

# Clean Power 2040

Powering the future



# IRP long survey results summary

**(data collected via Civil Space)**

February 18, 2020

# Long Survey background

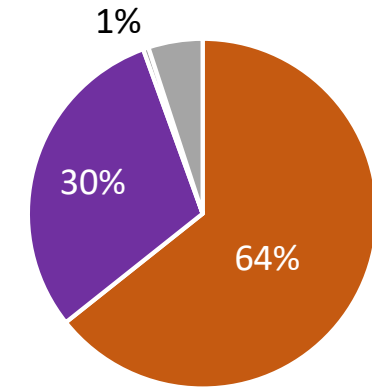
- The long survey was open to the public in parallel with the short survey, running from September 14, 2020 until January 31, 2021.
- The survey was designed by BC Hydro and Domain7 and hosted in a platform known as Civil Space. The survey was available to the public via the CleanPower 2040 page within BC Hydro's website.
- A total of 728 completed responses were received.
- The survey was open to the public to offer the opportunity for customers to provide their feedback. As such, the audience for the survey was self-selected, meaning responses were not managed for population sampling. While some demographic data was collected in the survey, these were collected to better understand the respondents, not to create a statistically representative sample of the BC population.

# General observations

- There were two main surveys open to the general public: a short survey and a long survey. This report reflects results from the long survey only. (see separate summary report for the short survey)
- The long survey was designed for those who have greater interest in the topics covered. In general, responses to the long survey did indeed reflect both stronger interest in and specific knowledge of the topics presented.
- As with the short survey, the long survey was open to the public and was not designed to exclude any participants. Consequently, comments expressed by the long survey respondents tended to be reflect more details as well as stronger opinions or preferences than responses collected in the short survey.

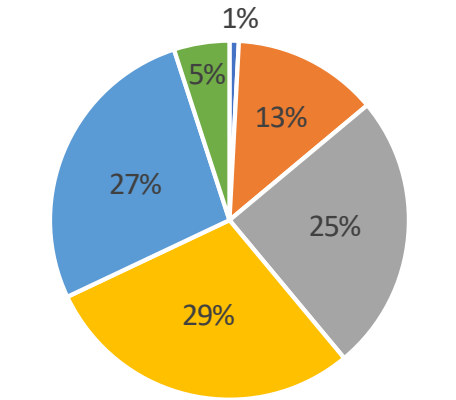
# Who is talking to us?

Respondent Gender



- Male
- Female
- Other
- Prefer not to say / unknown

Respondent Age



- Under 20
- 20-34
- 35-49
- 50-64
- 65 or older
- Unknown

Respondent primary language

95%	English
4%	Non-English
1%	Declined or not answer

Q2. What age bracket do you fit into? (n=728)

Q2a. Which of the following do you identify with? (excludes bad-faith responses, n=687)

Q2b. Which language do you consider your primary language? (n=691)

# Where do they live?

	Lower Mainland / Fraser Valley	Vancouver Island / Gulf Islands	Southern Interior	Central Interior	Northwest	Northeast
	45%	27%	13%	6%	2%	1%
	(n=327)	(n=199)	(n=91)	(n=45)	(n=14)	(n=10)
Apt / condo	27%	14%	8%	2%	0%	0%
Single detached	57%	76%	80%	91%	86%	60%
Townhouse / duplex	15%	10%	8%	7%	14%	10%
Other	1%	1%	4%	0%	0%	30%

Customer type (multiple select)	
93%	Residential
7%	Business
4%	Industrial
5%	Not a customer

Customer region	
6%	Unknown (n=41)

Q2d. What region do you live in? (n=728)

Q2e. What type of dwelling do you live in? (n=689)

Q2f. Which of the following best describes you? Select all that apply. (n=689)

# What sources of energy are in the home?

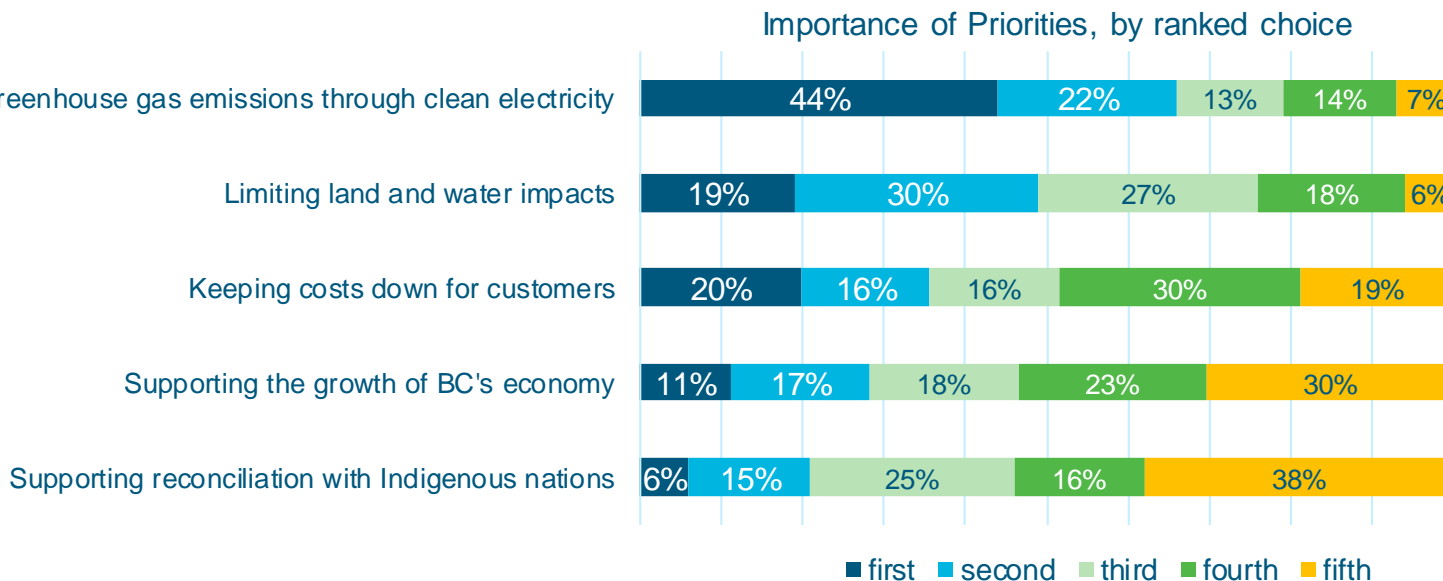
	Electricity only	Electricity + Other	Other (not electricity)
Space	30%	40%	29%
Water/Water Heating	47%	9%	44%

Q2c. Please tell us what sources of energy you use to heat your building: home? (excludes those not answering, n=682)

Q2c. Please tell us what sources of energy you use to heat your building: water? (excludes those not answering, n=673)

# Ranking the planning priorities

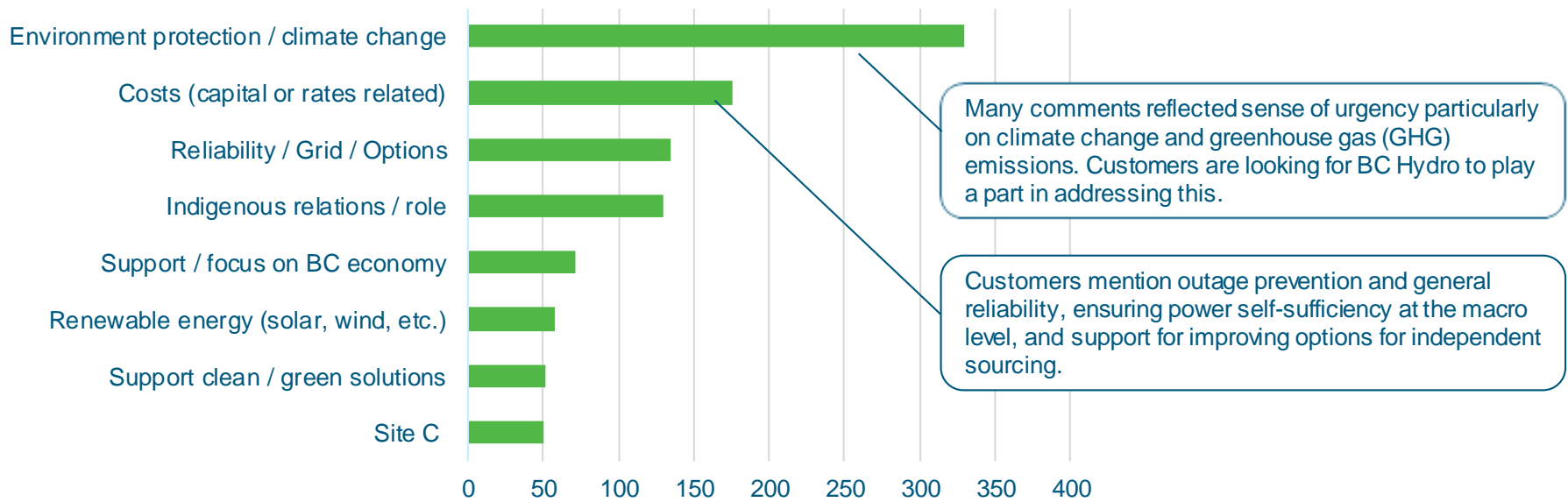
Reducing greenhouse gas is a clear priority, followed by limiting and and water impacts and keeping costs down.



Q3. As we plan our clean electricity future, which of our planning priorities are most important to you? (asked of all, n=643)

# Reasons for ranking (open end)

Top themes: reasons for ranking priorities

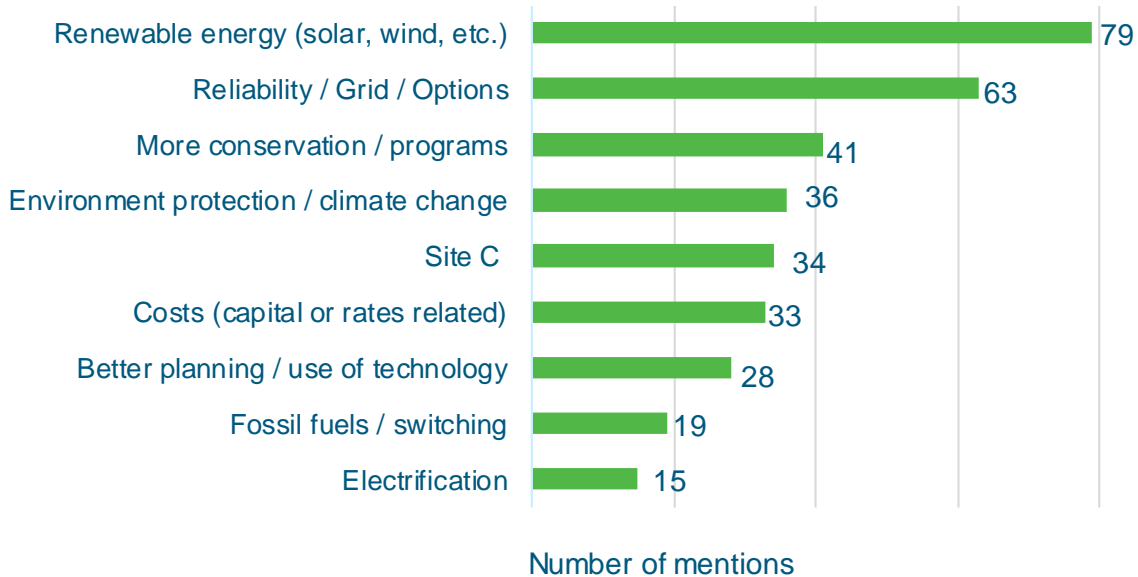


Q3a. Tell us why you ranked them the way you did (asked of all, valid comments n=469; excluded: blanks and "no comment" type of responses)



# Other priorities (open end)

Top themes: other priorities not listed (by number of mentions)



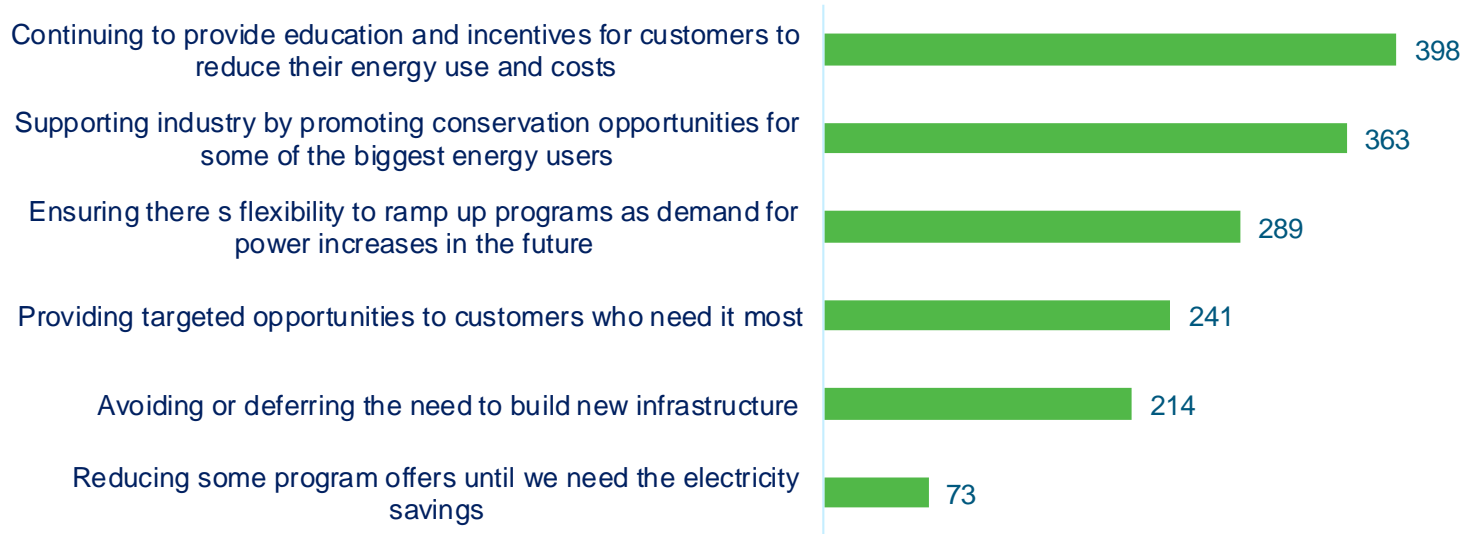
As seen in the short survey, almost all comments related to Site C reflected a strong opposition to the project.

Q3b. Is there another priority that is important to you that is not listed here?  
(asked of all, valid comments n=316; excluded: blanks and "no comment" type of responses)

# Conservation priorities

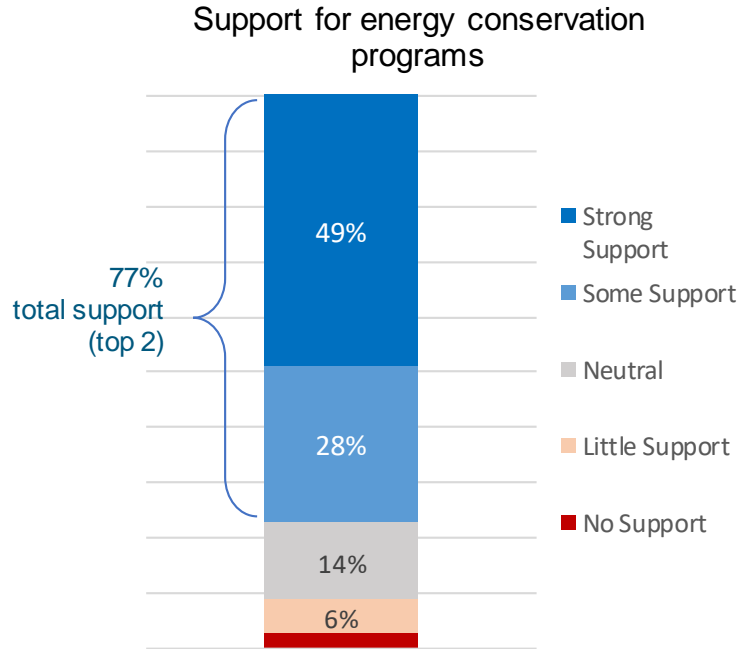
Similar to short survey results, Education / Incentives resonated most, followed by Supporting Industry.

## Conservation program priorities (select up to 3)

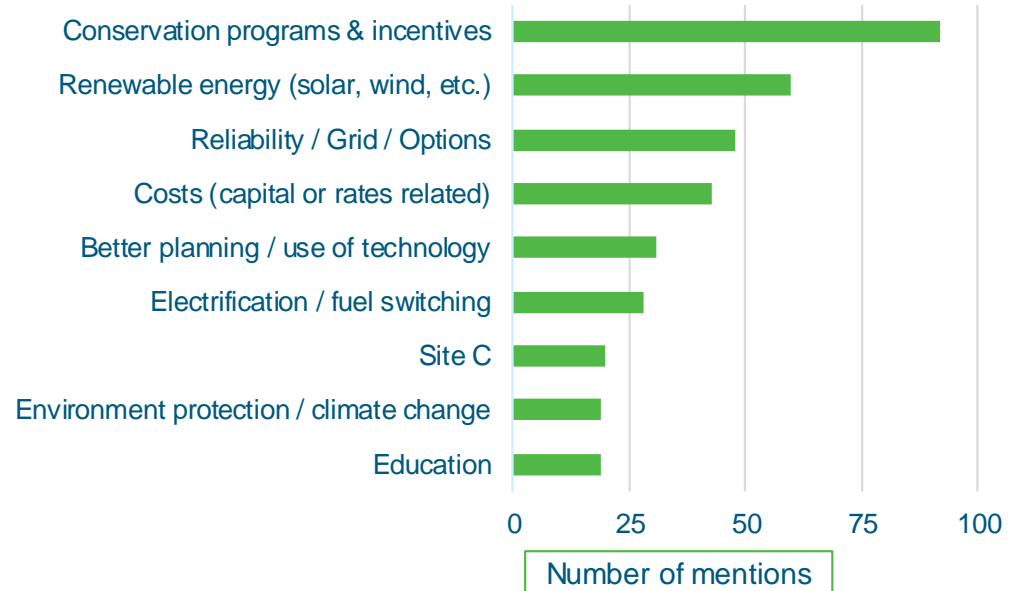


Q5. When thinking about the future of our energy conservation programs choose up to three priorities that are important to yo u... (ranked by mention, asked of all; n=560)

# Support for energy conservation programs



## Top themes: other things that are important

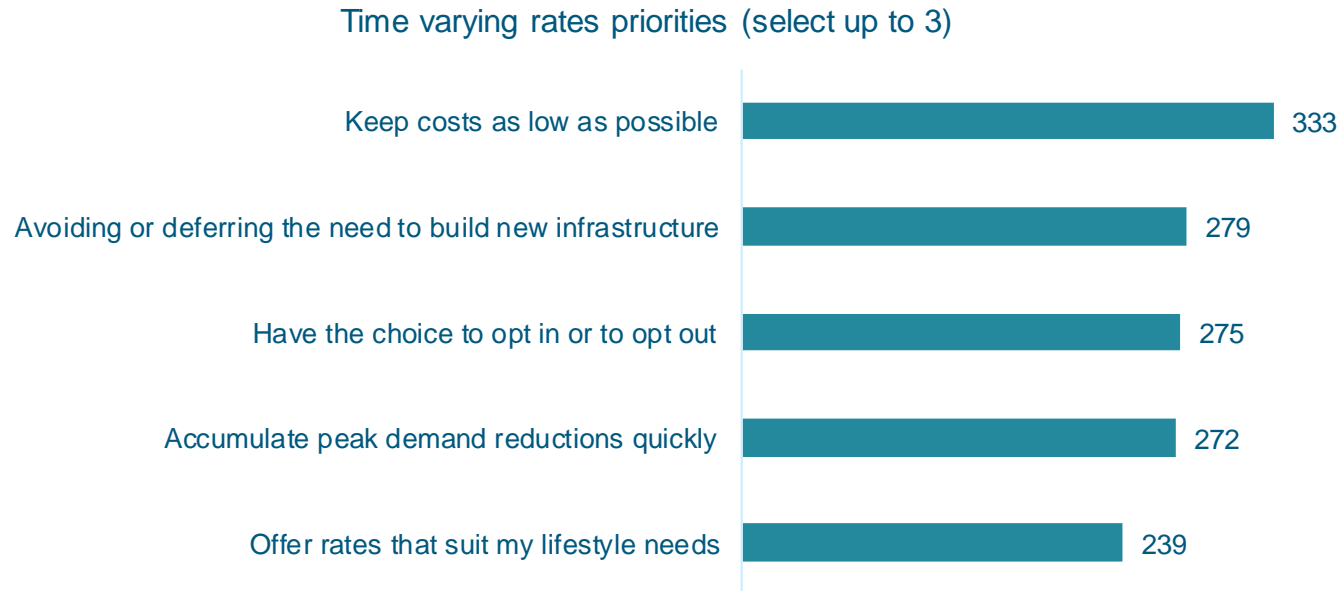


Q5g. How much do you support our energy conservation programs? (excluding those who did not answer, n=564)

Q5h. Is there anything else you'd like to add about what's important to you? (n=268 valid responses)

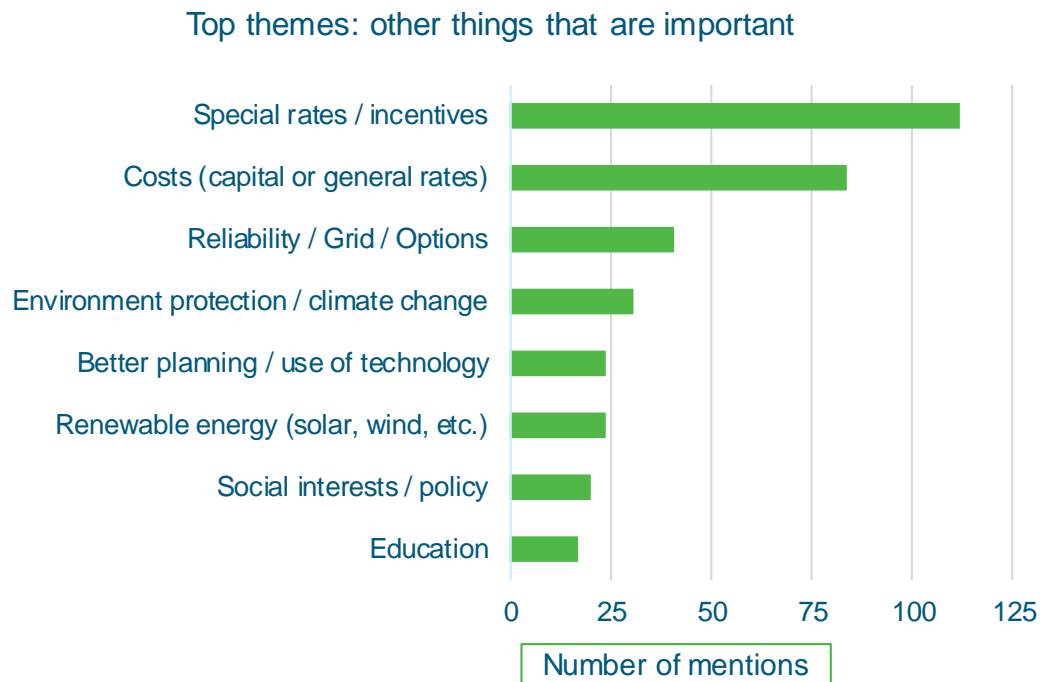
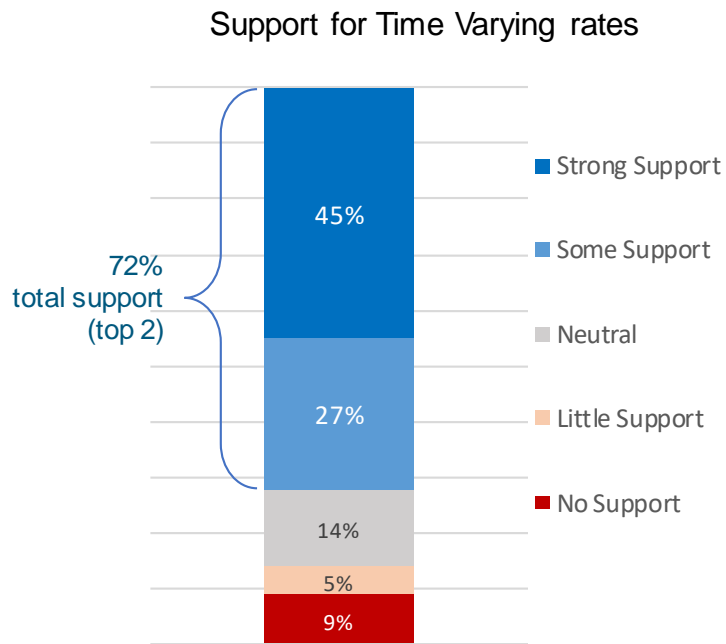
# Time Varying rates priorities

Unlike Conservation priorities, the Time Varying rates priorities are more evenly distributed.



Q6. When thinking about the time varying rates, choose up to three priorities that are important to you....(ranked by mention, asked of all; n=535)

# Support for Time Varying rates



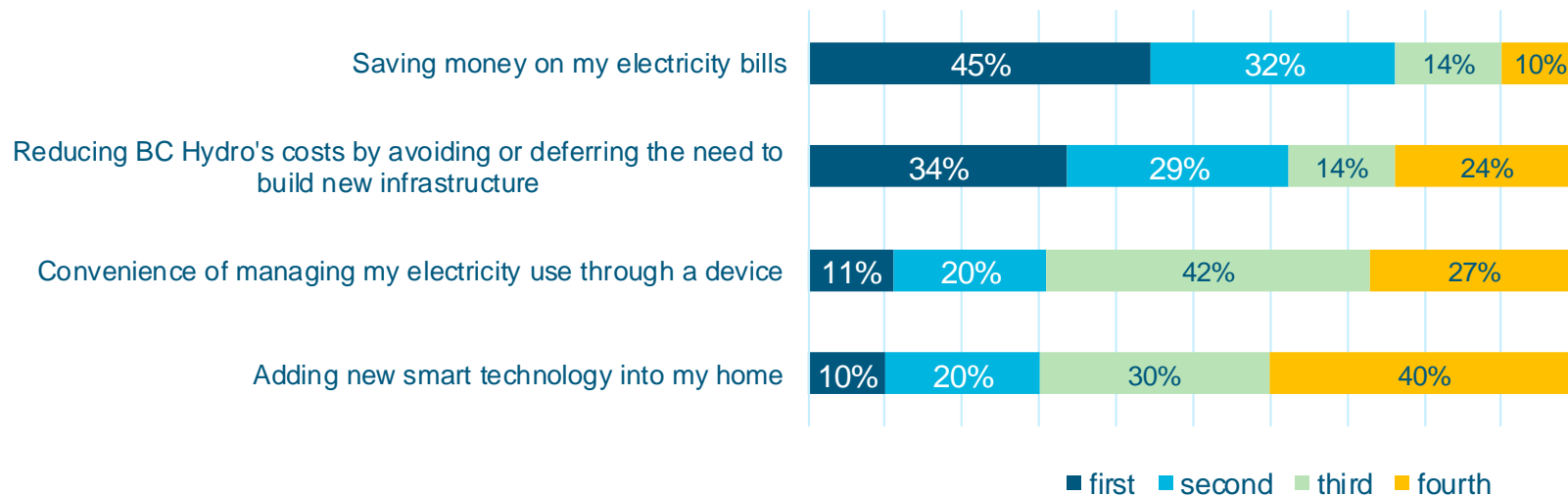
Q6f. How much do you support time varying rates? (excluding those who did not answer, n=540)

Q6g. Is there anything else you'd like to add about what's important to you as we build our Plan? (n=226 valid responses)

# Ranking the demand response priorities

Saving money appears to be the dominant priority. The lower relative positions of technology use at the individual level suggest there may be insufficient understanding of technology use applicability in the home and/or a level of discomfort with the concept.

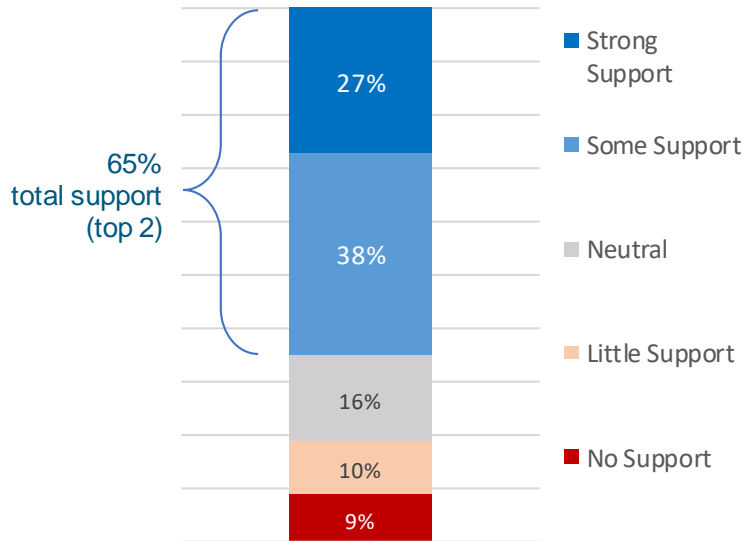
Demand Response Priorities, ranked by choice



Q7. Rank the following by how important each priority is to you click on each priority and drag it up or down to rank it from 1 to 5 (excludes those not answering, n=568)

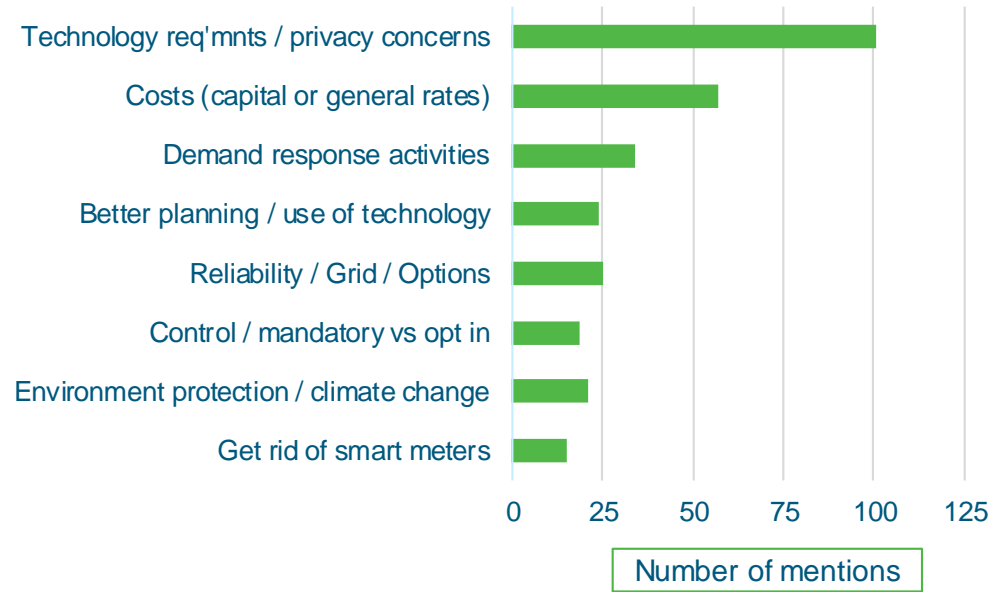
# Support for Demand Response technology

Support for Demand Response Technology



Mentions of other things that are important in this topic:

Top themes: other things that are important



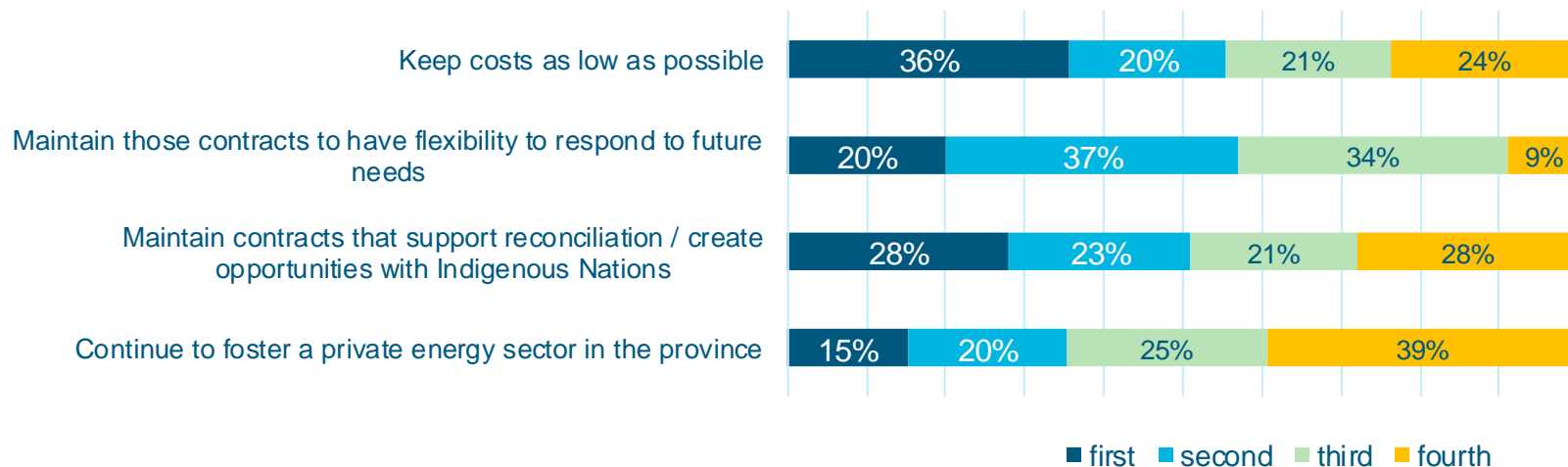
Q7e. How much do you support introducing demand response technology to help you manage your electricity use? (excluding those who did not answer, n=539)

Q7f. Is there anything else you'd like to add about what's important to you as we build our Plan? (n=207 valid responses)

# Ranking the electricity purchase priorities

Respondent preference was generally reflecting desire for lower costs and flexibility. However, support for Indigenous Nations was also strong, having the second highest “first” ranking among the four priorities.

Electricity Purchase Agreement Priorities, ranked by choice

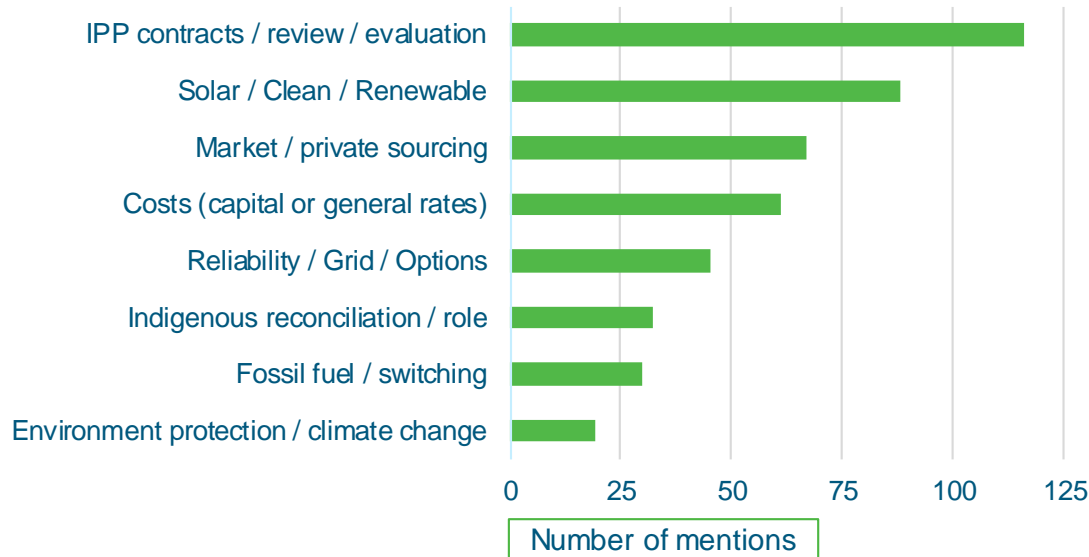


Q8. When thinking about whether BC Hydro should renew electricity purchase agreements rank the following by how important each aspect is to you (excludes those not answering, n=566)



# Other important aspects to electricity purchase agreements

Top themes: other things that are important



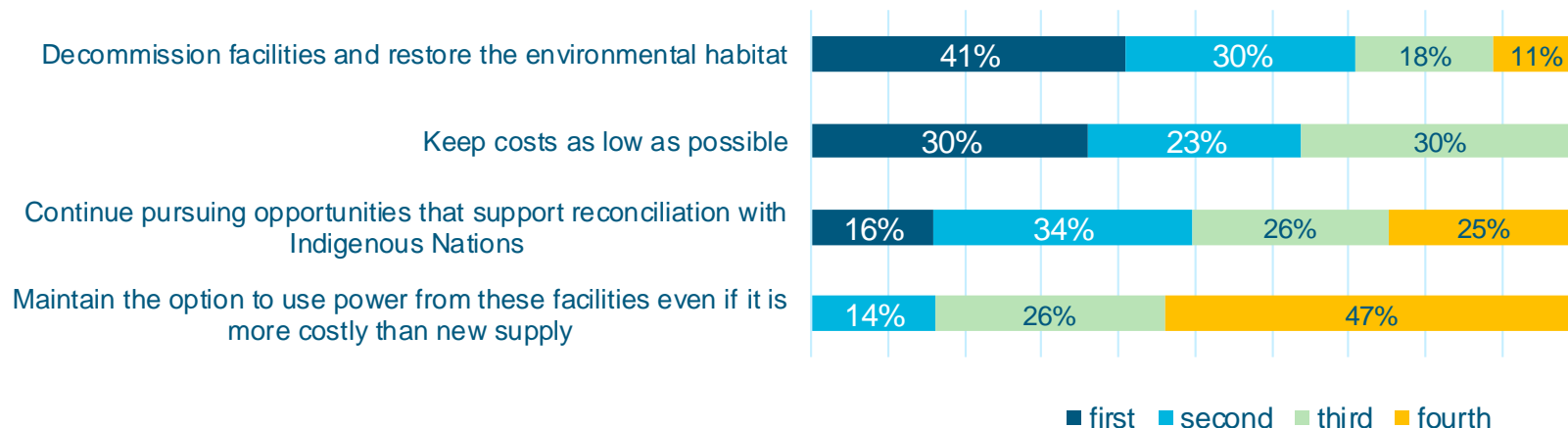
There is a split in perceptions of IPPs/private players: some support their involvement, others oppose it.

Q8e. Is there anything else you'd like to add about what's important to you? (n=218 valid responses)

# Ranking the small plant end-of-life priorities

Rankings reflected preferences for decommissioning with habitat restoration, followed by desire to keep costs low.

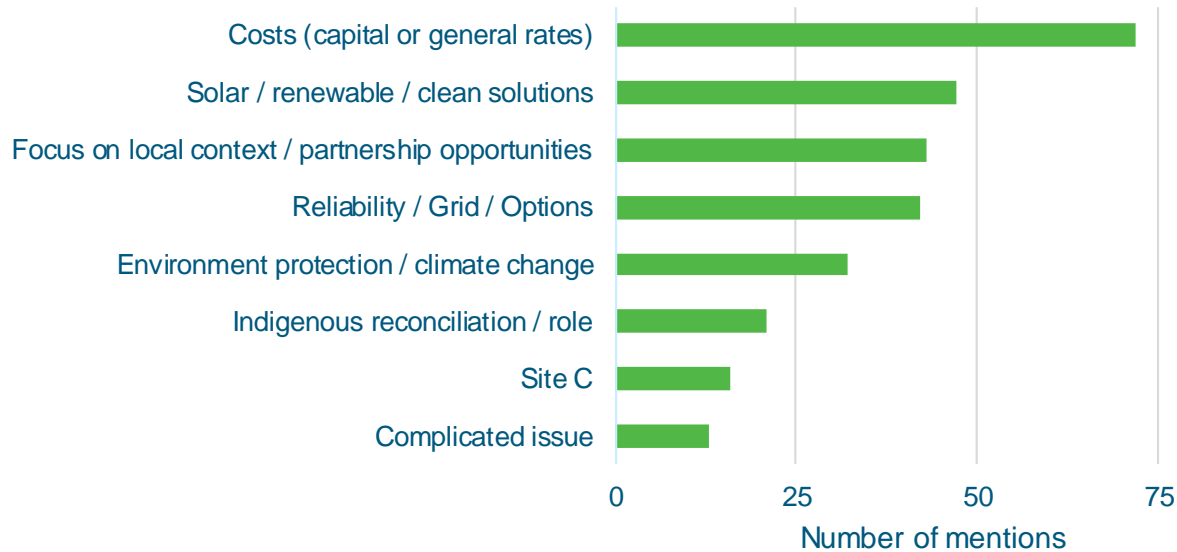
Priorities ranked by respondent preference



Q9. As part of our plan, we need to consider what to do with these smaller plants. When thinking about these small hydro plants that are at, or reaching end of life, rank the following by how important each aspect is to you (excludes those not answering, n=563)

# Other important aspects to small plant end-of-life priorities

Top themes: other things that are important

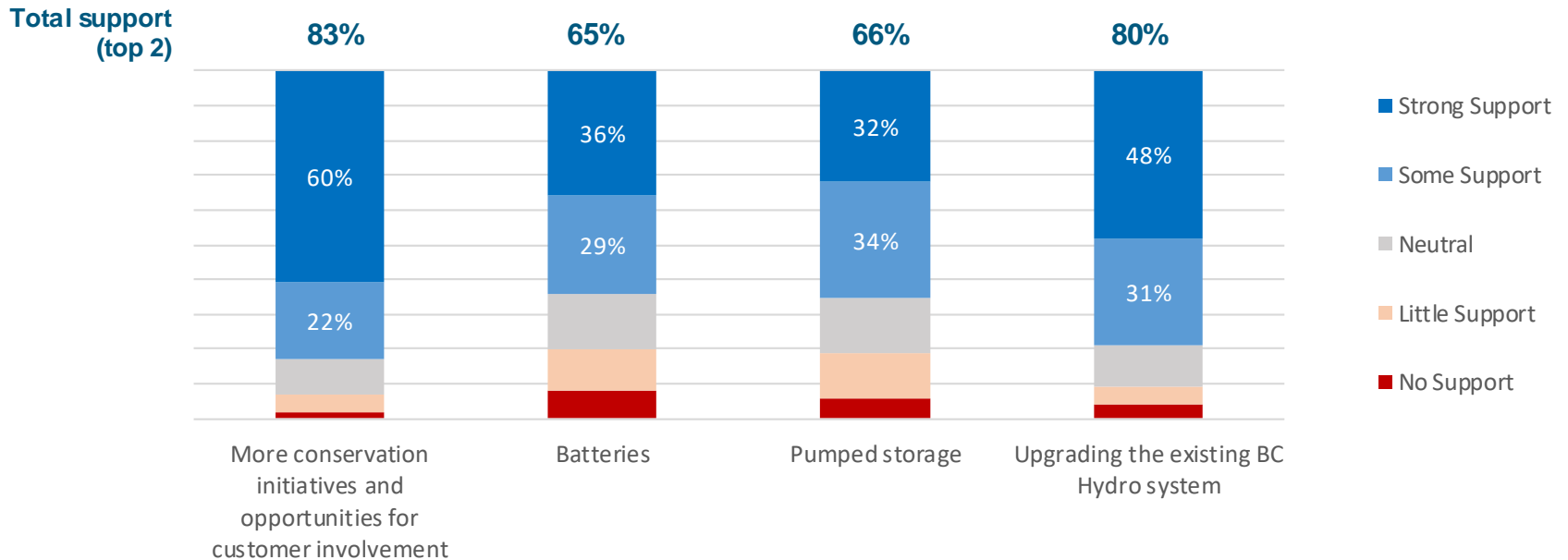


- Customers concerned about containing costs and impact on rates favoured decommissioning.
- Customers also favour focusing on newer, more viable alternatives.
- But, some customers expressed desire to work with communities and/or Indigenous nations to explore local options for end of life assets.

Q9e. Is there anything else you'd like to add about what's important to you? (n=206 valid responses)

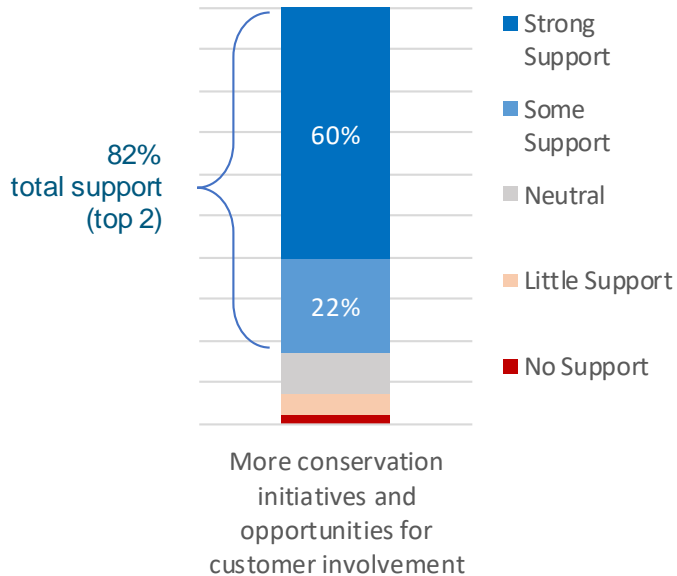
# Support for potential future ideas (2030-2040)

Support for potential ideas (2030-2040)

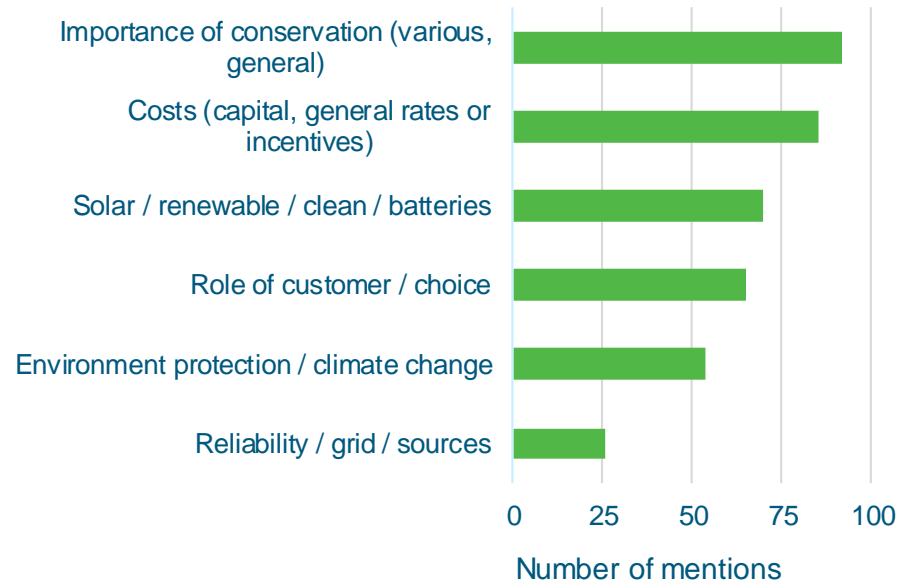


Q12a/13a/13b/14a. How much do you support....? (excluding those not answering, n=521; 518; 518; 513; top 2 scores may not precisely match individual scores due to rounding)

# Support for more conservation



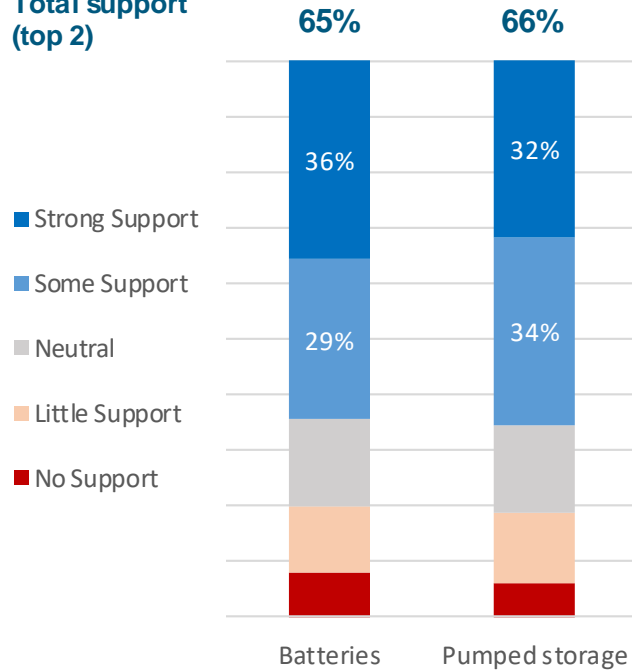
## Top themes: why you chose this level of support



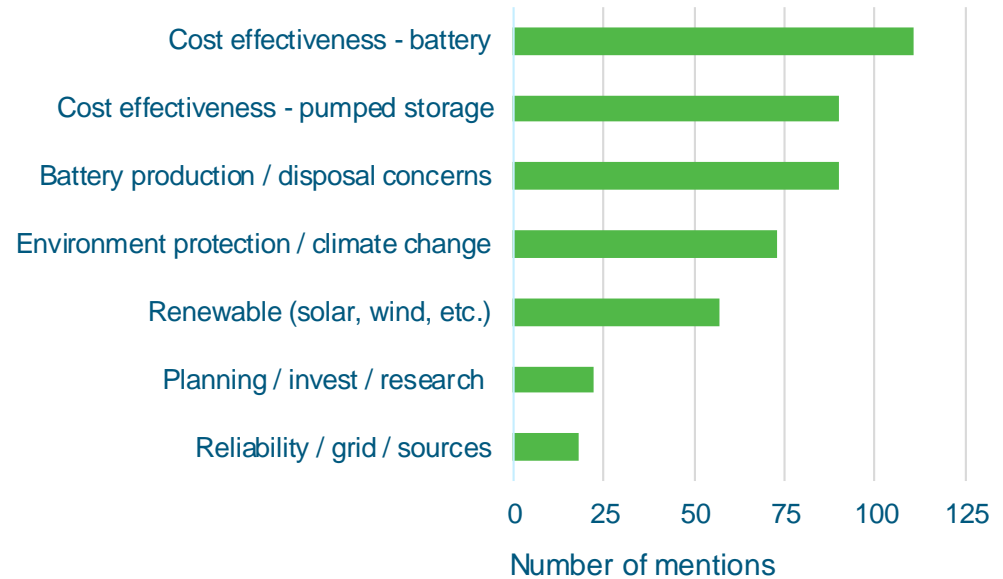
Q12b. Tell us why you chose this level of support?  
(n=330 valid responses)

# Support for Batteries and Pumped Storage

Total support (top 2)



Top themes: why you chose this level of support



Note: this question covers both batteries and pumped storage  
 Q13c. Tell us why you chose this level of support? (n=351 valid responses)

# Comments on Batteries and Pumped Storage

## Observations

Comments reflected **diverse views on these options**. While some favoured one over the other, or thought both options seemed reasonable, there were also comments explicitly opposing both of them.

**Batteries:** customers supporting batteries favoured the flexibility of placement (homes and/or industrial use) and smaller physical footprint compared to large capital infrastructure.

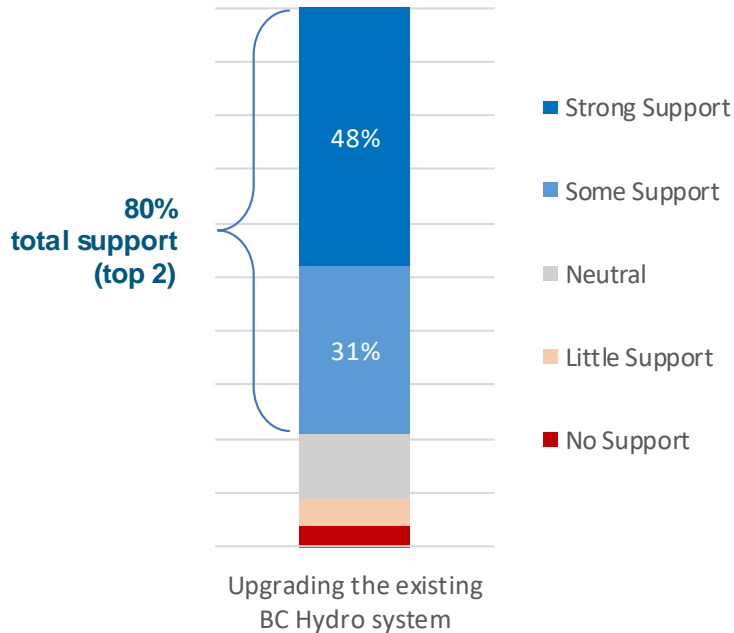
Customers opposing batteries cited harmful environmental impact in terms of production, materials used, and disposal, as well as shorter life cycle vs. large capital infrastructure.

**Pumped storage:** customer support was often dependent on degree of environmental protection provided, cost effectiveness, and consideration of impact on local communities.

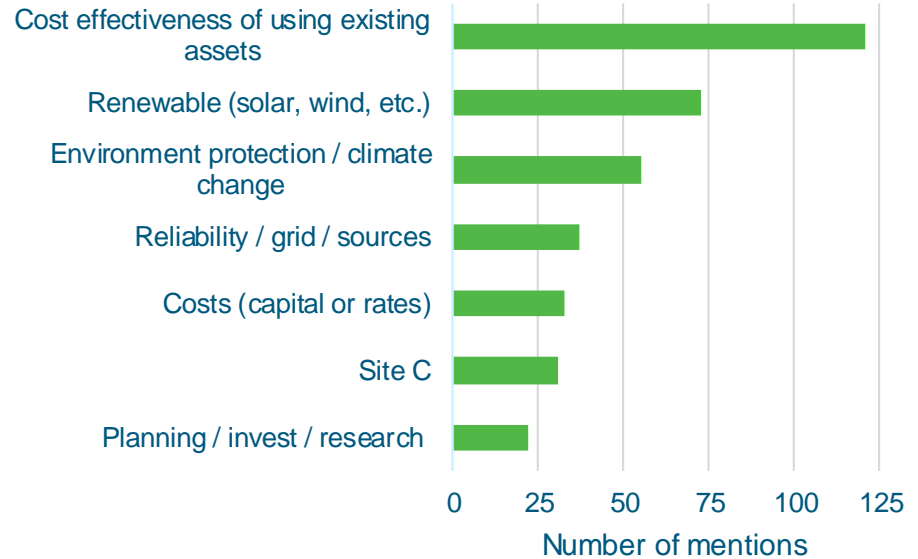
Opponents cited environmental impact, geographical limitations, and dependency on climate.

General: a small minority of customers called out the fact that **lack of knowledge** made it difficult to answer these questions or questioned appropriateness of BC Hydro presenting concepts without better information.

# Support for Upgrades to the system



## Top themes: why you chose this level of support

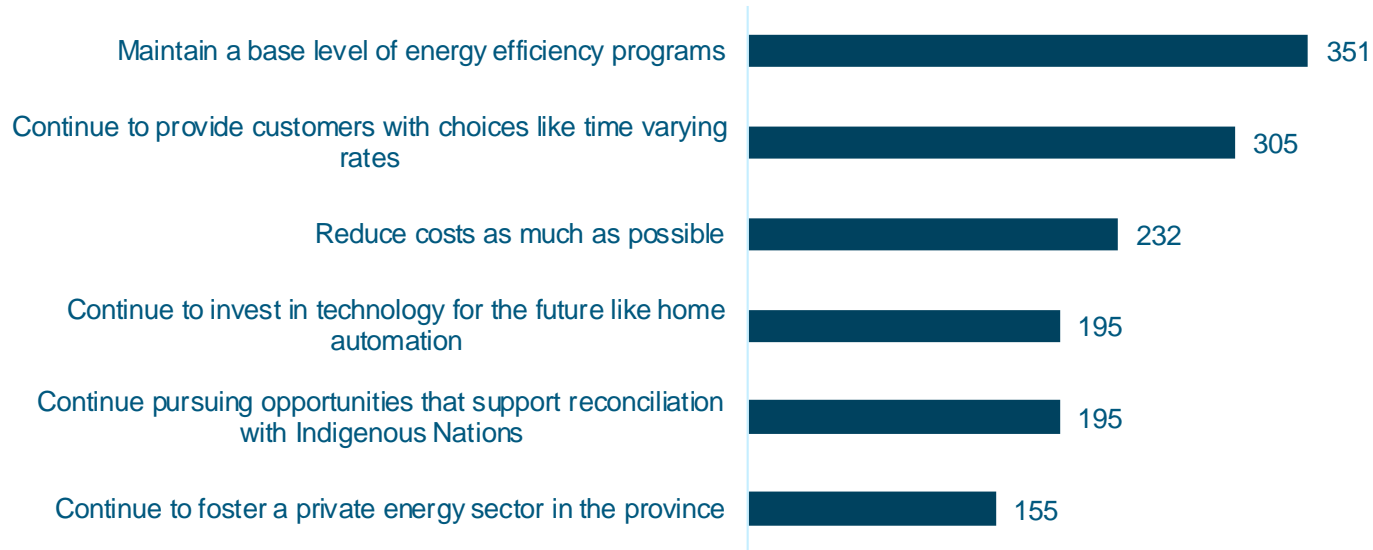


Q14b. Tell us why you chose this level of support? (n=314 valid responses)



# Priorities in the *lower demand* scenario

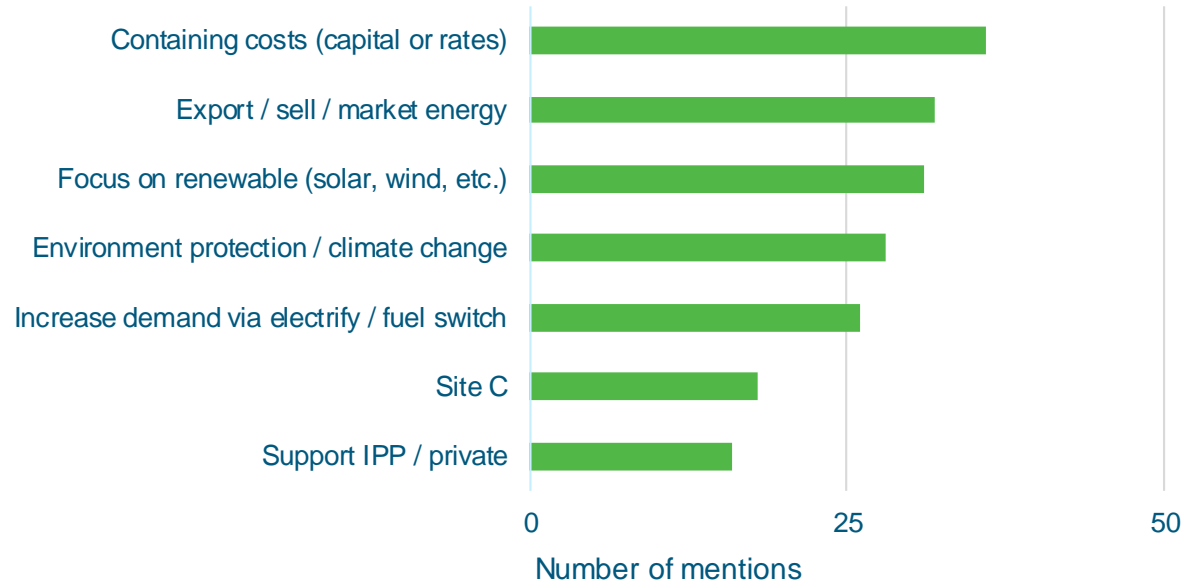
Priorities in a lower demand, lower revenue scenario (select up to 3)



Q15. If demand is lower and BC Hydro has less revenue, choose up to three priorities that are important to you ....(ranked by mention, asked of all; n=510)

# Other priorities for *lower demand*

Top themes: why you chose this level of support

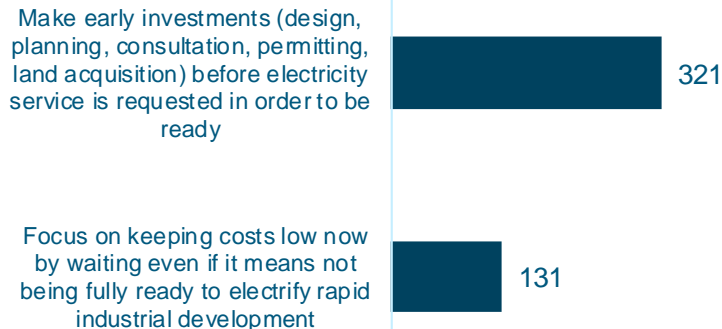


Q15h Is there anything you'd like to add about what's important to you as we prepare for lower demand? (n=202 valid responses)

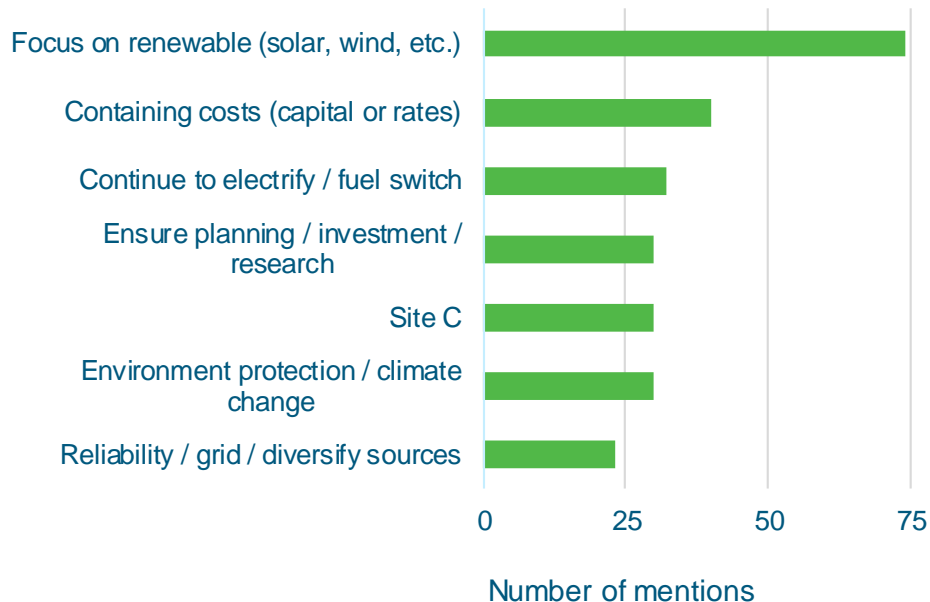
# Priorities in the *higher demand* scenario

71% chose Early Investments  
vs.  
29% choosing Keeping Costs Low

## Priority in a higher demand scenario



## Top themes: why you chose this level of support

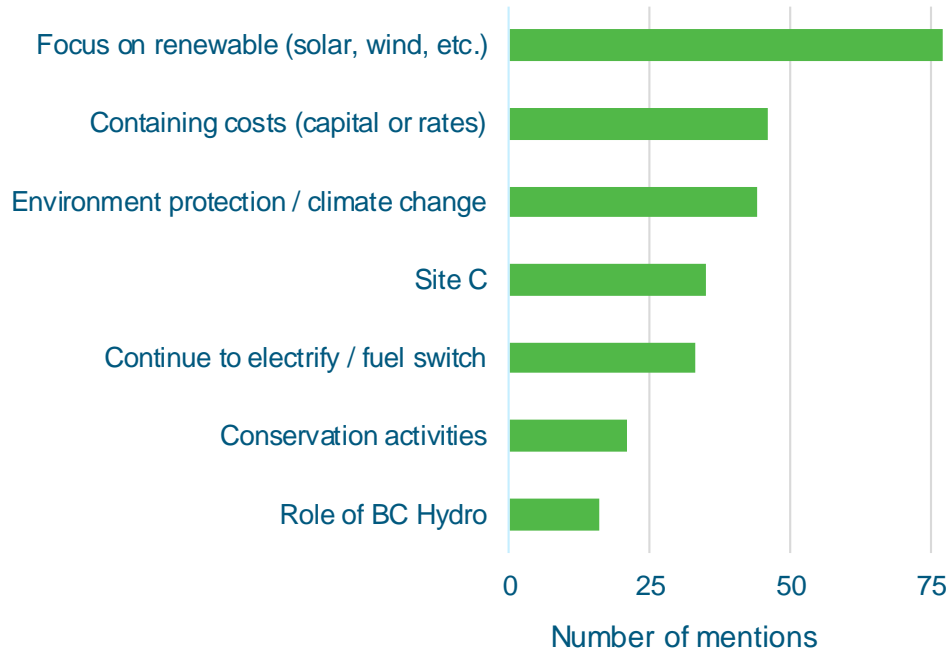


Q15i. Choose the priority that is important to you ... (excluding those not answering, n=452)

Q15j. Is there anything you'd like to add about what is important to you as we prepare for higher demand? (n=246 valid responses)

# Anything else? (open end)

Top themes: anything else you'd like to share



- Towards the final questions, comments about survey fatigue were appearing; many customers who made it to the end largely reiterated their previous points.
- One theme that emerged from some customers is the hope or expectation that BC Hydro take on a greater leadership role in the province's response to climate change. This was reflected in specific mentions about the role, or alluded to in comments related to supporting the environment and customers.

Q16. Is there anything else you'd like to share that you think is important for us to consider as we build our plan? (n=270 valid responses)

