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# 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 the City of Fort Collins Utilities, 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 272 randomly-selected residential customers and 280 commercial customers. The results of the residential survey have a margin of error of  $\pm 5.9$  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 5.9 percent in the actual total population. The results of the commercial survey have a margin of error of  $\pm 5.7$  percent.

Of the 272 residential survey completions, 97 (36 percent) were completed online by customers responding to a postcard mailing or email notice. Following the online completions, 175 (64 percent) surveys were completed by callers conducting phone interviews. In completing the 175 phone surveys there were 17 refusals or disconnects, for a refusal rate of 9 percent. Of the 280 commercial survey completions, 18 (6 percent) were completed online, and 262 (94 percent) were completed by phone. In completing the 262 phone surveys there were 59 refusals or disconnects, for a refusal rate of 18 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.<sup>®</sup>, 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

- More than 5 in 10 residential customers are aware Platte River Power Authority provides electricity generation and transmission services to their utility – slightly fewer commercial customers are aware
- 44 percent of residential customers and 53 percent of commercial customers rate Platte River 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
- Large gap between residential and commercial customers in awareness of solar and wind power generation – 21 percent and 19 percent higher awareness among residential customers, respectively



## Renewable Resource Options

- 2 in 3 residential customers say it is somewhat or very important that 100 percent of the electricity they receive comes from renewable resources – only half of commercial customers say the same
- Both commercial and residential customers place similar priority on service reliability and receiving electricity at the lowest possible cost – residential customers are more concerned about receiving electricity from 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
- Nearly half of commercial customers are willing to pay 1 percent to 20 percent more per month for renewable energy – 4 in 10 are not willing to pay more



## Demographics

- Mix of ages responding to the residential survey – median age is 53, median length of service is 8 years
- Considerable education and income levels – 7 in 10 residential respondents have a college degree, 1 in 5 earn \$100,000 or more per year – median income is \$85,454



## Firmographics

- Median length of service for commercial customers is 9 years – more than 6 in 10 of the businesses have fewer than 10 employees
- More service businesses responding (63 percent) to the commercial survey, followed by retail sales (19 percent) and manufacturing (6 percent)
- About half of businesses have annual revenue of less than \$500,000, nearly 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 City of Fort Collins, 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 272 residential end users and 280 commercial customers.

# Highlights

- More than 5 in 10 residential customers are aware Platte River Power Authority provides electricity generation and transmission services to their utility – slightly fewer commercial customers are aware
- 44 percent of residential customers and 53 percent of commercial customers rate Platte River 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
- Lower awareness among commercial customers of resources used by Platte River Power Authority – particularly low awareness of hydropower among both groups
- Large gap between residential and commercial customers in awareness of solar and wind power generation – 21 percent and 19 percent higher awareness among residential customers, respectively
- 2 in 3 residential customers say it is somewhat or very important that 100 percent of the electricity they receive comes from renewable resources – only half of commercial customers say the same
- Both commercial and residential customers place similar priority on service reliability and receiving electricity at the lowest possible cost – residential customers are more concerned about receiving electricity from 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

Nearly half of commercial customers are willing to pay 1 percent to 20 percent more per month for renewable energy – 4 in 10 are not willing to pay more

Mix of ages responding to the residential survey – median age is 53, median length of service is 8 years

Considerable education and income levels – 7 in 10 residential respondents have a college degree, 1 in 5 earn \$100,000 or more per year – median income is \$85,454

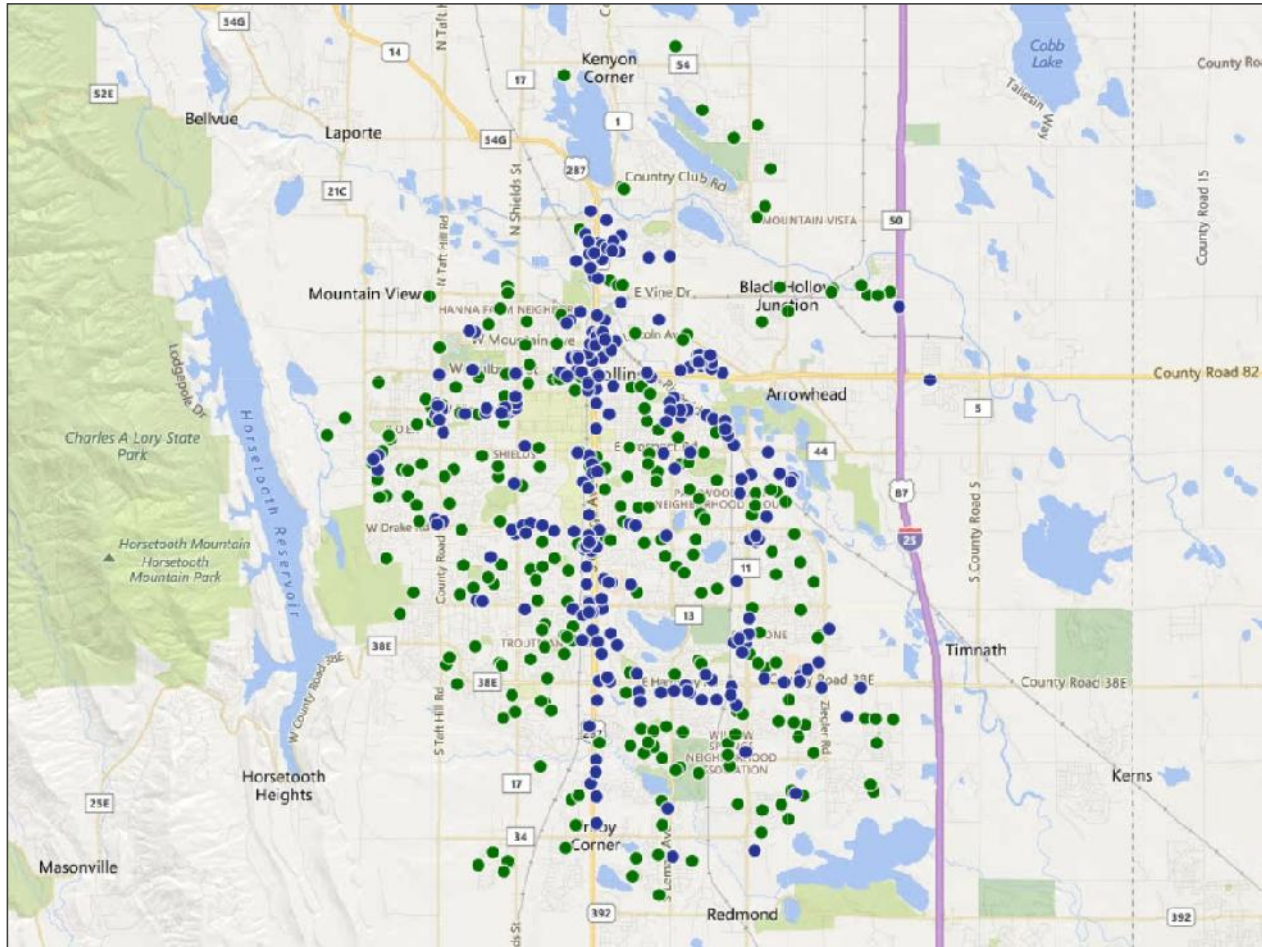
Median length of service for commercial customers is 9 years – more than 6 in 10 of the businesses have fewer than 10 employees

More service businesses responding (63 percent) to the commercial survey, followed by retail sales (19 percent) and manufacturing (6 percent)

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



# Respondents

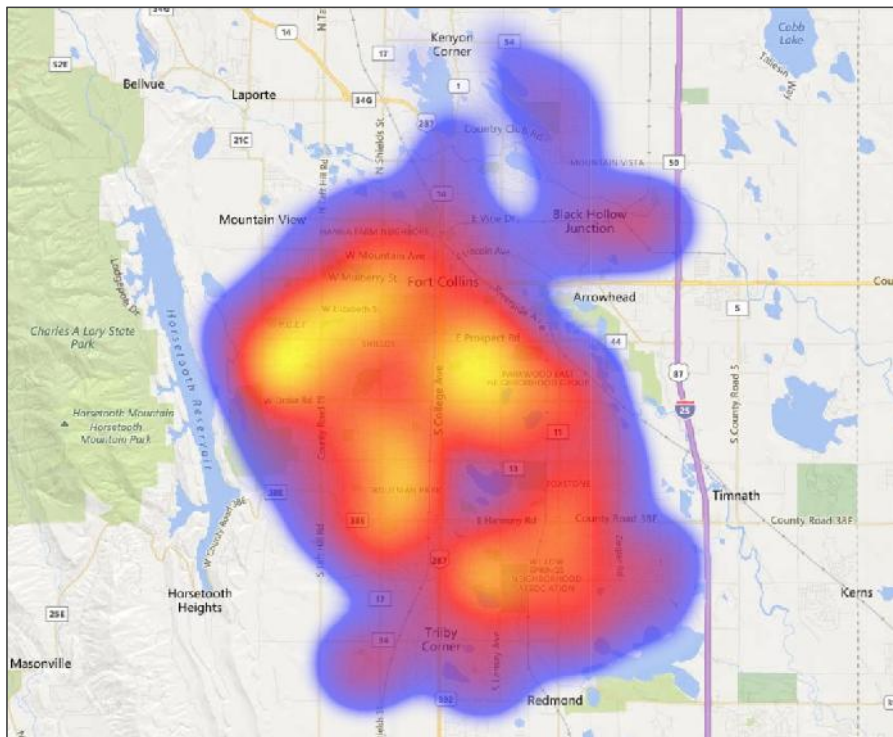


- Residential
- Commercial

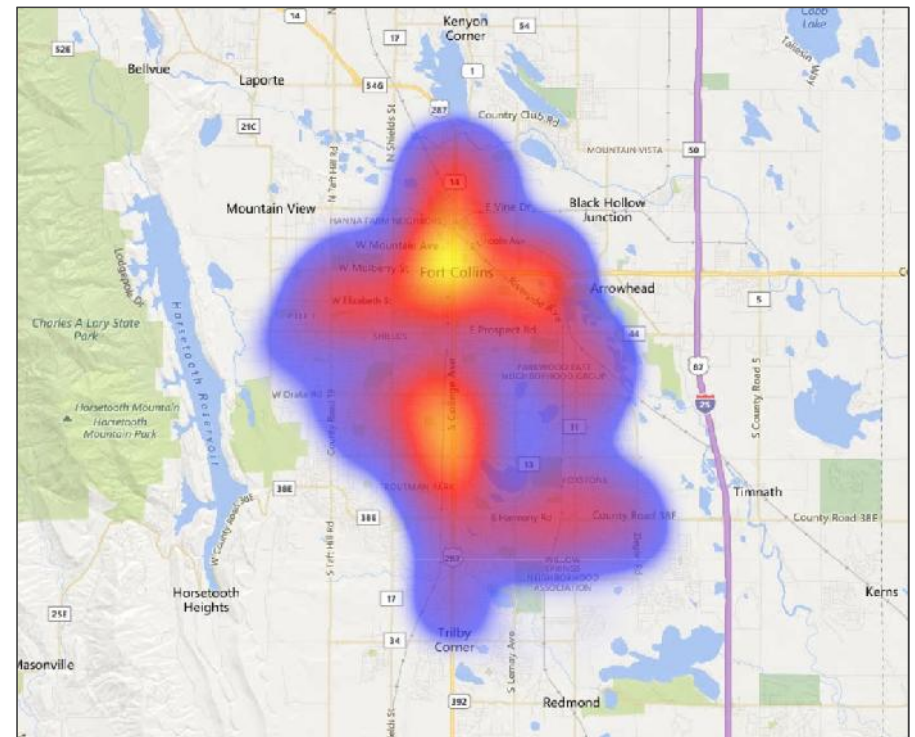
# Respondents

## Response Density

### Residential



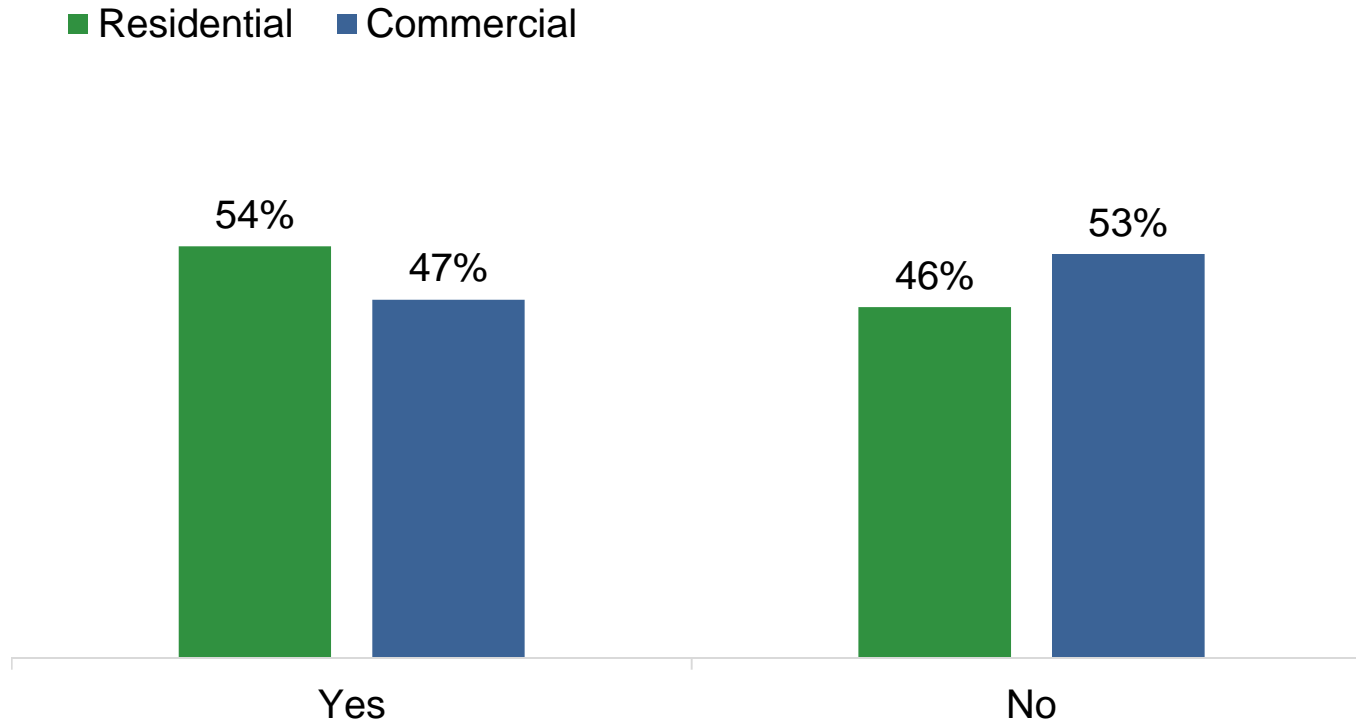
### Commercial





# **Platte River Power Authority**

Aware Platte River Power Authority provides generation

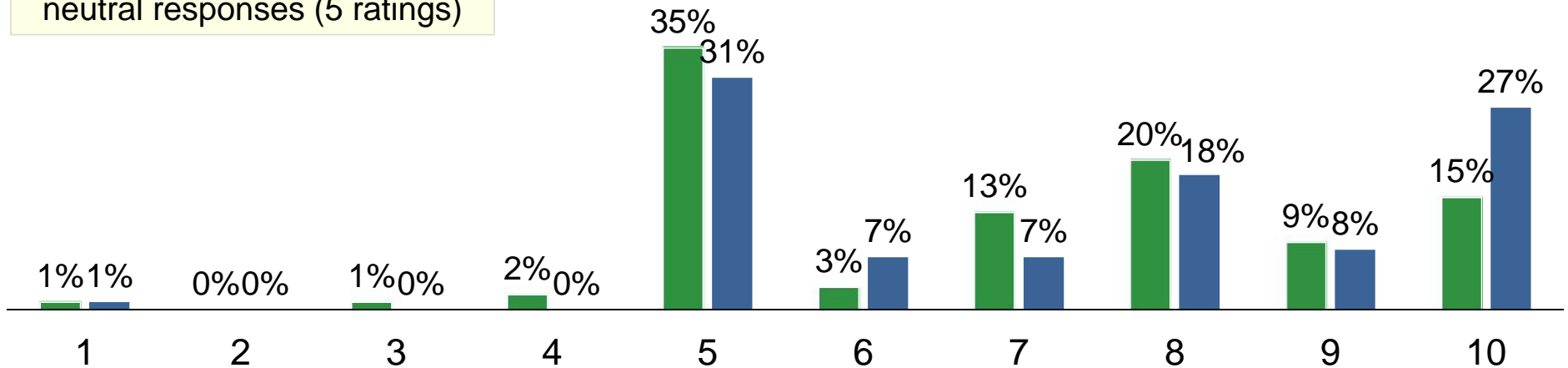


## Opinion of Platte River Power Authority

■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	44%	53%
Bottom box (1-3 ratings)	2%	1%
Mean	6.9	7.4

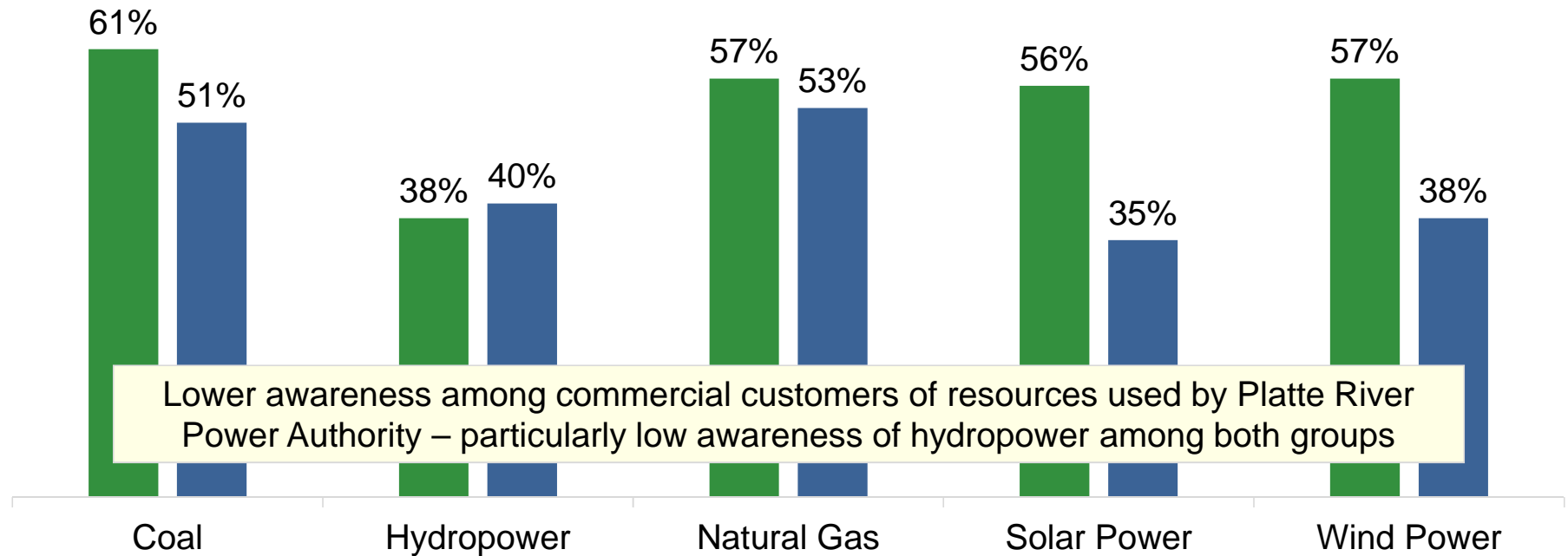
Considerable number of  
neutral responses (5 ratings)



1=not at all favorable, 10=very favorable

## Resources used by Platte River Power Authority

■ Residential ■ Commercial

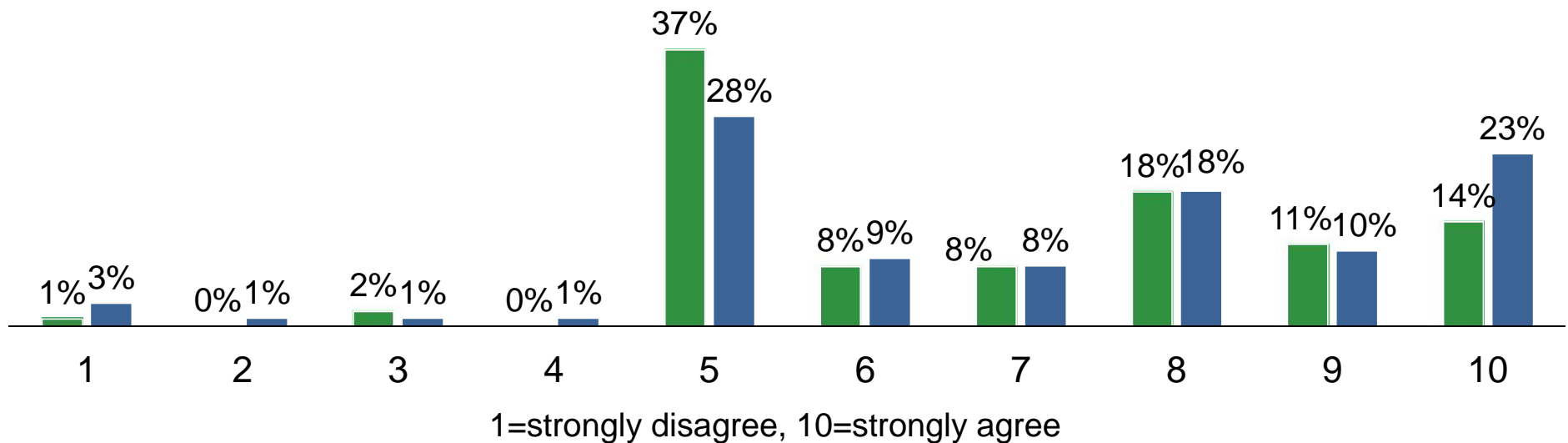




## Platte River Power Authority shows concern for the environment

■ Residential ■ Commercial

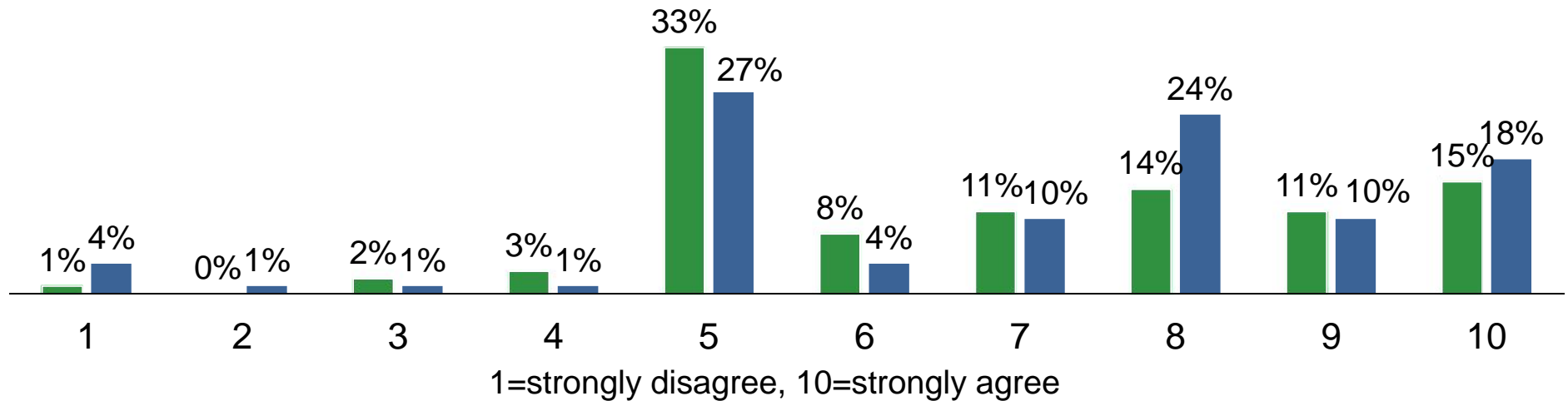
	Residential	Commercial
Top box (8-10 ratings)	43%	51%
Bottom box (1-3 ratings)	3%	5%
Mean	6.8	7.2



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

■ Residential ■ Commercial

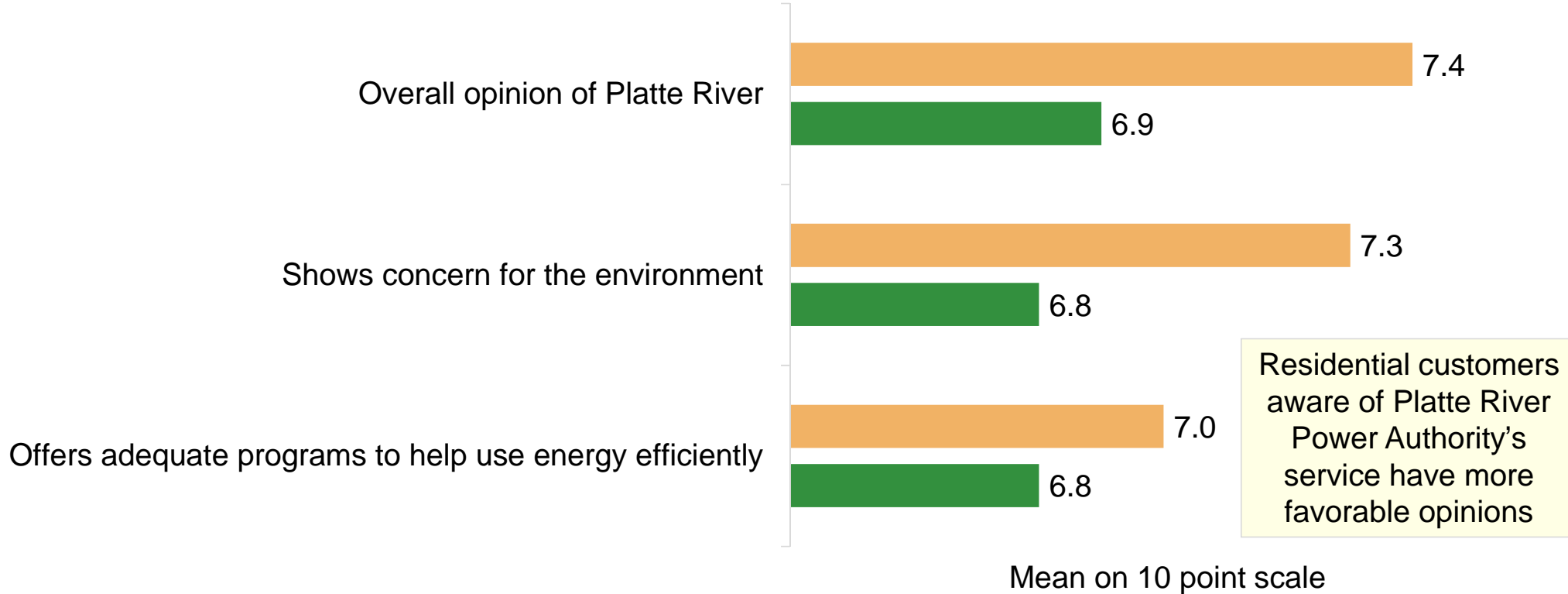
	Residential	Commercial
Top box (8-10 ratings)	40%	52%
Bottom box (1-3 ratings)	3%	6%
Mean	6.8	7.0





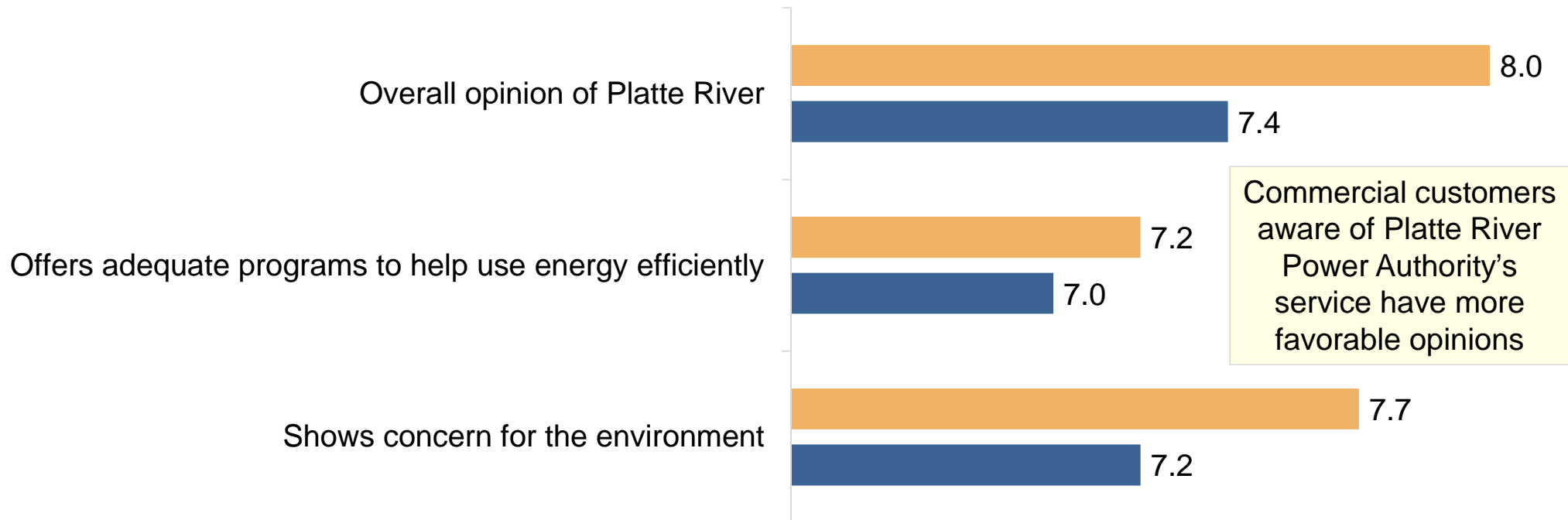
## Opinion comparison - residential

■ Those aware Platte River Power Authority provides electricity ■ Overall

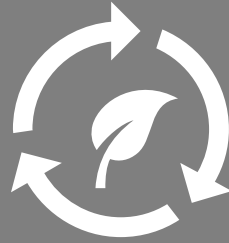


## Opinion comparison - commercial

■ Those aware Platte River Power Authority provides electricity ■ Overall



Mean on 10 point scale



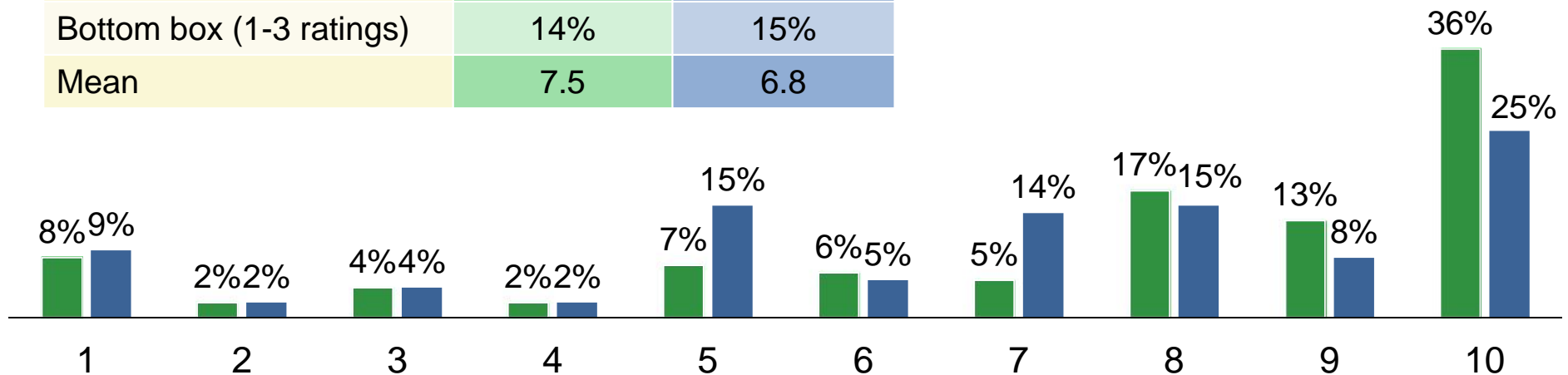
# **Renewable Resource Opinions**

# 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)	66%	48%
Bottom box (1-3 ratings)	14%	15%
Mean	7.5	6.8



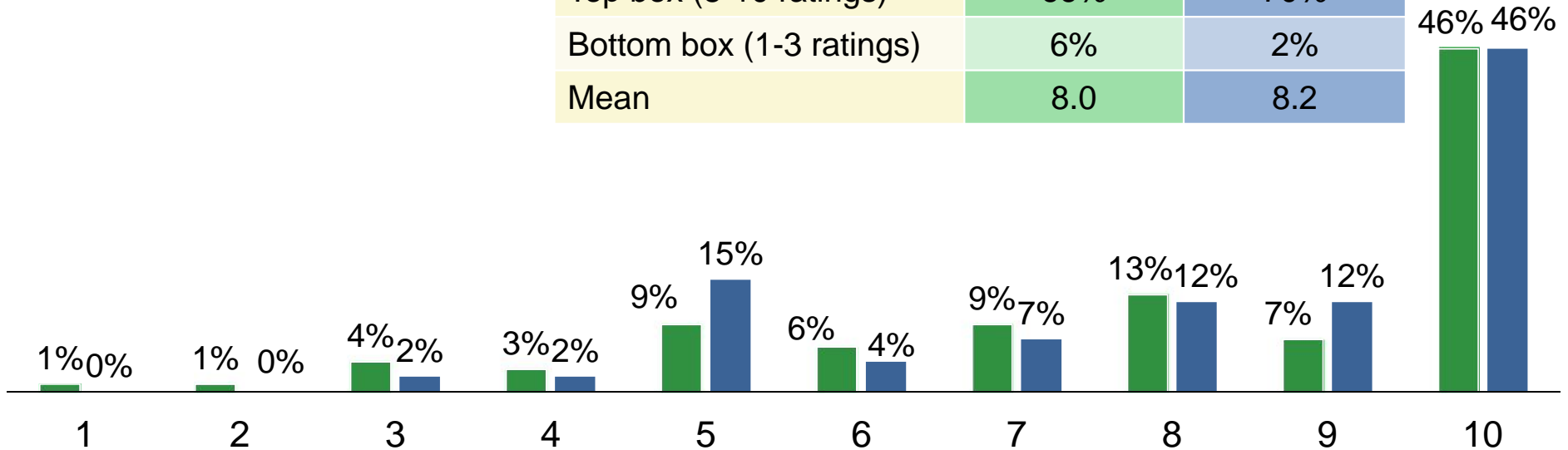
1=not at all important, 10=very important

# Renewables

## Importance of lowest possible cost

■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	66%	70%
Bottom box (1-3 ratings)	6%	2%
Mean	8.0	8.2



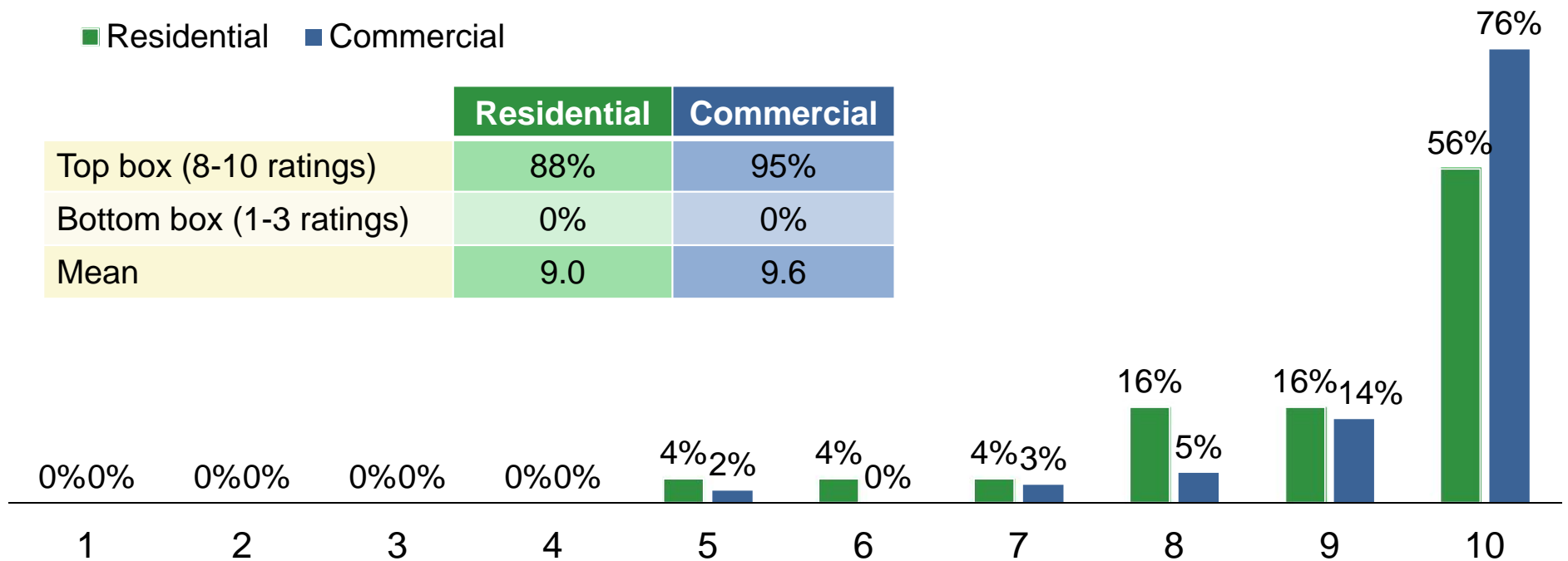
1=not at all important, 10=very important

# Renewables

## Importance of reliable service

■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	88%	95%
Bottom box (1-3 ratings)	0%	0%
Mean	9.0	9.6



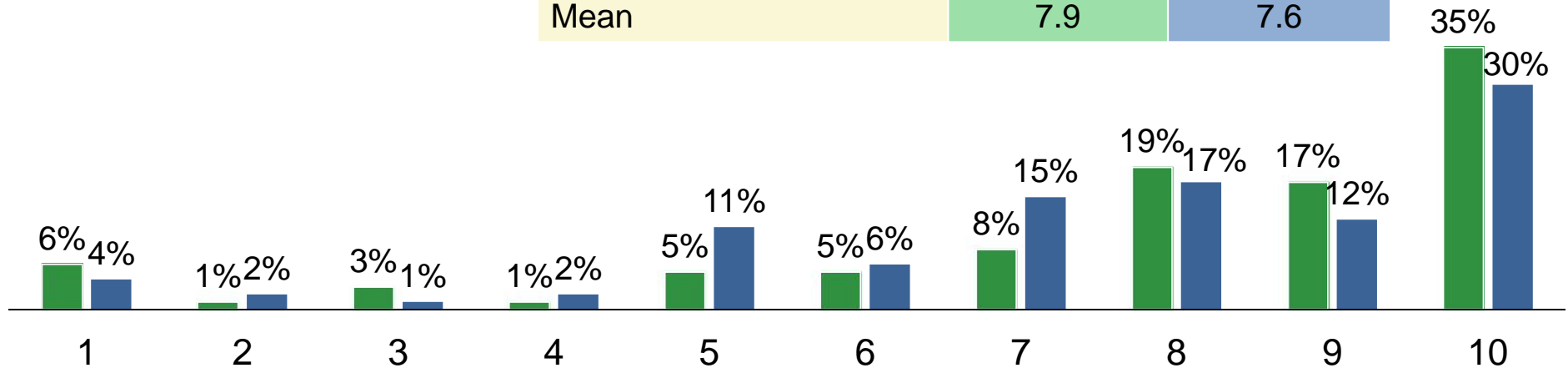
1=not at all important, 10=very important

# Renewables

## Importance of renewable resources

■ Residential ■ Commercial

	Residential	Commercial
Top box (8-10 ratings)	71%	59%
Bottom box (1-3 ratings)	10%	7%
Mean	7.9	7.6

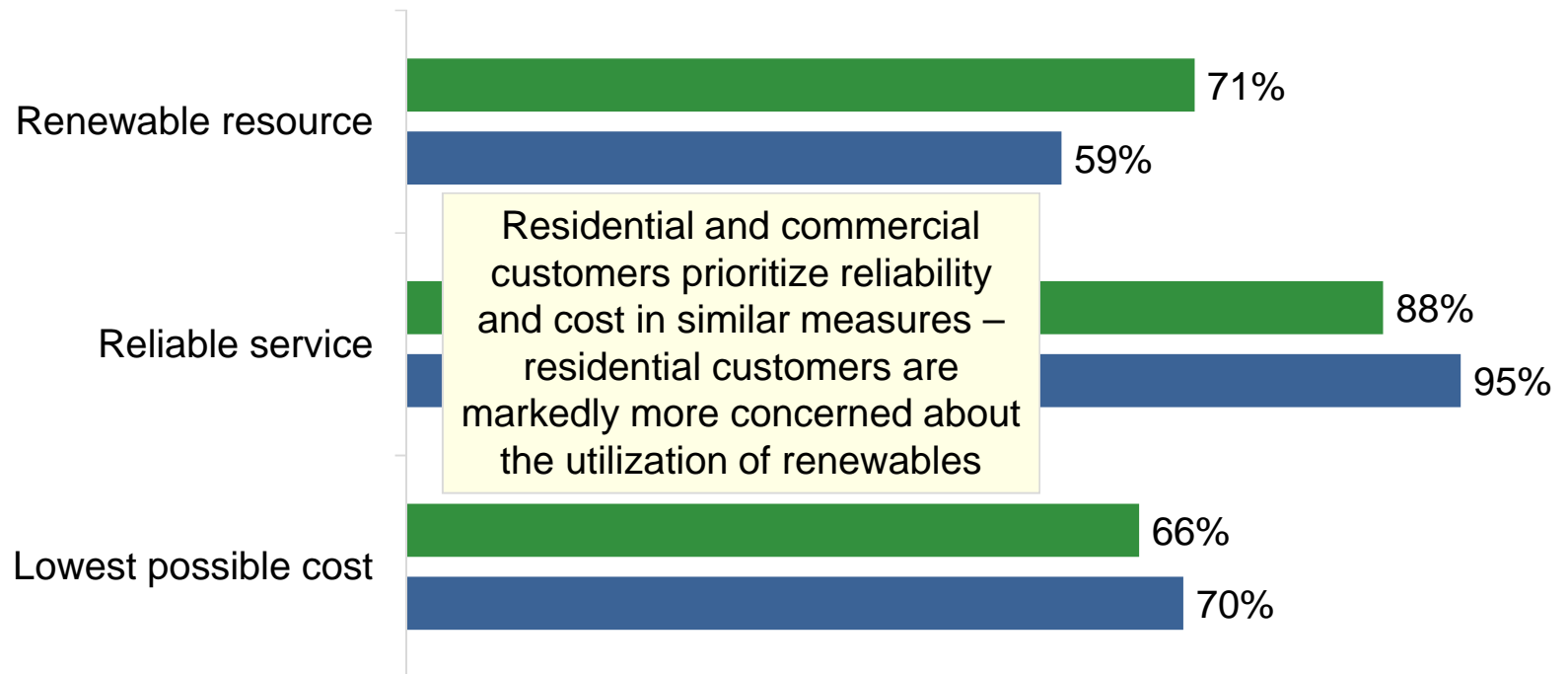


1=not at all important, 10=very important

# Renewables

## Service characteristics importance

■ Residential ■ Commercial



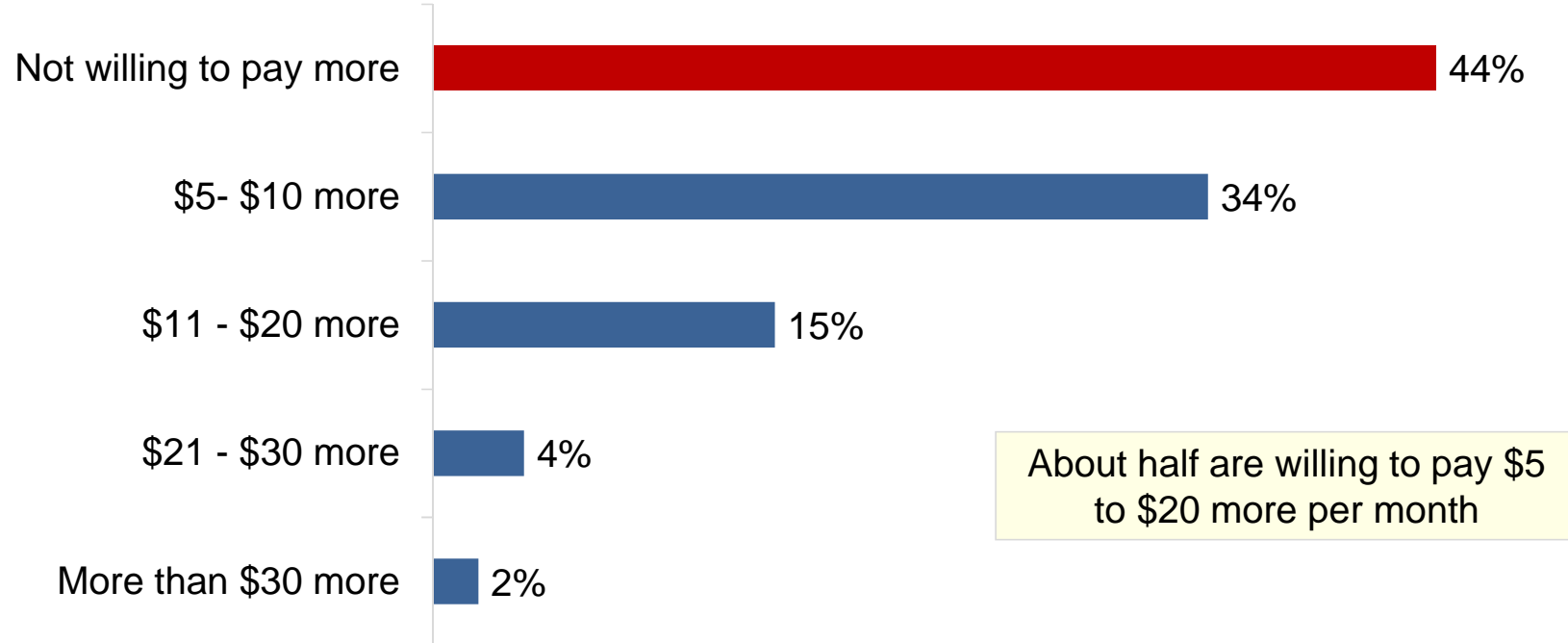
Residential and commercial customers prioritize reliability and cost in similar measures – residential customers are markedly more concerned about the utilization of renewables

Somewhat or very important (8-10 ratings)



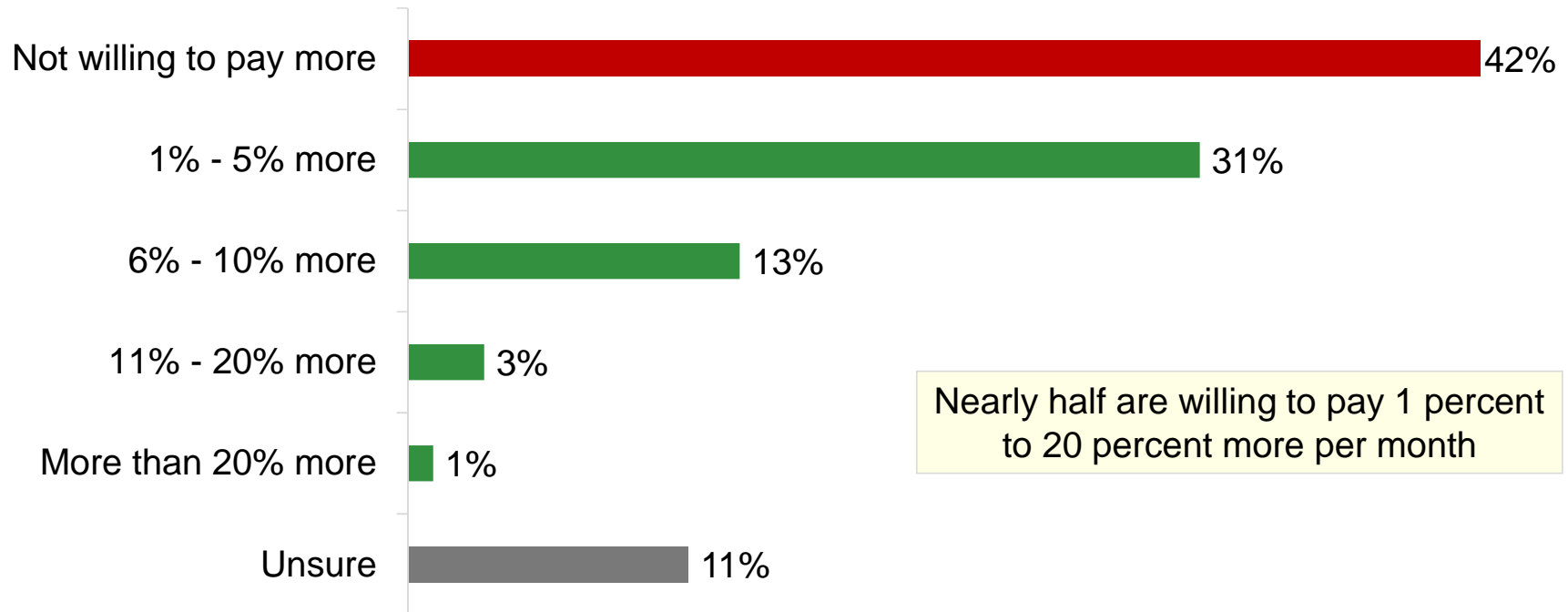
## Renewables

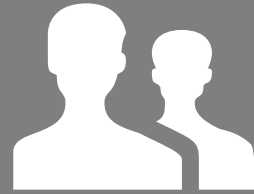
Additional monthly amount willing to pay for renewable energy - residential



## Renewables

Additional monthly amount willing to pay for renewable energy - commercial



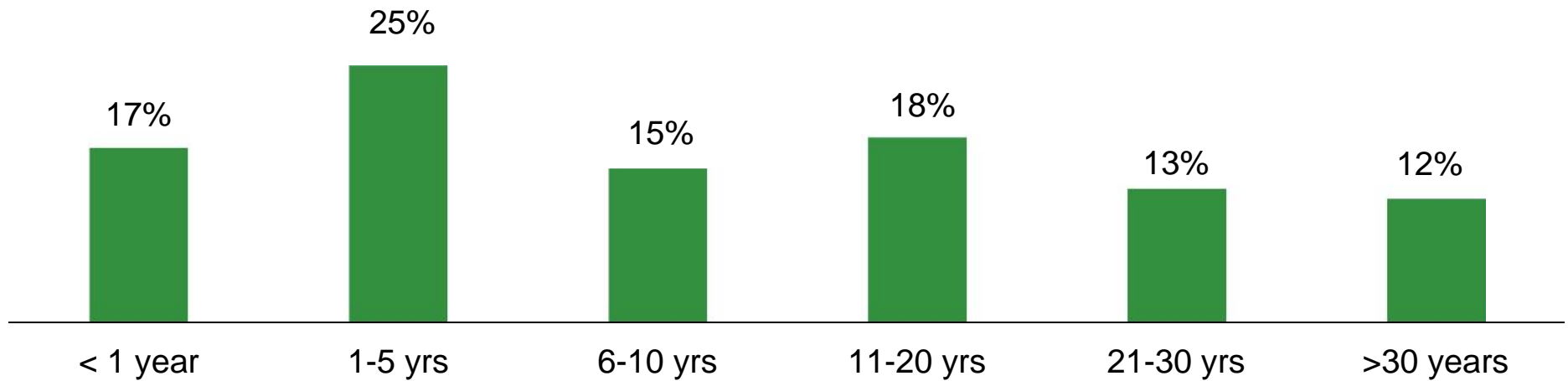


# Demographics

## Demographics

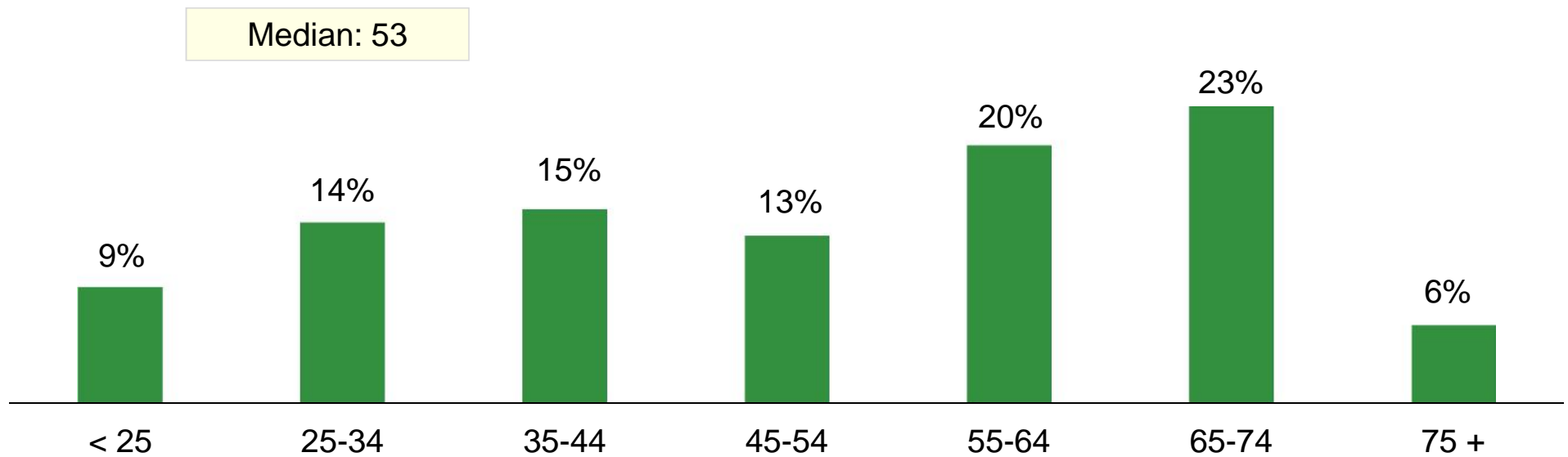
### Length of service

Median: 8 years



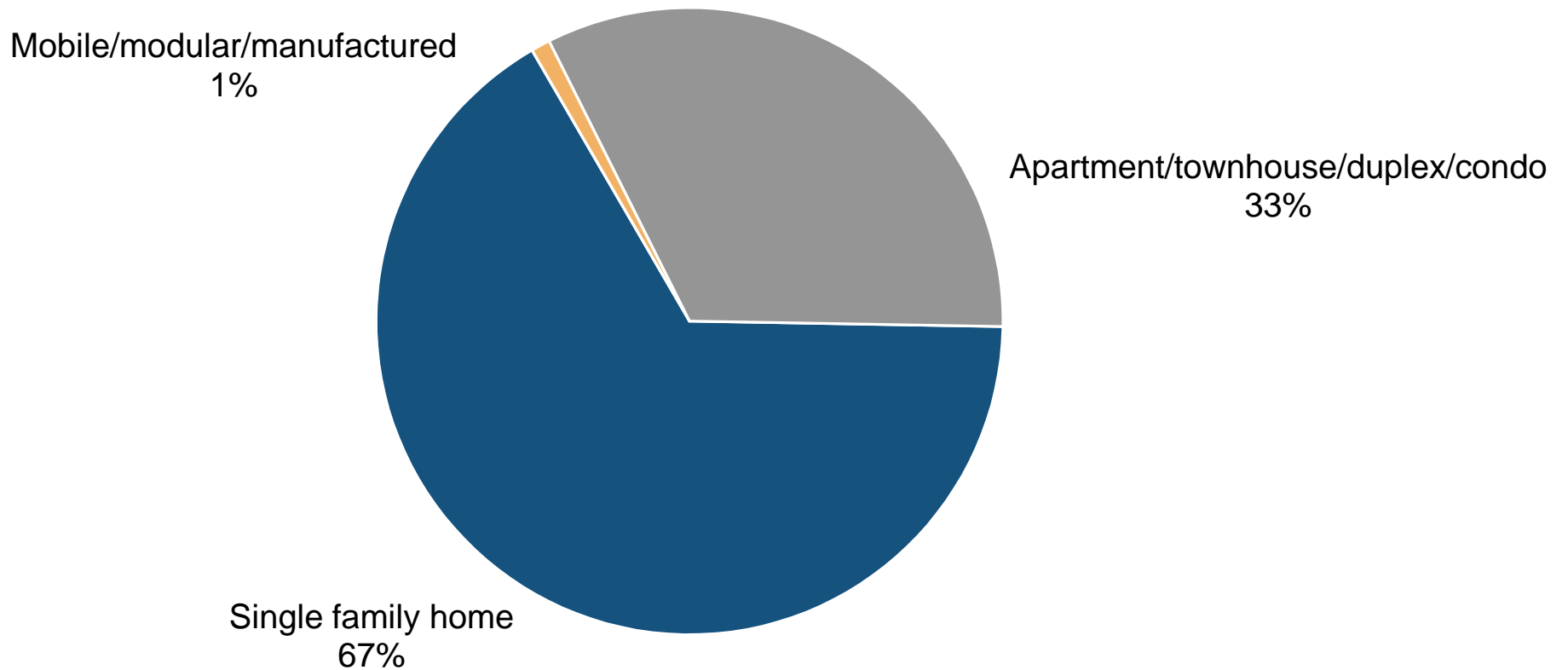
## Demographics

### Respondent age



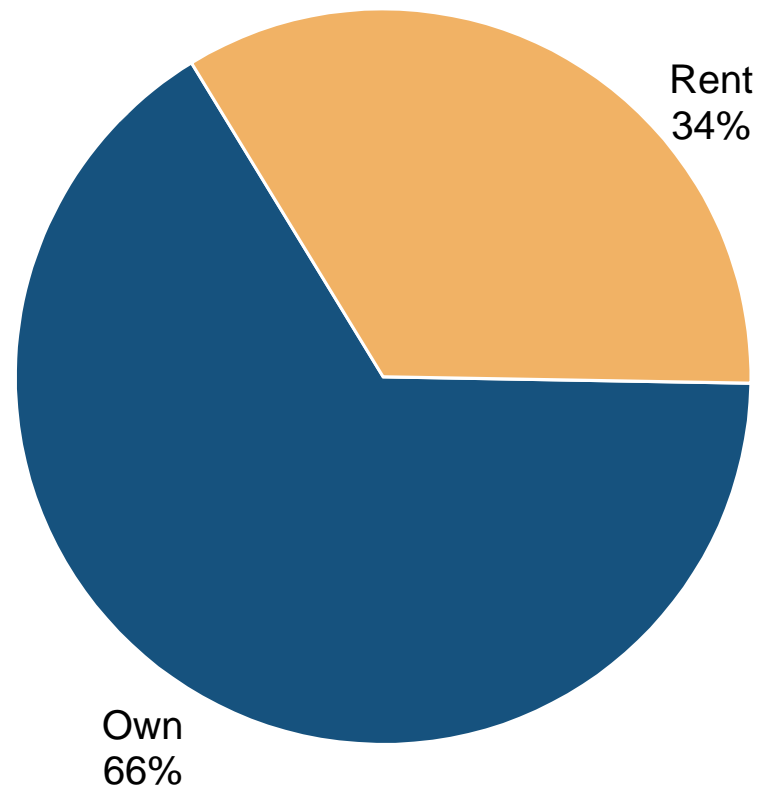
## Demographics

Type of residence



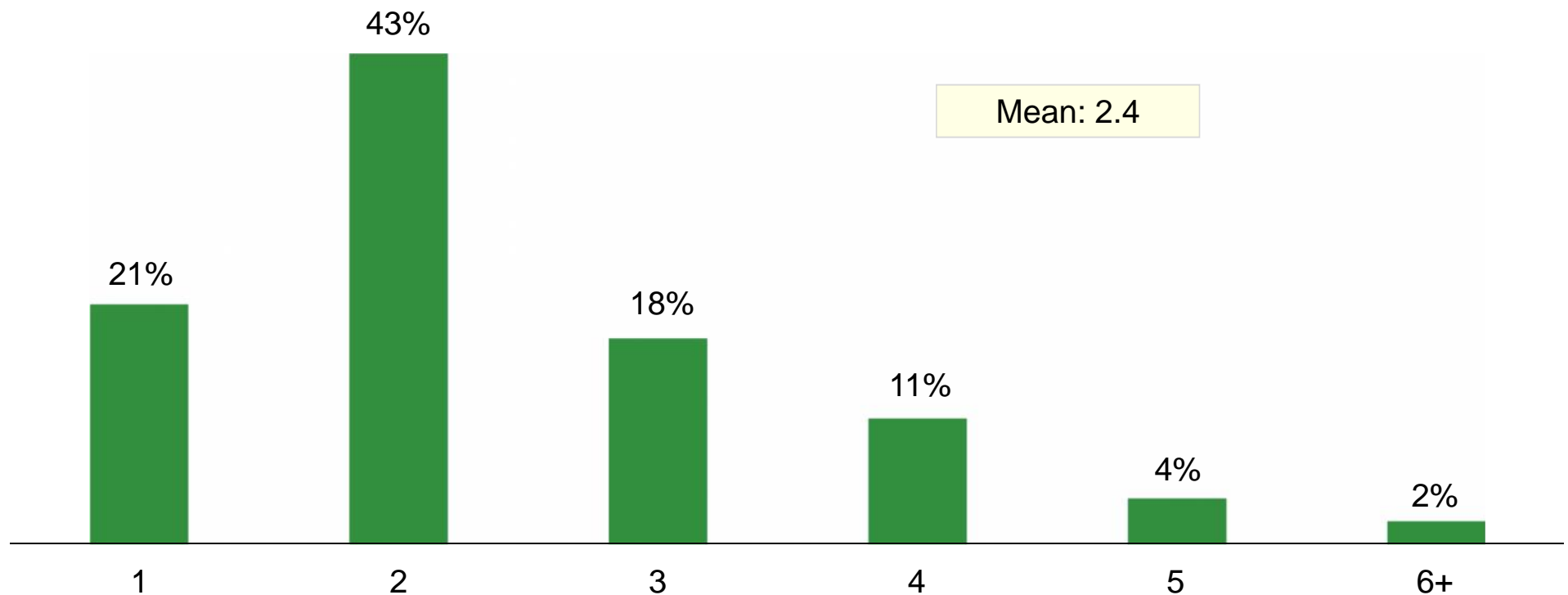
## Demographics

### Home ownership



## Demographics

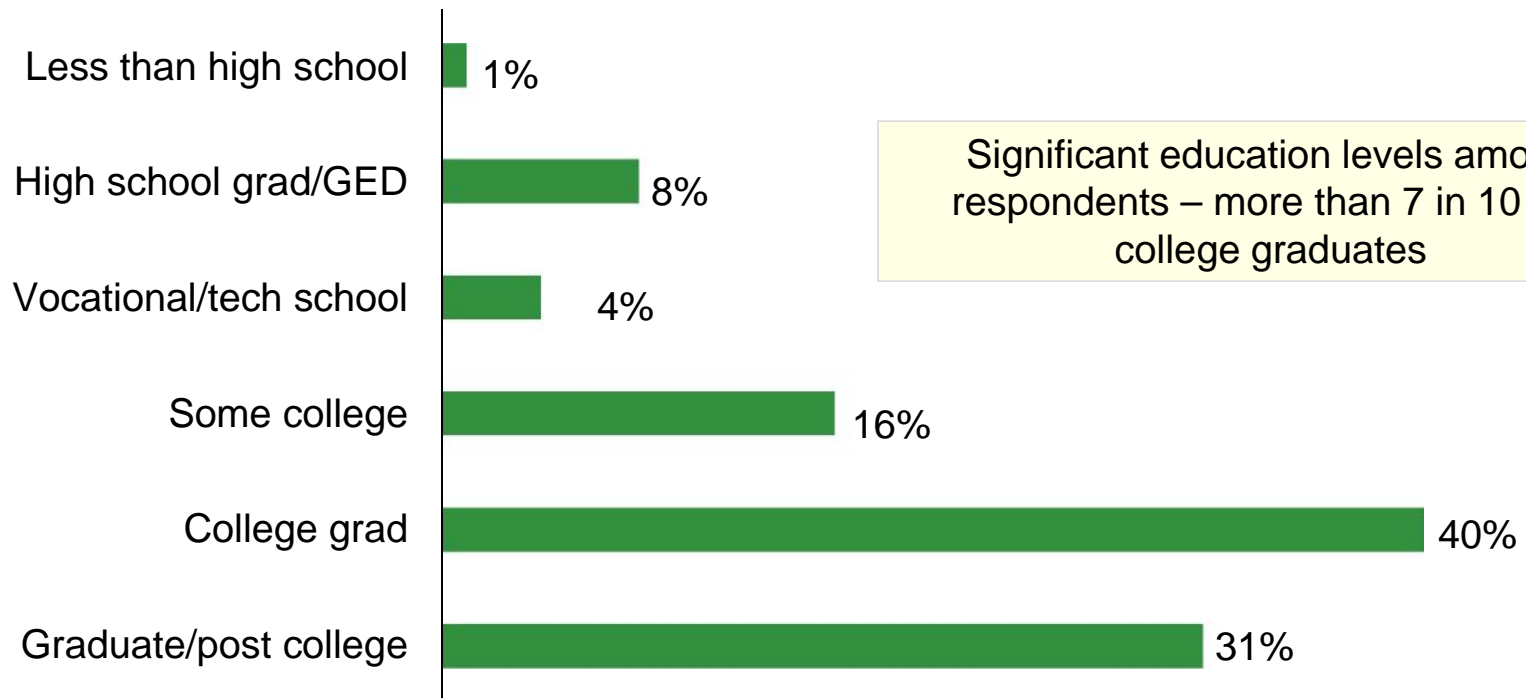
Number of residents per household





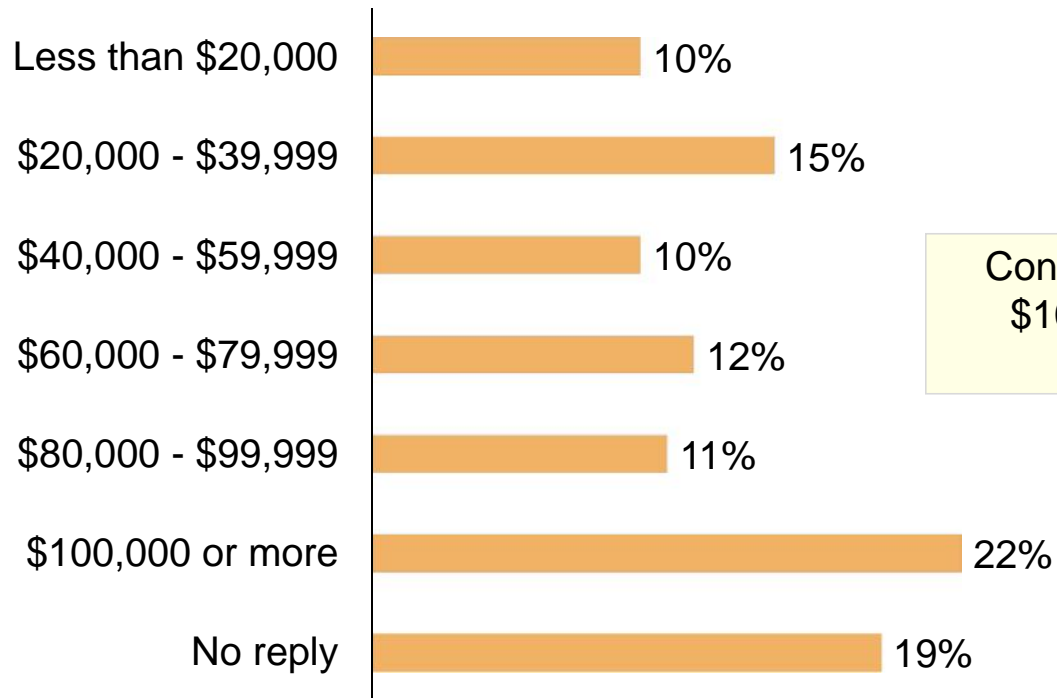
# Demographics

## Education



## Demographics

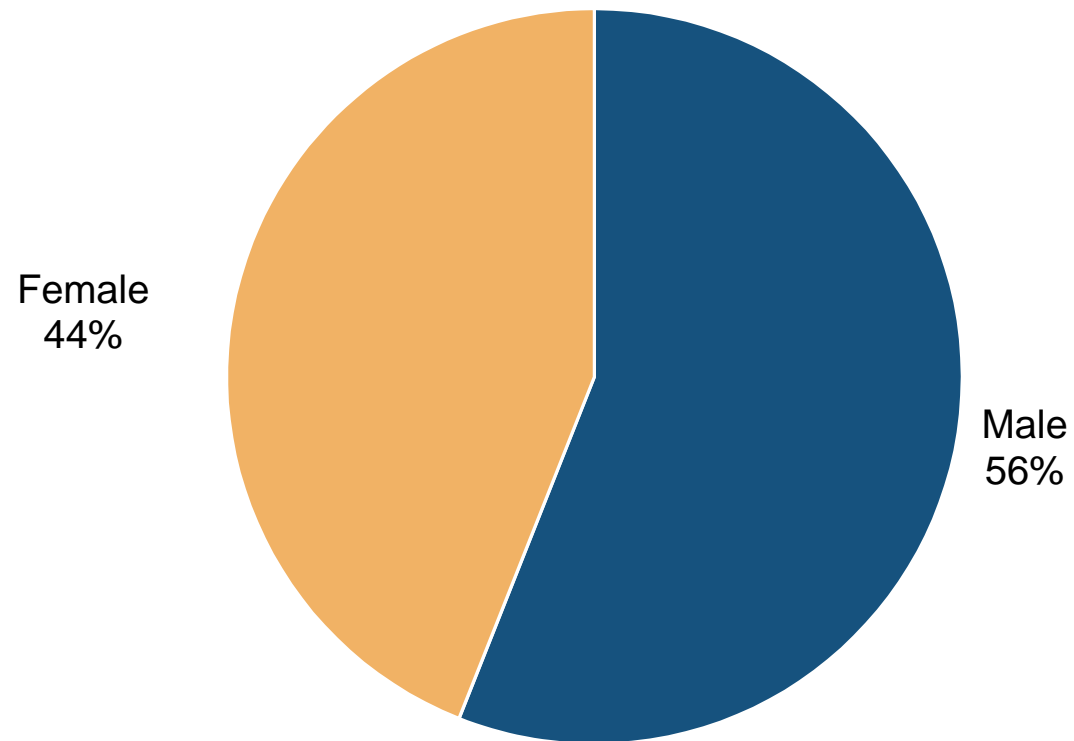
### Income



Considerable income levels, 1 in 5 earn \$100,000 or more per year – median income is \$85,454

## Demographics

Gender

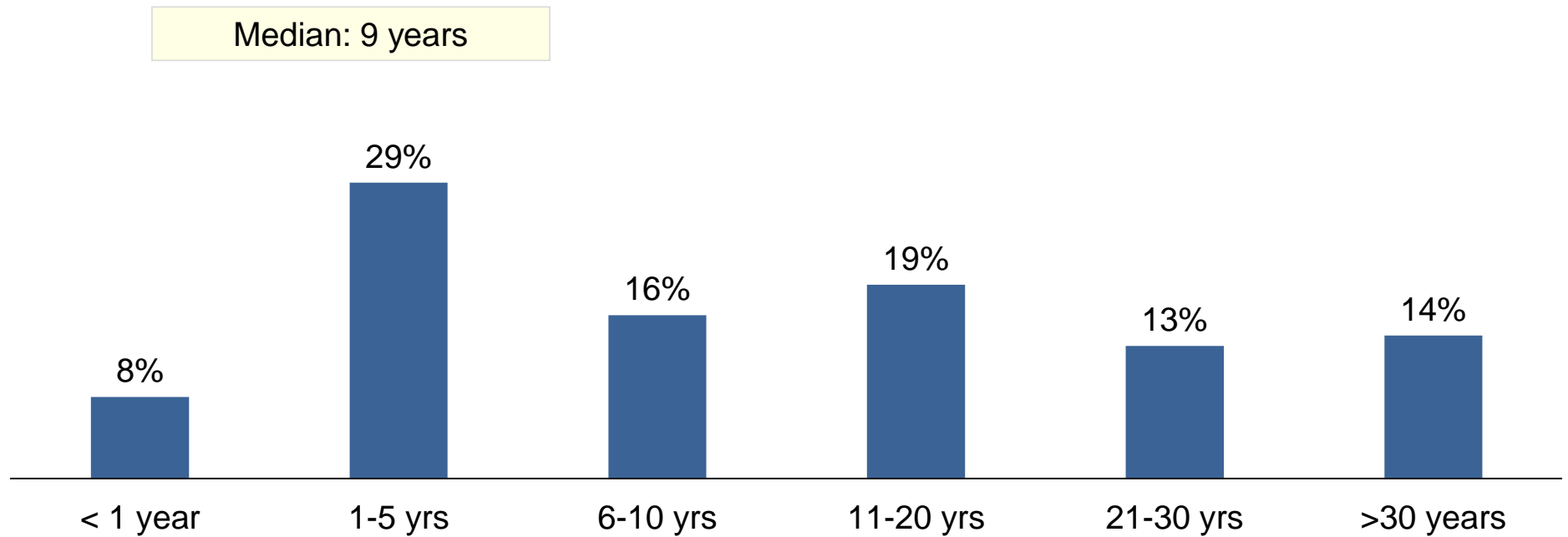




# Firmographics

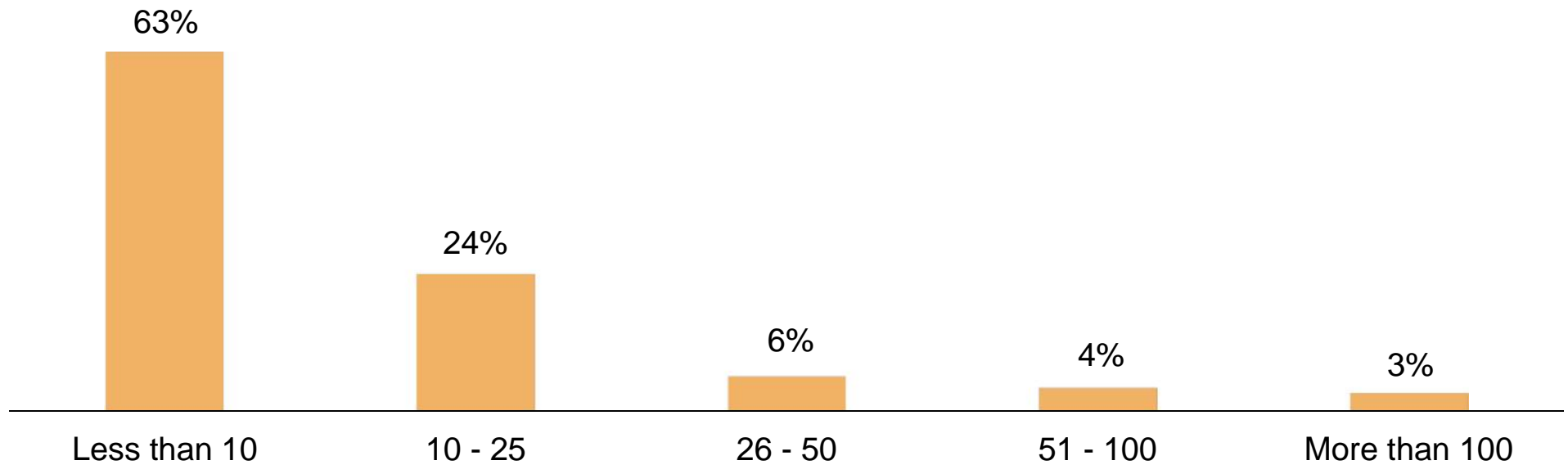
## Firmographics

### Length of service



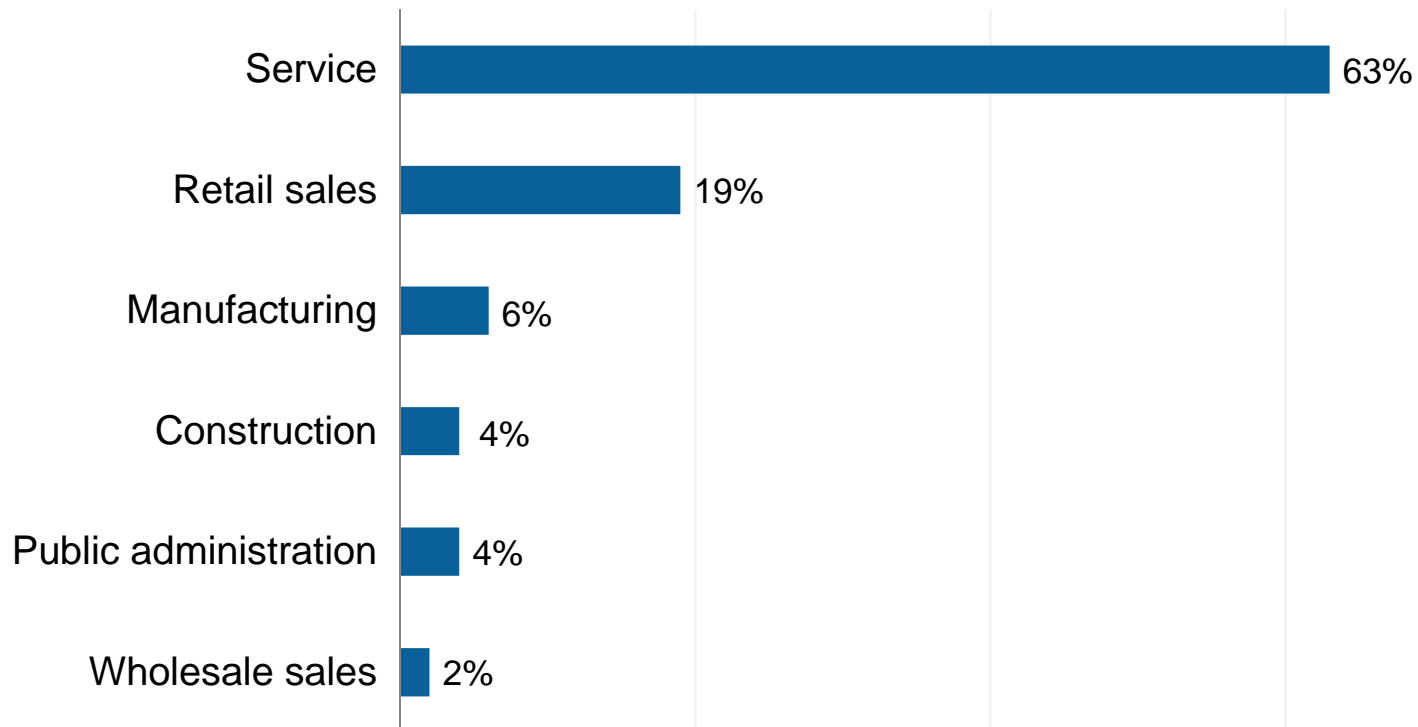
## Firmographics

Number of employees



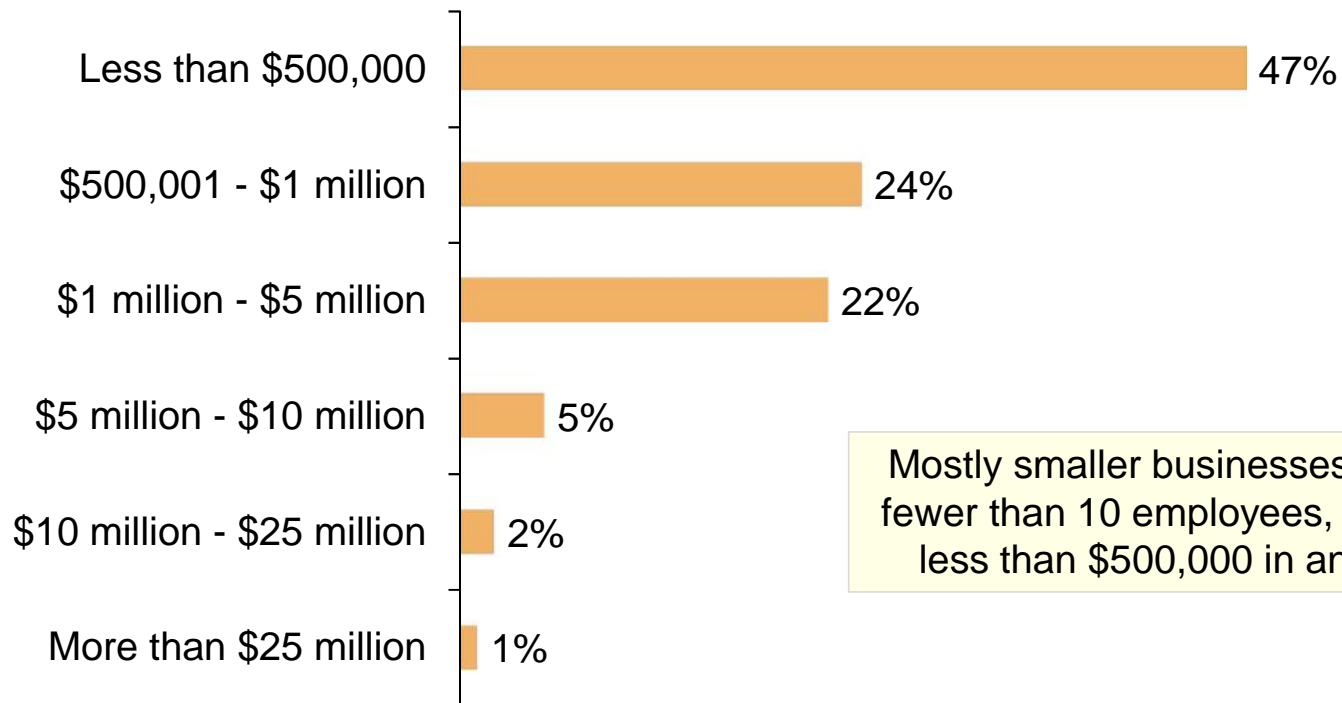
# Firmographics

## Business type



## Firmographics

### Annual revenue

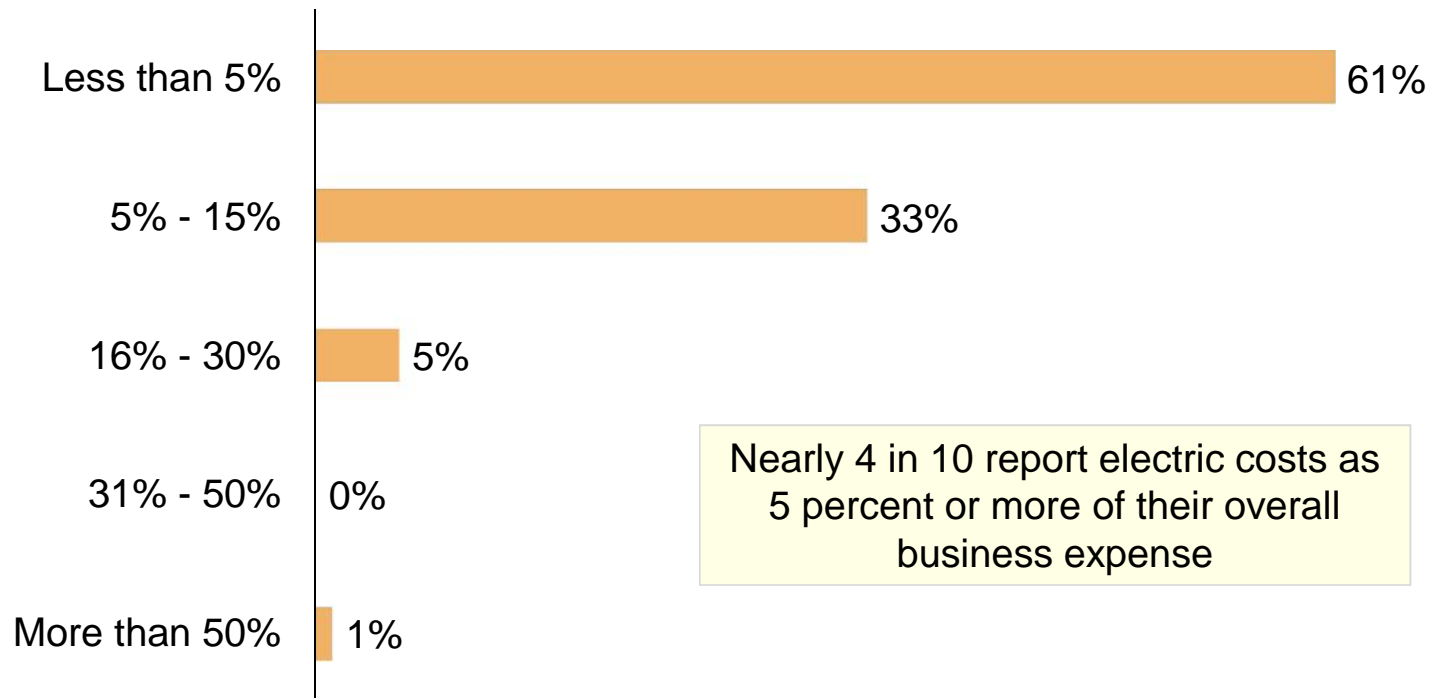


Mostly smaller businesses – 6 in 10 have fewer than 10 employees, about half have less than \$500,000 in annual revenue



## Firmographics

### Electric costs as percentage of overall expense



# Customer Notification

## Your Opinion Counts!

As the wholesale power provider to the City of Fort Collins, Platte River Power Authority is seeking your input to help shape Northern Colorado's energy future.

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

**Complete the survey online anytime before November 12, 2018**



**Go to:**  
**[www.bit.ly/fcures18](http://www.bit.ly/fcures18)**  
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 970-212-2900

# Survey Questions

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

	<b>Online</b>	<b>Phone</b>											
<b>Residential: Results based on 272 responses</b>	35.7%	64.3%											
<b>Commercial: Results based on 280 responses</b>	6.4%	93.6%											
<b>1. How long have you received electric service from the City of Fort Collins?</b>													
	<b>Residential</b>	<b>Commercial</b>											
Less than 1 year	17%	8%											
1 - 5 years	25%	29%											
6 - 10 years	15%	16%											
11 - 20 years	18%	19%											
21 - 30 years	13%	13%											
More than 30 years	12%	14%											
Median length of service	8	9											
<b>2. Are you aware that Platte River Power Authority provides wholesale electricity generation and transmission services to the City of Fort Collins?</b>													
	<b>Residential</b>	<b>Commercial</b>											
Yes	54%	47%											
No	46%	53%											
<b>3. Based on what you know, what is your opinion of Platte River Power Authority?</b>													
	<i>Not at all favorable -----&gt; Very favorable</i>												
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>Average</b>	<b>Top Box</b>	
<b>Residential</b>	1%	0%	1%	2%	35%	3%	13%	20%	9%	15%	<b>6.90</b>	<b>44.0%</b>	
<b>Commercial</b>	1%	0%	0%	0%	31%	7%	7%	18%	8%	27%	<b>7.37</b>	<b>53.0%</b>	
<i>*Top Box = 8 - 10 ratings combined, or highest opinion.</i>													
<b>4. What resources do you think Platte River Power Authority uses to provide your municipality with electricity? (all that apply)</b>													
	<b>Residential</b>	<b>Commercial</b>											
Coal	61%	51%											
Hydro power	38%	40%											
Natural gas	57%	53%											
Solar power	56%	35%											
Wind power	57%	38%											

## 2018 IRP Survey Results

5. 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.												
	Strongly disagree -----> Strongly agree											
Residential	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Shows concern for the environment	1%	0%	2%	0%	37%	8%	8%	18%	11%	14%	6.80	43.0%
Offers adequate programs to help you use energy efficiently	1%	0%	2%	3%	33%	8%	11%	14%	11%	15%	6.78	40.0%
Commercial	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Shows concern for the environment	3%	1%	1%	1%	28%	9%	8%	18%	10%	23%	7.19	51.0%
Offers adequate programs to help you use energy efficiently	4%	1%	1%	1%	27%	4%	10%	24%	10%	18%	7.03	52.0%
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
	8%	2%	4%	2%	7%	6%	5%	17%	13%	36%	7.48	66.0%
Commercial	1	2	3	4	5	6	7	8	9	10	Average	Top Box
*Top Box = 8 - 10 ratings combined, or highest importance.	9%	2%	4%	2%	15%	5%	14%	15%	8%	25%	6.84	48.0%
7. Please rate the importance of the following electric service characteristics:												
Not at all important -----> Very important												
*Top Box = 8 - 10 ratings combined, or most important.												
Residential	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Lowest possible cost	1%	1%	4%	3%	9%	6%	9%	13%	7%	46%	8.00	66.0%
Reliable service	0%	0%	0%	0%	4%	4%	4%	16%	16%	56%	9.02	88.0%
Renewable resource	6%	1%	3%	1%	5%	5%	8%	19%	17%	35%	7.87	71.0%
Commercial	1	2	3	4	5	6	7	8	9	10	Average	Top Box
Lowest possible cost	0%	0%	2%	2%	15%	4%	7%	12%	12%	46%	8.23	70.0%
Reliable service	0%	0%	0%	0%	2%	0%	3%	5%	14%	76%	9.58	95.0%
Renewable resource	4%	2%	1%	2%	11%	6%	15%	17%	12%	30%	7.60	59.0%

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		44%		Not willing to pay more		42%					
\$5 to \$10 per month		34%		1% to 5% per month		31%					
\$11 to \$20 per month		15%		6% to 10% per month		13%					
\$21 to \$30 per month		4%		11% to 20% per month		3%					
More than \$30 per month		2%		More than 20% per month		1%					
				Unsure/unknown		11%					
Demographics											
D1. How old are you?											
Under 25		9%		45 - 54	13%		75+	6%			
25 - 34		14%		55 - 64	20%						
35 - 44		15%		65 - 74	23%						
Median age: 53											
D2. What type of residence do you live in?											
Single-family home		67%									
Mobile, modular or manufactured home		1%									
Apartment, townhouse, duplex or condominium		33%									
D3. Do you own or rent your home?											
Own		66.0%		Rent	34.0%						
D4. How many people live in your household?											
1		2	3	4	5	6+					
21%		43%	18%	11%	4%	2%		Average:	2.42		

## 2018 IRP Survey Results

<b>D5. What is the highest level of education you have completed?</b>											
Less than high school	1%				Some college	16%					
High school graduate/GED	8%				College graduate	40%					
Vocational-technical school	4%				Graduate or post-college school	31%					
<b>D6. What is your household income?</b>											
Less than \$20,000	10%				\$80,000 to \$99,999	11%					
\$20,000 to \$39,999	15%				\$100,000 or more	22%					
\$40,000 to \$59,999	10%				No response	19%					
\$60,000 to \$79,999	12%										
Median income: \$85,454											
<b>D7. Respondent's gender</b>											
Male	56.0%				Female	44.0%					

## 2018 IRP Survey Results

Firmographics											
<b>F1. How many employees does your business have?</b>											
Less than 10	63%										
10 to 25	24%										
26 to 50	6%										
51 to 100	4%										
More than 100	3%										
<b>F2. What type of business do you have?</b>											
Service	63%					Agriculture	0%				
Retail sales	19%					Mining or refining	0%				
Wholesale sales	2%					Transportation	0%				
Manufacturing	6%					Public administration	4%				
Construction	4%					Other	0%				
<b>F3. What is the annual revenue of your business?</b>											
Less than \$500,000	47%										
\$500,001 to \$1 million	24%										
\$1 million to \$5 million	22%										
\$5 million to \$10 million	5%										
\$10 million to \$25 million	2%										
More than \$25 million	1%										
<b>F4. What is the percentage of electricity costs to your overall business costs?</b>											
Less than 5%	61%										
5% to 15%	33%										
16% to 30%	5%										
31% to 50%	0%										
More than 50%	1%										