



Platte River
Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Board of directors

Dec. 9, 2021



2021 budget contingency appropriation transfer

Dec. 9, 2021

2021 budget contingency appropriation transfer

Total not to exceed \$5.8 million

2021 contingency budget	\$ 28.0
Estimated transfer request for operating expenses	(5.0)
Estimated transfer request for capital expenses	(0.8)
Contingency balance	<u>\$ 22.2</u>

\$ millions

Process

- After year end close, only the amount needed will be transferred
- Update in the management report at the February board meeting

Questions



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2022 Strategic Budget review and adoption

Dec. 9, 2021

Agenda

- Budget changes since public hearing
- Budget overview
- Adoption

Budget changes since public hearing

Changes incorporated into the budget

- Updates to fuel and purchased power
- Additional consulting expenses for an organized energy market
- Revised Craig Generating Station decommissioning costs
- Updates to capital projects
- Document updates
 - Reorganization
 - New table representing the change from proposed to final

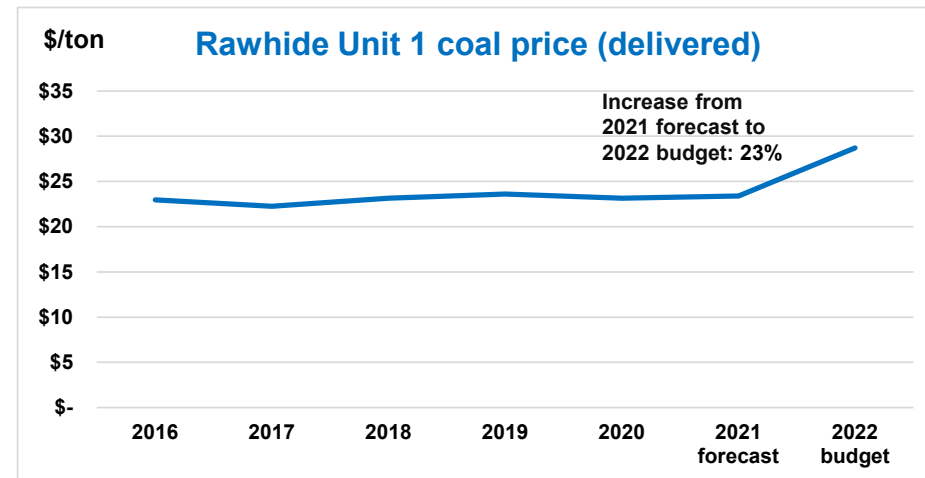
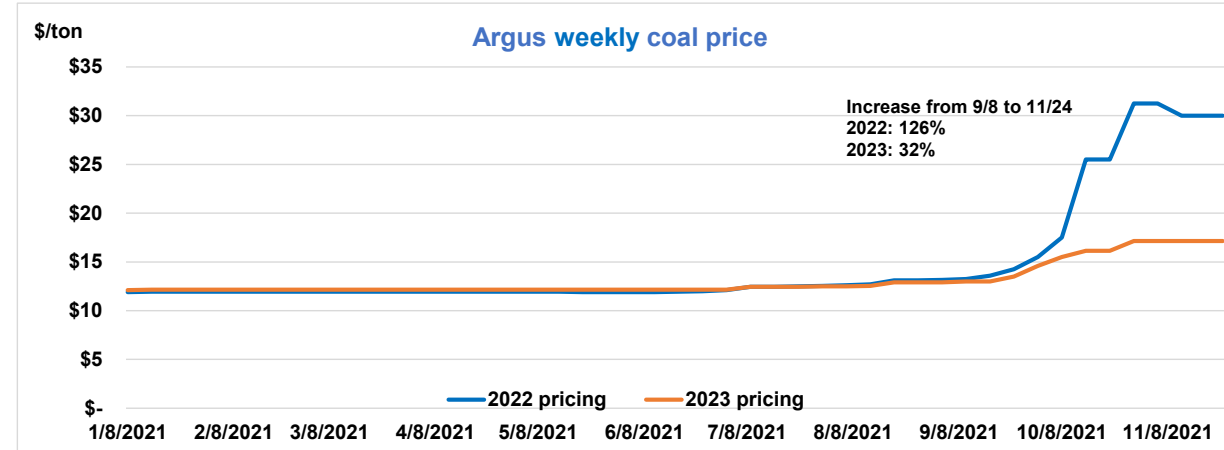
Budget changes since public hearing

<p>⬆️ Fuel (\$4.9 million)</p> <ul style="list-style-type: none"> Rawhide Unit 1 coal price increase due to elevated market prices 	<p>⬆️ Operating expenses (\$2.5 million)</p> <ul style="list-style-type: none"> Increases <ul style="list-style-type: none"> Consulting services for organized energy market (\$2.2 million) O&M wages due to changes to capital projects (\$0.4 million) Decrease <ul style="list-style-type: none"> WAPA wheeling rates finalized \$0.1 million
<p>⬇️ Purchased power \$0.4 million</p> <ul style="list-style-type: none"> WAPA CRSP rates finalized 	<p>⬇️ Capital additions \$11 thousand</p> <ul style="list-style-type: none"> Increases <ul style="list-style-type: none"> Control network replacements - Rawhide (\$0.4 million) Energy trading software (\$0.4 million) SCADA and energy management system (\$0.3 million) Decreases <ul style="list-style-type: none"> Enterprise resource planning software \$1.1 million Transmission projects \$68 thousand
<p>⬇️ Accretion expense \$1.1 million</p> <ul style="list-style-type: none"> GASB 62 board approved accounting policy Craig decommissioning study updated Impacts net income 	<p>Overall results</p> <ul style="list-style-type: none"> Increase in operating expenses \$7 million Decrease in capital additions \$11 thousand Increase in contingency \$1 million Decrease in accretion expense \$1.1 million

favorable/(unfavorable) change

Budget changes - coal prices

- Increase due to
 - Primarily natural gas prices
 - Demand with an overall increase in burns
 - Low inventory levels
 - Coal producers scaled back reducing supply due to less demand and COVID-19
 - Saving coal for winter
- Expect prices to normalize
- Rawhide Unit 1 coal price
 - Weekly index price is a component
 - Price locking opportunities
 - Increase not as significant due to averaging



Financial results

Budget results (\$ millions)	2022 budget
Total revenues	\$ 263.2
Total expenditures	\$ 256.4
Board contingency	\$ 24.0

Strategic financial plan indicators	Target minimums	2022 budget
Net income (\$ millions)	3% of projected operating expenses*	\$ 13.7
Fixed obligation charge coverage ratio	1.50x	2.03x
Debt ratio	< 50%	28%
Unrestricted days cash on hand	200	381
Rate increase		3.2%

* 3% of projected operating expenses for 2022 is \$6.3 M.

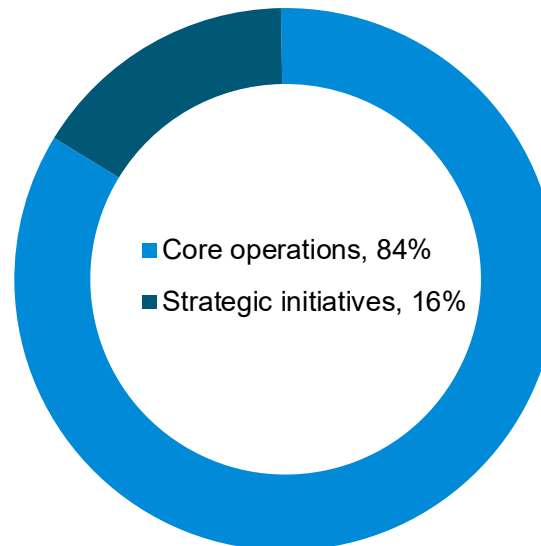
Highlights – 2022 Strategic Budget



Strategic initiatives

- Energy efficiency and program expansion
- Public engagement and communications
 - new strategic plan
 - electric vehicle microsite
- Resource planning
 - planning for new resources
 - DER
 - operational flexibility
- Organized energy market evaluation
- Infrastructure advancement
 - enterprise resource planning
 - control systems
 - airflow spoilers

Operating expenses and capital additions: \$238.6 million



Core operations

- Baseload and peaking generation, transmission
- PPAs for existing renewable resources & hydropower
- Predictive maintenance
- Proactive capital investments to maintain reliability, efficiency and environmental compliance

Revenues \$263.2 million

- Increase in owner community loads
- Increase in sales for resale
- 3.2% rate increase

2022 budget for approval: \$280.4 million

Questions



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Inside Information community survey

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Customer survey results

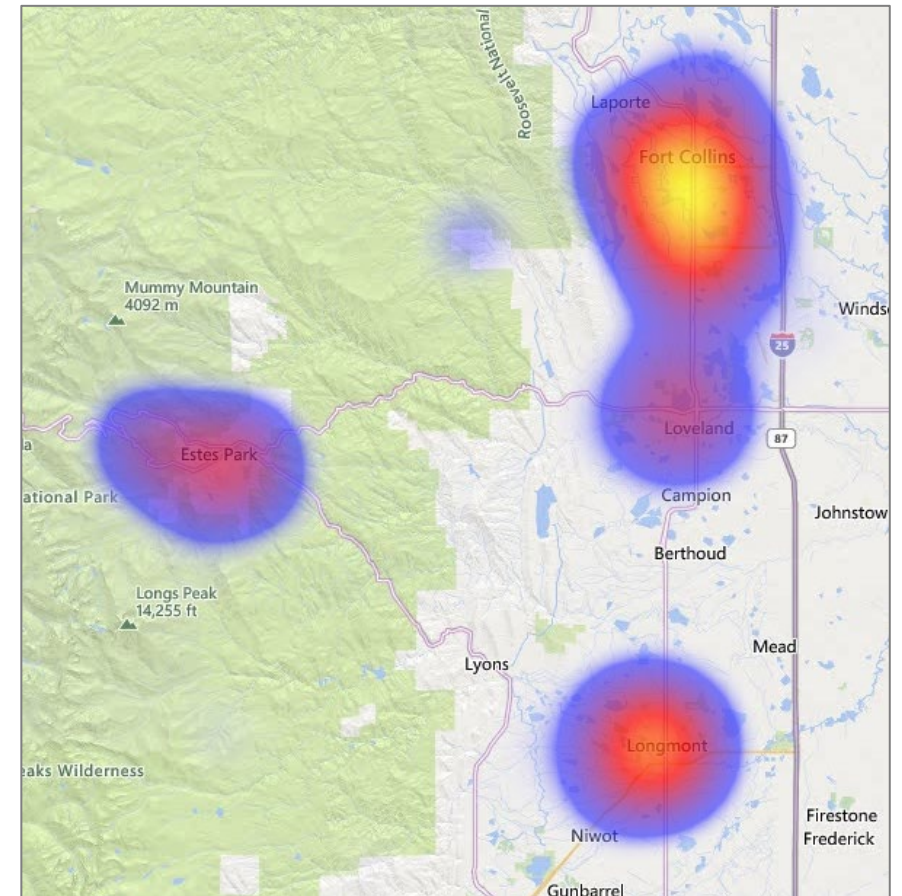
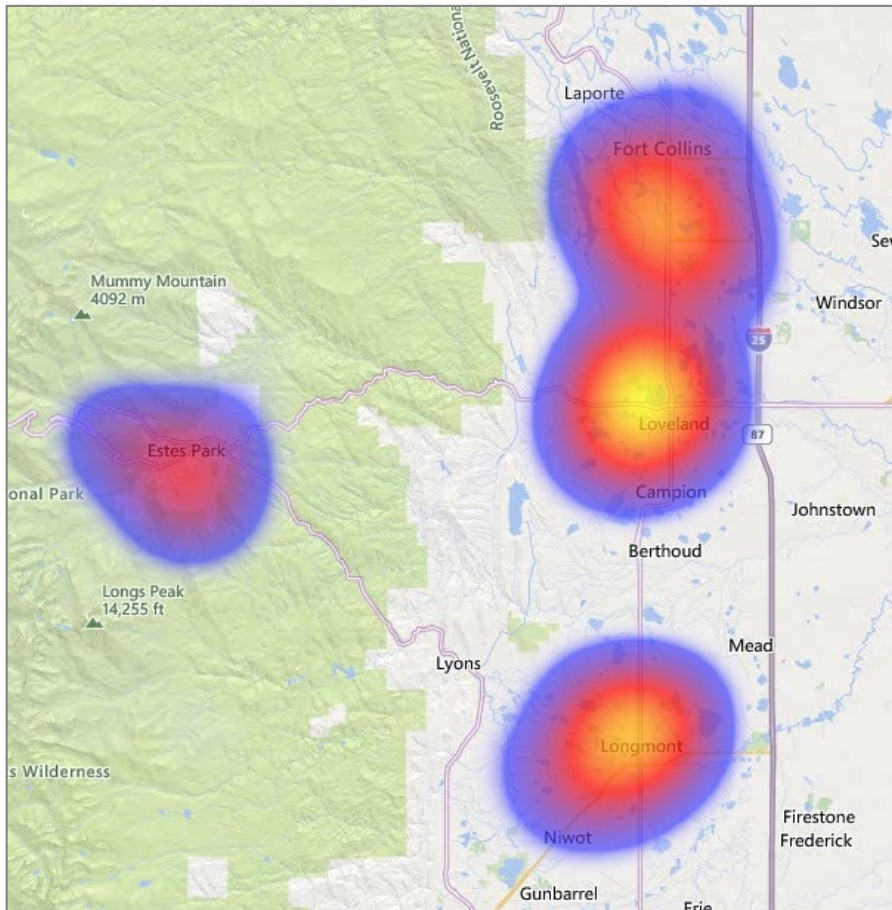
2021

Respondents

Response density

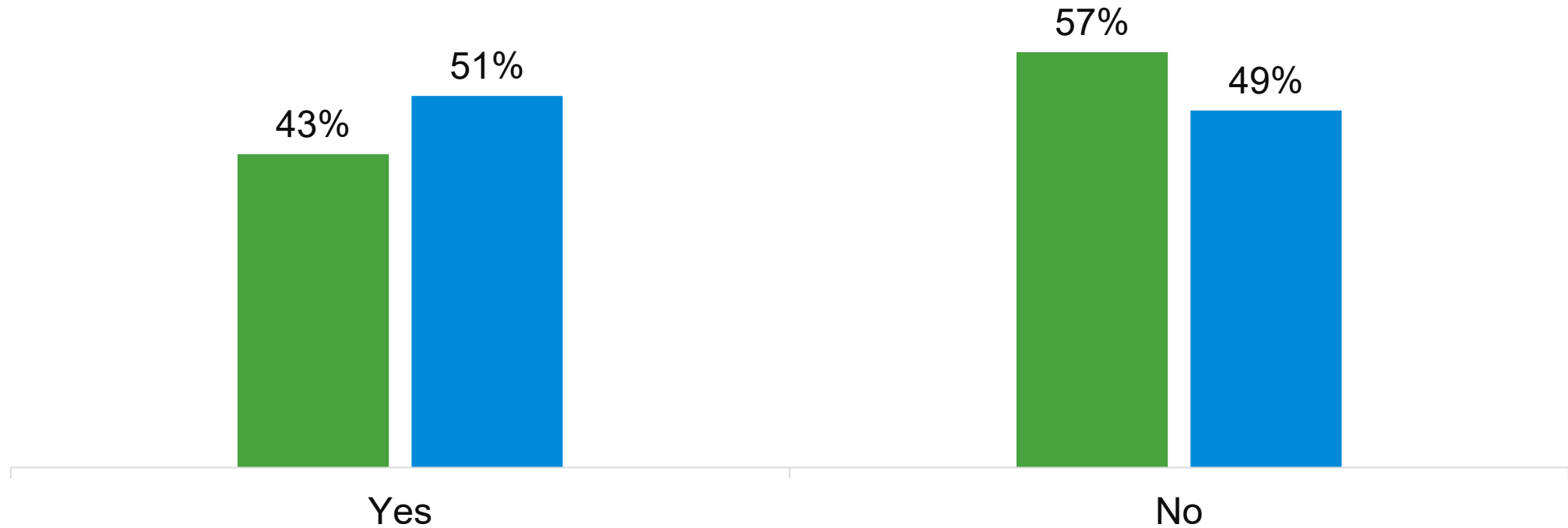
Residential

Commercial



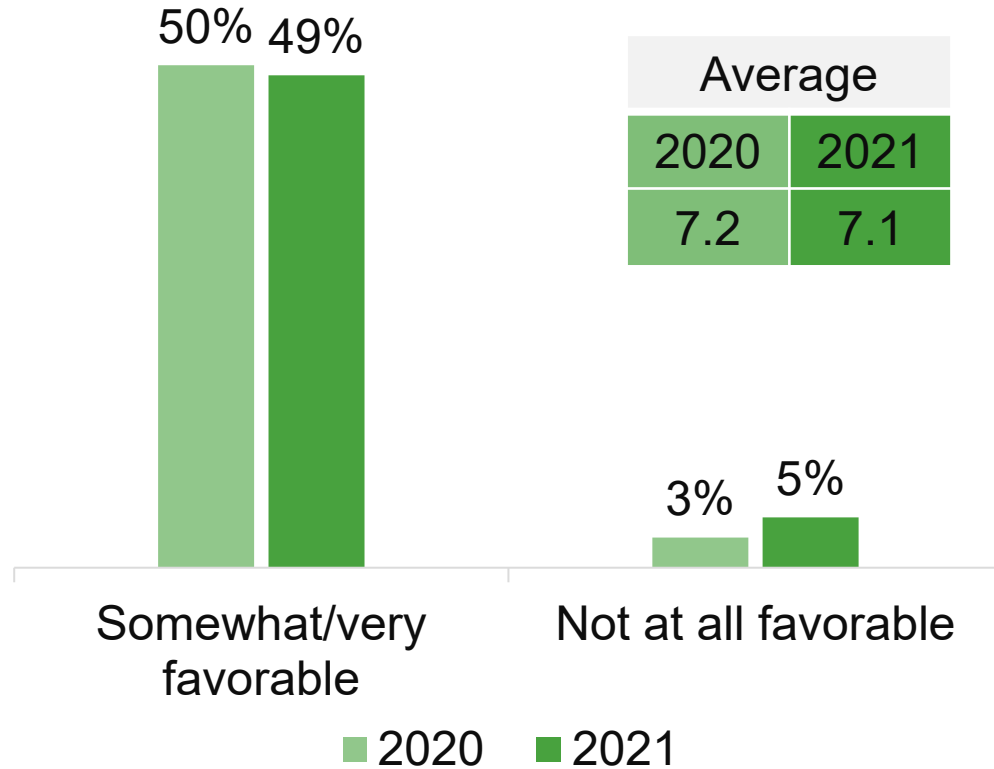
Aware Platte River owned by communities

■ Residential ■ Commercial

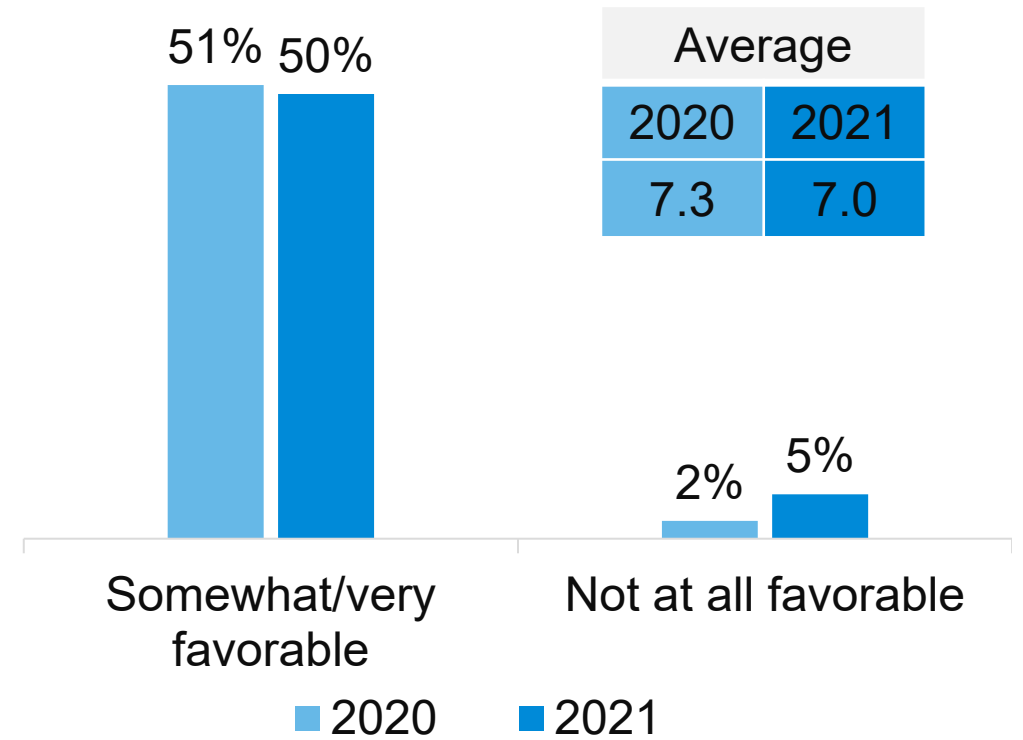


Opinion of Platte River

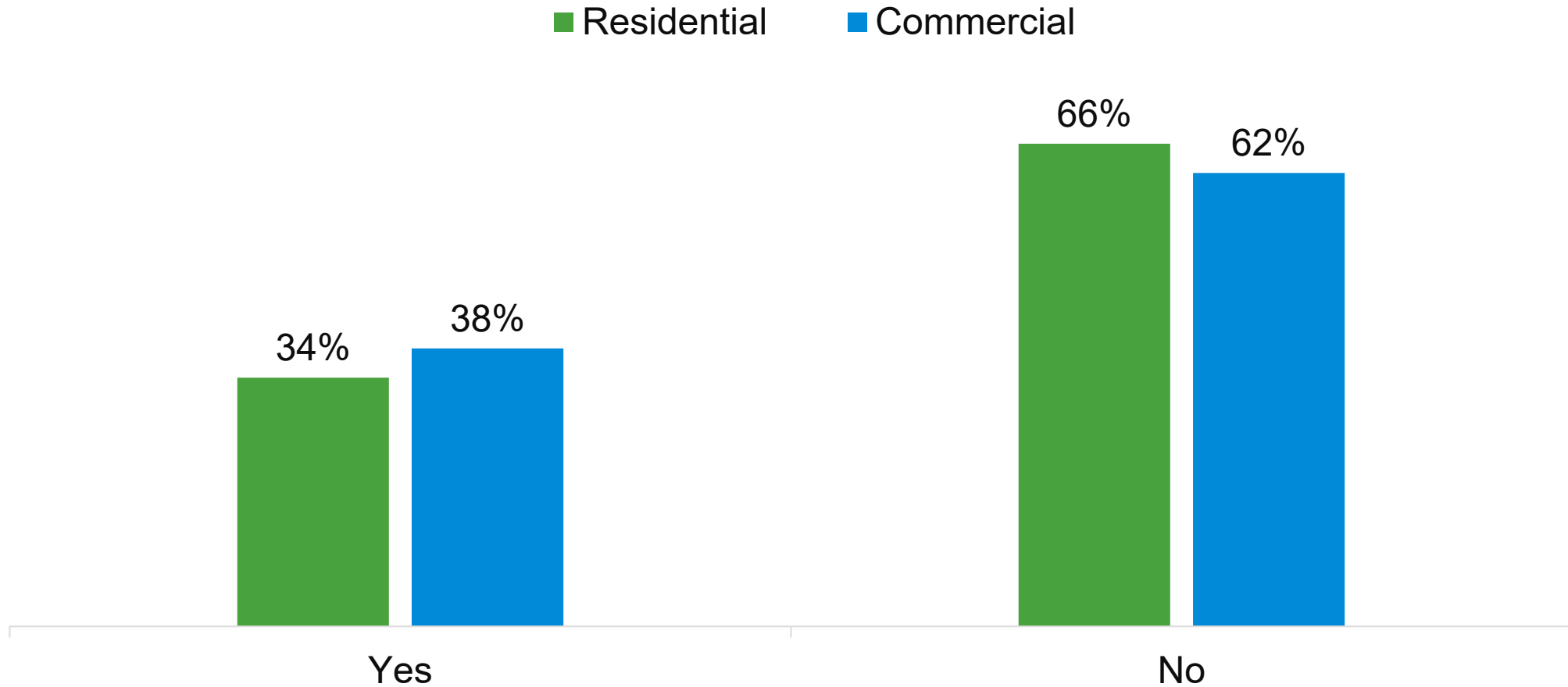
Residential



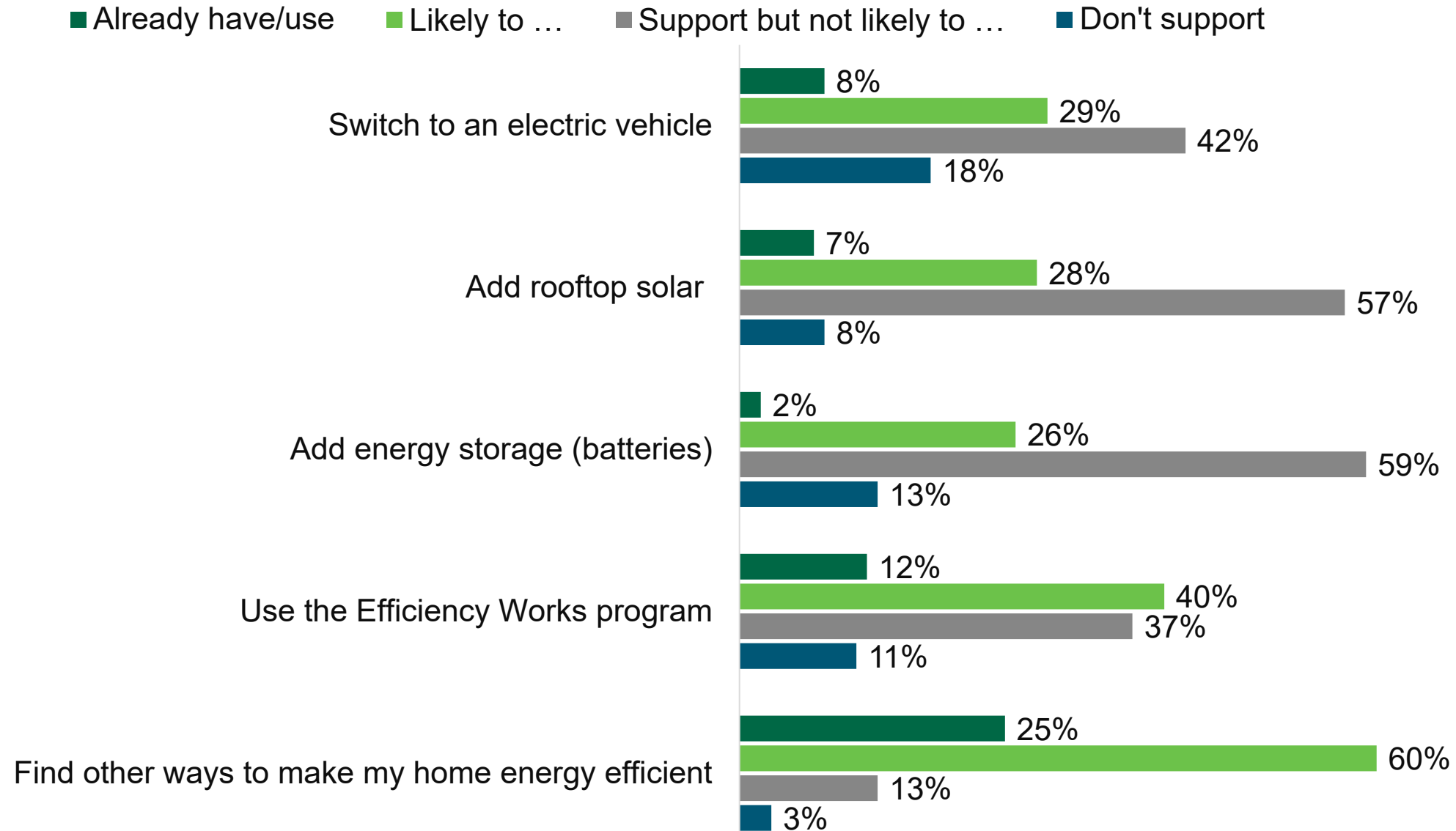
Commercial



Aware Platte River's noncarbon energy goal

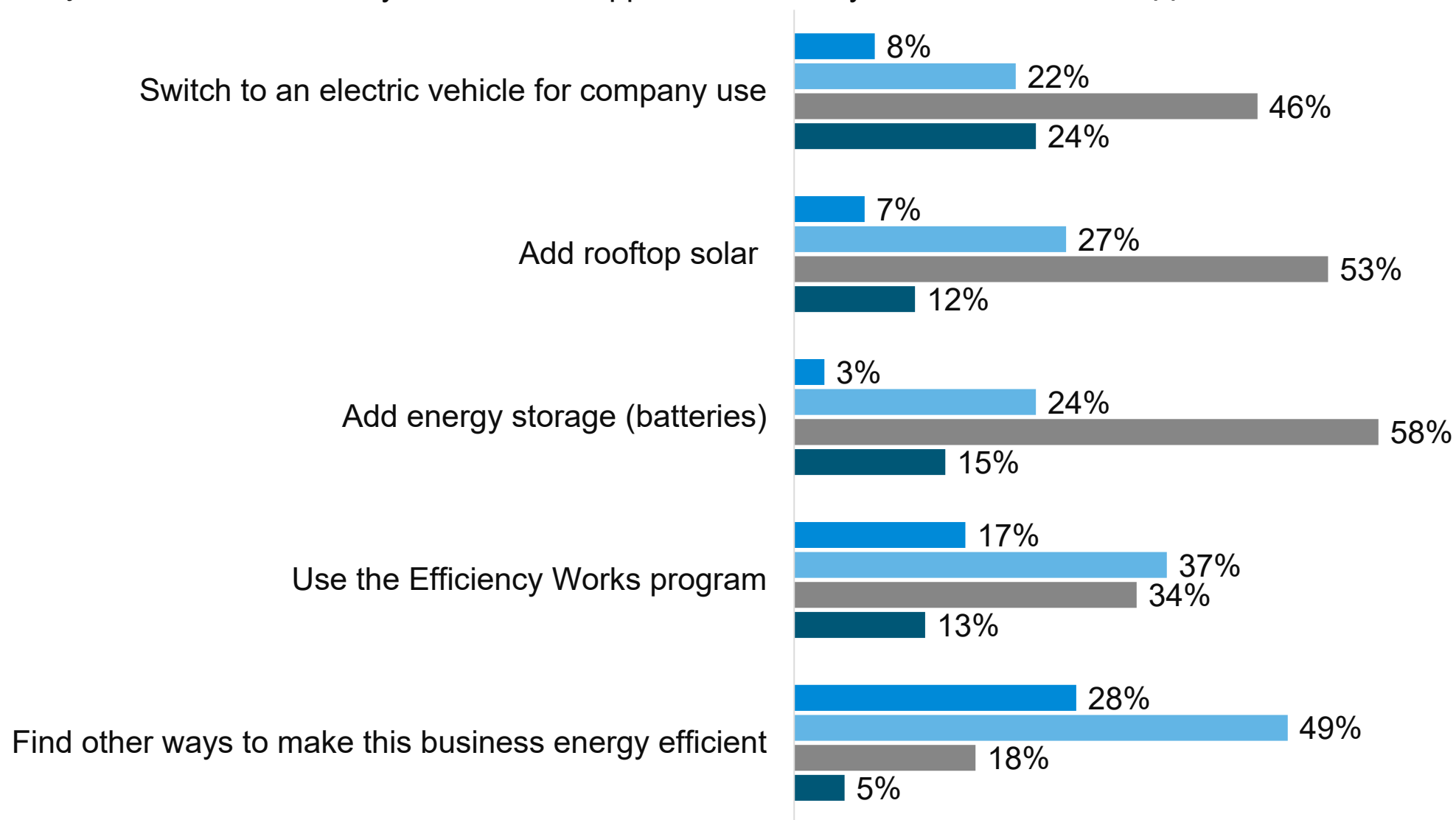


Measures supported to achieve noncarbon goals - residential



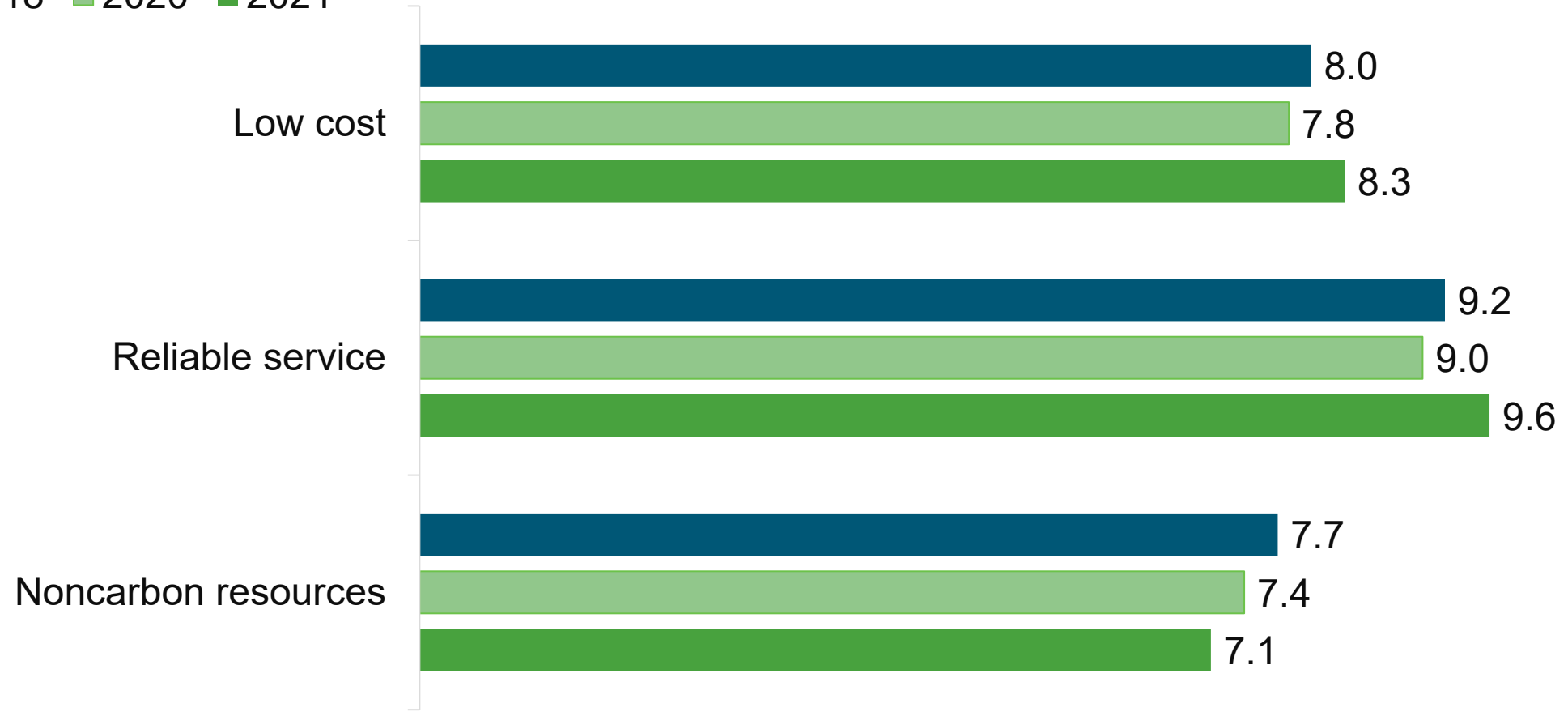
Measures supported to achieve noncarbon goals – commercial

■ Already have/use ■ Likely to ... ■ Support but not likely to ... ■ Don't support



Trend of service characteristics importance - residential

■ 2018 ■ 2020 ■ 2021



Average on 10-point scale

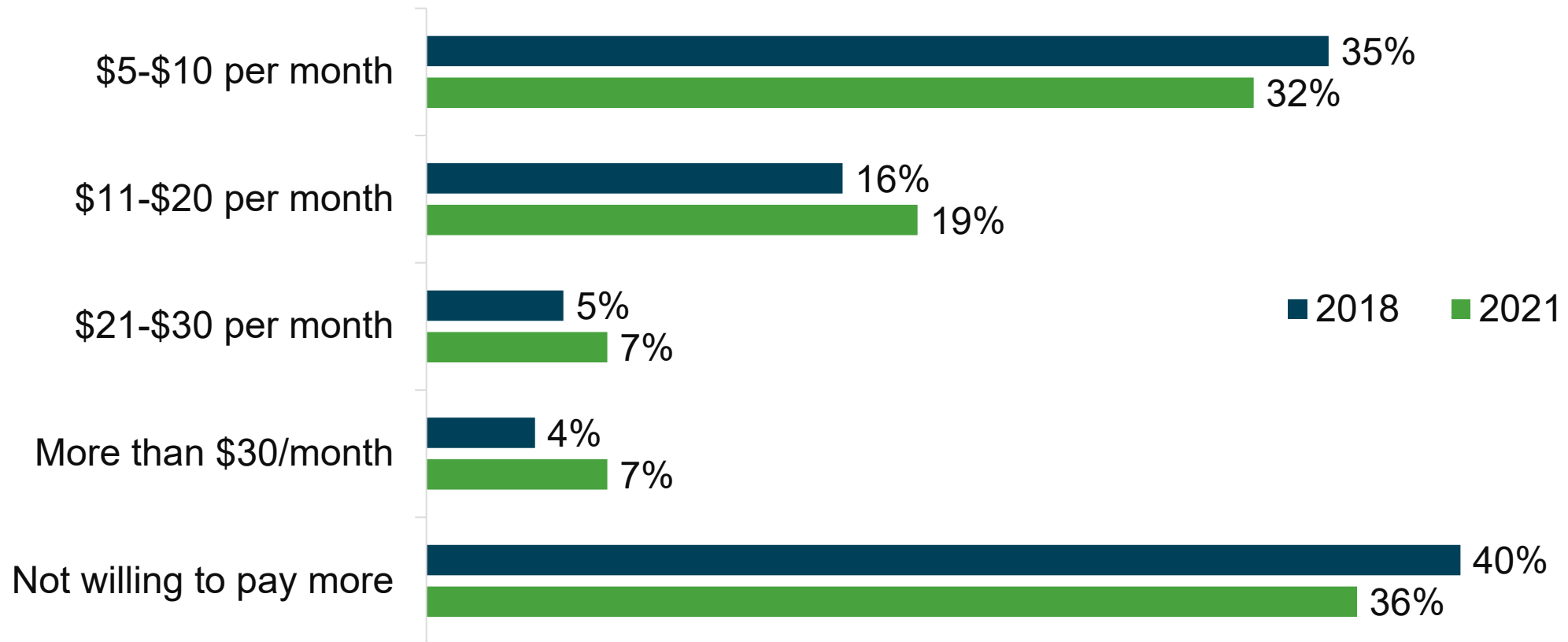
Trend of service characteristics importance - commercial

■ 2018 ■ 2020 ■ 2021

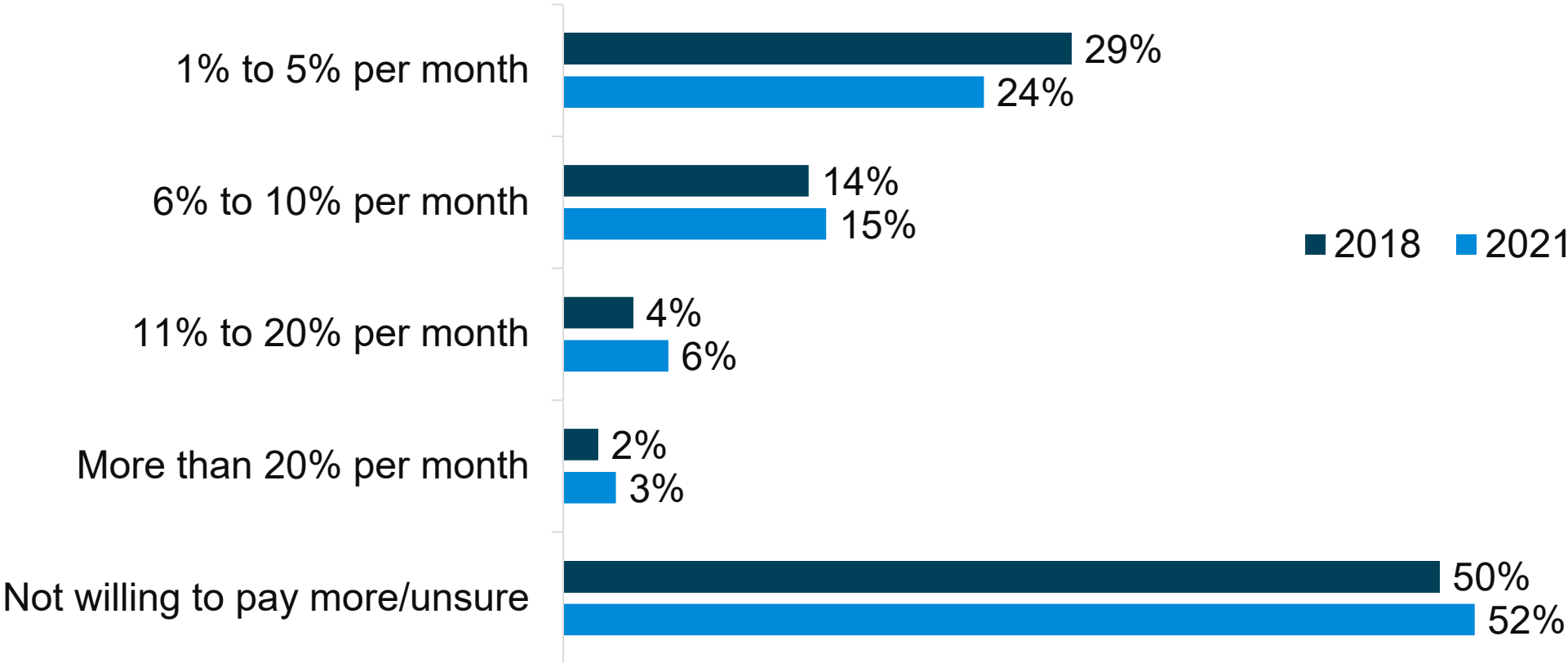


Average on 10-point scale

Additional monthly amount willing to pay for energy from renewable resources - residential

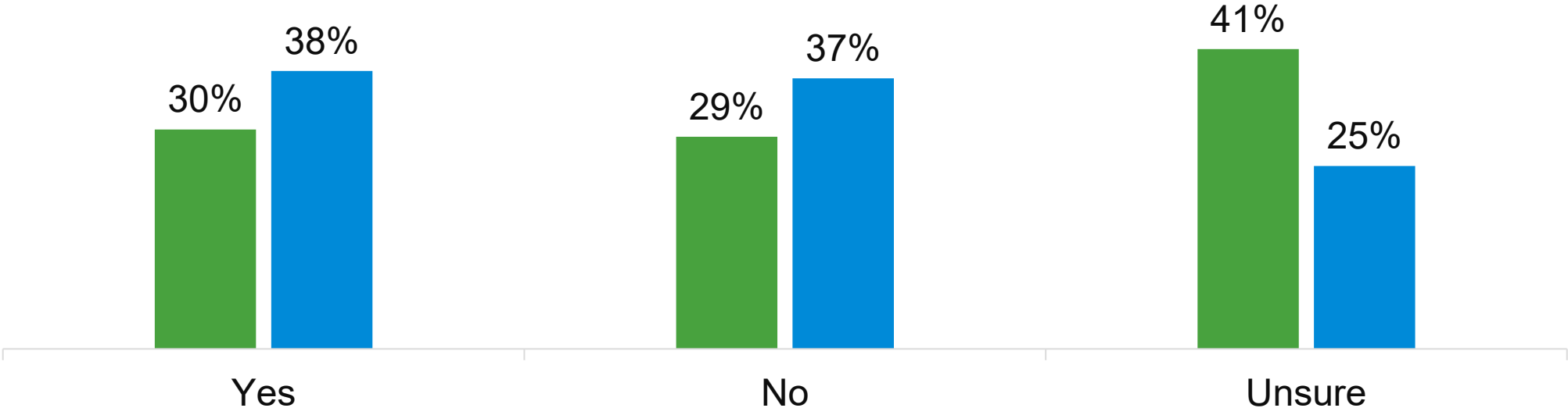


Additional monthly amount willing to pay for energy from renewable resources - commercial



Concerned about Rawhide workforce transition

■ Residential ■ Commercial

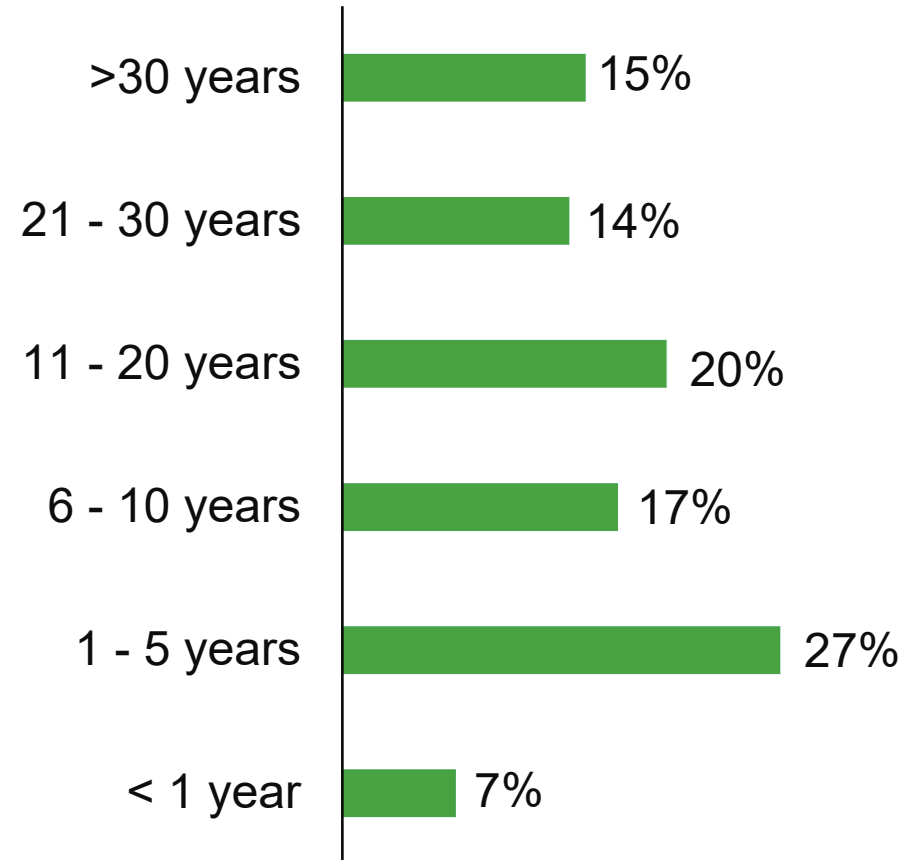


Demographics

Typical residential survey response

- Middle age
- Own (single family, detached) home
- Live in home with partner
- Highly educated
- Strong personal earnings
- May have moved to area in last 10 years

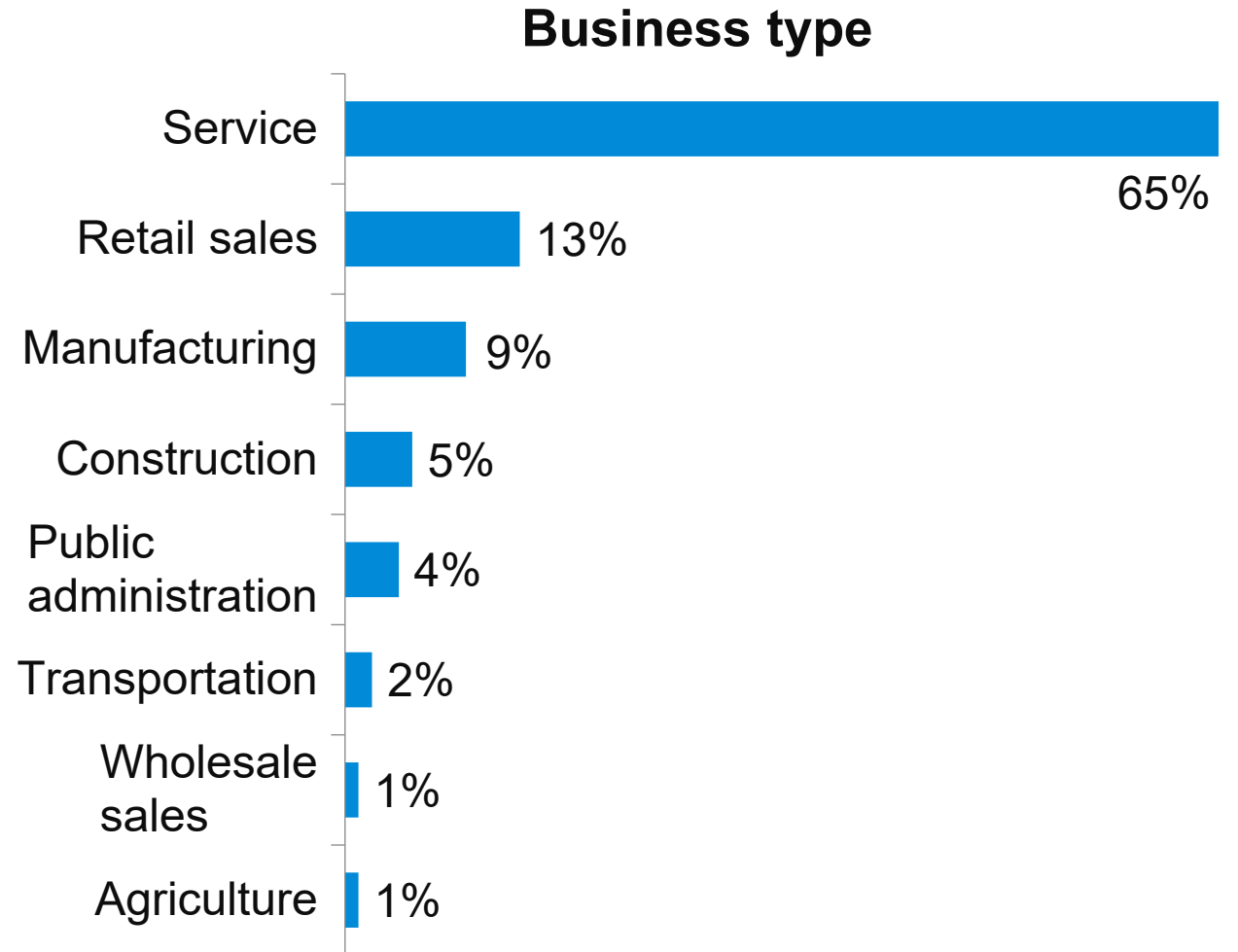
Length of utility service



Firmographics

Typical business survey response

- 10 or fewer employees
- Annual revenue \$500,000 or less
- Electricity is 15% or less of total expenditures for most businesses



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Power market analysis update

Dec. 9, 2021

Agenda

- Historical timeline of western power markets
- Current landscape
- Short-term plan
- Long-term options
- Summary

Timeline of western markets

2000-2013

IndeGO, RTO West, Grid West, Desert Star, the Northwest Power Pool's Market Assessment and Coordination Committee forms

2014

CAISO Western Energy Imbalance Market (WEIM) starts

2019

Platte River, PSCo*, Black Hills and CSU** announce intention to join WEIM

Q4 2021

Platte River, PSCo*, Black Hills and CSU** announce intention to join WEIS

2013

Mountain West Transmission Group (MWTG) coordination begins and issues a request for proposals

2018

PSCo withdraws from MWTG

Q2 2021

SPP Western Energy Imbalance Services (WEIS) starts; CSU elects to join WEIS

*Public Service Company of Colorado (PSCo)

**Colorado Springs Utilities (CSU)

Current landscape

PSCo balancing authority (BA)

- Consists of PSCo, Platte River, Black Hills and Colorado Springs Utilities (CSU)
- Parties are required to sign onto Western Joint Dispatch Agreement (WJDA) to join WEIS
- In May, CSU announced plans to join WAPA BA in order to join the SPP RTO West
 - Last month, CSU expressed interest in remaining in the PSCo BA if it joins WEIS
- PSCo BA charges include Schedule 16 for flex reserves
 - Purpose is to charge for capacity reserved to balance wind
 - Schedule 16 charges to Platte River are estimated to be \$3.5M per year
 - Platte River has been working with PSCo to develop a flex reserve self-supply option which reduces flex reserve costs

Current landscape

Existing SPP Western Energy Imbalance System (WEIS)

- Consists of WAPA, Tri-State G&T, Basin Electric Power Cooperative, Municipal Energy Agency of Nebraska (MEAN), Wyoming Municipal Power Agency and Deseret Power Electric Cooperative
- WEIS is a real-time market similar to the current joint dispatch agreement in the PSCo BA
- In 2025, existing members plan to transition to SPP RTO West with the following capabilities
 - Two-day market including financially binding day-ahead and real-time markets
 - Co-optimization of ancillary services
 - Regional transmission planning
 - Day-ahead unit commitment and reliability assessment
 - Congestion hedging

Current landscape

Western Market Exploratory Group (WMEG)

- Includes several utilities across the western interconnect including Platte River, PSCo, Black Hills, Arizona Public Service, PacifiCorp, NV Energy, Idaho Power and Salt River Project
- Platte River is participating as WMEG may be a valid market option in the future
- Group discussions are focused on “long-term solutions to improve market efficiencies in the West”
- An RFP has been issued for consulting services to facilitate the development of a market
- Guiding principles of the group include the following
 - Must produce overall cost benefits
 - Resource adequacy as a reserve margin requirement
 - Centralized transmission planning
 - Governance based on open and inclusive stakeholder process

Forecasted western markets development

Q4 2021

WMEG announced;
PSCo BA participants sign WJDA

Q3 2022

WMEG market design
straw proposal due

Q2 2023

PSCo BA joins
SPP WEIS market

Q2 2025

SPP launches
RTO West

Q1 2022

WMEG begins market
design development

Q1 2023

WMEG cost/benefit
analysis due

Short-term plan

Stay with the PSCo BA to join SPP WEIS in spring 2023

- Contingent on resolving self-supply of flex reserves
- Alternative is to switch to the WAPA BA to participate in SPP WEIS
- Avoids overstretching resources
 - Staff is tackling several large projects in 2022
 - Moving to another BA while keeping other projects on time and within budget would be extremely difficult

Long-term options

Stay with PSCo BA and remain in WEIS after SPP RTO West goes live

- Preserves optionality to join SPP RTO West or other RTO that may develop
- Creates a market seam between WEIS and SPP RTO West
- PSCo and Black Hills do not plan to join SPP RTO West
- Does not provide a common transmission tariff or address transmission cost allocation risk

Move to WAPA BA and join SPP RTO West when it goes live, 2025 projection

- Eliminates transmission costs of \$2.8M associated with the Spring Canyon wind farm
- Mitigates risk of an excessive transmission cost allocation
- Reduces requirements for flex reserve capacity to balance renewables

Join WMEG market solution

- Dependent on the final market construct

Summary

- Platte River will remain in the PSCo BA to participate in the SPP WEIS market
 - WEIS will go-live spring 2023
 - Staff will be focused on training and building new processes in preparation for market entry
- In 2022, Platte River will enter discussions with SPP to determine the value and risks associated with exiting the PSCo BA to join the SPP RTO West in 2025
 - Goal is to decide on SPP RTO West membership by Q3 2022
 - Electing to join before 2025 will allow Platte River to participate in market development
- Concurrently, Platte River will monitor WMEG market development
 - It will be many years before WMEG will be ready to go live

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Preview of board work session

Dec. 9, 2021

Agenda

- Planning process
- Board work session
- Next steps

Strategic planning process

- Draft workplan
- Conduct needs assessment / environmental scan
- Hold facilitated planning sessions, including **board work session**
- Engage stakeholders
- Draft strategic plan, including process for tracking and reporting

Board work session

- Where we are and how we got here
 - Achievements
 - Opportunities
 - Challenges
- Goal: to lay the foundation for understanding how best to move forward as one organization comprised of five utilities with sometimes competing priorities and different resources/programs

Next steps

- Finalize strategic planning timeline and workplan with consultant
- Consultant to gather background information
- Set board work session

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October operational results

Category	October variance		YTD variance	
Municipal demand	(2.0%)	◆	3.5%	●
Municipal energy	(1.0%)	◆	5.2%	●
Baseload generation	94.0%	●	3.3%	●
Wind generation	(7.9%)	■	(14.7%)	■
Solar generation	(14.0%)	■	(8.5%)	■
Surplus sales volume	(33.4%)	■	(9.5%)	■
Surplus sales price	63.6%	●	70.1%	●
Purchase volume	(59.7%)	●	(14.4%)	●
Purchase price	93.2%	■	8.0%	■
Dispatch cost	13.7%	■	5.4%	■

Variance key: Favorable: ● >2% | Near budget: ◆ +/- 2% | Unfavorable: ■ <-2%



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Financial summary

Category	October variance from budget (\$ in millions)	Year to date variance from budget (\$ in millions)
Net income	\$(1.0) ■	\$18.6 ●
Fixed obligation charge coverage	(.23x) ■	.83x ●
Revenues	---	\$21.5 ●
Operating expenses	\$(0.7) ■	\$(1.5) ◆
Capital additions	\$1.2 ●	\$12.2 ●

> 2% ● Favorable | 2% to -2% ◆ At or near budget | < -2% ■ Unfavorable



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