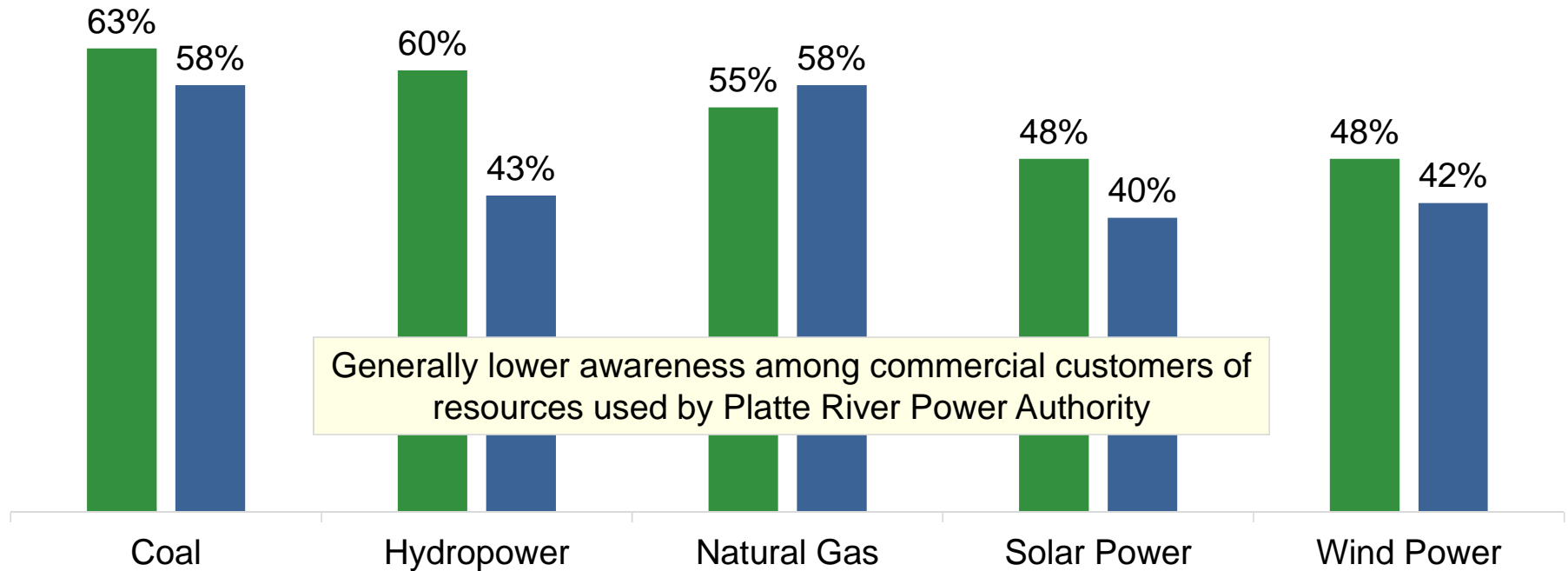
	Residential	Commercial
Top box (8-10 ratings)	56%	55%
Bottom box (1-3 ratings)	4%	4%
Mean	7.3	7.4

Considerable number of neutral responses (5 ratings)



Resources used by Platte River Power Authority

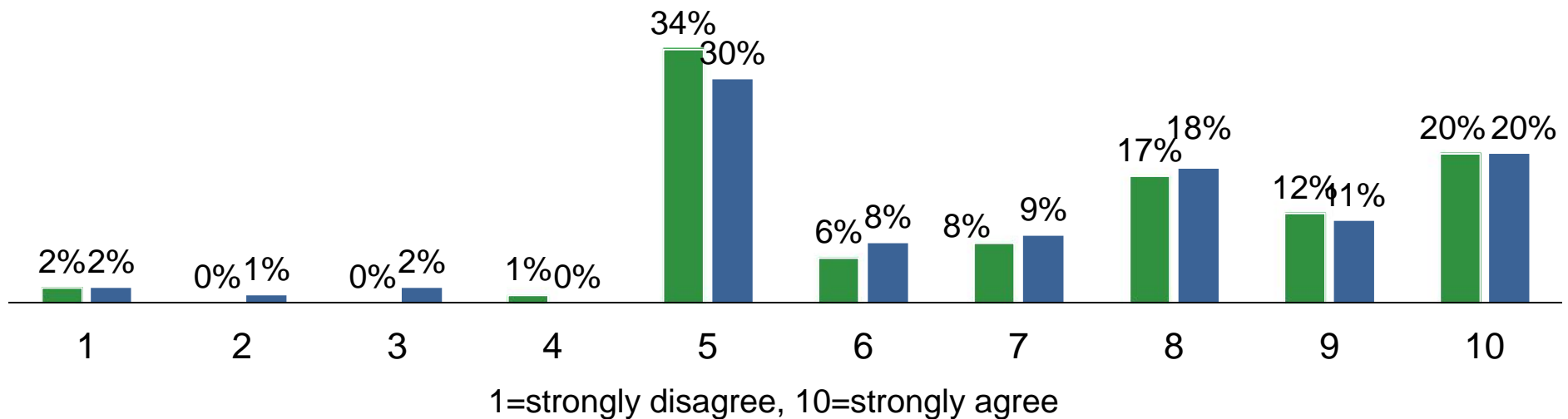
■ Residential ■ Commercial



Platte River Power Authority shows concern for the environment

■ Residential ■ Commercial

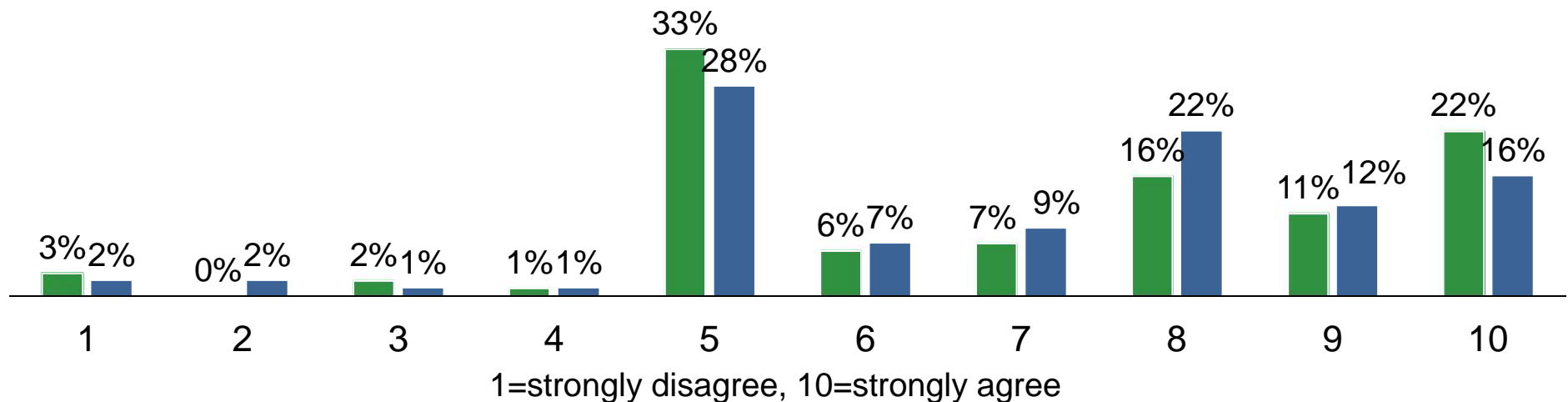
	Residential	Commercial
Top box (8-10 ratings)	49%	49%
Bottom box (1-3 ratings)	2%	5%
Mean	7.1	7.1



Platte River Power Authority offers adequate programs to help use energy efficiently

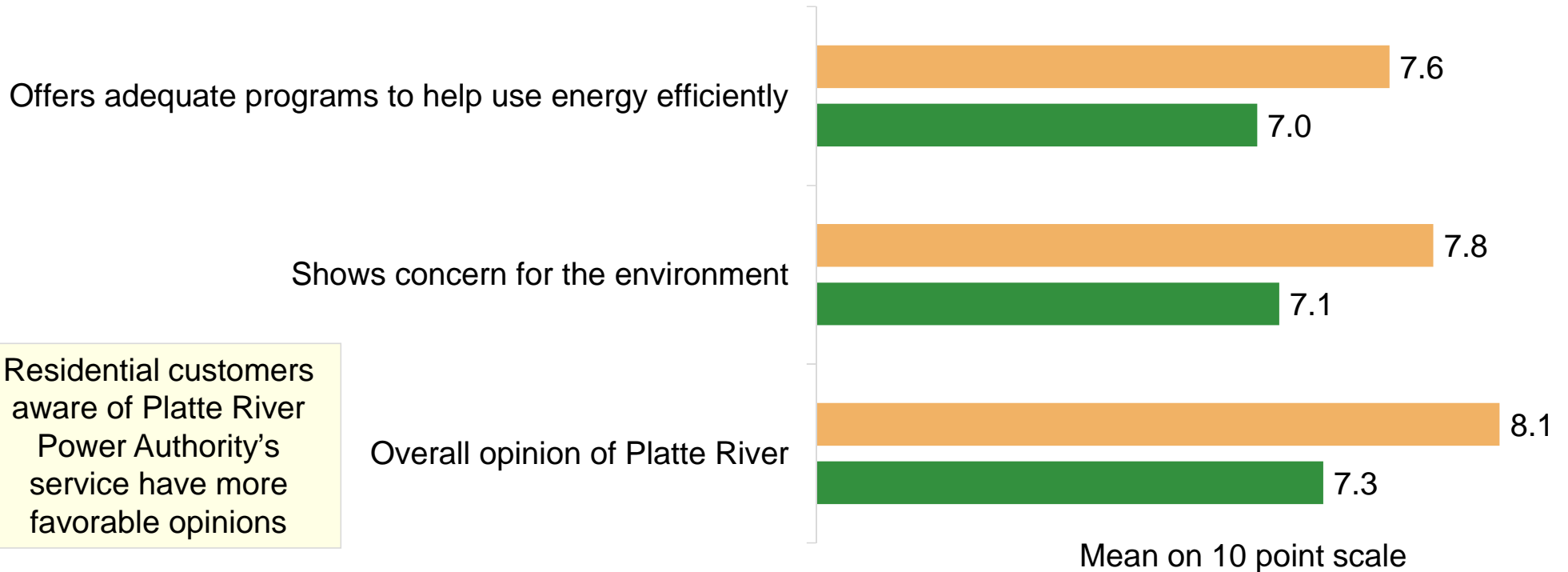
■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	49%	50%
Bottom box (1-3 ratings)	5%	5%
Mean	7.0	7.0



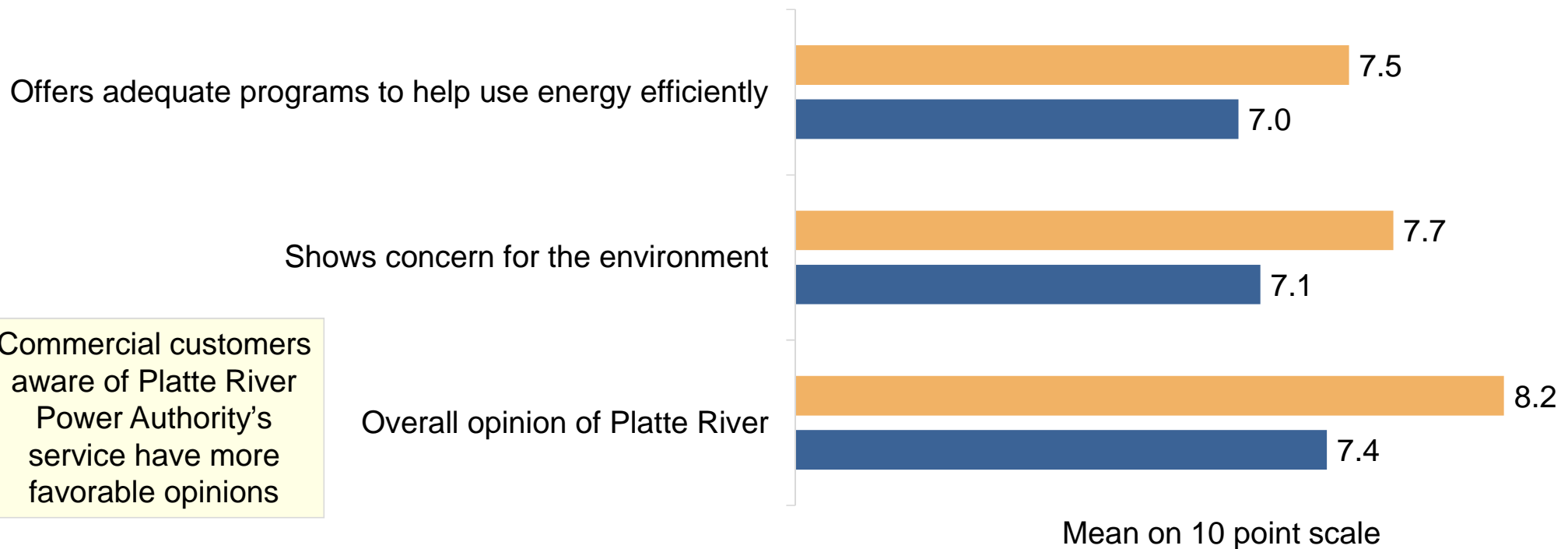
Opinion comparison - residential

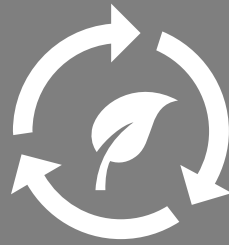
■ Those aware Platte River Power Authority provides electricity ■ Overall



Opinion comparison - commercial

■ Those aware Platte River Power Authority provides electricity ■ Overall





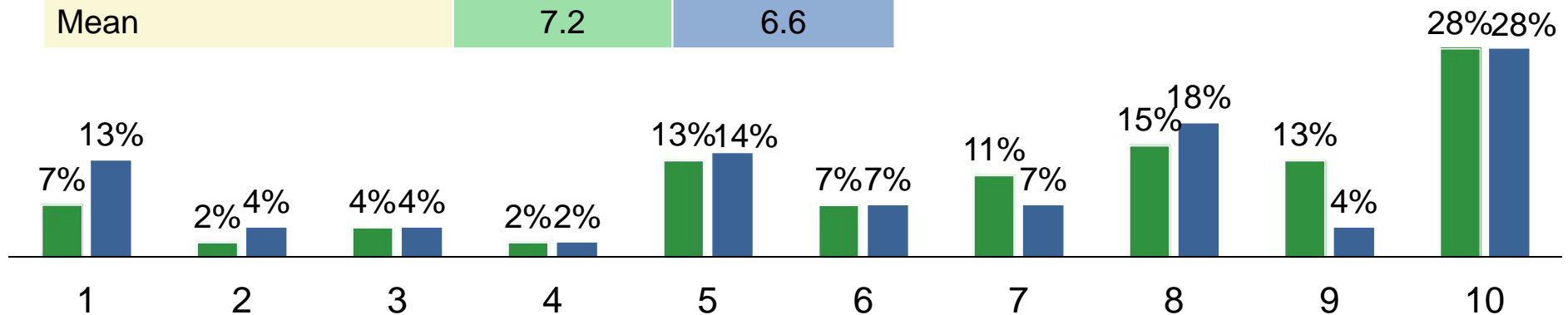
Renewable Resource Opinions

Renewables

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

■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	56%	50%
Bottom box (1-3 ratings)	13%	21%
Mean	7.2	6.6



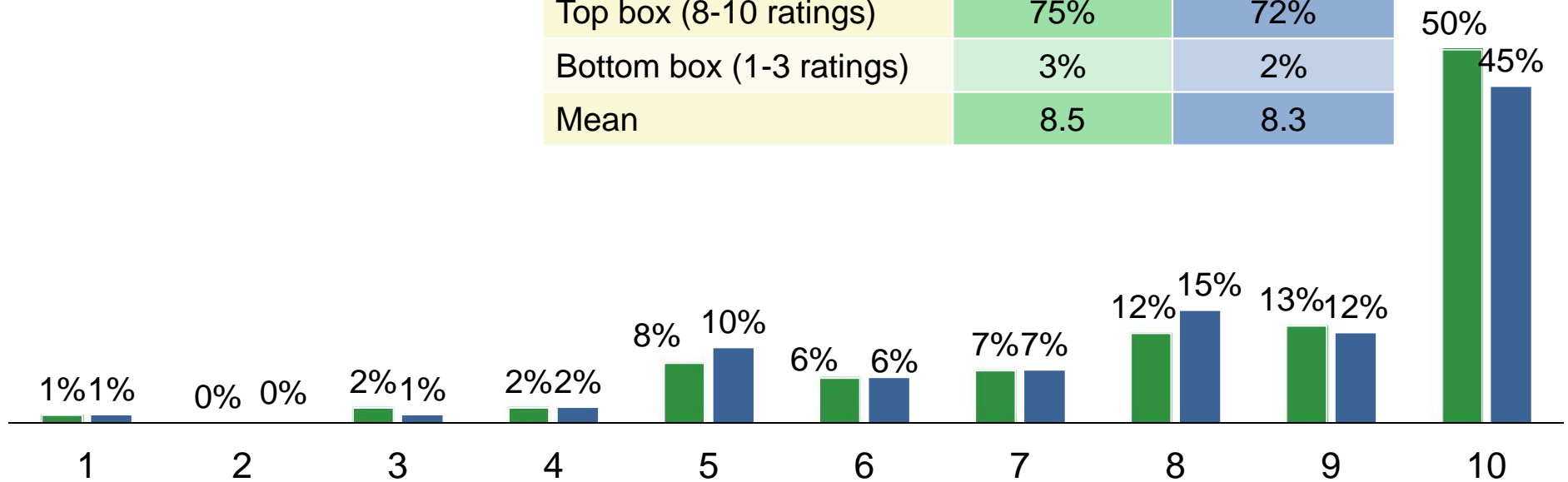
1=not at all important, 10=very important

Renewables

Importance of lowest possible cost

■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	75%	72%
Bottom box (1-3 ratings)	3%	2%
Mean	8.5	8.3



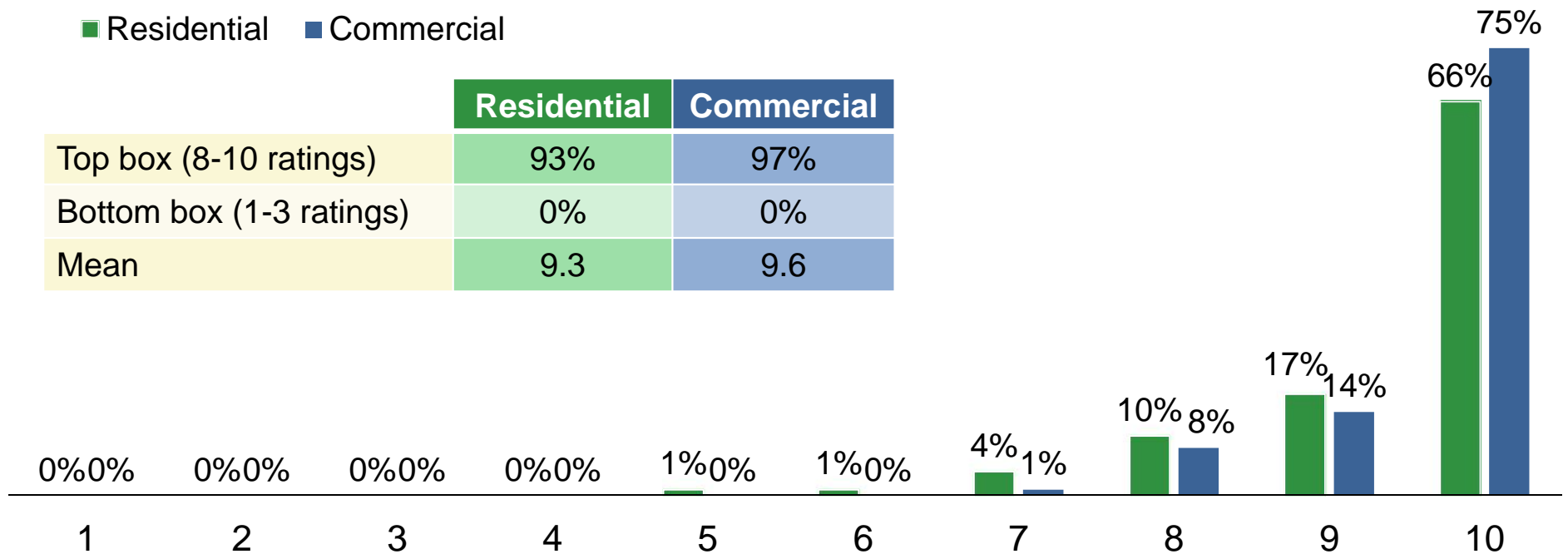
1=not at all important, 10=very important

Renewables

Importance of reliable service

■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	93%	97%
Bottom box (1-3 ratings)	0%	0%
Mean	9.3	9.6



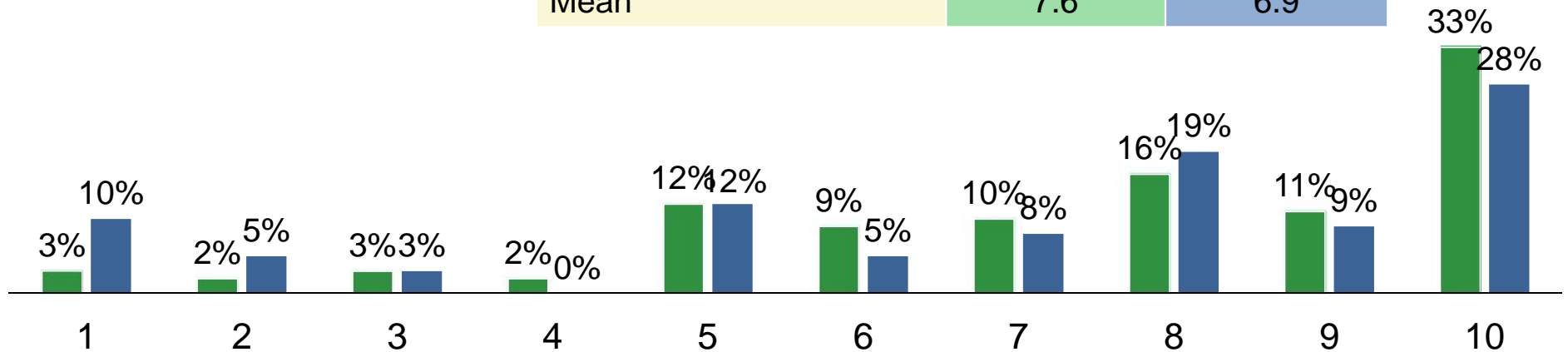
1=not at all important, 10=very important

Renewables

Importance of renewable resources

■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	60%	56%
Bottom box (1-3 ratings)	8%	18%
Mean	7.6	6.9

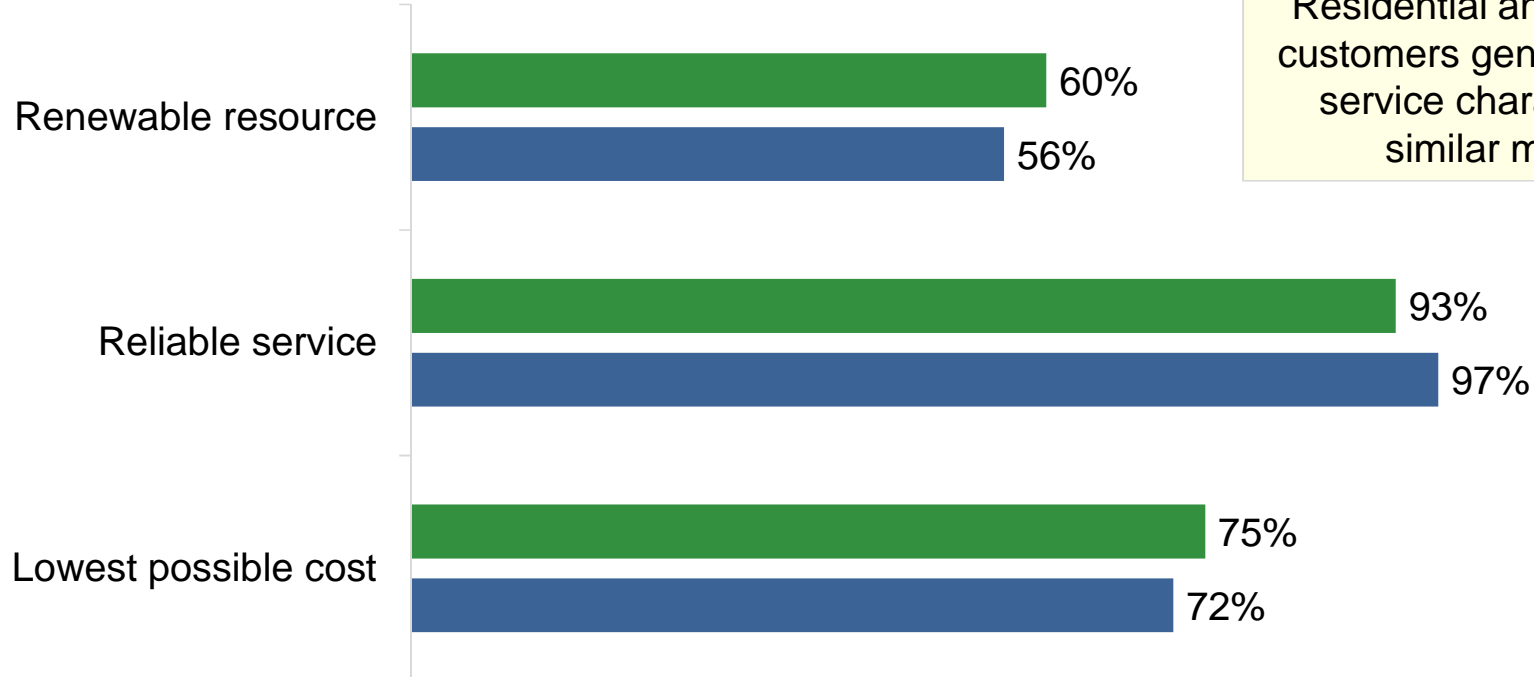


1=not at all important, 10=very important

Renewables

Service characteristics importance

■ Residential ■ Commercial

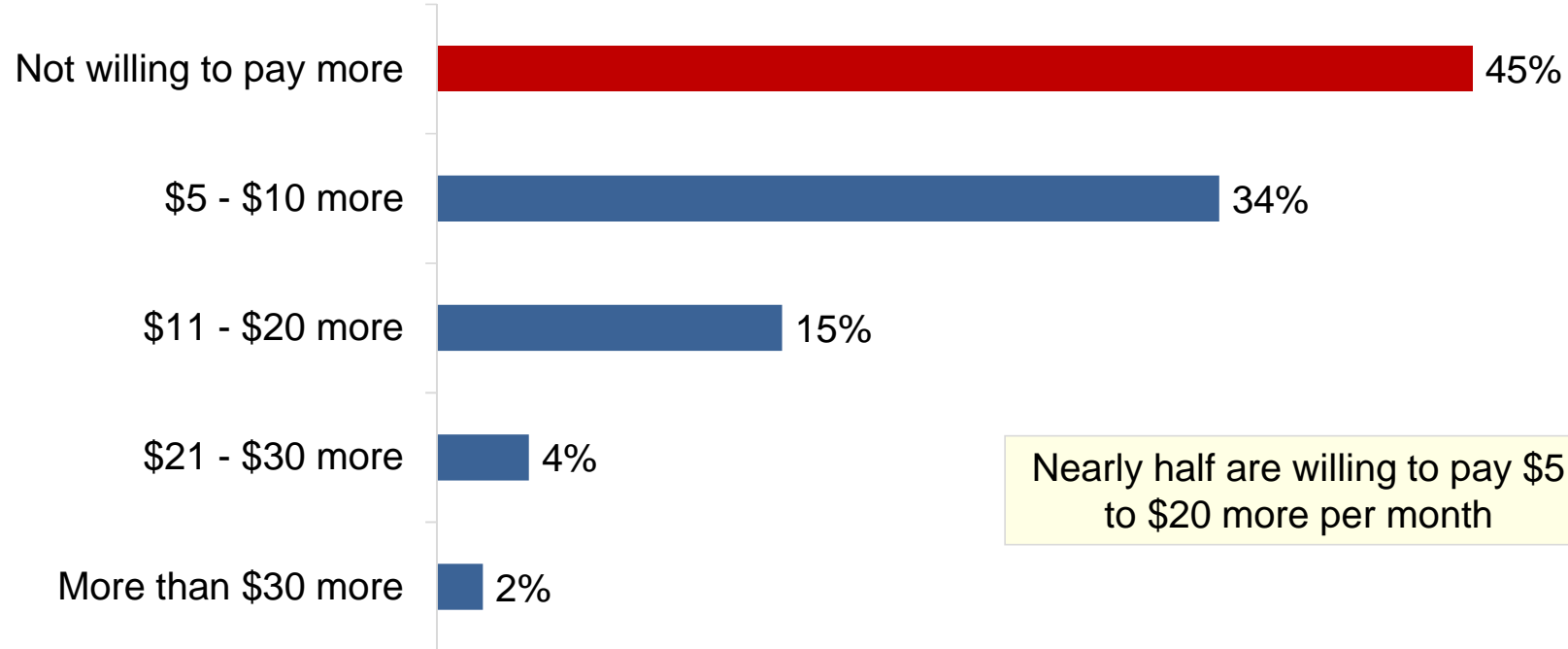


Residential and commercial customers generally prioritize service characteristics in similar measures

Somewhat or very important (8-10 ratings)

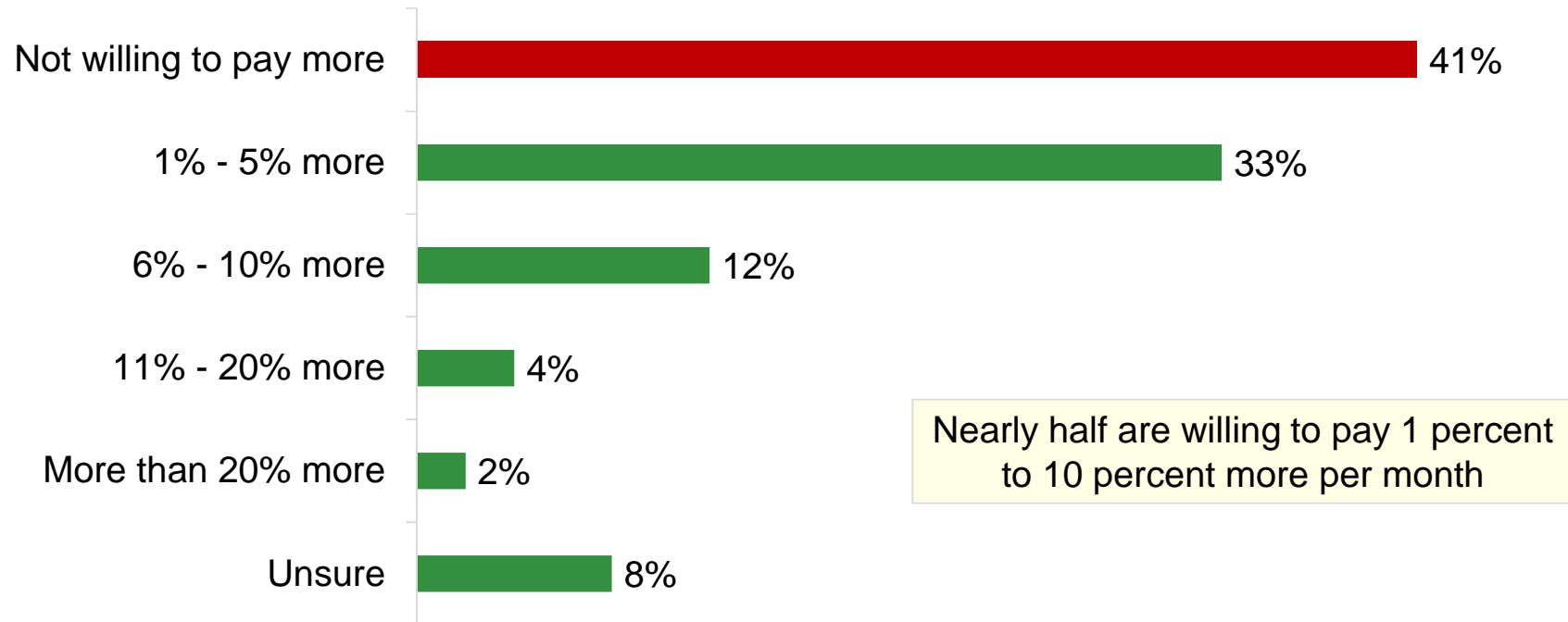
Renewables

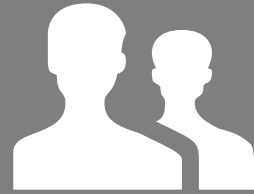
Additional monthly amount willing to pay for renewable energy - residential



Renewables

Additional monthly amount willing to pay for renewable energy - commercial



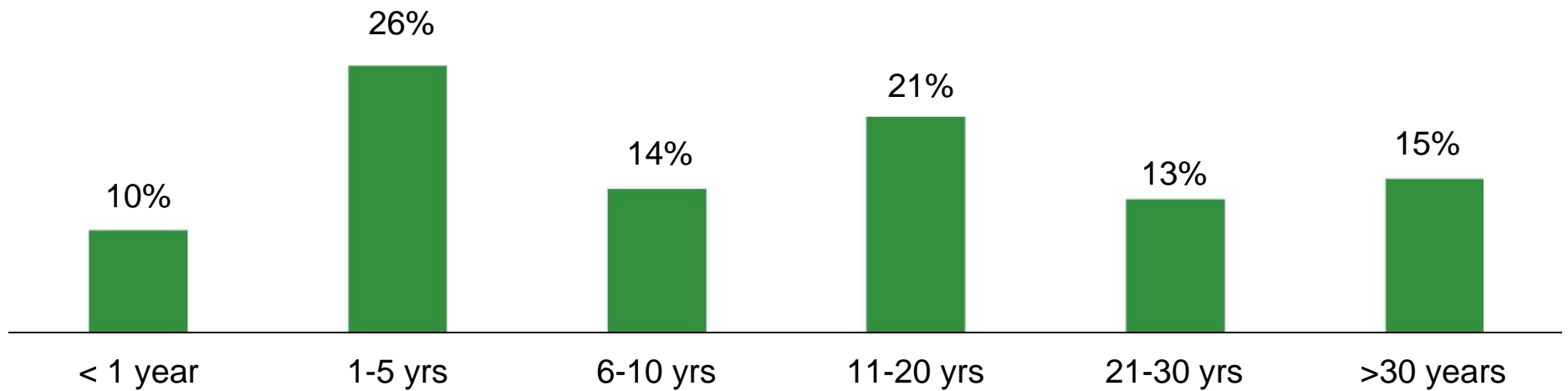


Demographics

Demographics

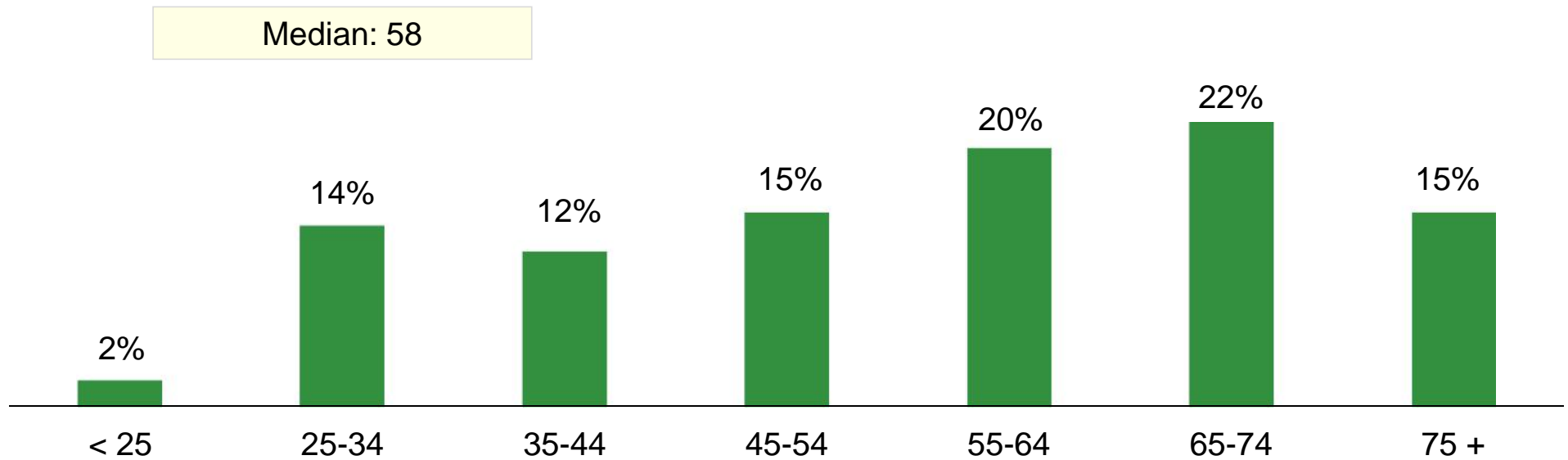
Length of service

Median: 10 years



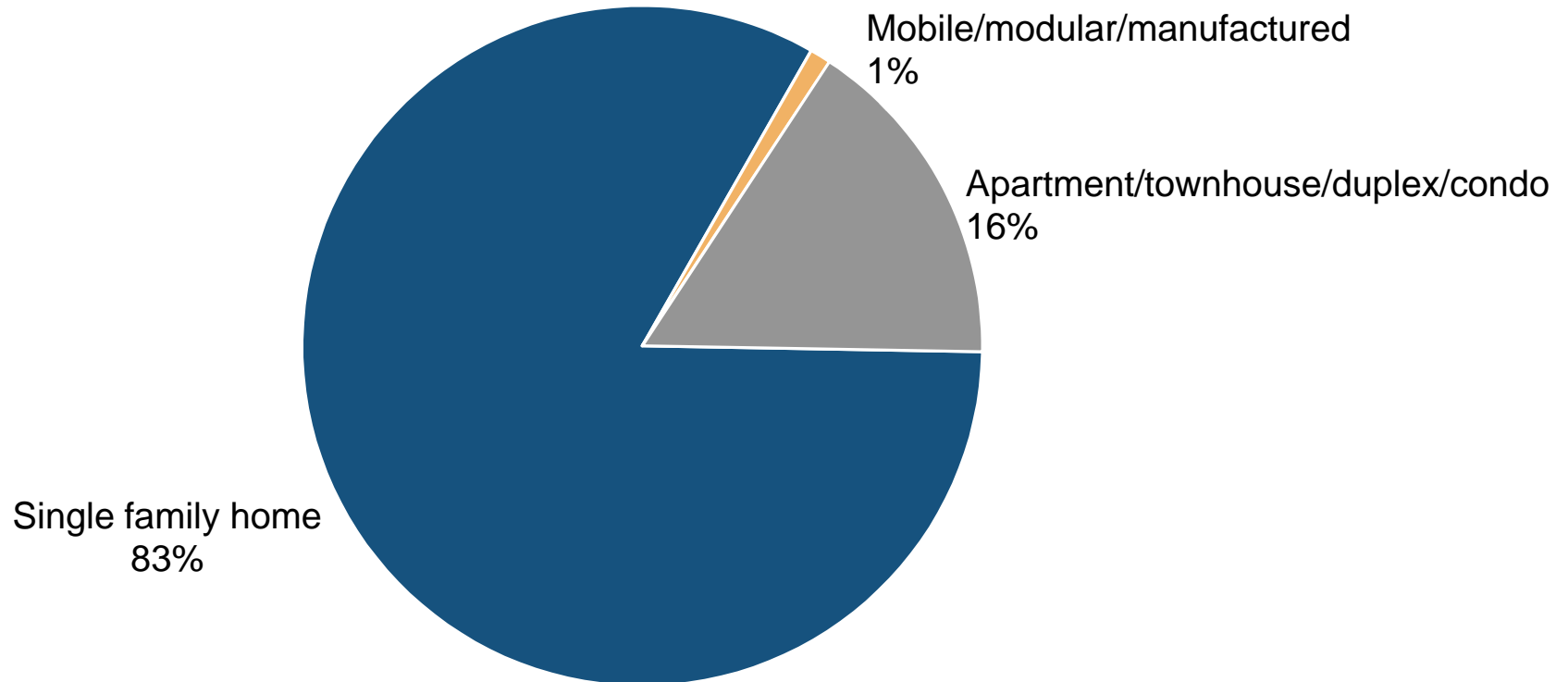
Demographics

Respondent age



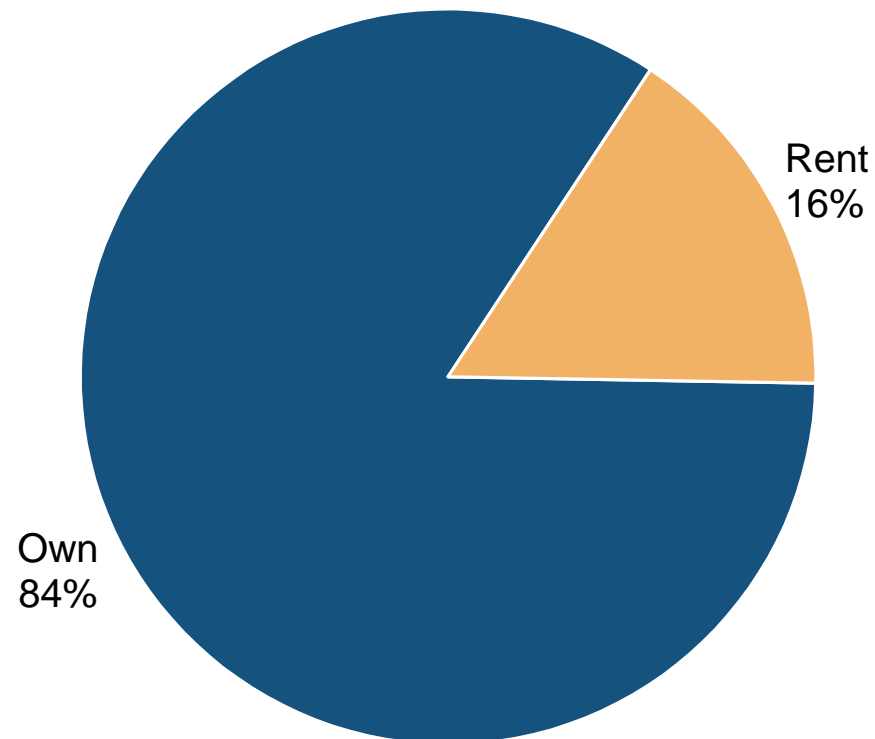
Demographics

Type of residence



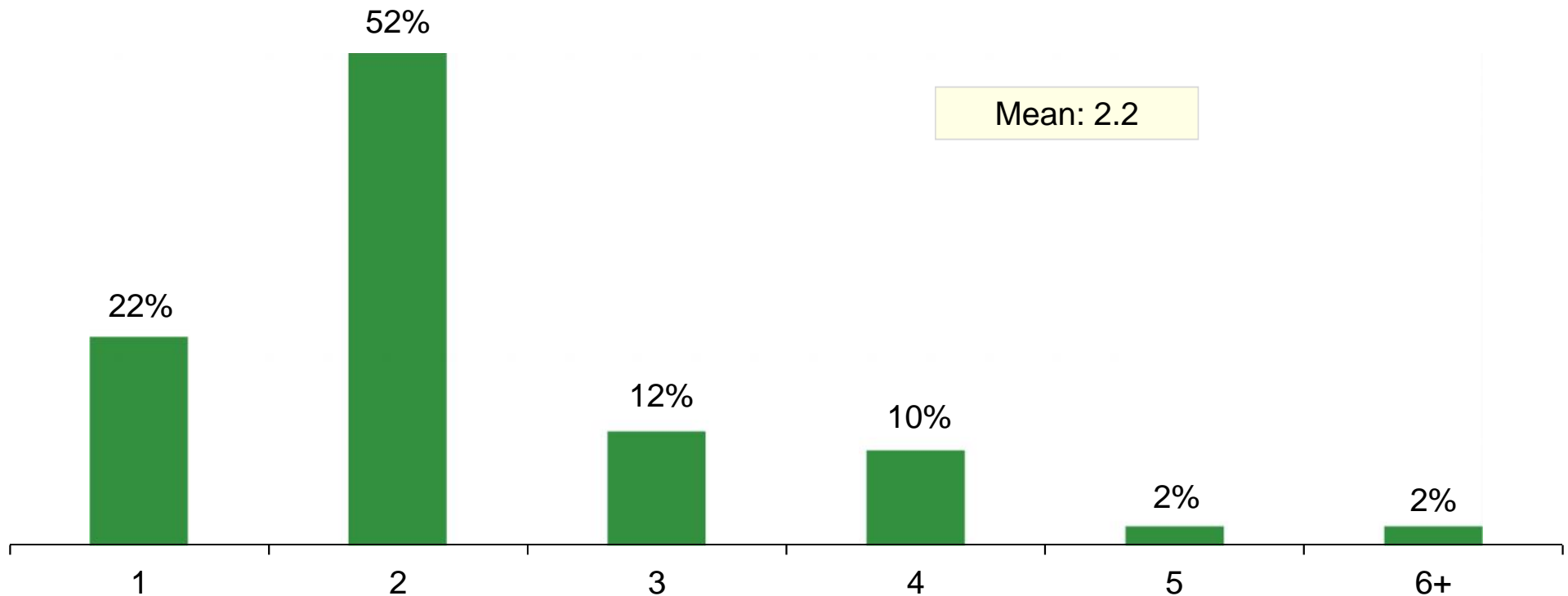
Demographics

Home ownership



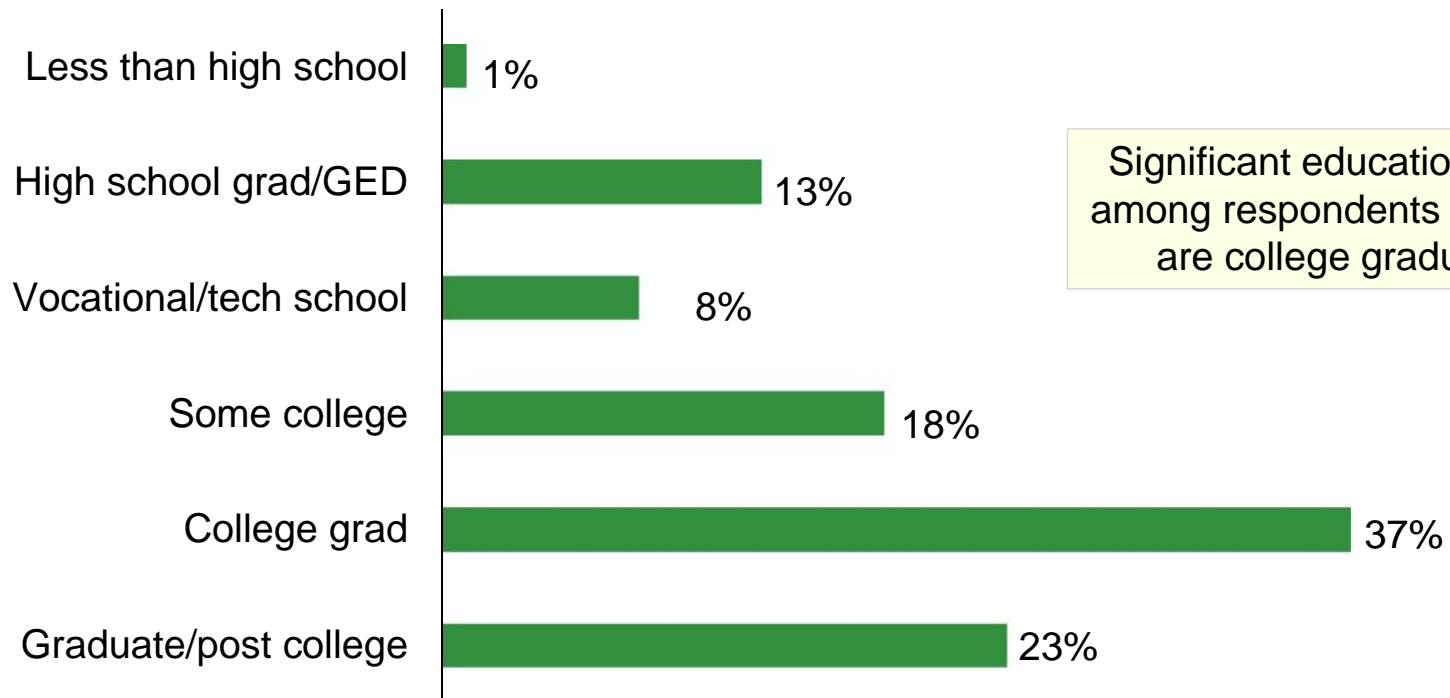
Demographics

Number of residents per household



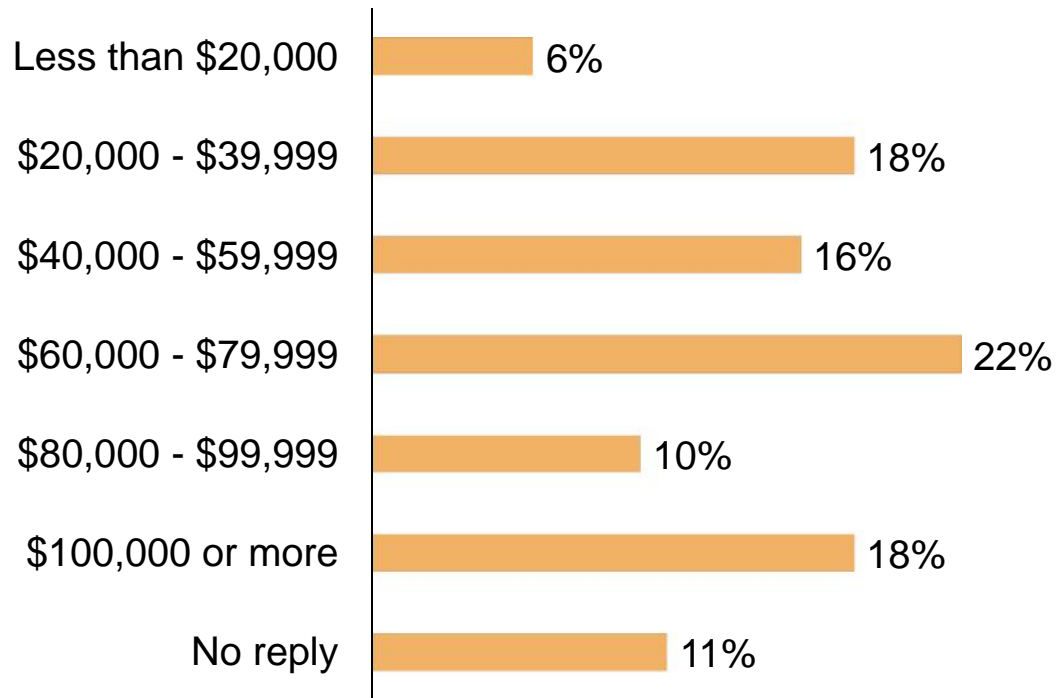
Demographics

Education



Demographics

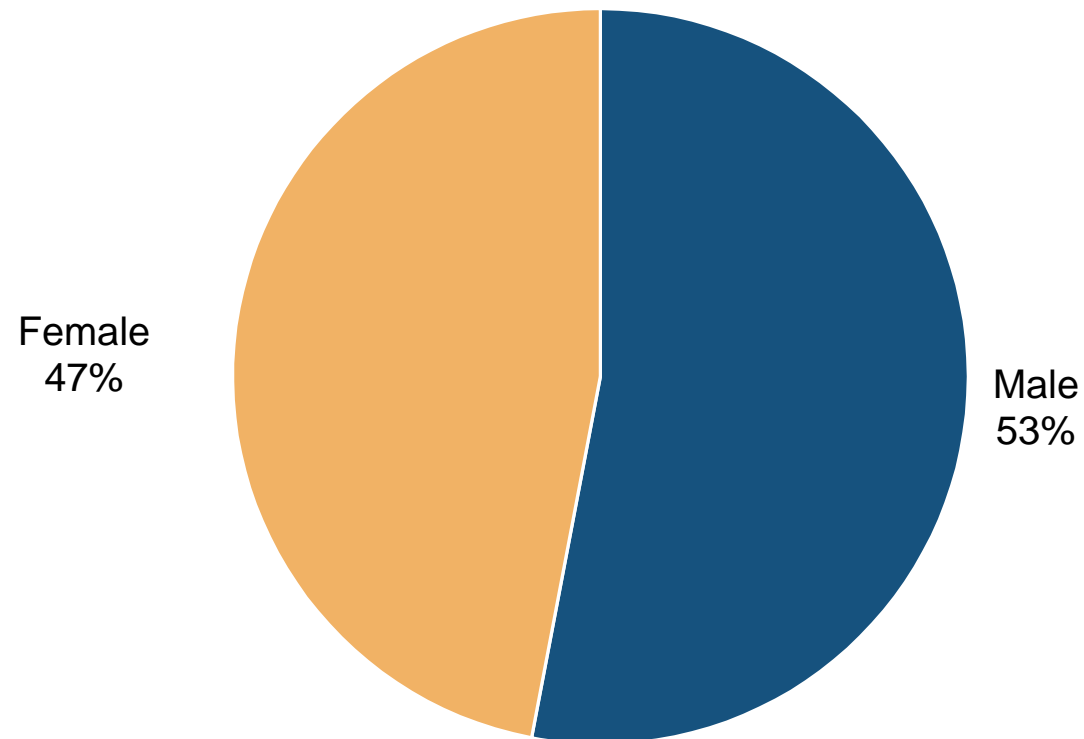
Income



Mix of income levels –
median is \$64,999

Demographics

Gender



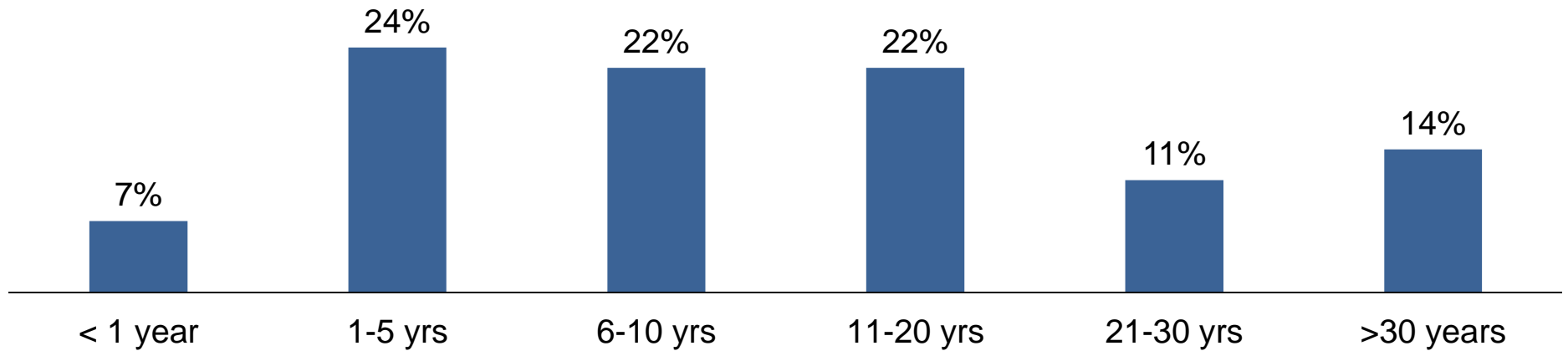


Firmographics

Firmographics

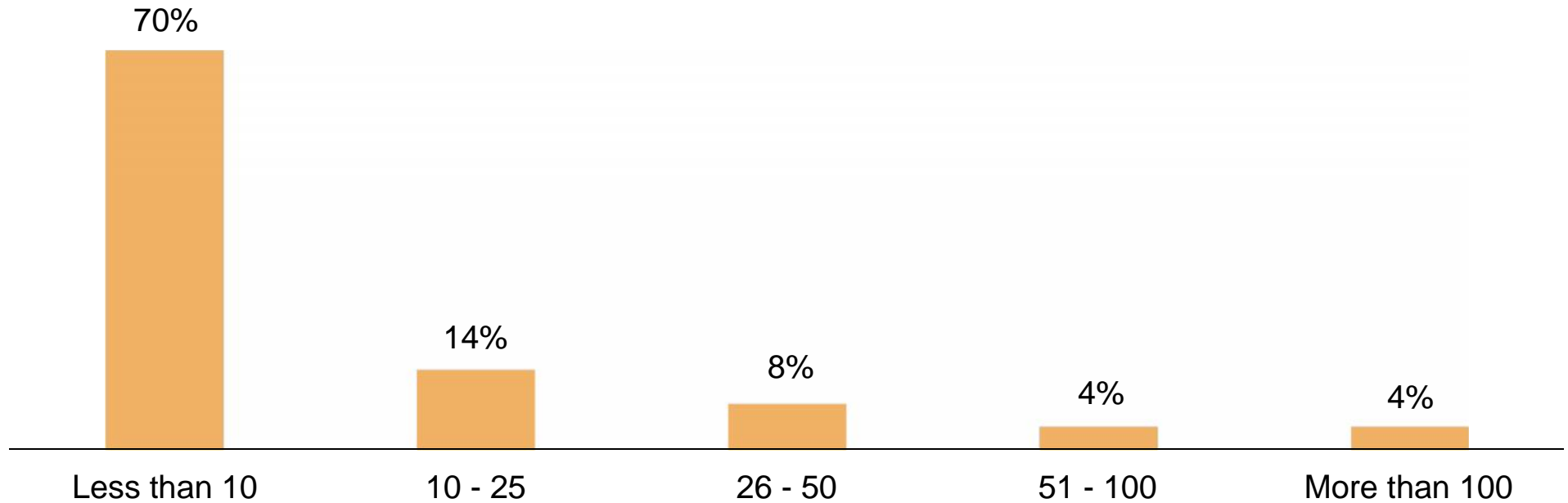
Length of service

Median: 9 years



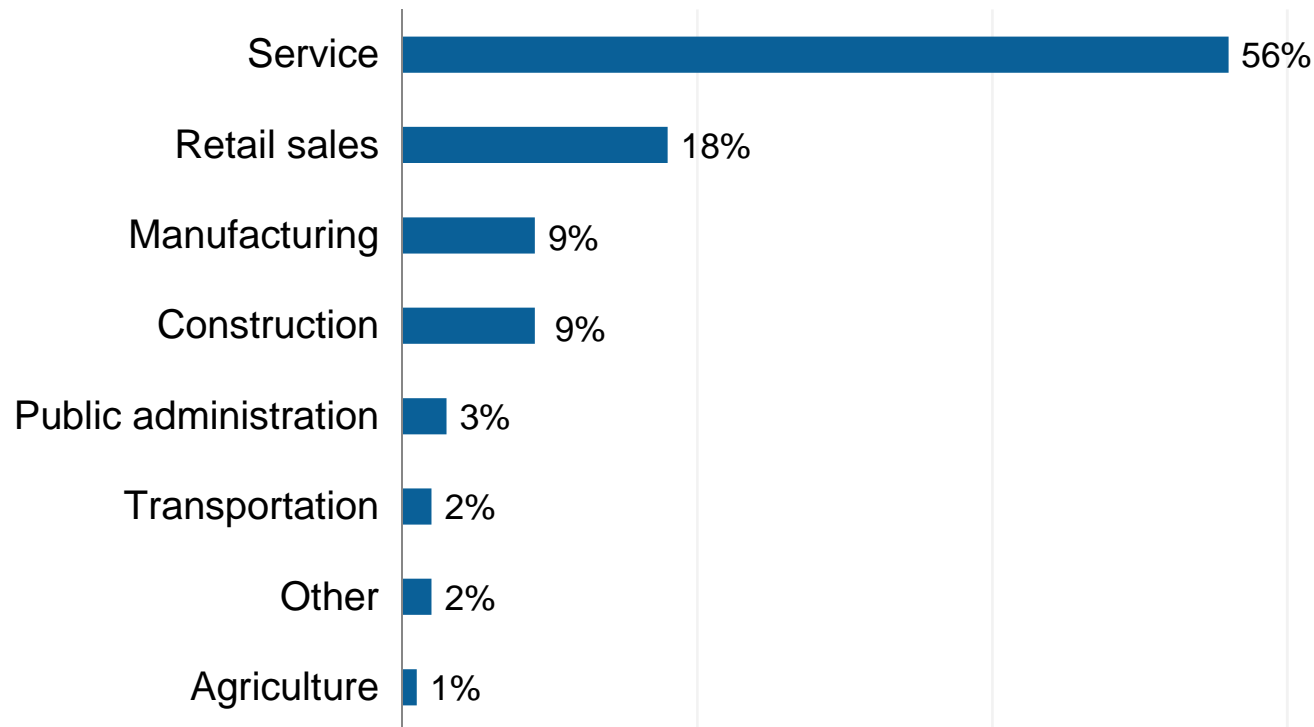
Firmographics

Number of employees



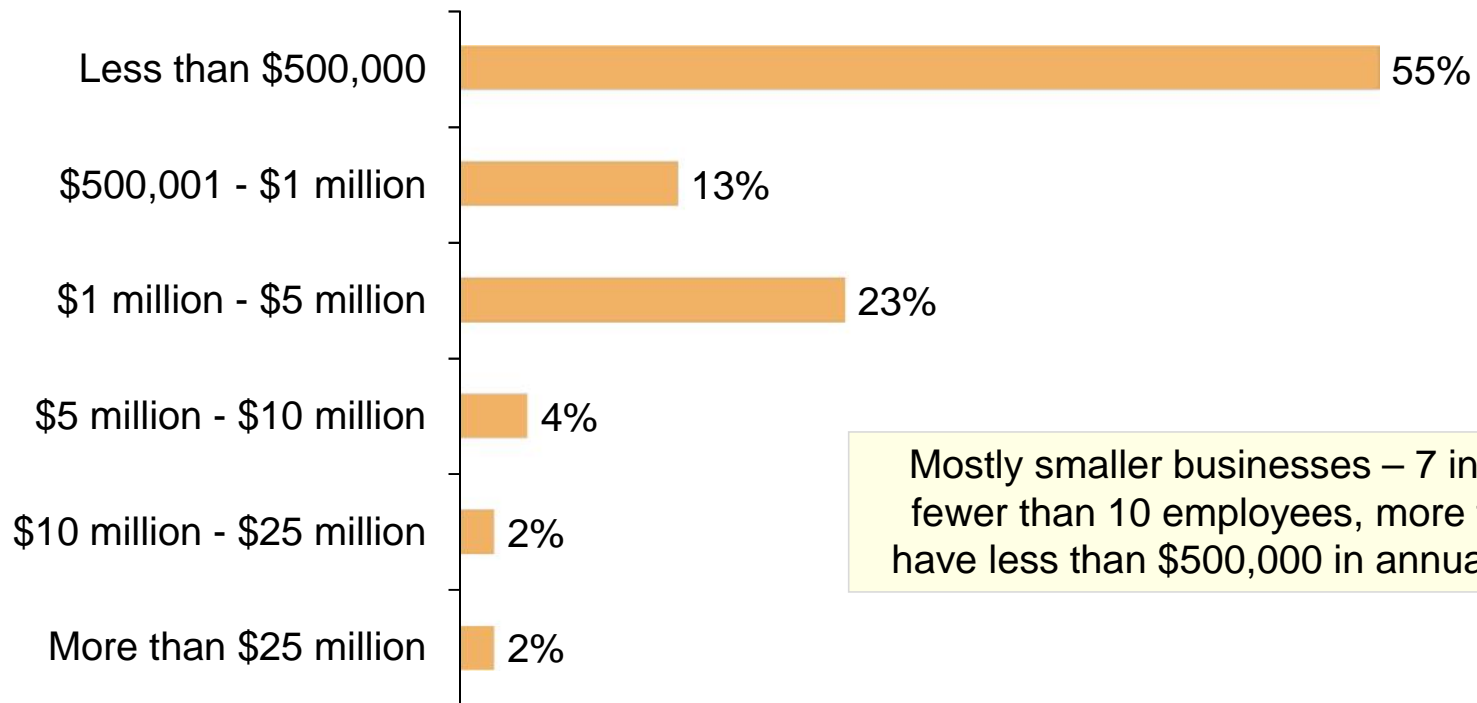
Firmographics

Business type



Firmographics

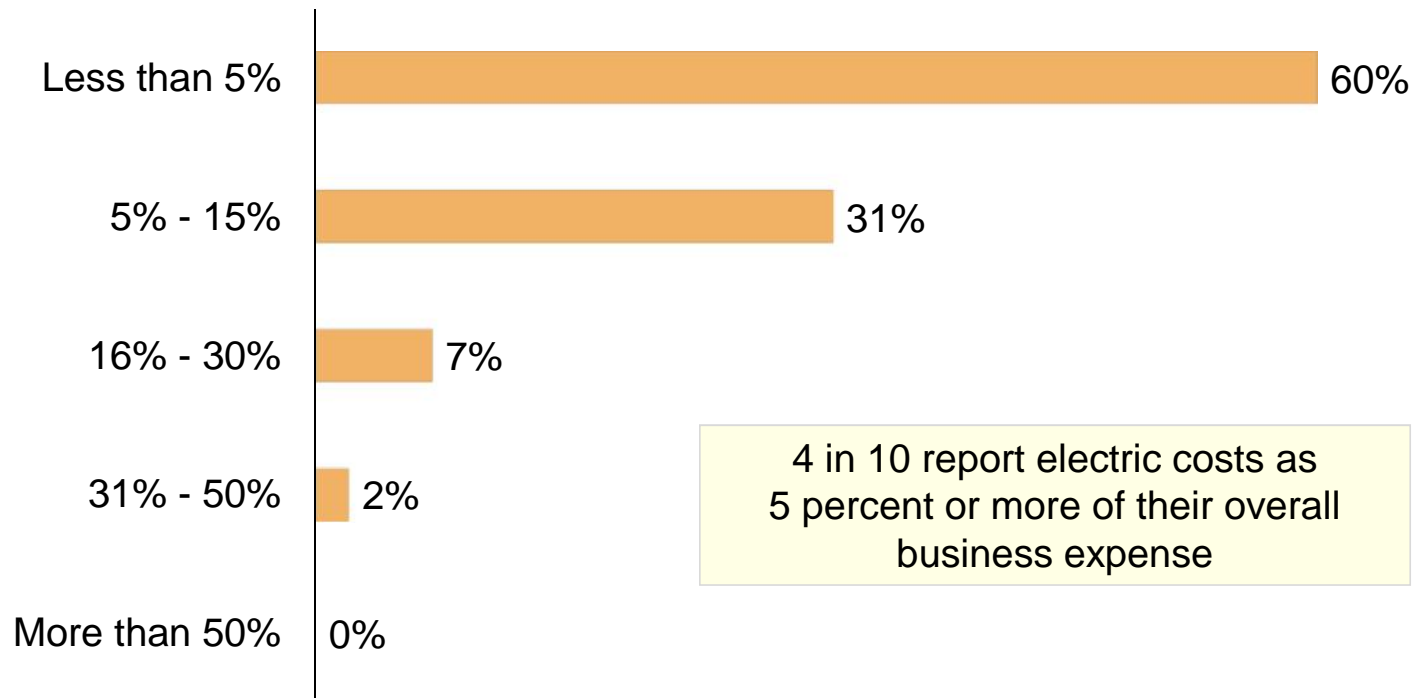
Annual revenue



Mostly smaller businesses – 7 in 10 have fewer than 10 employees, more than half have less than \$500,000 in annual revenue

Firmographics

Electric costs as percentage of overall expense



Customer Notification

Your Opinion Counts!

As the wholesale power provider to Loveland Water and 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/lwpres18
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



Questions?
Call 970-962-3000

Survey Questions

- › How long have you received electric service from City of Loveland Water and Power?
- › Are you aware that Platte River Power Authority provides wholesale electricity generation and transmission services to City of Loveland Water and 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 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?

2018 IRP Survey Results

	Online	Phone											
Residential: Results based on 266 responses	36%	64%											
Commercial: Results based on 251 responses	18%	82%											
1. How long have you received electric service from the City of Loveland?													
	Residential	Commercial											
Less than 1 year	10%	7%											
1 - 5 years	26%	24%											
6 - 10 years	14%	22%											
11 - 20 years	21%	22%											
21 - 30 years	13%	11%											
More than 30 years	15%	14%											
Median length of service	10	9											
2. Are you aware that Platte River Power Authority provides wholesale electricity generation and transmission services to the City of Loveland?													
	Residential	Commercial											
Yes	51%	49%											
No	49%	51%											
3. Based on what you know, what is your opinion of Platte River Power Authority?													
	Not at all favorable -----> Very favorable										Average	Top Box	
	1	2	3	4	5	6	7	8	9	10			
Residential	3%	0%	1%	0%	29%	4%	8%	19%	14%	23%	7.30	56.0%	
Commercial	3%	0%	1%	1%	28%	5%	8%	19%	8%	28%	7.35	55.0%	
<i>*Top Box = 8 - 10 ratings combined, or highest opinion.</i>													
4. What resources do you think Platte River Power Authority uses to provide your municipality with electricity? (all that apply)													
	Residential	Commercial											
Coal	63%	58%											
Hydropower	60%	43%											
Natural gas	55%	58%											
Solar power	48%	40%											
Wind power	48%	42%											

2018 IRP Survey Results

5. Please rate your level of agreement with the following statements regarding Platte River Power Authority.												
<i>*Top Box = 8 - 10 ratings combined, or strongest level of agreement.</i>			Strongly disagree -----> Strongly agree									
Residential	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Shows concern for the environment	2%	0%	0%	1%	34%	6%	8%	17%	12%	20%	7.09	49.0%
Offers adequate programs to help you use energy efficiently	3%	0%	2%	1%	33%	6%	7%	16%	11%	22%	7.00	49.0%
Commercial	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Shows concern for the environment	2%	1%	2%	0%	30%	8%	9%	18%	11%	20%	7.12	49.0%
Offers adequate programs to help you use energy efficiently	2%	2%	1%	1%	28%	7%	9%	22%	12%	16%	7.02	50.0%
6. How important is it to you that 100% of the energy you receive comes from renewable resources, such as hydro, solar and wind?												
			Not at all important -----> Very important									
Residential	1	2	3	4	5	6	7	8	9	10	Average	Top Box
	7%	2%	4%	2%	13%	7%	11%	15%	13%	28%	7.21	56.0%
Commercial	1	2	3	4	5	6	7	8	9	10	Average	Top Box
<i>*Top Box = 8 - 10 ratings combined, or highest importance.</i>	13%	4%	4%	2%	14%	7%	7%	18%	4%	28%	6.57	50.0%
7. Please rate the importance of the following electric service characteristics:												
<i>*Top Box = 8 - 10 ratings combined, or most important.</i>			Not at all important -----> Very important									
Residential	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Lowest possible cost	1%	0%	2%	2%	8%	6%	7%	12%	13%	50%	8.45	75.0%
Reliable service	0%	0%	0%	0%	1%	1%	4%	10%	17%	66%	9.34	93.0%
Renewable resource	3%	2%	3%	2%	12%	9%	10%	16%	11%	33%	7.57	60.0%
Commercial	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Lowest possible cost	1%	0%	1%	2%	10%	6%	7%	15%	12%	45%	8.31	72.0%
Reliable service	0%	0%	0%	0%	0%	0%	1%	8%	14%	75%	9.57	97.0%
Renewable resource	10%	5%	3%	0%	12%	5%	8%	19%	9%	28%	6.93	56.0%

2018 IRP Survey Results

8. Are you willing to pay more on your monthly bill to receive energy from renewable resources, and if so, how much more?											
	Residential				Commercial						
Not willing to pay more	45%			Not willing to pay more	41%						
\$5 to \$10 per month	34%			1% to 5% per month	33%						
\$11 to \$20 per month	15%			6% to 10% per month	12%						
\$21 to \$30 per month	4%			11% to 20% per month	4%						
More than \$30 per month	2%			More than 20% per month	2%						
				Unsure/unknown	8%						
Demographics											
D1. How old are you?											
Under 25	2%			45 - 54	15%		75+	15%			
25 - 34	14%			55 - 64	20%						
35 - 44	12%			65 - 74	22%						
Median age: 58											
D2. What type of residence do you live in?											
Single-family home	83%										
Mobile, modular or manufactured home	1%										
Apartment, townhouse, duplex or condominium	16%										
D3. Do you own or rent your home?											
Own	84.0%			Rent	16.0%						
D4. How many people live in your household?											
1		2	3	4	5	6+					
22%		52%	12%	10%	2%	2%		Average:	2.24		

2018 IRP Survey Results

D5. What is the highest level of education you have completed?												
Less than high school	1%				Some college	18%						
High school graduate/GED	13%				College graduate	37%						
Vocational-technical school	8%				Graduate or post-college school	23%						
D6. What is your household income?												
Less than \$20,000	6%				\$80,000 to \$99,999	10%						
\$20,000 to \$39,999	18%				\$100,000 or more	18%						
\$40,000 to \$59,999	16%				No response	11%						
\$60,000 to \$79,999	22%											
Median income: \$64,999												
D7. Respondent's gender												
Male	53.0%				Female	47.0%						

2018 IRP Survey Results

Firmographics												
F1. How many employees does your business have?												
Less than 10	70%											
10 to 25	14%											
26 to 50	8%											
51 to 100	4%											
More than 100	4%											
F2. What type of business do you have?												
Service	56%					Agriculture	1%					
Retail sales	18%					Mining or refining	0%					
Wholesale sales	0%					Transportation	2%					
Manufacturing	9%					Public administration	3%					
Construction	9%					Other	2%					
F3. What is the annual revenue of your business?												
Less than \$500,000	55%											
\$500,001 to \$1 million	13%											
\$1 million to \$5 million	23%											
\$5 million to \$10 million	4%											
\$10 million to \$25 million	2%											
More than \$25 million	2%											
F4. What is the percentage of electricity costs to your overall business costs?												
Less than 5%	60%											
5% to 15%	31%											
16% to 30%	7%											
31% to 50%	2%											
More than 50%	0%											