Regulatory Reset 2026 - 2031

Test and Validate Program

Quantitative Study

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Contents

Program background and objectives

Background and Program Outcomes

To support the development of CitiPower, Powercor, and United Energy's Regulatory Reset Proposal for the 2026-2031 period, a series of engagements with community and stakeholders was undertaken to provide a direct input into finalising the 2026-2031 CPPALUE regulatory reset proposals.

To support these organisational requirements, Forethought supported the design and execution of a program that tested customer preferences towards proposed investments and initiatives for inclusion in the final regulatory reset proposal for each network.

The program aimed to provide clarity on the preferred 'package' of customer commitments from community and stakeholders to inform the final regulatory reset proposal, ensuring that it aligns with the needs and preferences of a diverse customer base.

Organisational Objectives

Support CitiPower, Powercor, and United Energy in developing a Regulatory Reset Proposal that aligns with the needs and preferences of their diverse customer bases.

Program Objectives

To identify the profiles, key motivators, and barriers that influence consumer willingness to modify energy consumption habits. This includes a focus on specific areas of energy use, such as smart home technology, home practices, and appliance usage.

To assess consumer awareness, understanding, and responsiveness to time-of-use energy tariffs, acceptance of network control, preferences on meter upgrading and feedback on overall investments.

Who we spoke to

Approach

15 minute online quantitative study

Fieldwork Dates: 12th September 2024 – 26th September 2024

Weighting information was used to ensure that the overall sample is demographically representative **within each network's distribution area in Victoria**.

To ensure data integrity, our panel partner employs a system of checks including the use of CleanID. CleanID is an industry-leading fraud and duplication detection system built to analyse and identify device-level attributes to eliminate known data threats in real time. This solution forms an integral part of our ongoing commitment to providing efficient, reliable, and high-quality data.

Results captured in this study are stated and not inferred. Stated preferences, also referred to as sampling probabilities, are counts that are subject to psychological biases. Inferred probabilities are, on the other hand, how confident you are about your data. Essentially, stated preferences are just a description, while inferred probabilities indicate how confident you are about that description.

Addressable market

Respondents were 18+ Victorians in the CitiPower, Powercor, or United Energy networks who were either the main or joint decision-makers for household or SMB energy.

Sample

	Residential Customers	Small Business Customers	Total
CitiPower	n = 311	n = 117	n = 428
Powercor	n = 317	n = 110	n = 427
United Energy	n = 313	n = 104	n = 417
Total	n = 941	n = 331	n = 1,272

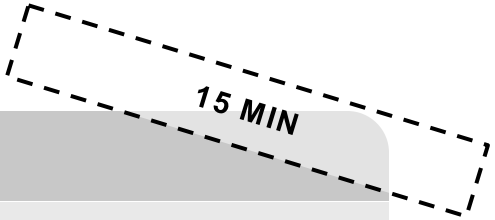
Sample: Customers experiencing vulnerability

	Income Vulnerable	Medically Vulnerable	Australian Aboriginal or Torres Strait Islander	Single Parent	Vulnerable population
CitiPower	n = 51	n = 45	n = 4	n = 14	n = 90
Powercor	n = 123	n = 31	n = 3	n = 22	n = 145
United Energy	n = 66	n = 30	n = 4	n = 23	n = 98

Notes on sample

- Any responses captured from vulnerable customers were natural fallout and included the types of vulnerable customers outlined in the table above.

Overview of survey



Questionnaire Flow
Screening Respondents were screened to ensure they qualified as part of the defined addressable market.
Household / Business Energy Profiling Each customer was asked about the sources of energy that they currently have in their household / business.
Motivations and Barriers for reducing energy usage at peak hours Each customer was asked about the energy usage in their household / business at different times as well as the stated motivations and barriers to adjust their energy usage.
Profiling and willingness to accept behaviour change Respondents were asked questions regarding the energy-intensive tasks in their household / business and the ability for them to shift their timing on it.
Profiling of Household and Business including EV, Carer, and Pet Respondents were asked questions regarding their energy usage in their household / business, including usage around areas such as electric vehicles, medically vulnerable customers, and pets.
Profiling of Gas Usage Respondents were asked questions regarding their gas usage in their household / business.
Testing of various proposed solutions Respondents were asked questions regarding different solutions, such as time-of-use tariffs and external network control, as well as their preferences on meter changes and proposed package.
Profiling, Attitudinals, and Demographics Respondents were asked profiling questions, including their values and attitudes towards their energy consumption behaviours.

Executive Summary

Executive Summary: overview

Shifting energy consumption habits:

- Residential customers were more willing to shift their energy usage than SMB customers.
- Dishwashers, washing machines, and clothes dyers are high potential candidates to target, as they are high usage but also high willingness to shift for Residential customers
- There is limited willingness to shift heating and cooling services. SMB customers were more willing than Residential to shift these behaviours.
- In general, greater awareness and education is required on the individual and collective benefits of load shifting. Cohorts that showed greater knowledge in this area (including awareness of time of use tariffs, or having/considering EV's) were both more willing to load shift, and more willing to give networks control.

Electrification, time of use tariff, network control, meter upgrades and overall investment:

- Gas usage remains high across all networks, however intention to electrify in the next five years is also significant.
- Time of use tariffs awareness is mixed for both Residential and SMB customers.
- Significant barriers remain to network control, particularly for Residential customers. Price levers were the highest stated way to move forward for both Residential and SMB customers.
- Newer technologies, e.g., smart controls and EV charging, may present the strongest opportunity for network control, especially for SMB customers.
- Preference for proactive meter replacements is high.

Executive Summary

Shifting Consumption Habits:

CitiPower

- Residential customers were more willing to shift their energy usage than SMB customers (32.3% vs 26.1%).
- Lowering energy bills was the primary stated motivator to shift, and current activities being undertaken were the biggest barrier for Residential and SMB customers. SMB customers were more likely to have no time to implement the changes than Residential customers (34.3% vs 28.6%). Making price benefits clear in communications will be central to driving behaviour change.
- Washing machines, the dishwasher and clothes dryer were the top appliances that Residential customers used in specific times and were most willing to shift. However, heating and cooling systems were the appliances that SMB customers mostly used where willingness to shift usage remained low. Despite low overall willingness, SMB customers were more willing to shift their usage of their electric heaters and air conditioners than residential (37.4% vs 27.9% and 30.8% vs 15.3%).
- Compared to customers not willing to shift, those willing to shift their energy usage were more likely to be EV owners / considerers for both Residential and SMB customers. EV owners / considerers were more interested in energy-efficient products, with Residential also interested in smart automated products. This presents an opportunity for the networks.
- For both Residential and SMB customers, those who were familiar with time-of-use tariffs and willing to allow external network control were more willing to shift their energy usage than those unfamiliar with these tariffs and unwilling to allow external network control. This reinforces the importance of awareness and education.

Powercor

- Compared to SMB customers, Residential customers were more willing to shift their energy usage (39.8% vs 25.3%).
- Lowering energy bills remained the main stated motivator for Residential and SMB customers. However, more SMB customers stated environmental concerns, social responsibility, and availability of energy-efficient products as motivators than Residential customers. For barriers, Residential and SMB customers stated their current activities and upfront costs of energy-efficient products as their top barrier (36.5% vs 41.2% and 32.8% vs 32.7%).
- Washing machines, dishwasher and clothes dryers were the top appliances that Residential customers used in specific times and were most willing to shift. However, SMB customers used electric heaters more than Residential customers but had still had low willingness to shift (46.1% vs 28.6%).
- Residential and SMB EV owners / considers were more willing to shift their energy usage than non-EV owners. Like other networks, Residential EV owners / considerers were more likely to want both smart automated products and energy-efficient products, while SMB EV owners / considerers were likely to want energy-efficient products only.
- Familiarity with time-of-use tariffs and allowing external network control increased willingness to shift energy usage among both Residential and SMB customers.

United Energy

- Residential customers were more willing to shift their energy usage compared to SMB customers (35.4% vs 30.2%).
- Price-related factors such as lowering energy bills and government incentives remained the main stated motivator for Residential and SMB customers, significantly so for Residential. Both Residential and SMB customers also stated their current activities as top barriers. SMB customers were more likely to have no time to implement the changes required to shift their energy usage to off-peak compared to Residential (28.1% vs 18.3%).
- Like other networks, washing machines, dishwasher, and clothes dryers were the top appliances that Residential customers used in specific times and were most willing to shift. Among heating and cooling appliances, air conditioners were used more by SMB customers than Residential customers (61.8% vs 48.3%) with willingness to shift remaining similar between Residential and SMB customers.
- Residential and SMB EV owners / considerers were also more willing to shift their energy usage than non-EV. EV owners / considerers were interested in energy-efficient products, with Residential customers also interested in smart automated products.
- Willingness to shift increased among Residential and SMB customers as they became more familiar with time-of-use tariffs and have more tolerance with allowing external network control.

Note: The percentages (%) in the brackets indicates the proportion of Residential customers vs SMB customers. For example, 32.3% of Residential CitiPower customers were willing to shift compared to 26.1% SMB CitiPower customers. Where willing to shift represents the proportion of customers that are 'very willing' 8-10.

Executive Summary

Electrification, Time of use tariff, Network control, Meter Upgrades and Overall investment:

CitiPower

- **Electrification:** Compared to Residential, SMB customers were more likely to consider electrifying their gas appliances in the near future (37.0% vs 58.3%). Among those considering, 53.2% of Residential customers were planning to replace their gas appliances within the next 5 years, while 79% of SMB planned to replace their appliances within the same timeframe.
- **Time of use tariffs:** Across both Residential and SMB customers, about half were familiar with the concept of time-of-use tariffs (49.0% vs 47.3%).
- **Network control:** Residential customers were less likely to allow for external control than SMB customers (55.1% vs 66.0%). However, more SMB customers indicated the improvement of grid reliability as another incentive than Residential (31.0% vs 17.9%). SMB customers were also more willing to allow CitiPower to manage their appliances in general than Residential customers.
- **Meter Upgrades:** Both Residential and SMB customers preferred CitiPower to start proactively replacing meters to avoid failures (72.6% vs 70.5%).
- **Overall Investment:** Almost half of Residential and SMB customers felt that they did not / were not sure the bill impact from the improvements that CitiPower made represented value for the service that they received (55.0% vs 49.4%).

Powercor

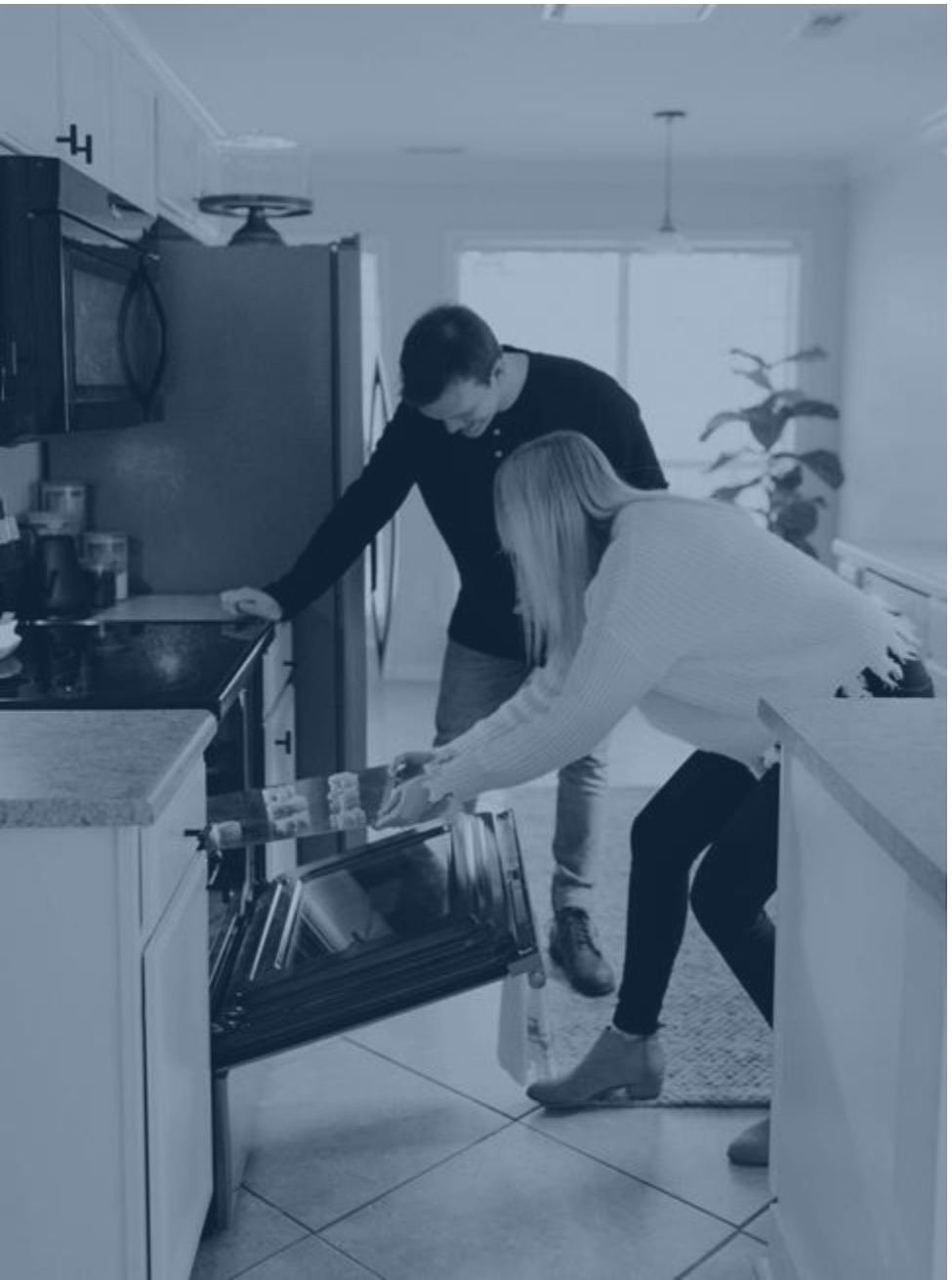
- **Electrification:** Half of SMB customers were likely to consider replacing their gas appliances whereas almost a third of Residential customers would consider replacing in the near future (50.0% vs 30.0%). Of those that would consider, over two third of SMB customers and half of Residential customers were planning to replace it in the next 5 years (73.5% vs 53.3%).
- **Time of use tariffs:** Half or more of Residential and SMB customers were unfamiliar with the concept of time-of-use tariffs (59.6% vs 49.9%).
- **Network control:** Similar to CitiPower, Residential Powercor customers were less likely to allow for external control than SMB customers (51.0% vs 64.6%). While price-related factors remained the biggest stated incentives, more SMB customers also indicated the improvement of grid reliability as another incentive compared to Residential customers (27.0% vs 16.7%). SMB customers were more willing to allow Powercor to manage their electric vehicle charging and smart home devices (23.7% vs 7.6% and 30.4% vs 9.3%).
- **Meter Upgrades:** Over two third of Residential and SMB customers preferred Powercor to start proactively replacing meters to prevent failures despite the current price of $5 per month (70.2% vs 68.5%).
- **Overall Investment:** When asked about the improvements, almost half of Residential and SMB customers felt that they did not / were not sure that the bill impact represented value for the service that they received (48.4% vs 39.9%).

United Energy

- **Electrification:** Less than a quarter of United Energy Residential customers would consider electrifying their gas appliances in the near future with half of SMB customers likely to consider it (23.1% vs 52.8%). Likewise, more SMB than Residential customers were planning to electrify their gas appliances within the next 5 year among those considering (72.1% vs 43.7%).
- **Time of use tariffs:** Half of Residential and SMB customers were unfamiliar with the concept of time-of-use tariffs (54.6% vs 49.2%).
- **Network control:** More than half of Residential customers were unwilling to allow for external network control, while less than 2 in 5 SMB customers were unwilling (53.4% vs 38.2%). Price related factors were the biggest stated incentives for both Residential and SMB customers. Residential were less likely to allow smart home devices to be managed by United Energy than SMB customers (11.8% vs 19.9%).
- **Meter Upgrades:** Both Residential and SMB customers preferred United Energy to start proactively replacing meters to avoid failures, similar to other networks (76.7% vs 72.6%).
- **Overall Investment:** Slightly less than half of Residential customers and more than half of SMB customers did not feel / were not sure that the bill impact from the improvements made by United Energy represented the value for the service that they received (45.7% vs 54.3%).

Note: The percentages (%) in the brackets indicates the proportion of Residential customers vs SMB customers. For example, 37.0% of Residential CitiPower customers consider electrifying their gas appliances in the near future compared to 58.3% of SMB CitiPower customers.

Residential Customers

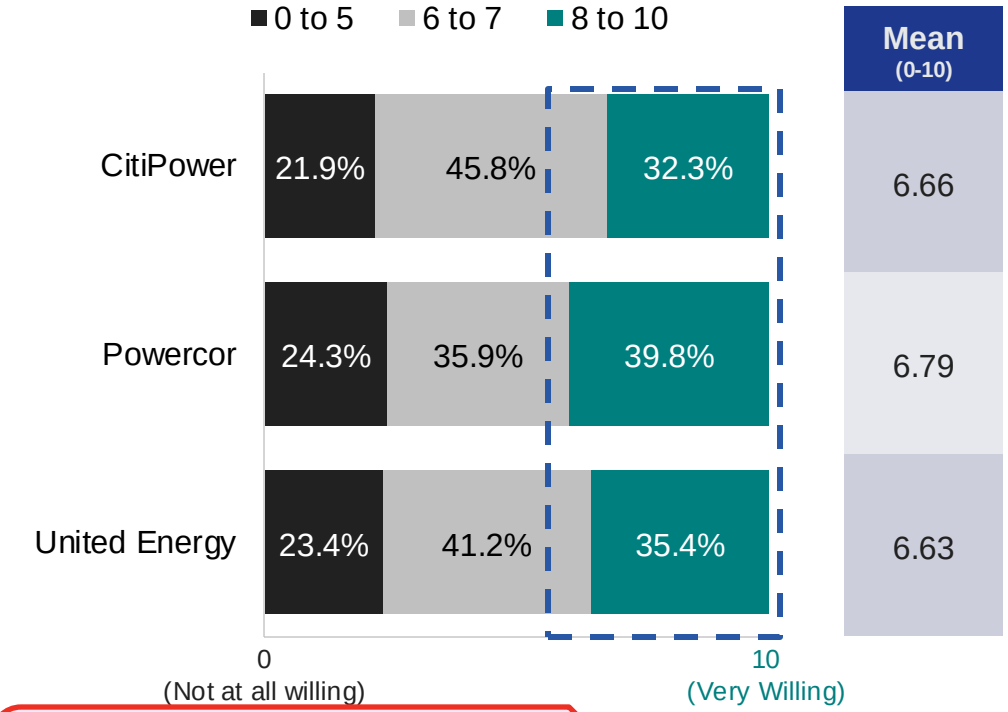


Shifting consumption habits

- How many customers are willing to load shift?
- What do they look like?
- What are the motivators and barriers of this behavior?

While over 30% of customers indicated they were willing to shift their energy usage, around two thirds have not made any changes to shift it in the past 12 months

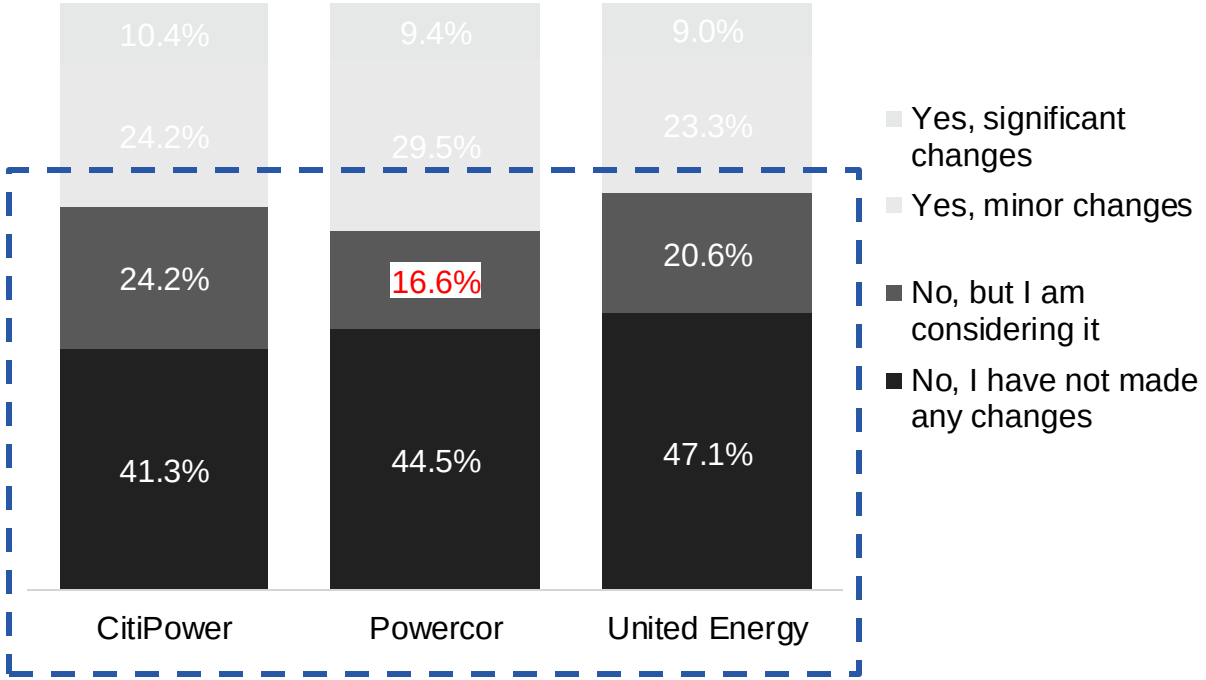
Willingness to shift energy usage to off-peak hours



The percentages in the bars indicates the spread of the results. So, 32.3% of all Residential CitiPower Customers rated their willingness between 8 and 10, with 10 being very willing and 0 being not at all willing.

The mean informs the average across all residential customers i.e. Residential CitiPower Customers rated their willingness on average 6.66 out of 10.

In the past 12 months, have you made any changes to shift your energy usage to off-peak hours in your household?



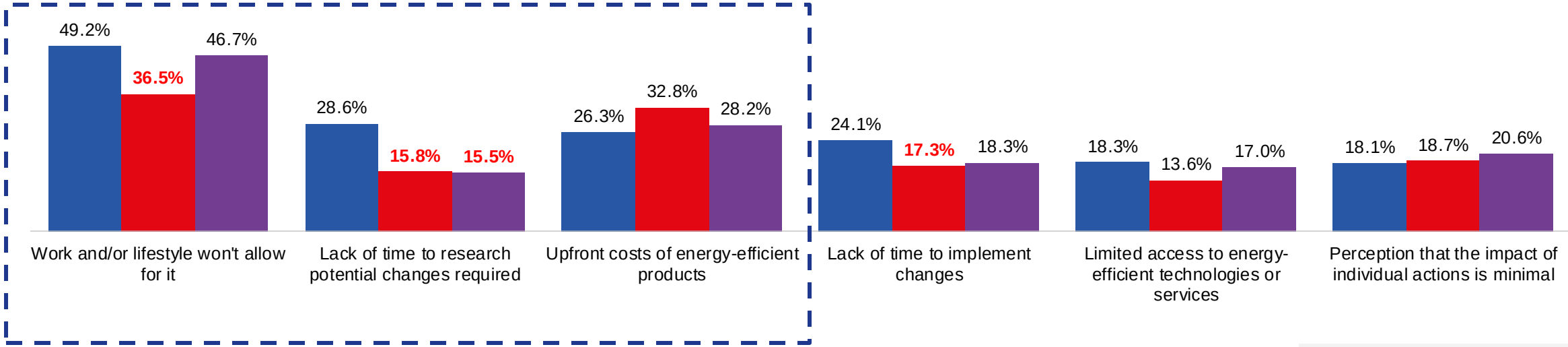
	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Red indicates that the other network result was significantly lower than the CitiPower result. Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between CitiPower and other networks. No substantial differences were found.

Work and/or lifestyle activities as well as the upfront cost of energy-efficient products were the top three barriers that prevented customers from shifting their energy usage

What are the barriers preventing you from shifting your energy usage to off-peak hours in your household?

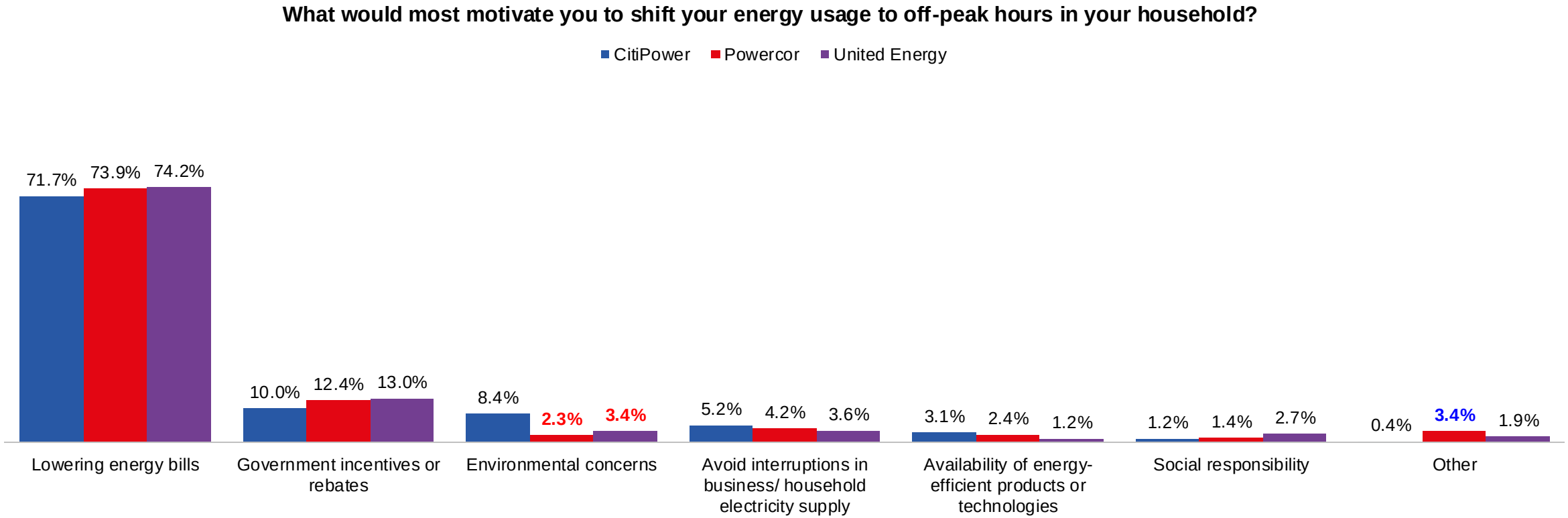
CitiPower customers were also more likely to not have enough time to research on the changes required. This was likely attributed to a higher portion of CitiPower customers working full-time, compared to Powercor and United Energy where more customers were older and either had full-time home duties or were retired. Meanwhile, Powercor customers were least likely to be unable to shift due to their current lifestyle but were unable to due to the potential high upfront costs of switching to energy-efficient products.



	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Red indicates that the other network result was significantly lower than the CitiPower result. Multiple responses were allowed for this question, so these results may not sum to 100%.

When asked about motivators that would shift their energy behaviours, price-related factors were stated as the main motivator



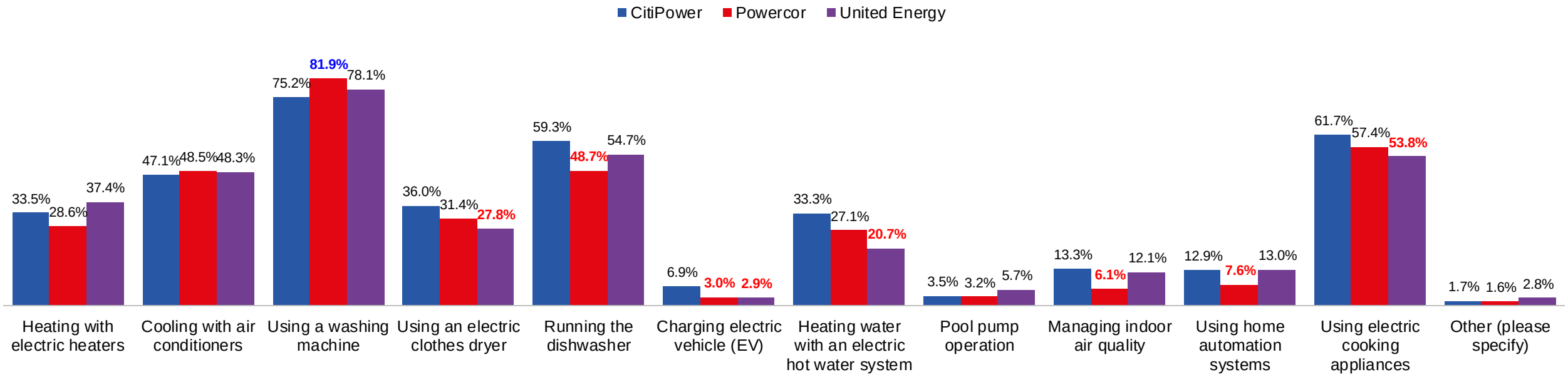
	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates it was significantly lower.

Among household appliances, washing machines were the most frequently used appliance during specific times of the day

Comparing across appliances, CitiPower customers were more likely to use their appliances during specific times than Powercor and United Energy customers. This maybe due to CitiPower having less time and less flexibility to change their energy consumption behaviors because of work commitments.

Which of the following do you typically use during specific times of the day in your household?

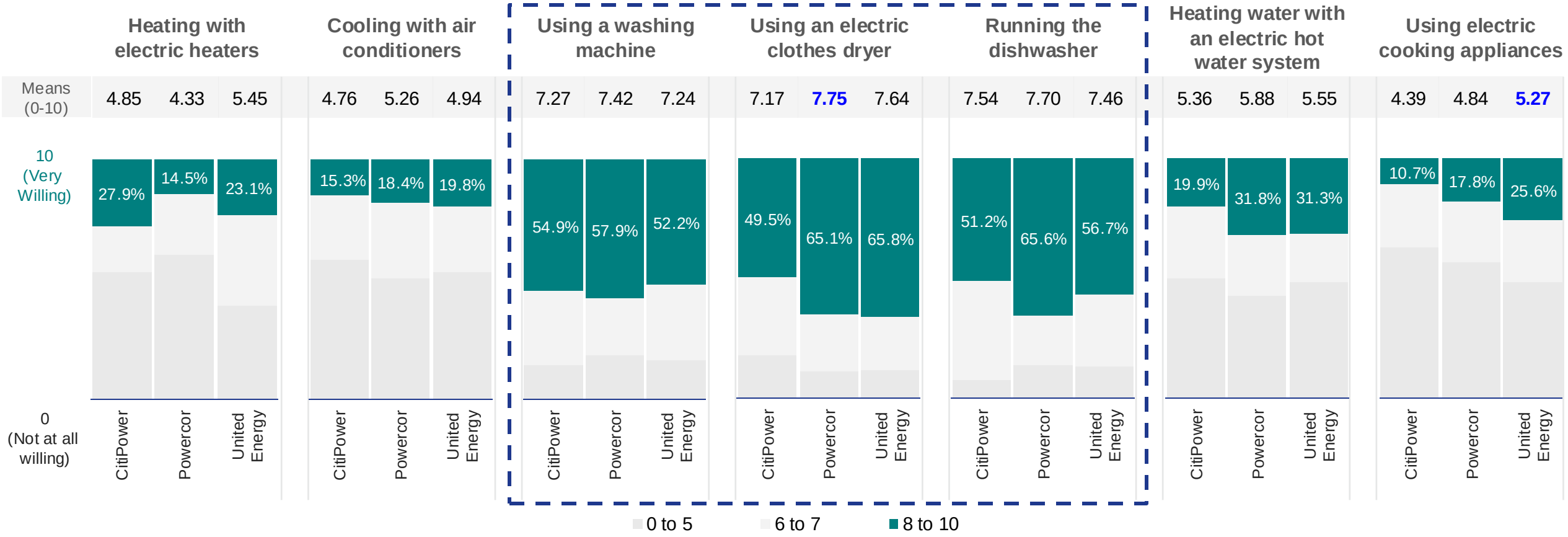


	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower. Multiple responses were allowed for this question, so these results may not sum to 100%.

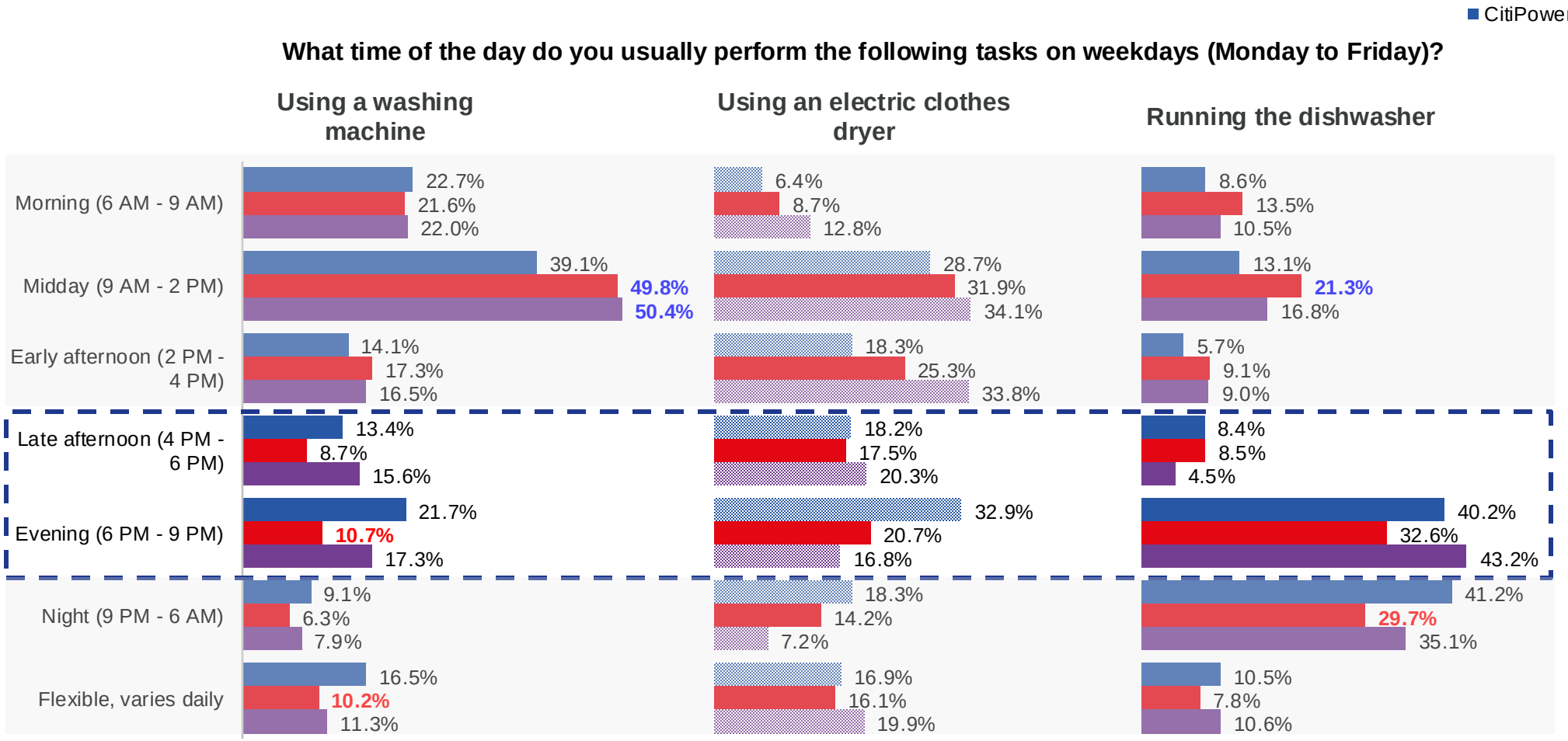
Washing machine, electric clothes dryer and dishwasher were the appliances that customers were willing to adjust the timing of their usage

Of the appliances that you typically use during specific times of the day, how willing are you to adjust the timing of these tasks in your daily routine and do these at a different time of day?



Note: Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between CitiPower and other networks. Blue indicates that the other network result was substantially higher than the CitiPower result. Results with low sample sizes were omitted. A minimum sample size of n=30 is recommended for an indicative result.

Of the appliances that customers were willing to shift, almost half of them were using their dishwashers and clothes dryers during peak hours, especially CitiPower customers



With the introduction of time-of-use tariffs, customers would also be willing to shift the timing of their usage on washing machines, dishwasher and electric clothes dryer to off-peak hours.

This was particularly true for CitiPower customers as the majority of them still used dishwashers during peak hours and were significantly more likely to shift their dishwasher usage to off-peak with the introduction of time-of-use tariffs.

	CitiPower	Powercor	United Energy
Washing Machine (n)	226	259	244
Electric Dryer (n)	99	101	90
Dishwasher (n)	182	151	171

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower. Shaded bars indicate results based on small sample sizes where significance testing could not be conducted. A minimum sample size of n=100 is recommended for an indicative result for frequencies.

Customers who are more engaged with their energy consumption (i.e., aware of time of use tariffs or willing to allow external network control) could be more likely to be willing to shift their energy to off-peak hours

Within Residential customers, those that were not willing to shift their energy usage were also less likely to allow for external network control and were less familiar with time-of-use tariffs. On the other hand, those that were willing to shift their energy usage were more likely to allow for external network control and were more familiar with time-of-use tariffs.

	CitiPower			Powercor			United Energy		
	Not willing to shift	Willing to shift		Not willing to shift	Willing to shift		Not willing to shift	Willing to shift	
% of people that are willing to allow external network control in exchange for potential cost savings	32.3%	62.5%	+30.2%	30.1%	67.4%	+37.3%	23.2%	59.2%	+36.0%
% of people that are familiar with the concept of time-of-use tariffs	42.6%	50.6%	+8.0%	34.1%	45.9%	+11.9%	46.3%	50.7%	+4.4%
Total respondents (n)	**68**	**100**		**75**	**126**		**74**	**111**	

Note: Significance testing is not conducted for results based on sample sizes less than n=100. A minimum sample size of n=100 is recommended for an indicative result for frequencies. Changes are based on unrounded values.

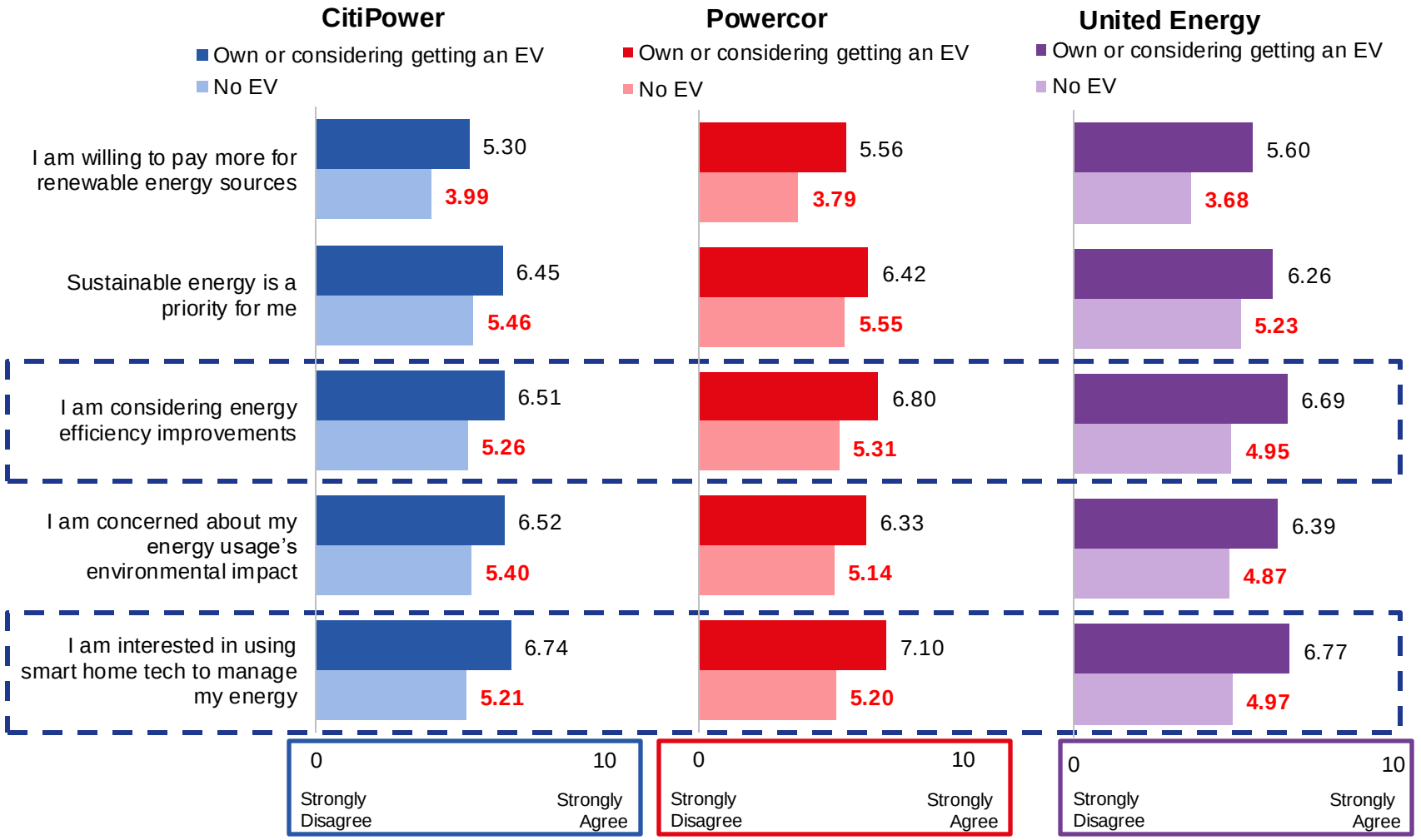
Among customers, **EV owners / considerers** showed the **highest willingness to shift** their energy usage to off-peak hours

- Households with 4 or more members also showed considerable differences which could be due to having more household members with more variable energy needs
- Appliance-heavy households were more willing to shift their energy usage to off-peak for CitiPower customers, whereas Powercor and United Energy appliance-heavy households were indifferent. This could be attributed to more CitiPower living in apartments in metro areas compared to other networks.

	CitiPower			Powercor			United Energy		
	Not willing to shift	Willing to shift		Not willing to shift	Willing to shift		Not willing to shift	Willing to shift	
Solar Customers	12.5%	12.2%	-0.3%	35.2%	32.8%	-2.4%	24.7%	27.3%	+2.6%
EV Owners / Considerers	32.5%	48.2%	+15.7%	15.3%	28.8%	+13.5%	24.5%	49.3%	+24.8%
Have 4 or more household members	8.1%	15.3%	+7.2%	9.7%	18.7%	+9.0%	12.5%	27.8%	+15.2%
Renters	48.7%	45.4%	-3.3%	27.3%	28.8%	+1.5%	29.0%	28.5%	-0.6%
9 or more different electrical appliances	29.4%	41.1%	+11.7%	32.5%	32.1%	-0.4%	31.9%	35.0%	+3.1%
Total respondents (n)	68	50-100		75	126		74	111	

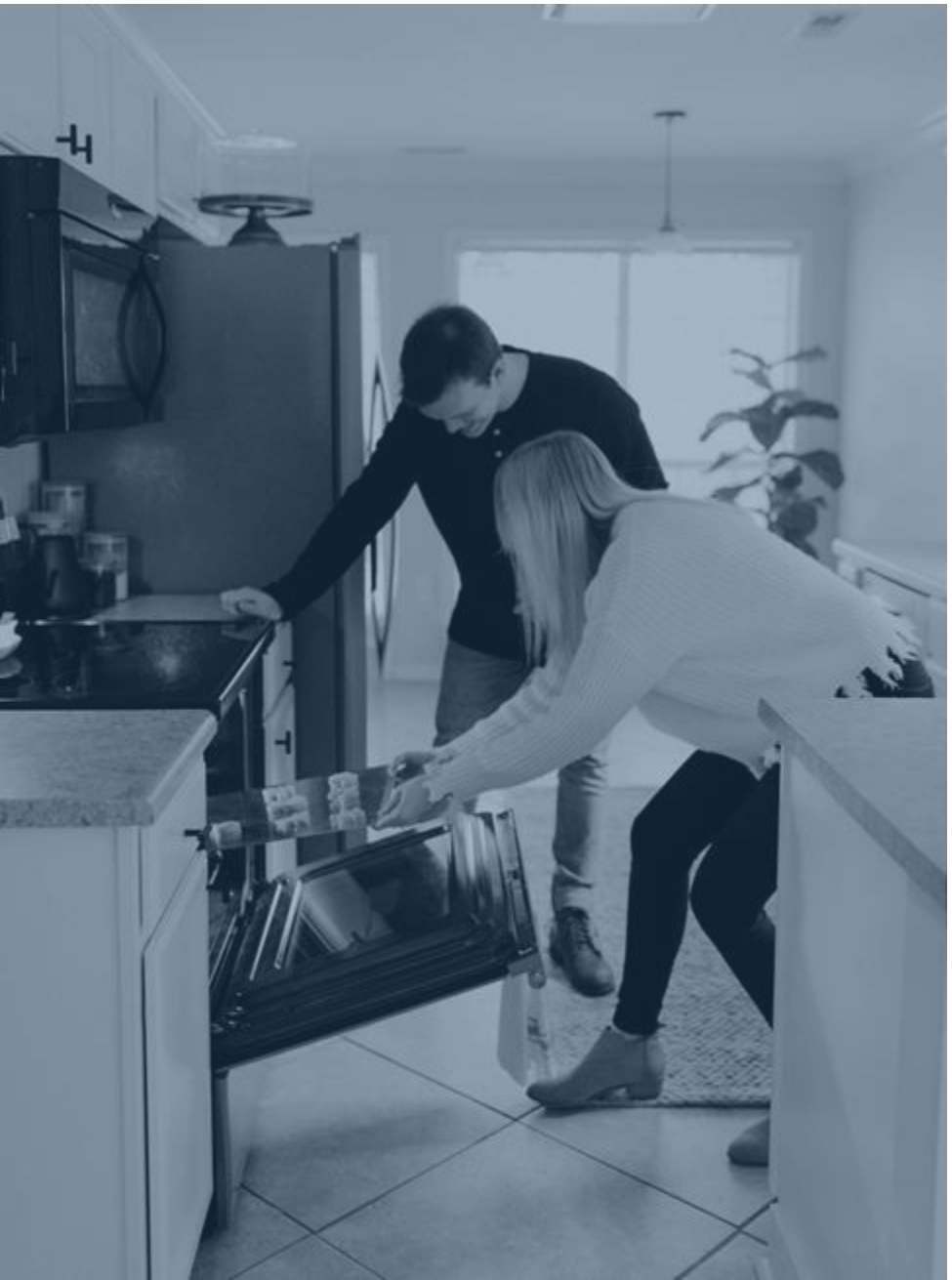
Note: Shaded cells indicate results based on small sample sizes where significance testing could not be conducted. A minimum sample size of n=100 is recommended for an indicative result for frequencies. Changes are based on unrounded values.

Comparing to non-EV customers, EV owners / considerers were more interested in smart automated and energy efficient products to help manage and improve their energy usage



	CitiPower	Powercor	United Energy
Own / consider EV (n)	145	70	119
No EV (n)	166	247	194

Note: Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between Own or considering getting an EV and No EV. Red indicates that the No EV result was substantially lower than the Own or considering getting an EV result.

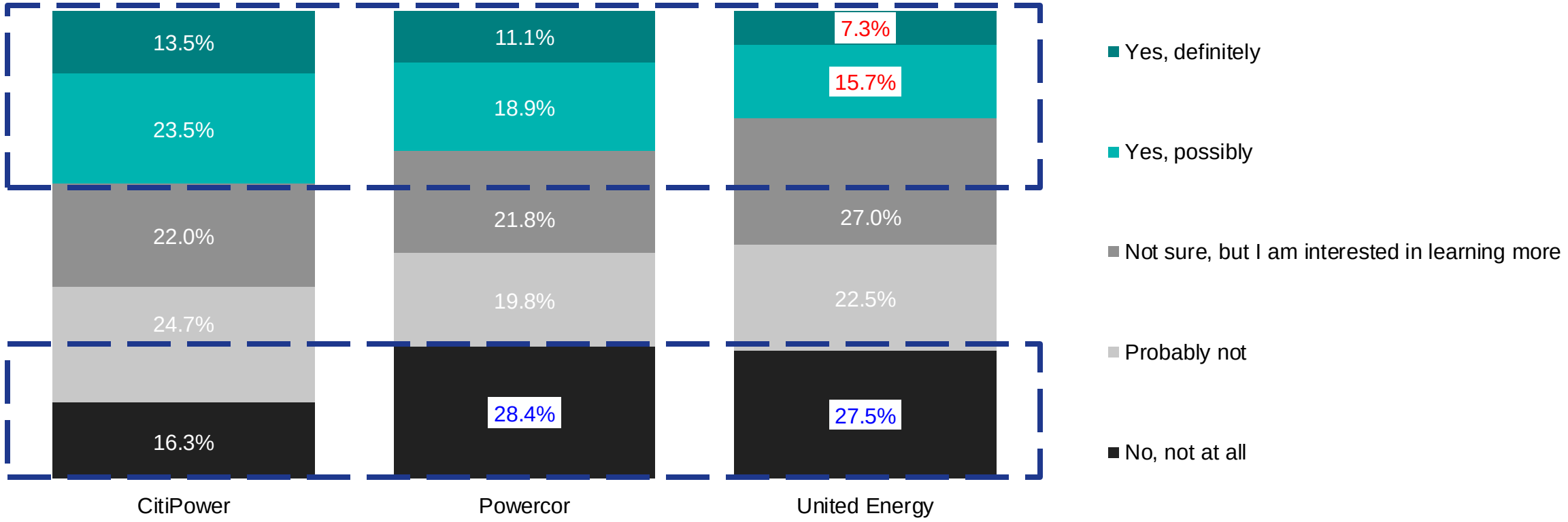


Electrification:

- What is the current usage of gas?
- What are the attitudes towards gas replacement?
- When will gas replacement most likely occur?

CitiPower customers were the most likely to consider electrifying gas appliances, while over a quarter of Powercor and United Energy customers would not consider it at all in the near future

Are you considering electrifying your gas appliances in the near future?

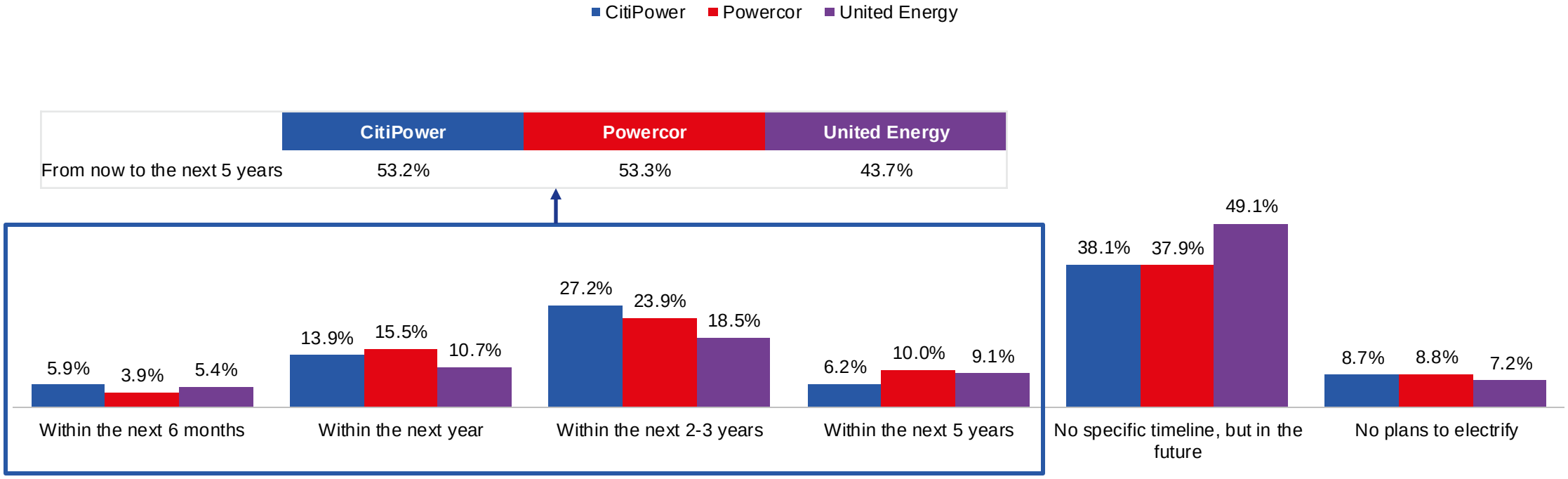


	CitiPower	Powercor	United Energy
(n)	198	225	242

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower.

Half of CitiPower and Powercor customers were planning to replace their gas appliances within the next 5 years, with around 40% of United Energy customers planning to do so as well

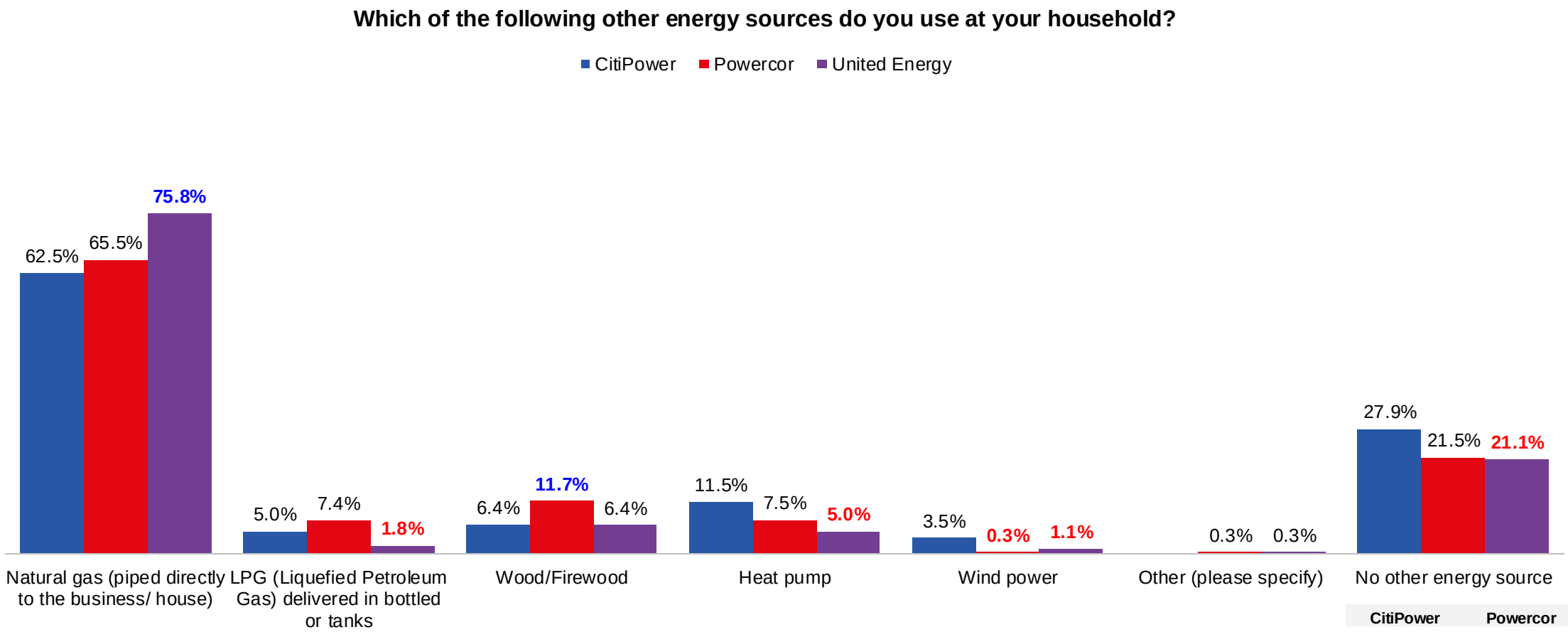
When do you plan to replace your gas appliances with electric alternatives?



	CitiPower	Powercor	United Energy
(n)	118	114	120

Note: Significance testing was conducted between Residential CitiPower and the other networks at the 5% level of significance. No significant differences were found.

Over two third of customers used natural gas at home. This was most pertinent for United Energy customers

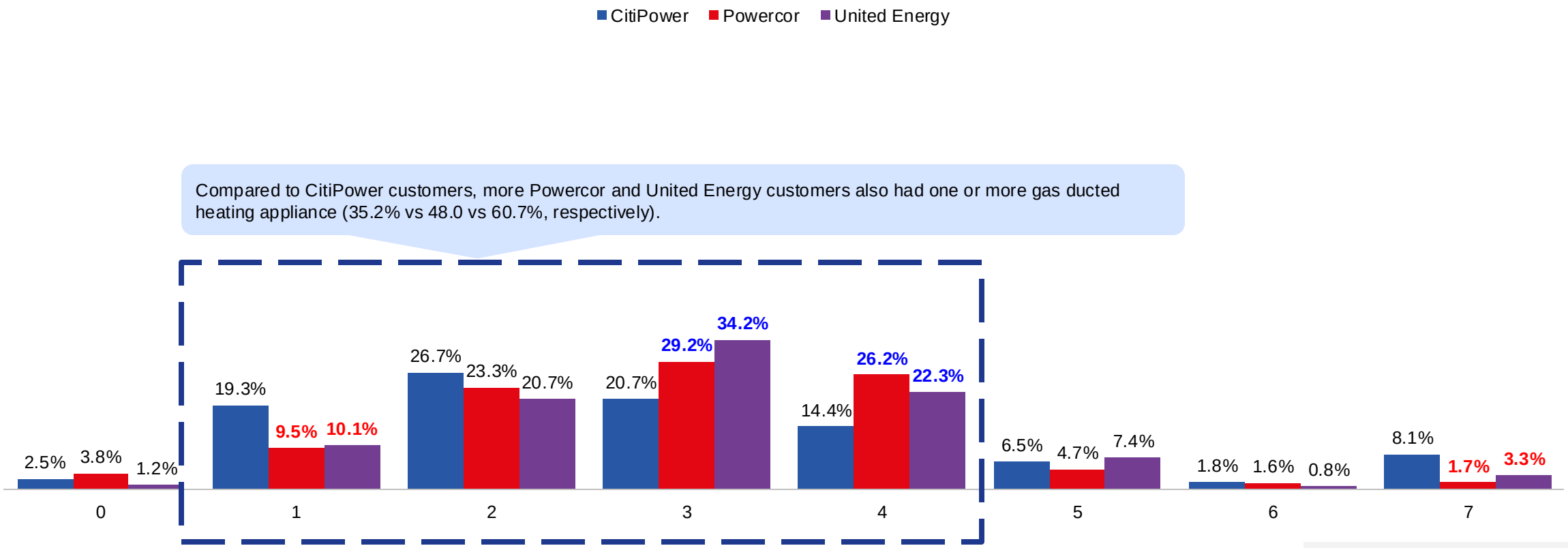


	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between Residential CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the Residential CitiPower result and red indicates that it was significantly lower.

Powercor and United Energy customers had different gas appliances to CitiPower, especially gas ducting heating appliances

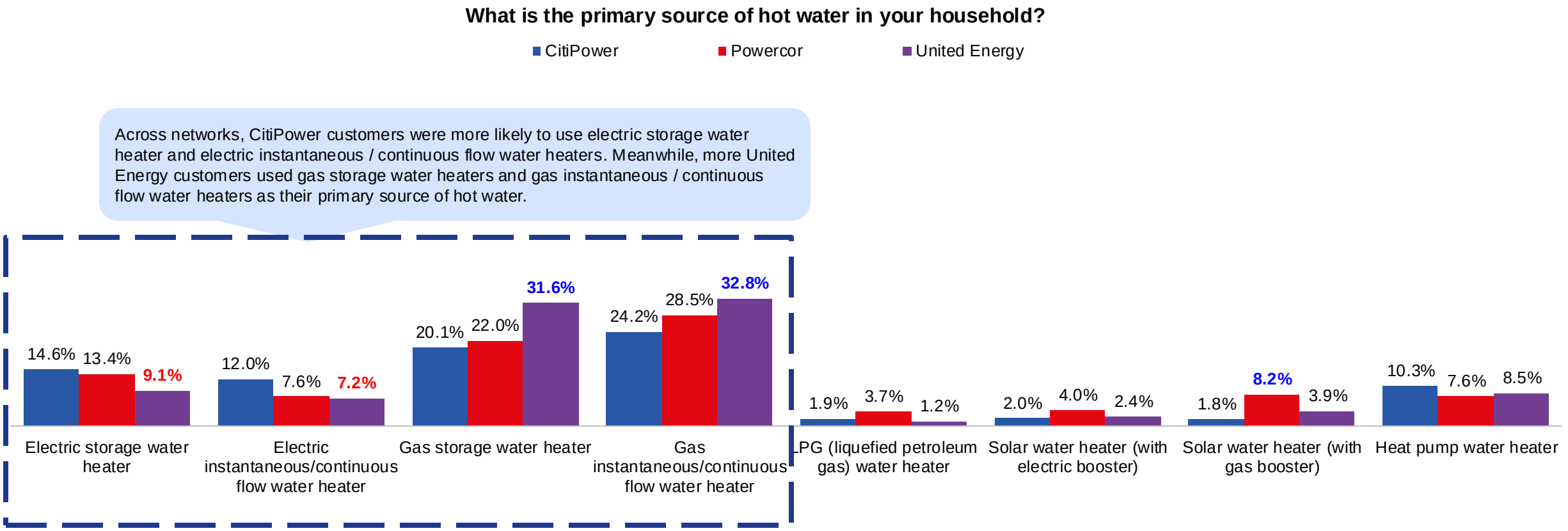
The number of different gas product/services that the household currently owns. (excl. BBQ)



	CitiPower	Powercor	United Energy
(n)	198	225	242

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower.

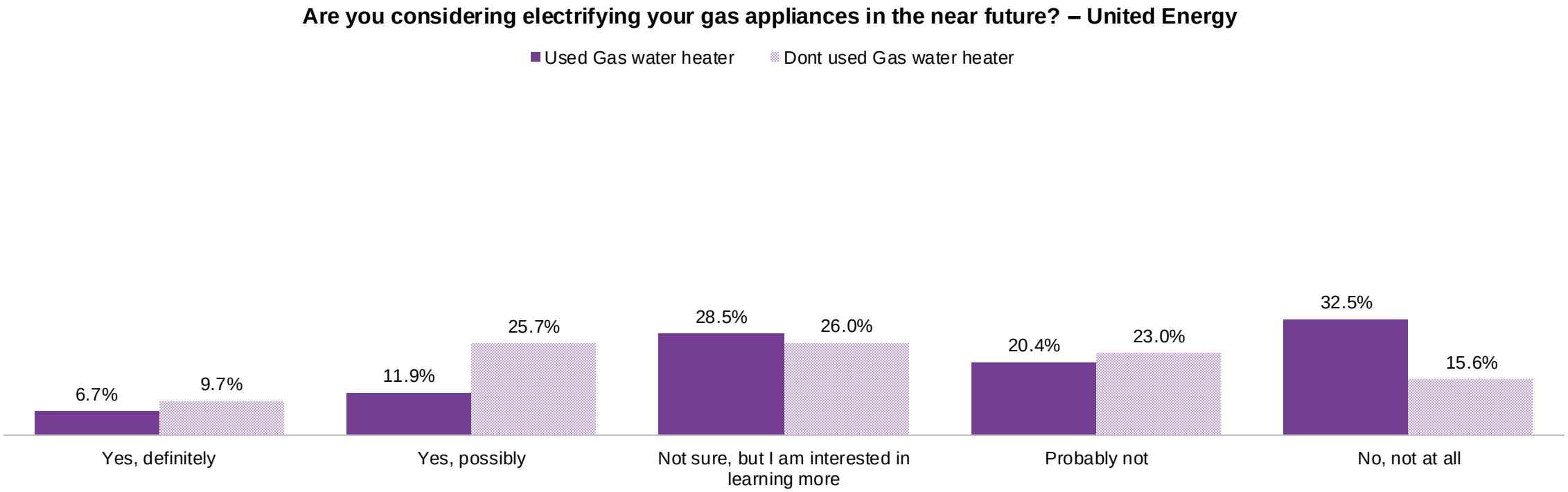
Almost 1 in 2 customers were also still using a gas water heater as their primary source of hot water, significantly so for United Energy



	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower.

Looking specifically into United Energy, customers who still used a gas water heater as their primary source were more unlikely to electrify their gas appliances

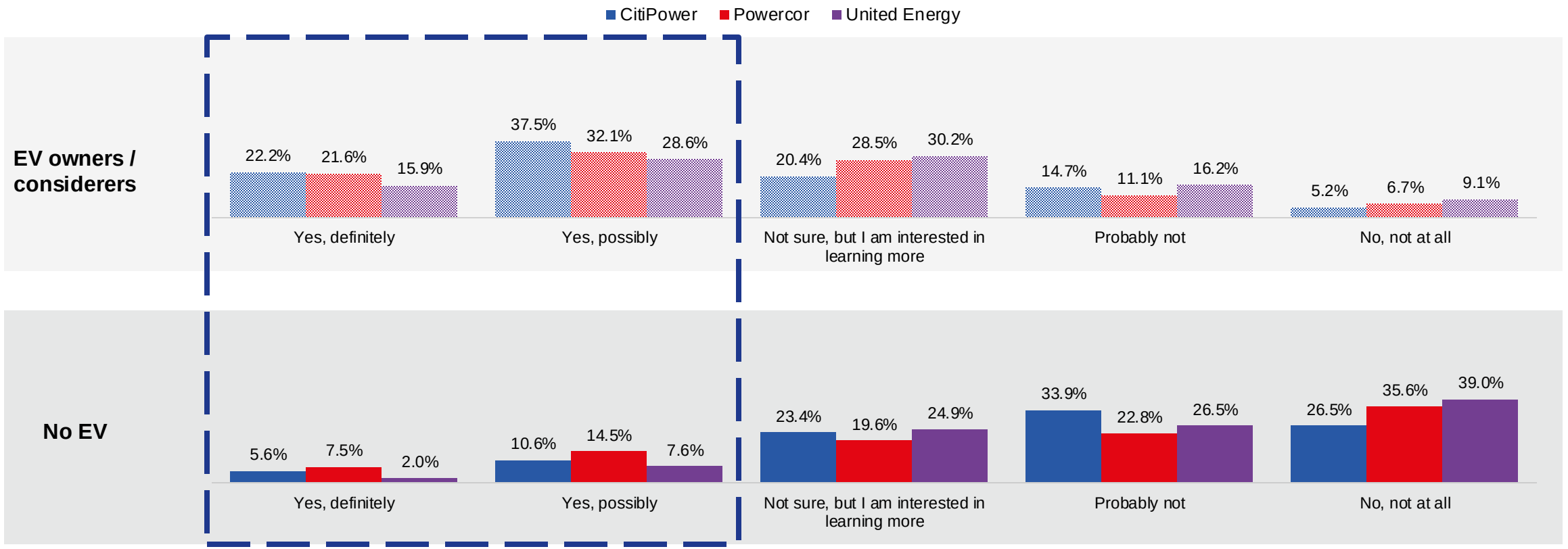


	Used gas water heater	Didn't use gas water heater
(n)	174	62

Note: Significance testing was conducted between Used Gas water heater and the other networks at the 5% level of significance. No significant differences were found. Shaded bars indicate results based on small sample sizes. A minimum sample size of n=100 is recommended for an indicative result for frequencies.

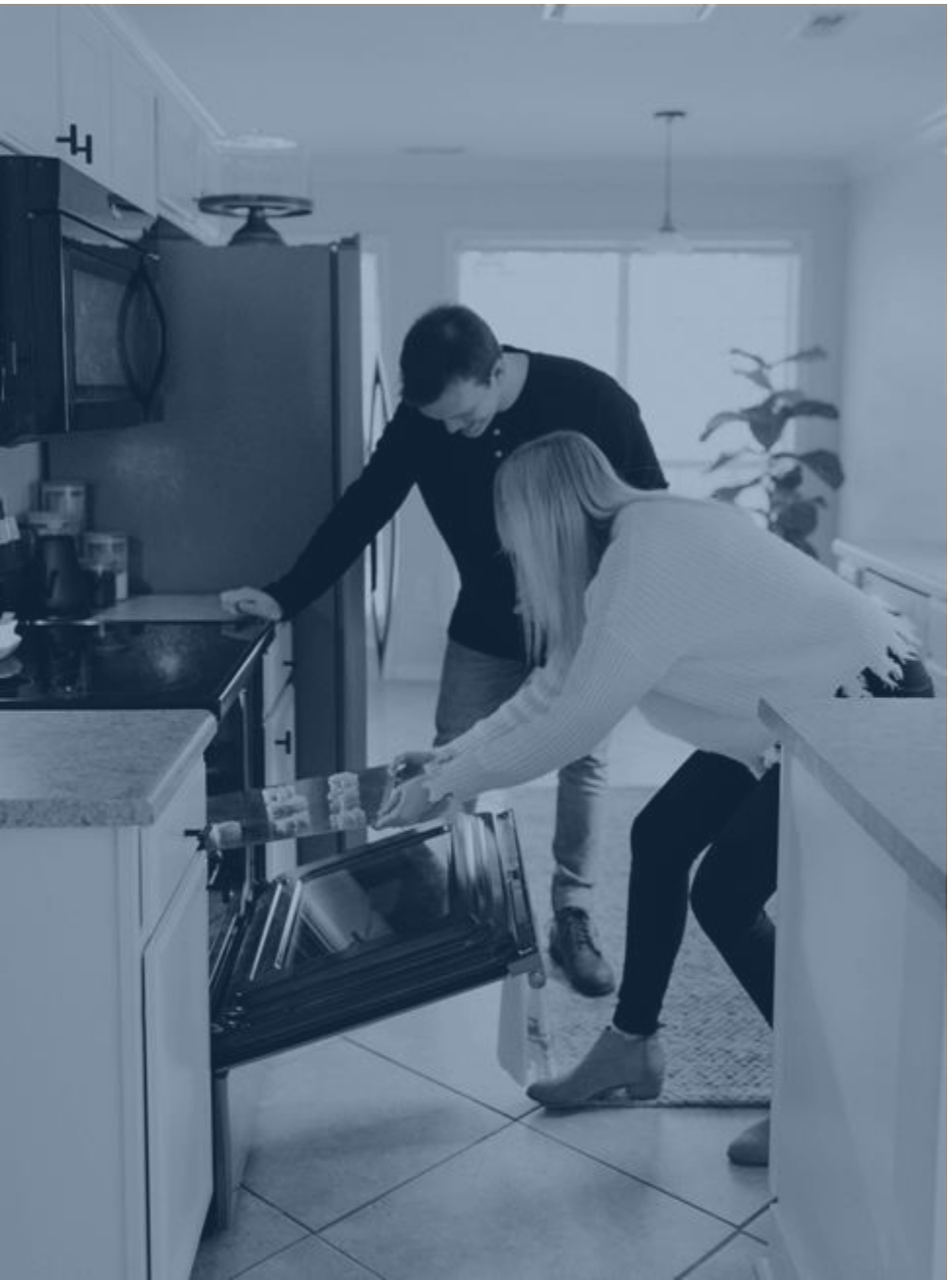
Additionally, energy conscious customers like EV customers showed greater inclination to electrify their gas appliances, driven by environmental goals to shift to more renewable sources

Are you considering electrifying your gas appliances in the near future?



	CitiPower	Powercor	United Energy
Owns / considering EV (n)	96	51	92
No EV (n)	102	174	150

Note: Shaded bars indicate results based on small sample sizes where significance testing could not be conducted. A minimum sample size of n=100 is recommended for an indicative result for frequencies.



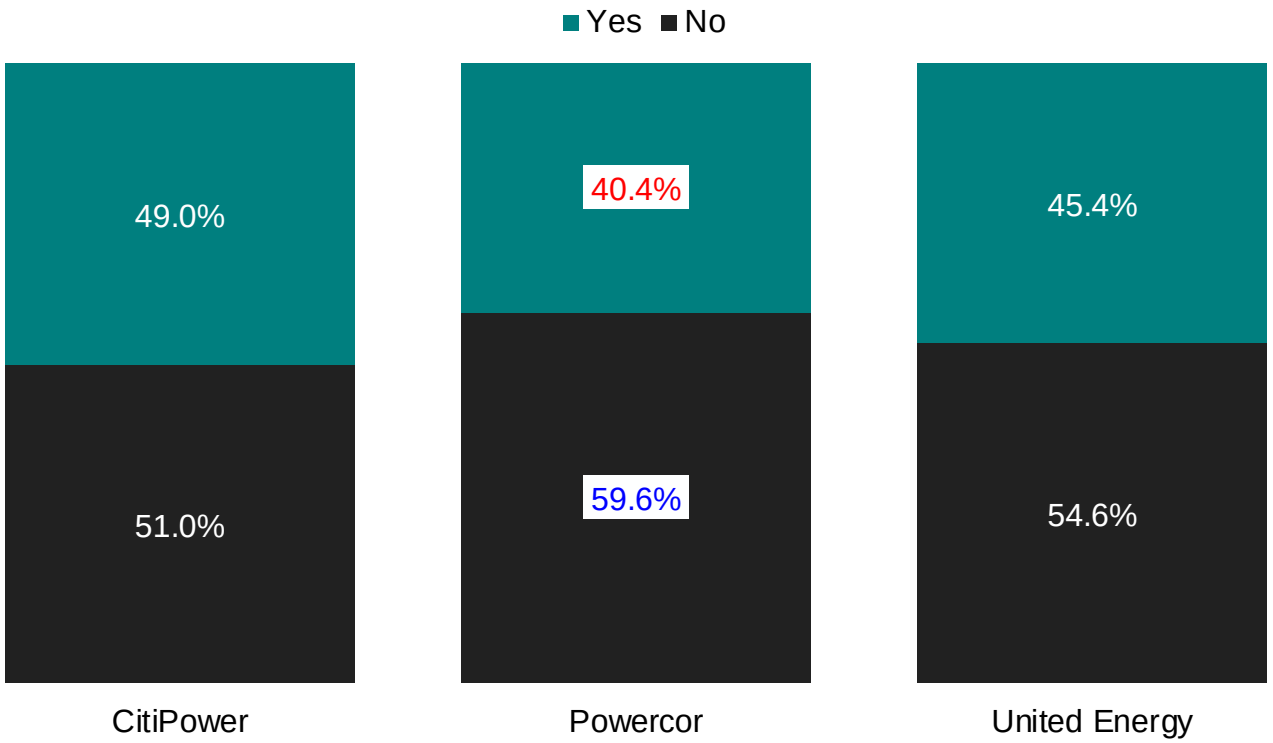
Time of Use Tariffs:

- How familiar are customers with time-of-use tariffs?
- How are customers stating they will respond to them?

Note: this study is only testing potential uptake, it is **not** testing the appeal/design of the tariffs / **not** identifying improvements to tariff design

More than half of the customers were unfamiliar with the concept of a time-of-use tariff, with Powercor more so than other networks

Are you familiar with the concept of time-of-use tariffs for energy pricing?



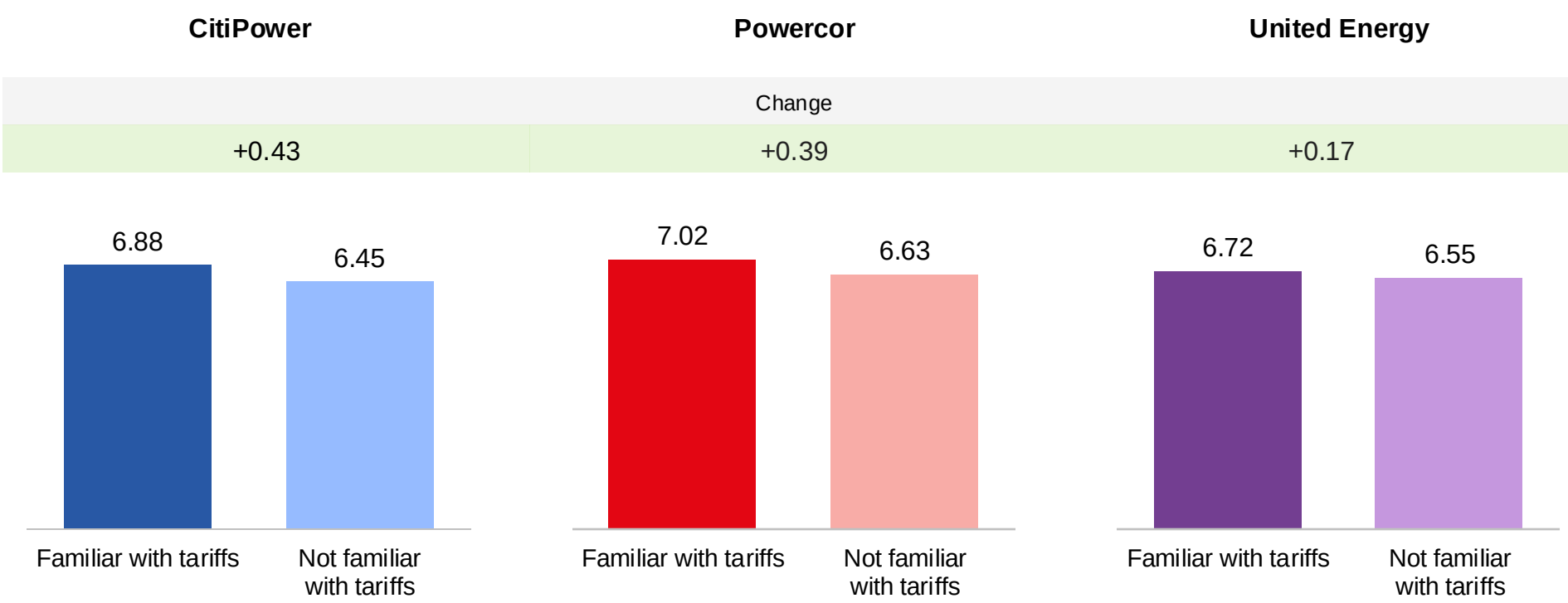
When considering the appliances and activities customers were most likely to shift under a time-of-use tariff plan, the preferences remained consistent even without the tariff plan. The washing machine, dishwasher, and electric clothes dryer were consistently identified as the appliances customers were most willing to shift, regardless of the presence of time-of-use tariffs.

	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower.

As more customers get familiar with the concept, customers could be more willing to shift their energy usage to off-peak hours

Overall willingness to shift energy usage to off-peak hours



Across all networks, customers familiar with time-of-use tariffs were more likely to shift their energy usage—particularly for appliances like the washing machine, clothes dryer, and dishwasher—compared to those who were unfamiliar with these tariffs.

The mean informs the average across all residential customers where 0 indicates not at all willing and 10 indicates very willing i.e. Residential CitiPower Customers that are familiar with tariffs rated their willingness on average 6.88 out of 10.

	CitiPower	Powercor	United Energy
Not familiar (n)	157	186	169
Familiar (n)	154	131	144

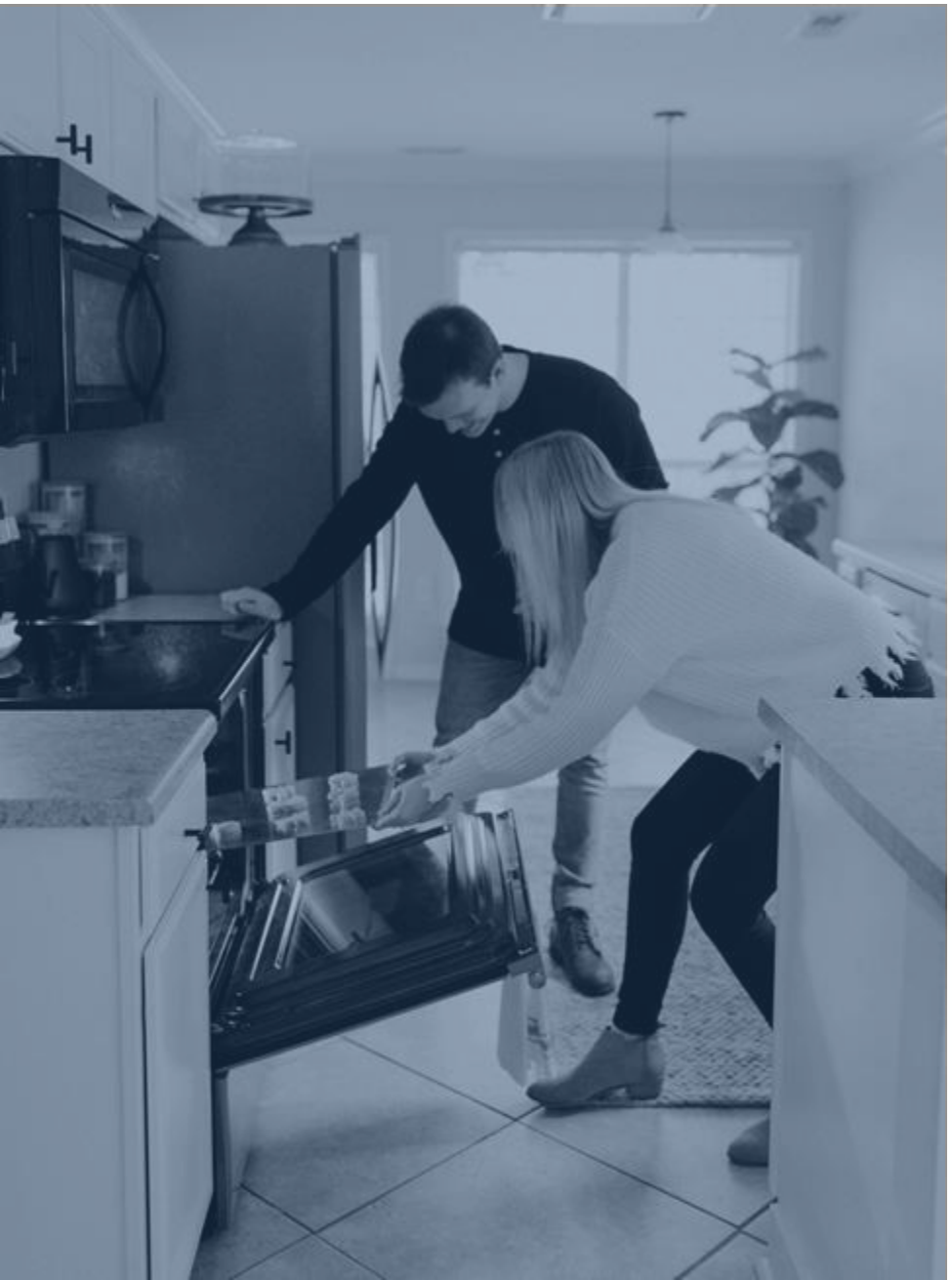
Note: Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between Familiar and Not familiar. No substantial differences were found. Changes in scores are unrounded figures.

Non-renters and solar customers showed greater familiarity with the concept, with those that were familiar more likely to be engaged with their energy consumption behaviors

Customers who were familiar with time-of-use tariffs were more conscious of their energy usage, as they were more likely to have already shifted their energy usage to off-peak hours in the past 12 months and will also consider electrifying their gas appliances in the near future.

	CitiPower			Powercor			United Energy		
	Familiar with time-of-use tariff	Not familiar with time-of-use tariff		Familiar with time-of-use tariff	Not familiar with time-of-use tariff		Familiar with time-of-use tariff	Not familiar with time-of-use tariff	
Solar Customers	11.1%	**17.9%**	+6.8%	27.5%	**45.3%**	+17.8%	19.2%	**33.2%**	+14.0%
EV Owners / Considerers	42.6%	50.0%	+7.3%	22.3%	25.2%	+2.9%	33.6%	44.7%	+11.0%
Renters	51.4%	39.8%	-11.5%	32.2%	22.0%	-10.2%	30.4%	20.1%	-10.3%
% of customers that made significant / minor changes on their energy to off-peak hours	27.9%	41.5%	+13.6%	31.9%	49.2%	+17.3%	28.3%	37.1%	+8.8%
% of customers that will definitely / possibly electrify their gas appliances in the near future	34.9%	40.6%	+5.7%	41.5%	33.2%	-8.2%	49.9%	48.0%	-1.9%
Total respondents (n)	50-157	68-154		64-186	50-131		65-169	55-144	

Note: Significance testing was conducted between Not familiar with tariffs and Familiar with tariffs at the 5% level of significance. Blue indicates that the Not familiar with tariffs result was significantly higher than the Familiar with tariffs result. Changes are based on unrounded values.



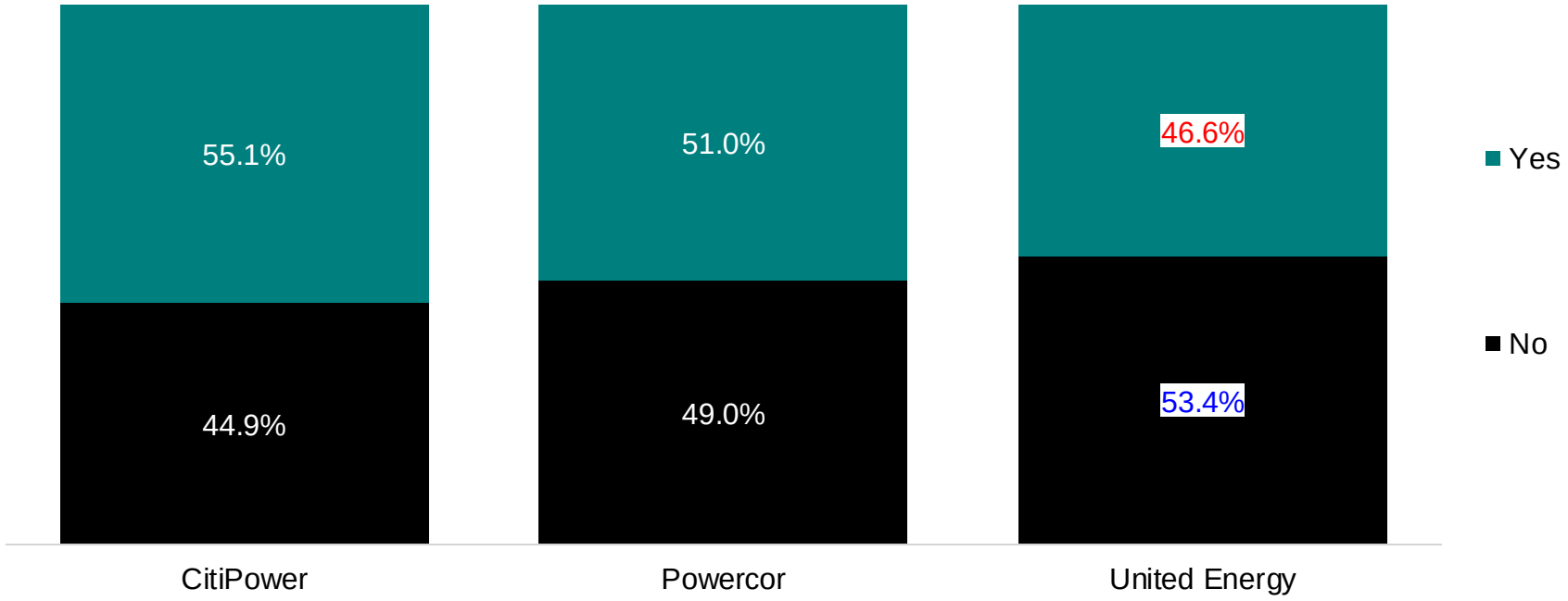
Network Control:

- What are the current level of acceptance of network control among customers?
- What areas are they willing to accept external control?

Around half of the customers would be willing to allow external network control in exchange for cost savings. United Energy customers were least likely to, compared to other networks

Are you willing to allow your energy distributor to externally manage certain aspects of your energy usage (e.g. adjusting appliance usage times) in exchange for potential cost savings?

Please note that your energy distributor may manage timing of hot water, air conditioning etc but wouldn't be looking to directly control cooking, dishwashing.



When asked about incentives to encourage customers to allow for external control, price related factors such as lowering energy bills and access to exclusive energy-saving programs or rebates remained the highest stated factor.

	CitiPower	Powercor	United Energy
(n)	311	317	313

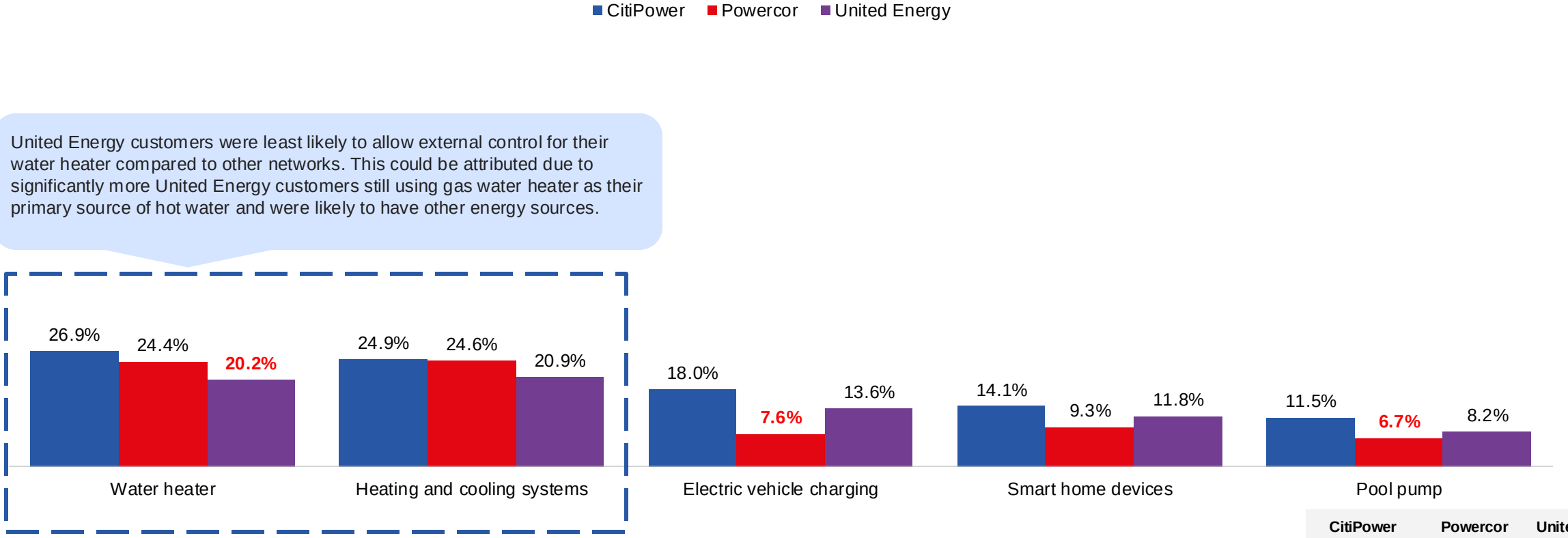
Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates it was significantly lower.

Customers that were familiar with time-of-use tariffs understood it as the differences in peak and off-peak pricing as well as providing a motivation to save costs by shifting their energy usage

CitiPower	Powercor	United Energy
"Prices are higher duration periods of peak demand (typically 7-9am and 3-9pm). Prices are lower during periods of less demand."	*"Off peak is cheaper. Peak is higher. Winter is higher for gas and electricity, and summer is less."*	*The cost of using gas and electricity during certain time frames - the cost varies depending on what time you use your energy."*
"Reduce cost by adjusting time of use."	*"Tariff rises in times of high use and is lower when more supply and lower demand."*	*"There is a tiered tariff of charges of paying higher rate on peak and lower rate off peak usage."*
"Tariffs are added at peak times so electricity costs more at this time, discouraging people from running too much power during peak times, reducing the load on the grid.."	*"At certain times of the day there are different tariffs for energy use so perhaps early in the day the tariff is higher and from the middle of the day to 9 it gets a little cheaper but after 11 it is much cheaper to run appliances."*	*"It means that people are encouraged to use their energy at non-peak times to ensure that energy consumption is not being bombarded."*

Water heater as well as the heating and cooling systems were the appliances that customers would be more willing to allow external control of

Which of the following household appliances or systems would you be willing to allow your energy provider or network to manage remotely?



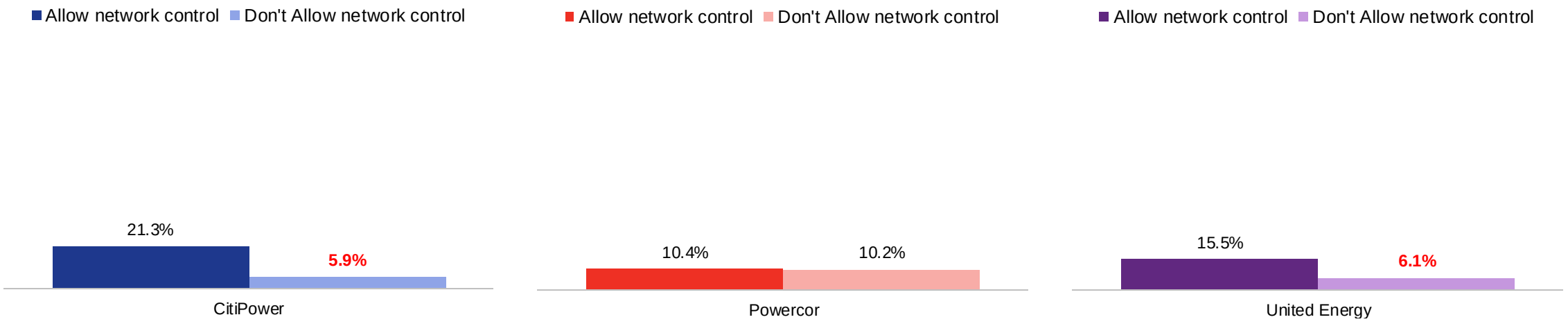
United Energy customers were least likely to allow external control for their water heater compared to other networks. This could be attributed due to significantly more United Energy customers still using gas water heater as their primary source of hot water and were likely to have other energy sources.

	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Red indicates that the other network result was significantly lower than the CitiPower result.

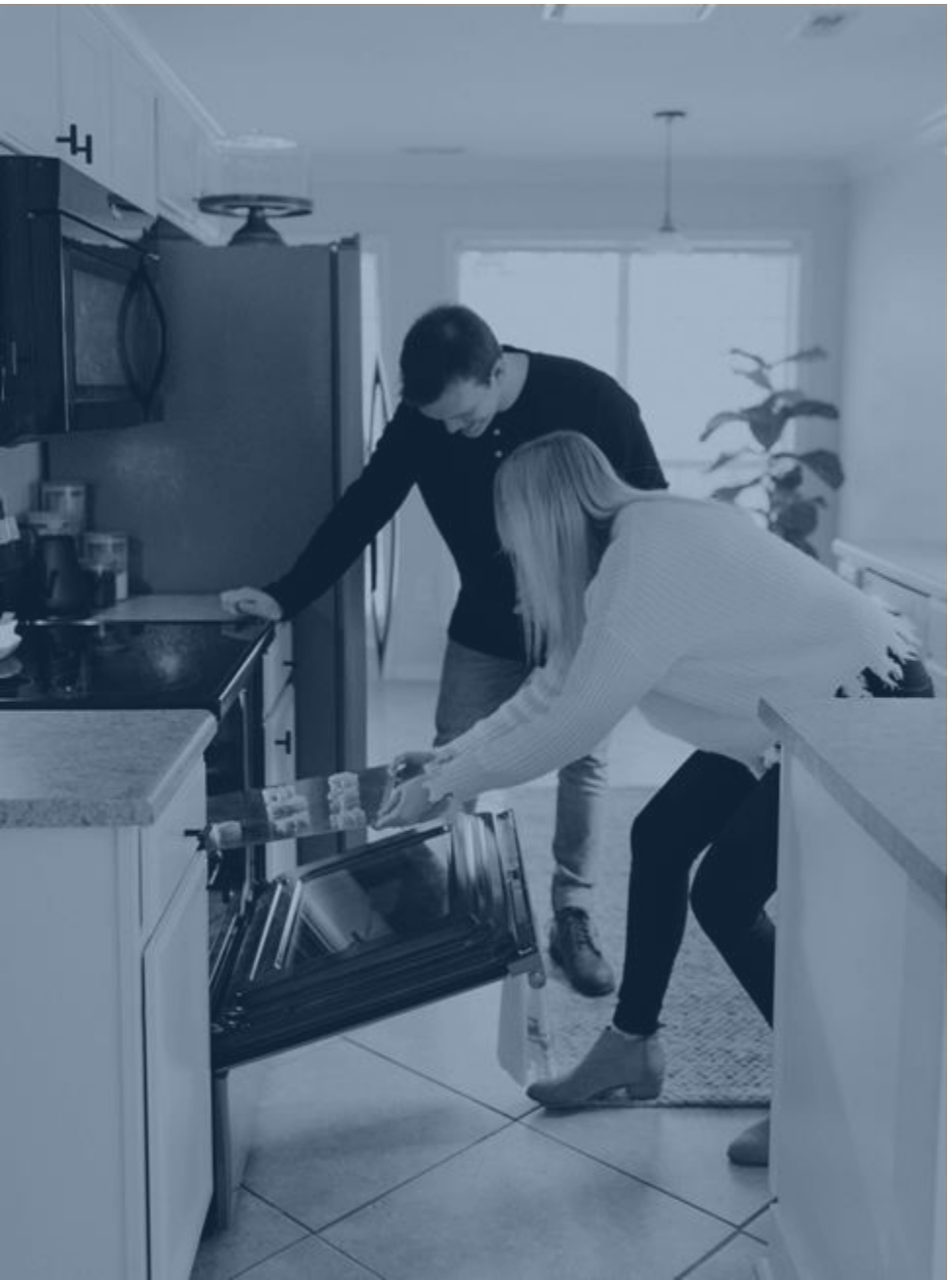
CitiPower and United Energy customers were more willing to allow for external network control if the household had a medically vulnerable customer

% of customers that are either or had someone in their household registered with your electricity provider as a 'medically vulnerable' customer due to specific health conditions or equipment requirements



	CitiPower	Powercor	United Energy
Allow network control (n)	167-169	157-159	146
Don't allow network control (n)	140-142	157-158	166-167

Note: Significance testing was conducted between Allow network control and Don't allow network control at the 5% level of significance. Blue indicates that the Don't allow network control result was significantly higher than the Allow network control result and red indicates that it was significantly lower.



Meter Upgrades and overall investment:

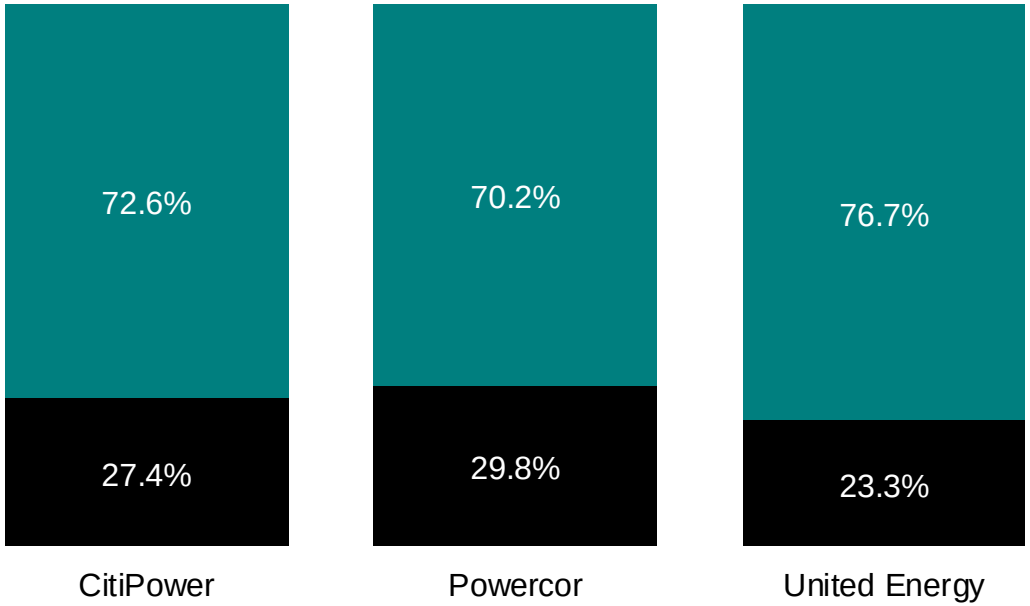
- What are customer preferences in the timing of meter replacement?
- What feedbacks do they have about the bill impact from the improvements?

For meter upgrades, customers across the networks preferred proactive meter replacements to prevent likelihood of failure despite the current price of $5 per month

The following question and explanation was shown:

"Electricity networks install and maintain smart meters in homes and businesses. Many smart meters are approaching an age where failure may increase in the coming years. In the event a customer's meter fails, this could lead to billing inaccuracies and potentially higher replacement costs.

Which of the following options do you prefer for the timing and approach of these meter upgrades?"



- Start proactively replacing meters from 2026.
  This prevents the likelihood of failures in the coming years. This results in maintaining current meter charges at about $5 per month
- Delay proactive replacement until after 2031.
  This means there might be an increase in failures in the coming years. This option would result in meter charges of around $4 per month from 2026-2031 (A decrease in $1 from the current $5 per month), but potentially increasing from 2031

	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. No significant differences were found. Figures may not sum to 100% due to rounding.

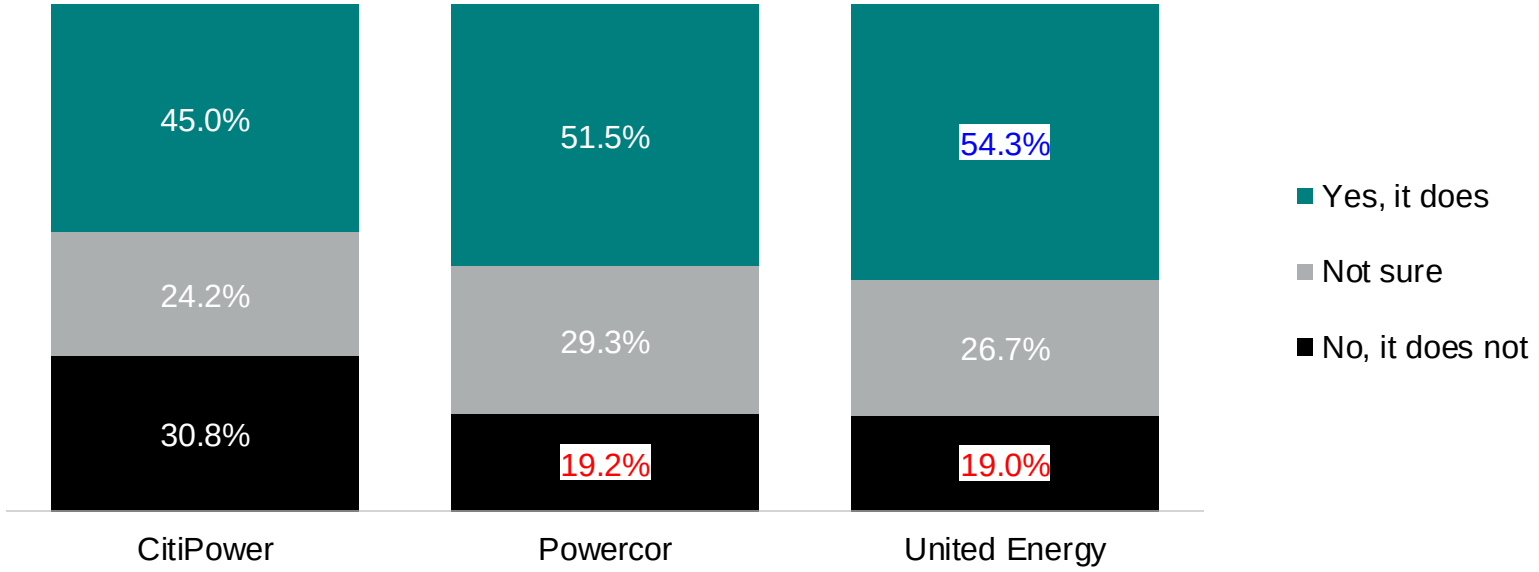
Around half of Residential customers felt that the bill impact from the improvements represented value for the service they received, with more United Energy customers feeling so

A series of improvements on key priority areas related to reliability, capacity, sustainability and customer supports were shown to customers.

Given all these improvements to help improve your network, the total bill impacts each year from all these improvements would be the following:

- **$1 (0.1% retail bill reduction) for CitiPower customers**
- **$2 (0.1% retail bill increase) for Powercor customers**
- **$1 (0.1% retail bill increase) for United Energy customers**

Do you feel this total bill impact represents value for the service you receive?



Despite about half of residential customers perceiving the improvements as valuable, roughly a quarter remained uncertain. This uncertainty may stem from heightened skepticism due to the relatively modest impact on their bills or a lack of understanding of how energy distribution billing works.

	CitiPower	Powercor	United Energy
(n)	311	317	313

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates it was significantly lower. Figures may not sum to 100% due to rounding.

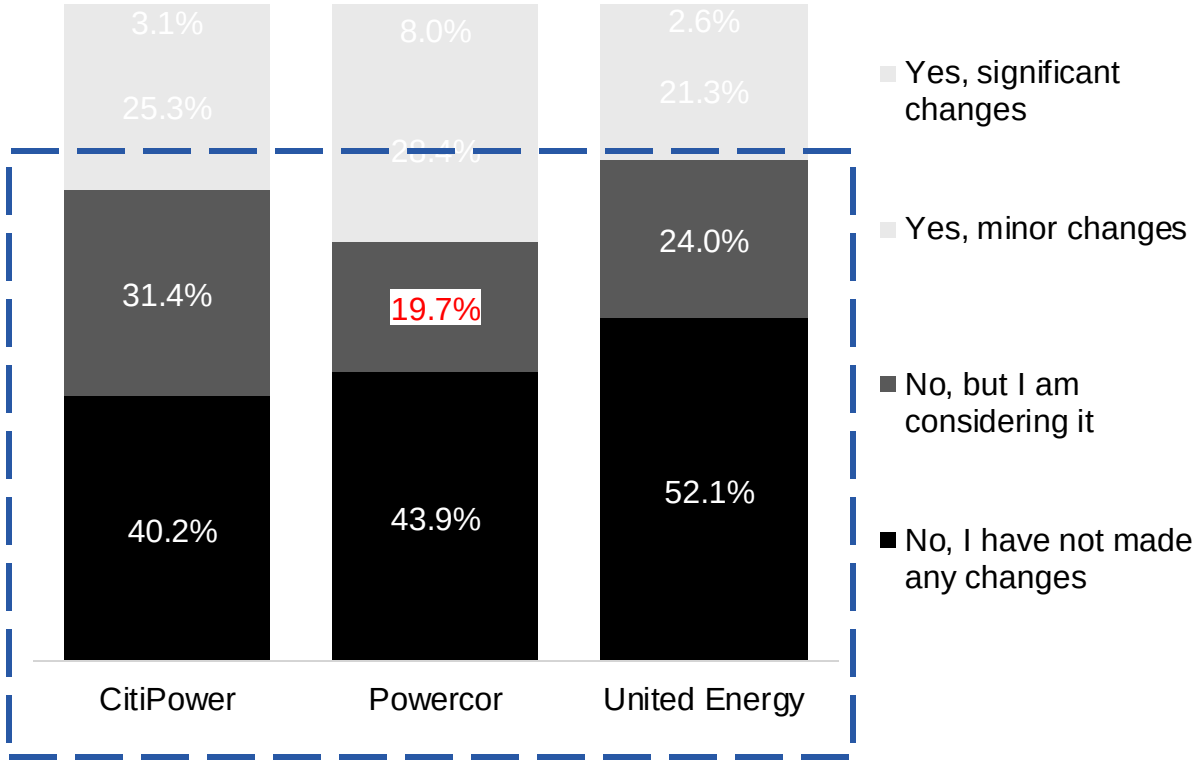
SMB Customers

Shifting consumption habits

- How many customers are willing to load shift?
- What do they look like?
- What are the motivators and barriers of this behavior?

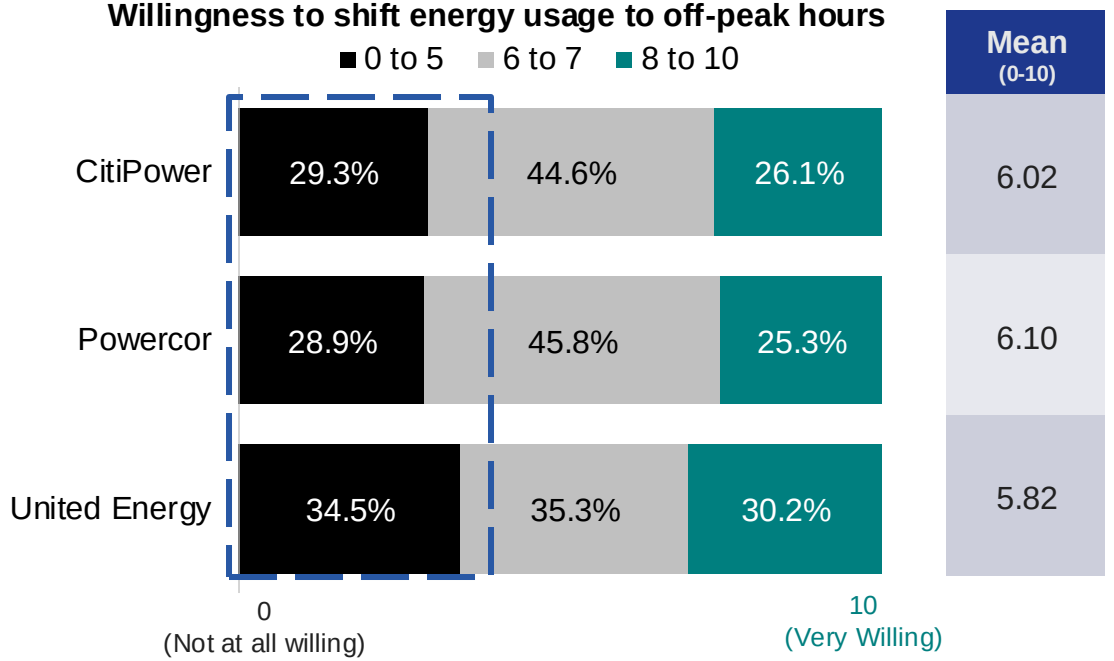
Over half of customers have not made any changes in the past 12 months with over a quarter of them not willing to shift their energy usage to off-peak hours

In the past 12 months, have you made any changes to shift your energy usage to off-peak hours in your business?



Compared against Residential customers, SMB customers were less willing to shift their energy usage to off-peak across all networks.

Willingness to shift energy usage to off-peak hours



The percentages in the bars indicates the spread of the results. So, 29.3% of all SMB CitiPower Customers rated their willingness between 0 and 5, with 10 being very willing and 0 being not at all willing.

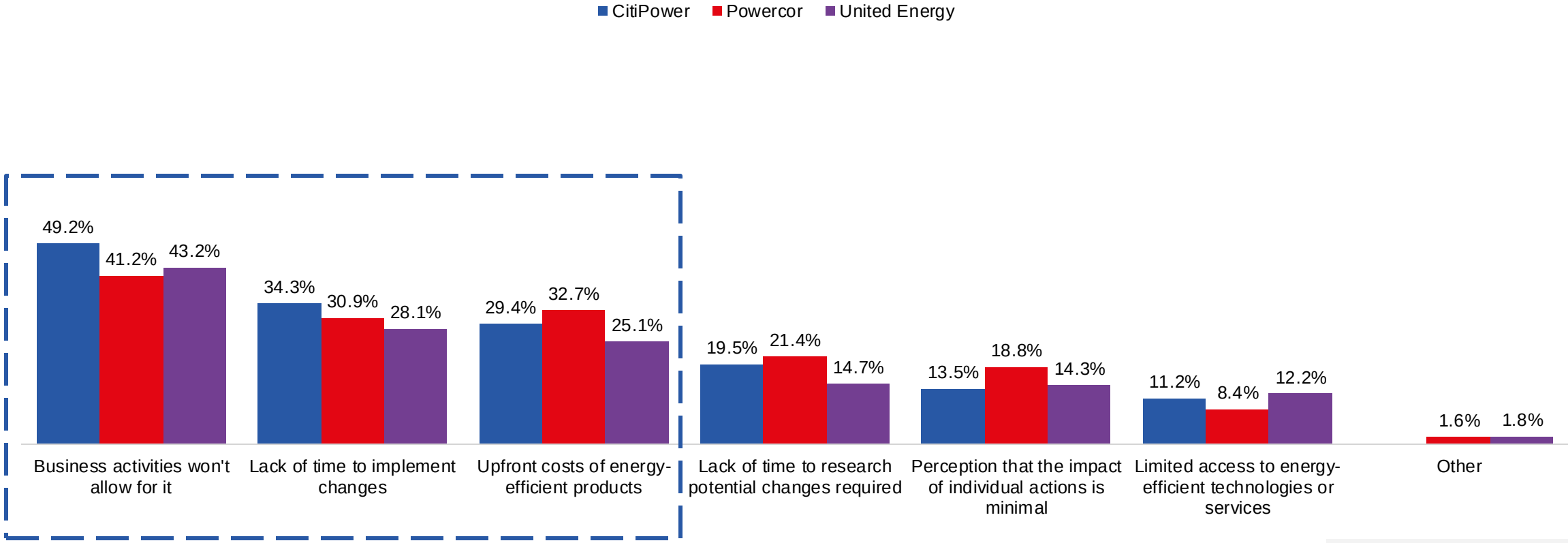
The mean informs the average across all SMB customers i.e. SMB CitiPower Customers rated their willingness on average 6.02 out of 10.

	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Red indicates that the other network result was significantly lower than the CitiPower result. Figures may not sum to 100% due to rounding. Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between CitiPower and other networks. No substantial differences were found.

Current business activities, lack of time, and upfront costs of energy-efficient products were stated by SMB customers as the top barriers that prevent them to shift their energy usage

What are the barriers preventing you from shifting your energy usage to off-peak hours in your business?

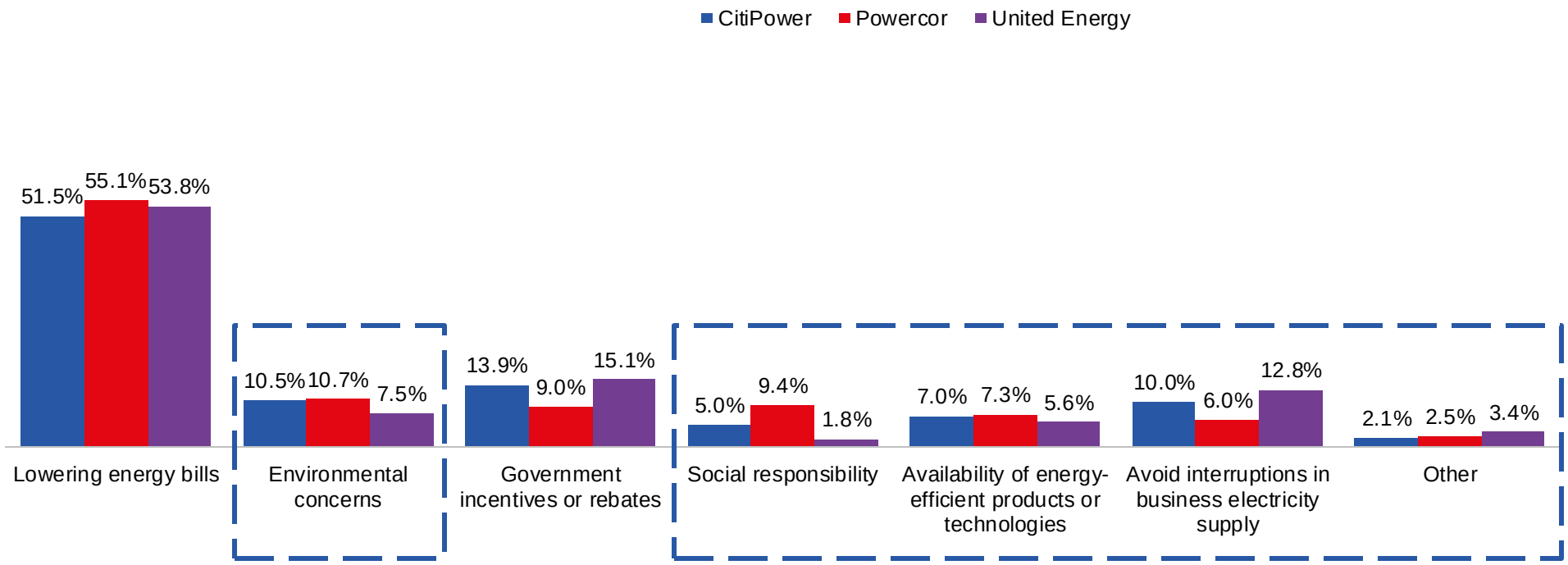


	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between SMB CitiPower and the other networks at the 5% level of significance. No significant differences were found. Multiple responses were allowed for this question, so these results may not sum to 100%.

Price-related factors remained as the stated top reason that would encourage SMB customers to shift to off-peak hours

What would most motivate you to shift your energy usage to off-peak hours in your business?

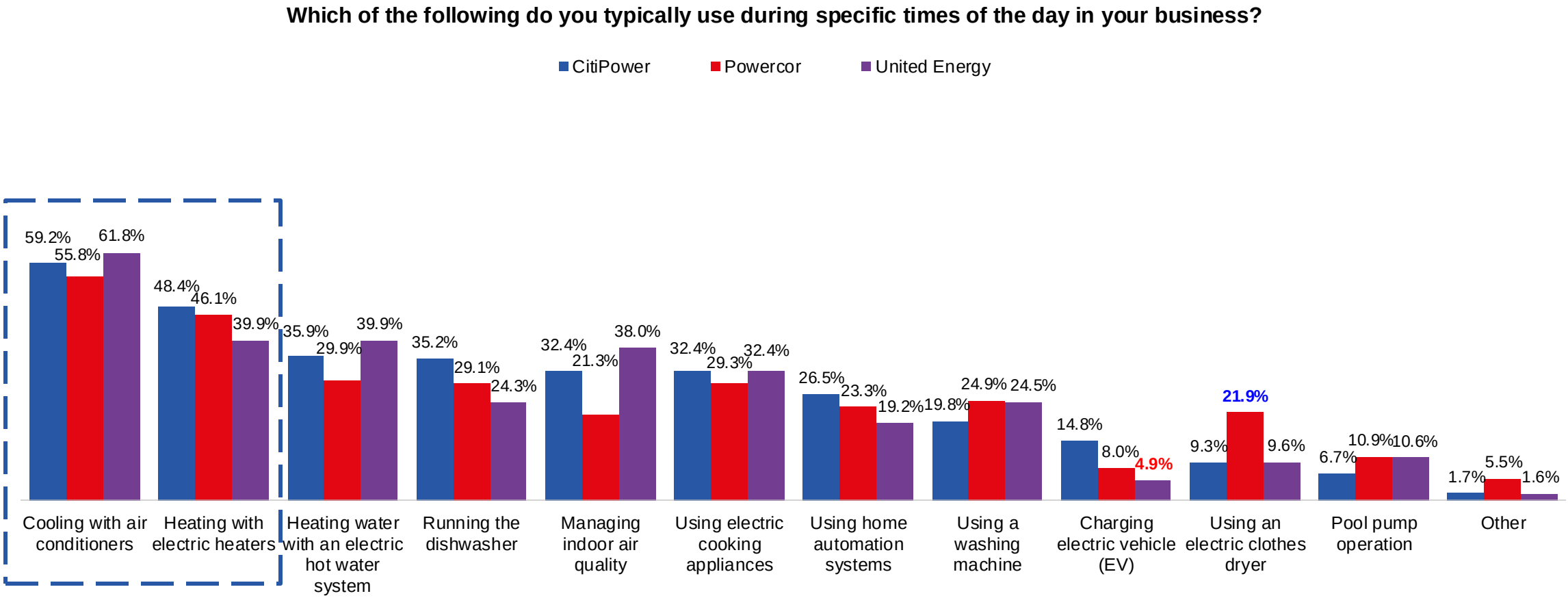


Unlike residential customers, who identified price-related factors as their primary motivators (with over 80% citing this as the main reason), approximately 30% of SMB customers mentioned non-price-related factors as key drivers for shifting their energy usage.

	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. No significant differences were found.

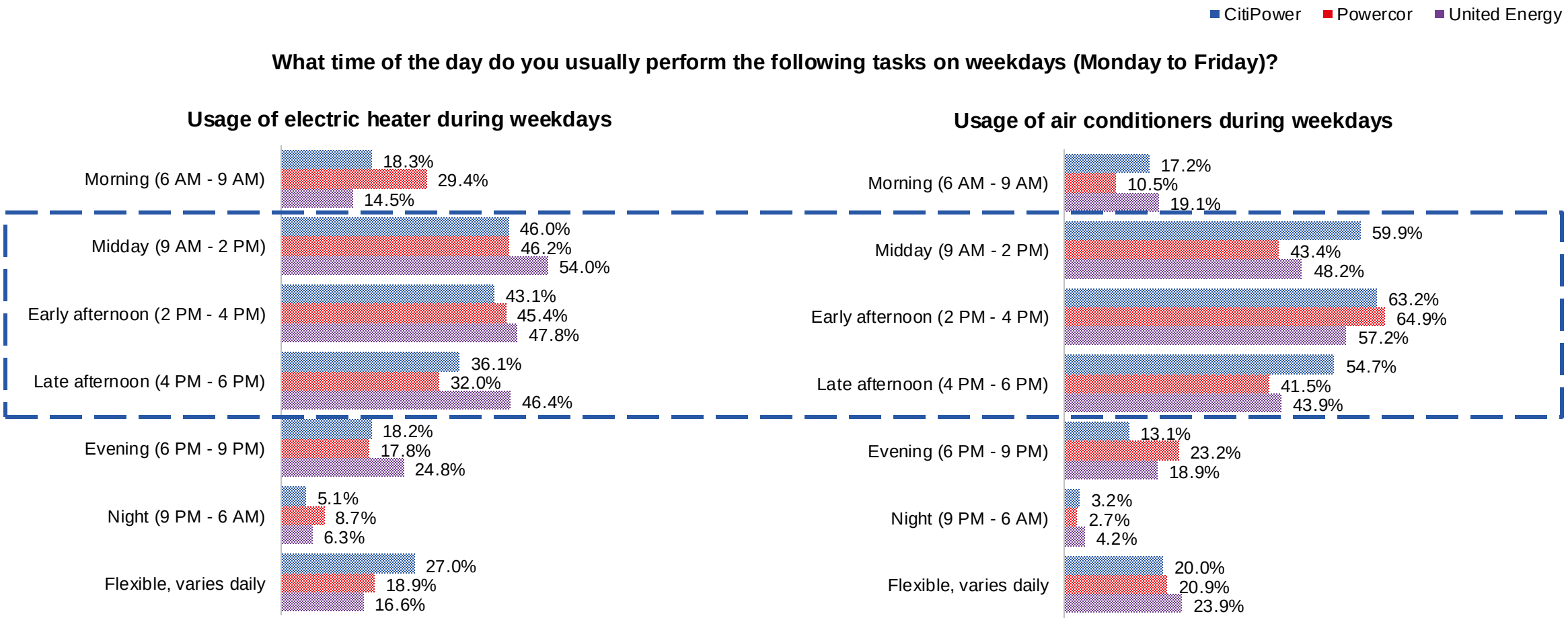
Across appliances, SMB customers were frequently using heating and cooling systems, especially air conditioners, during specific times of the day



	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower. Multiple responses were allowed for this question, so these results may not sum to 100%.

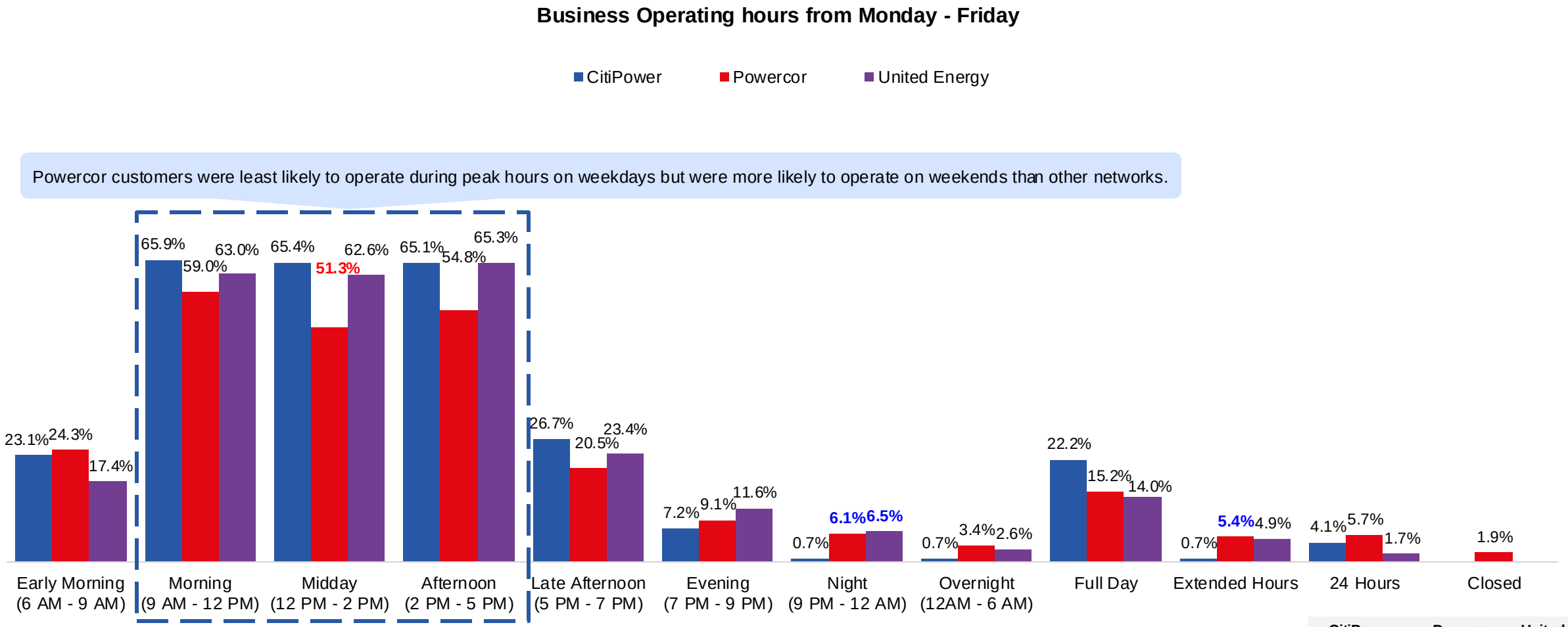
Of the two appliances that businesses mostly used, peak hours between 9am and 6pm had the highest usage



	CitiPower	Powercor	United Energy
Electric heater (n)	54	49	43
Air conditioners (n)	72	58	66

Note: Shaded bars indicate results based on small sample sizes where significance testing could not be conducted. A minimum sample size of n=100 is recommended for an indicative result for frequencies.

This was evident as customers mostly operated their business between 9am and 5pm during the weekdays

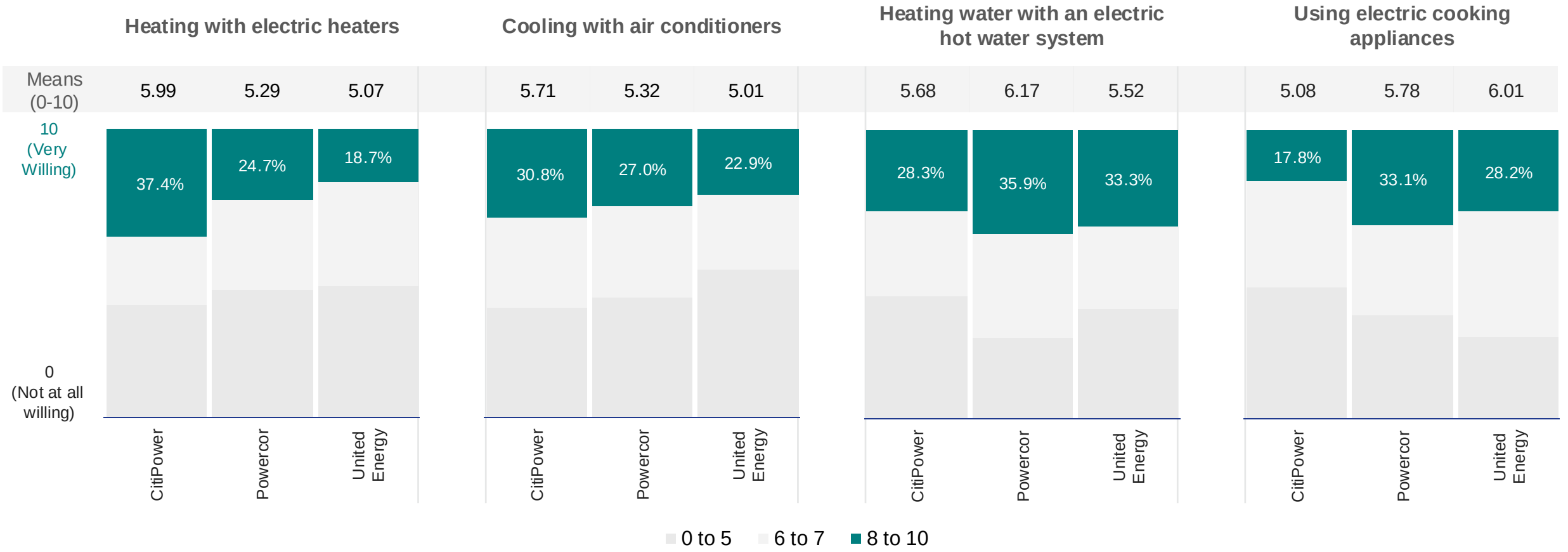


	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower. Multiple responses were allowed for this question, so these results may not sum to 100%.

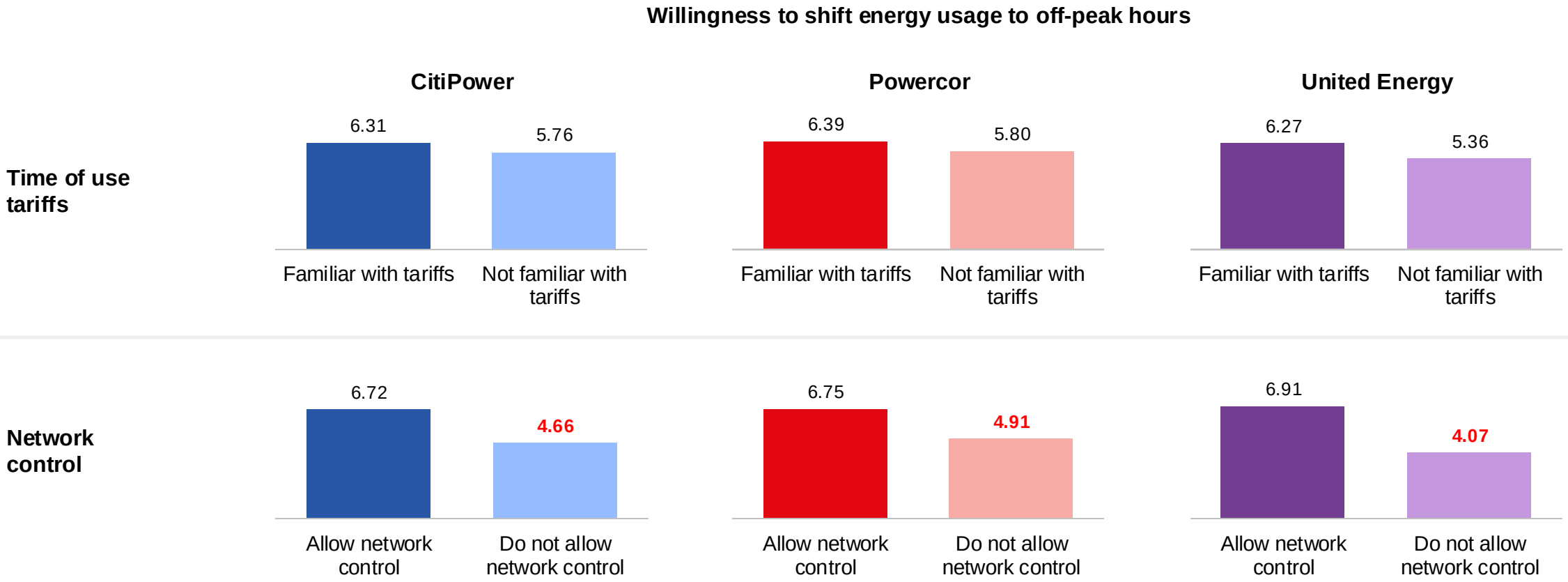
With most customers using their appliances and operating their business during peak hours, customers were unable to shift any of the appliances that they used in specific times

Of the appliances that you typically use during specific times of the day, how willing are you to adjust the timing of these tasks in your daily routine and do these at a different time of day?



Note: Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between CitiPower and other networks. No substantial differences were found. Results with low sample sizes were omitted. A minimum sample size of n=30 is recommended for an indicative result.

To encourage off-peak shifts, networks could educate customers to be more familiar with the time-of-use tariffs and encourage greater tolerance for allowing external network control



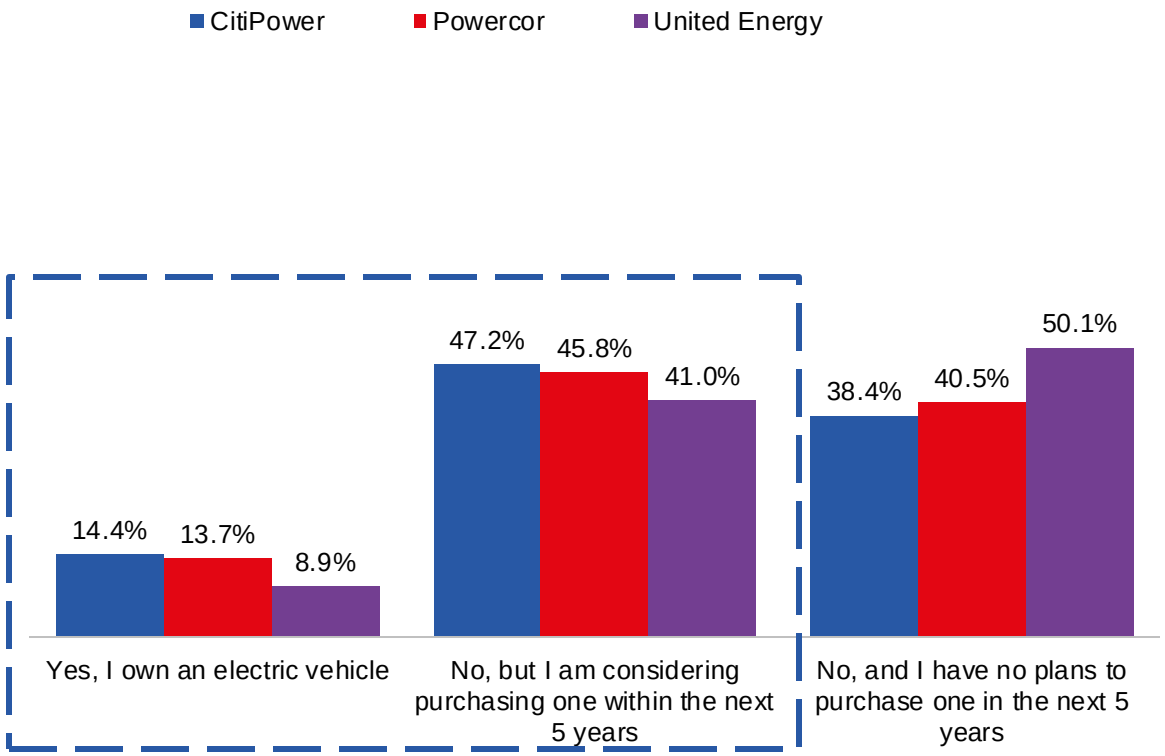
The mean informs the average across all SMB customers where 0 indicates not at all willing and 10 indicates very willing i.e. SMB CitiPower customers that are familiar with tariffs rated their willingness on average 6.31 out of 10.

	CitiPower	Powercor	United Energy
Familiar and not familiar with tariffs (n)	53 and 64	54 and 56	54 and 50
Allow and do not allow for network control (n)	76 and 41	69 and 41	62 and 42

Note: Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between Familiar with tariffs / Allow network control and not familiar with tariffs / do not allow network control. Red indicates that not familiar with tariffs / do not allow network control result was substantially lower.

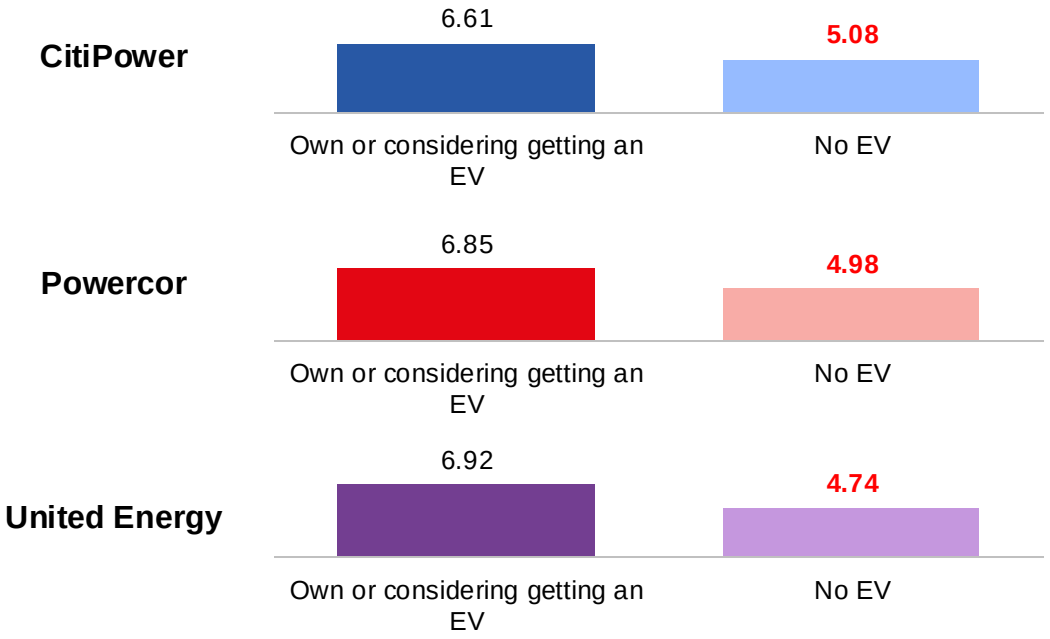
Additionally, over half of customers were either considering or owned an EV, and were more willing to shift their energy usage to off-peak hours

Do you own an electric vehicle for your business?



	CitiPower	Powercor	United Energy
(n)	117	110	104

Willingness to shift energy usage to off-peak hours

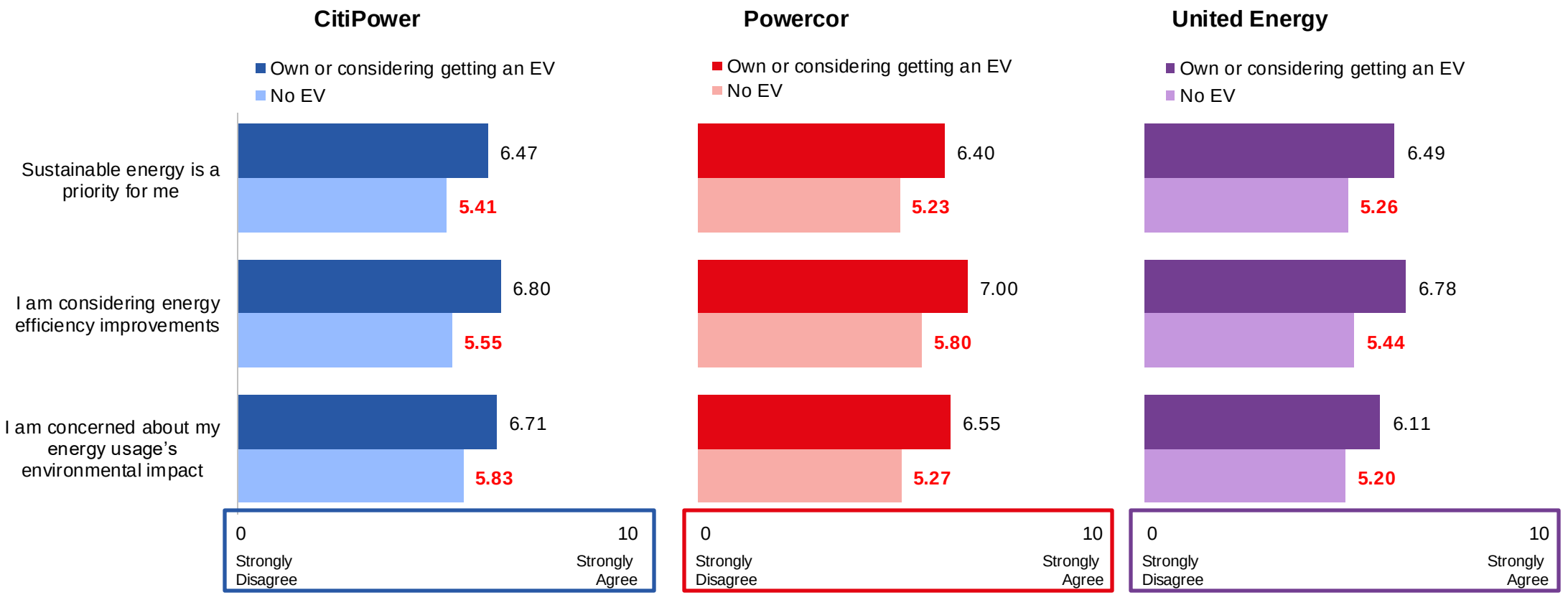


The mean informs the average across all SMB customers where 0 indicates not at all willing and 10 indicates very willing i.e. SMB CitiPower customers that are familiar with tariffs rated their willingness on average 6.31 out of 10.

	CitiPower	Powercor	United Energy
Owns / considering EV (n)	69	65	47
No EV (n)	48	45	57

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. No significant differences were found. Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between Own or considering getting an EV and No EV at the 5% level of significance. Red indicates that the No EV result was substantially lower than the Own or considering getting an EV result.

Aside from environmental concerns, EV owners / considerers were more likely to consider energy efficient products to improve their energy efficiency in which networks could assist to further increase willingness to shift



	CitiPower	Powercor	United Energy
Owns / considering EV (n)	69	65	47
No EV (n)	48	45	57

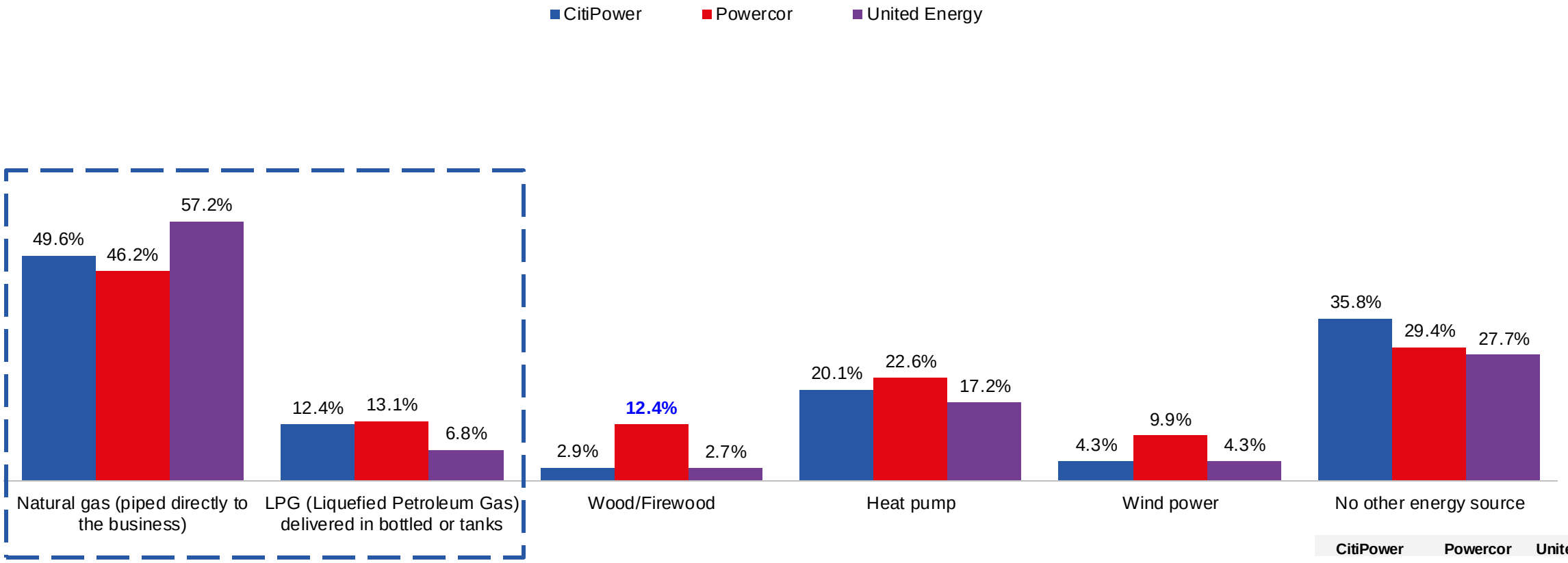
Note: Effect sizing was conducted to determine the substantive significance (effect) of the mean differences between Own or considering getting an EV and No EV at the 5% level of significance. Red indicates that the No EV result was substantially lower than the Own or considering getting an EV result. Results with low sample sizes were omitted. A minimum sample size of n=30 is recommended for an indicative result.

Electrification:

- What is the current usage of gas?
- What are the attitudes towards gas replacement?
- When will gas replacement most likely occur?

Over half of businesses were gas users, with most of them using natural gas. Powercor had the highest proportion of wood

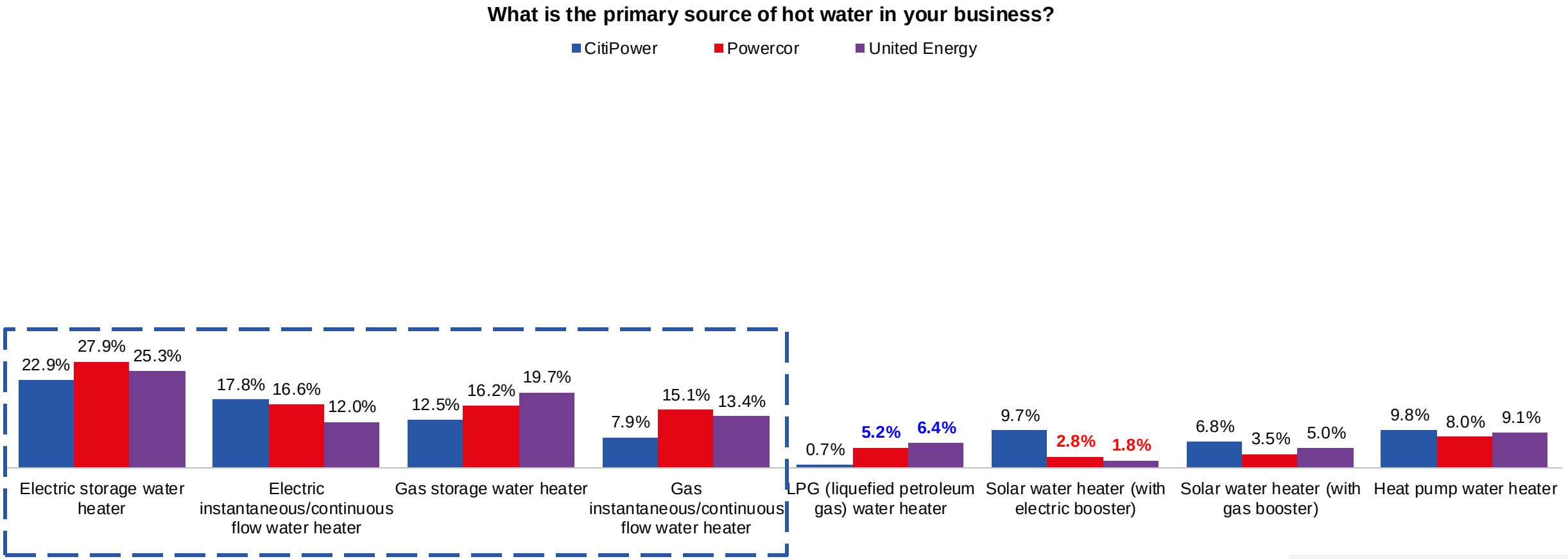
Which of the following other energy sources do you use at your business?



	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result.

For hot water however, customers were split relatively evenly between either using electric water heaters or gas water heaters as their primary source

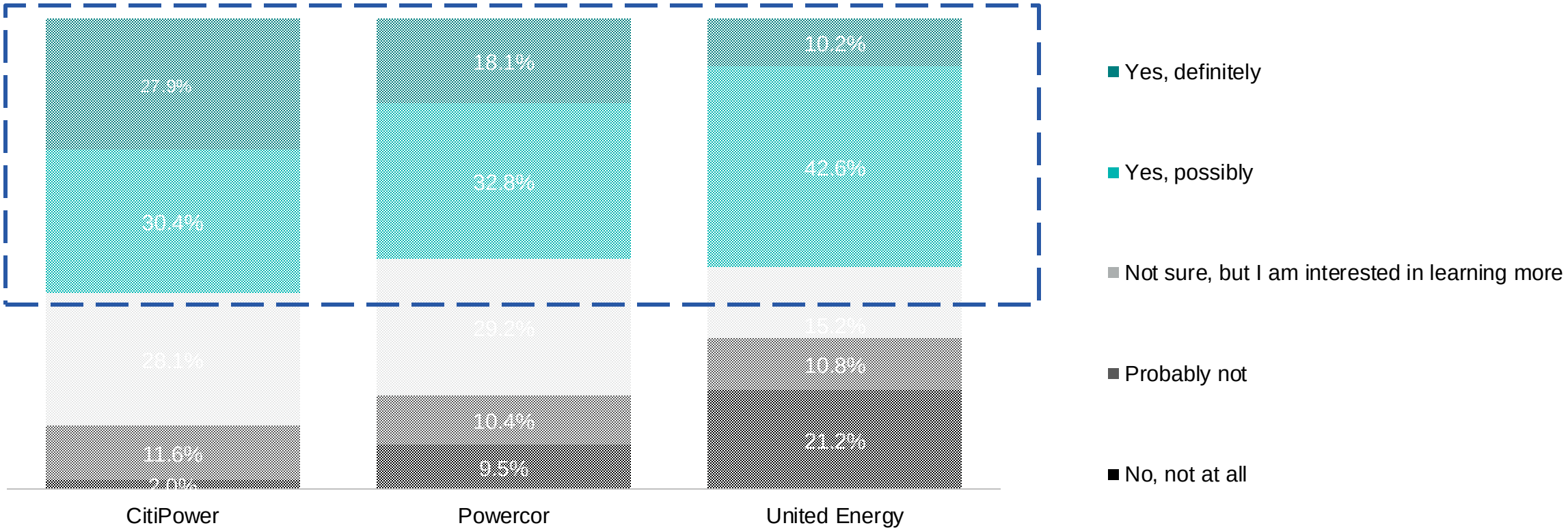


	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result.

1 in 2 customers were considering electrifying their gas appliances, with United Energy customers being the least likely to consider, when compared across networks

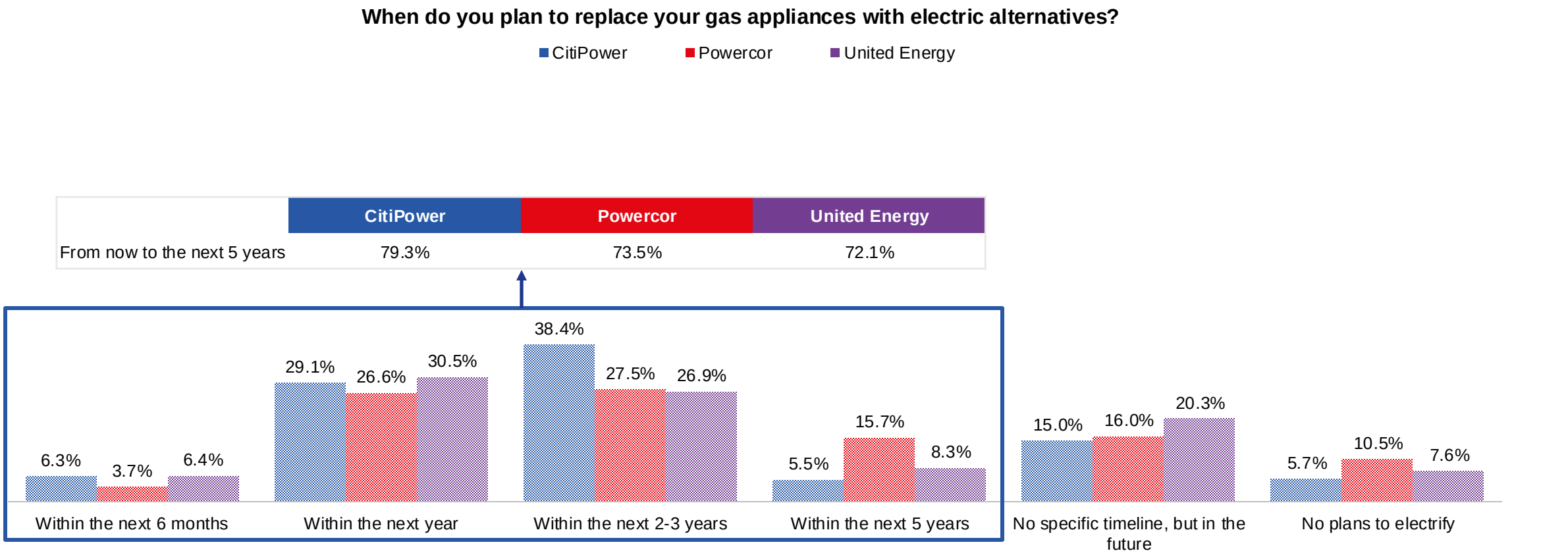
Are you considering electrifying your gas appliances in the near future?



	CitiPower	Powercor	United Energy
(n)	63	61	61

Note: Shaded bars indicate results based on small sample sizes where significance testing could not be conducted. A minimum sample size of n=100 is recommended for an indicative result.

When asked about timing, three quarters of customers were planning to replace it within the next 5 years



	CitiPower	Powercor	United Energy
(n)	54	49	40

Note: Shaded bars indicate results based on small sample sizes where significance testing could not be conducted. A minimum sample size of n=100 is recommended for an indicative result.

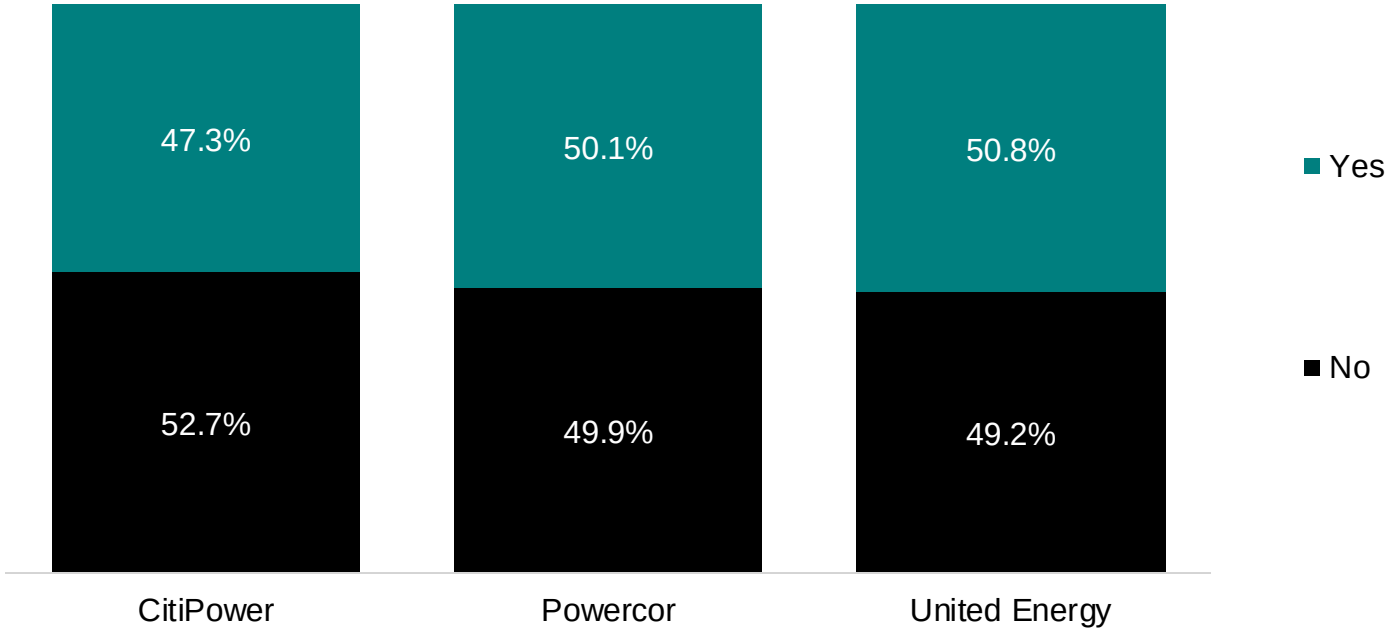
Time of Use Tariffs:

- How familiar are customers with time-of-use tariffs?
- How are customers stating they will respond to them?

Note: this study is only testing potential uptake, it is **not** testing the appeal/design of the tariffs / **not** identifying improvements to tariff design

Around 50% of customers remained unfamiliar with the concept of time-of-use tariffs, with no differences observed when compared to Residential customers

Are you familiar with the concept of time-of-use tariffs for energy pricing?



When looking at the appliances / activities that customers would most likely shift under a time-of-use tariff plan, the appliances / activities that customers were willing to shift remained the same without a time-of-use tariff plan. No appliances stood out as unique appliances to only be shifted under a time-of-use tariff.

	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. No significant differences were found.

Similar to Residential customers, those who were familiar with the concept understood it as time-dependent pricing and higher costs during peak hours.

CitiPower	Powercor	United Energy
"Electricity pricing system where the cost of electricity varies depending on time of day and level of demand."	*"Cost of gas use varies depending on times that it's in use, in high peak hours it costs more."*	*"…that there are different rates for different times of the day - overnight when less demand its cheaper."*
"Getting cash back for using off peak / higher costs for peak usage."	*"It's based on time of usage daily and there will be peak and off-peak time where rate will be high or low.."*	*"Tariffs charged differently at different time blocks during the day."*
"The rate depends on the time of day with a higher rate or lower rate."	*"I believe there are different peaks throughout the day depending on the energy supplier. A high peak will cause increased rates, while the opposite stands for the lower peak."*	*"Electricity is much cheaper when use during off-peak hours. The rates are cheaper."*

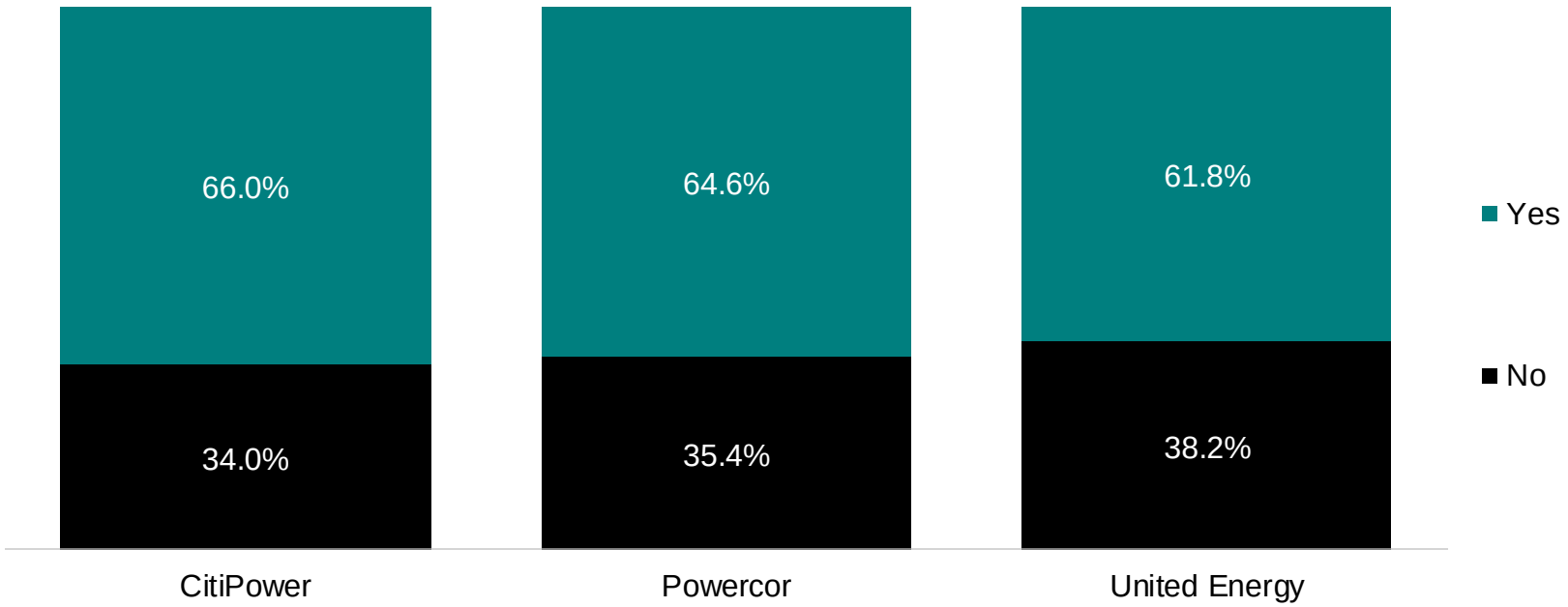
Network Control:

- What are the current level of acceptance of network control among customers?
- What areas are they willing to accept external control?

Two third of customers would be willing to allow their energy distributors to externally manage certain aspects in exchange for cost savings

Are you willing to allow your energy distributor to externally manage certain aspects of your energy usage (e.g. adjusting appliance usage times) in exchange for potential cost savings?

Please note that your energy distributor may manage timing of hot water, air conditioning etc but wouldn't be looking to directly control cooking, dishwashing.

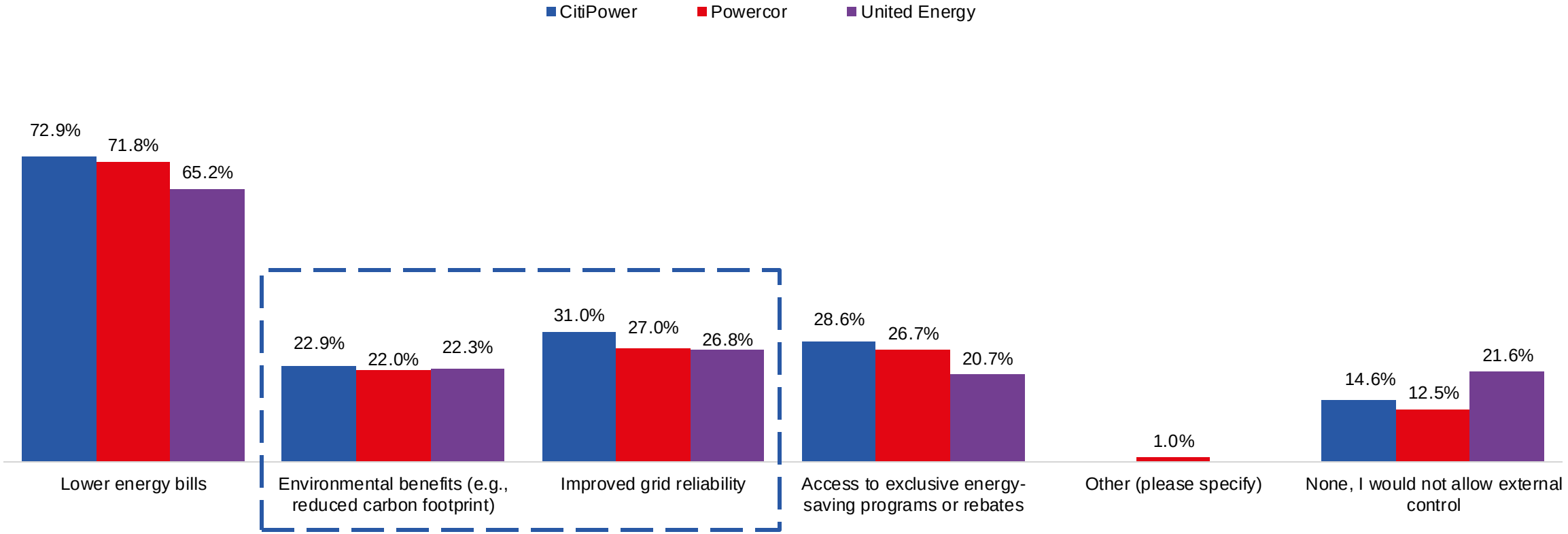


	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. No significant differences were found.

While price-related factors were the main incentive, around a quarter of customers would participate in allowing external control to improve grid reliability and environmental benefits

What incentives would encourage you to participate in allowing external management of your energy usage?



	CitiPower	Powercor	United Energy
(n)	117	110	104

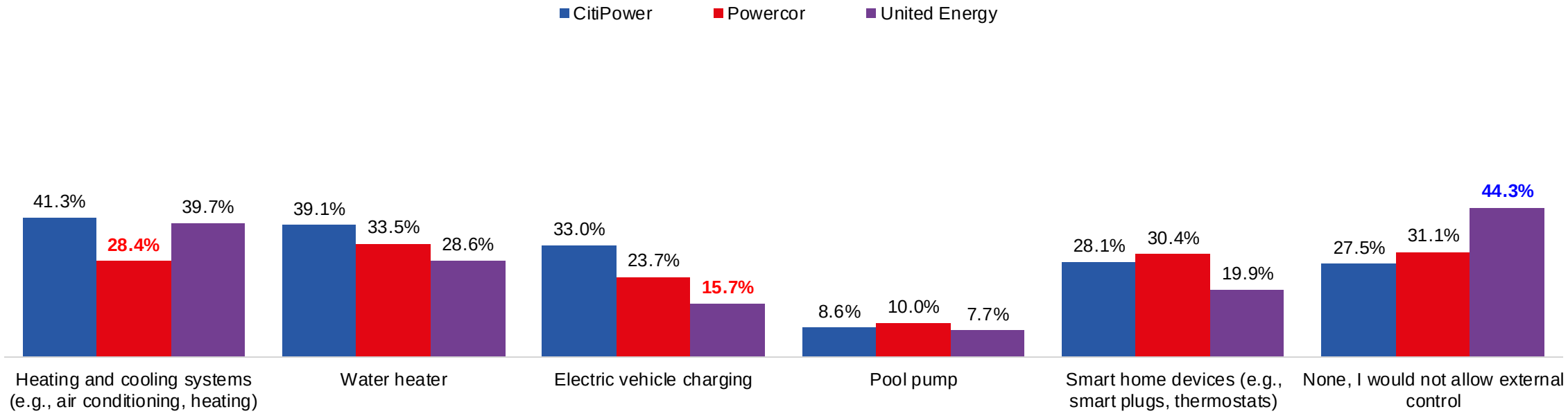
Note: Significance testing was conducted between CitiPower and the other networks at the 5% level of significance. No significant differences were found.

Heating and cooling systems as well as water heaters were the appliances that customers would be most willing to allow networks to manage remotely

Across networks, United Energy customers were the least willing to allow their networks to manage any appliances. This couldbe attributed to United Energy customers preferring more control on their energy usage than both CitiPower and Powercor customers.

In addition, compared to Residential customers, SMB customers were more likely to allow their energy provider to mange theirsmart home devices and electric vehicle charging.

Which of the following business appliances or systems would you be willing to allow your energy provider or network to manage remotely?



	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the CitiPower result and red indicates that it was significantly lower.

Meter Upgrades and overall investment:

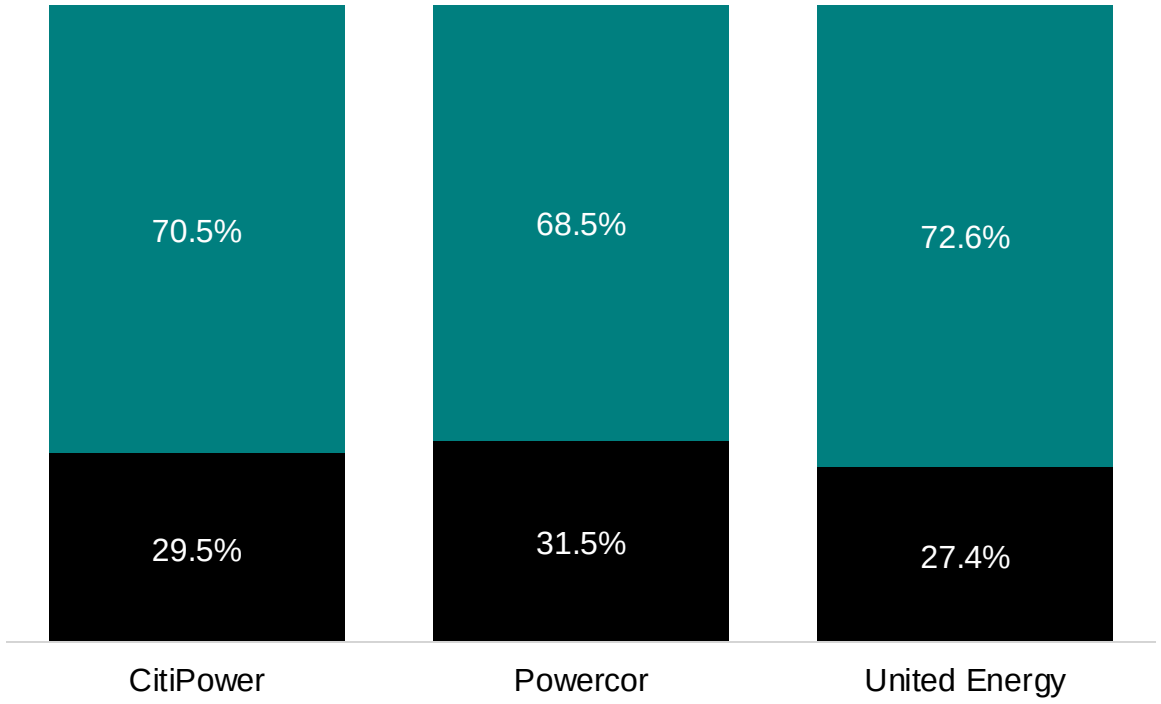
- What are customer preferences in the timing of meter replacement?
- What feedbacks do they have about the bill impact from the improvements?

Around 70% of SMB customers preferred their networks to start proactively replacing meters to prevent likelihood of failure

The following question and explanation was shown:

"Electricity networks install and maintain smart meters in homes and businesses. Many smart meters are approaching an age where failure may increase in the coming years. In the event a customer's meter fails, this could lead to billing inaccuracies and potentially higher replacement costs.

Which of the following options do you prefer for the timing and approach of these meter upgrades?"



- Start proactively replacing meters from 2026.

  This prevents the likelihood of failures in the coming years. This results in maintaining current meter charges at about $5 per month

- Delay proactive replacement until after 2031.

  This means there might be an increase in failures in the coming years. This option would result in meter charges of around $4 per month from 2026-2031 (A decrease in $1 from the current $5 per month), but potentially increasing from 2031

	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between CitiPower and other networks at the 5% level of significance. No significant differences were found. Figures may not sum to 100% due to rounding.

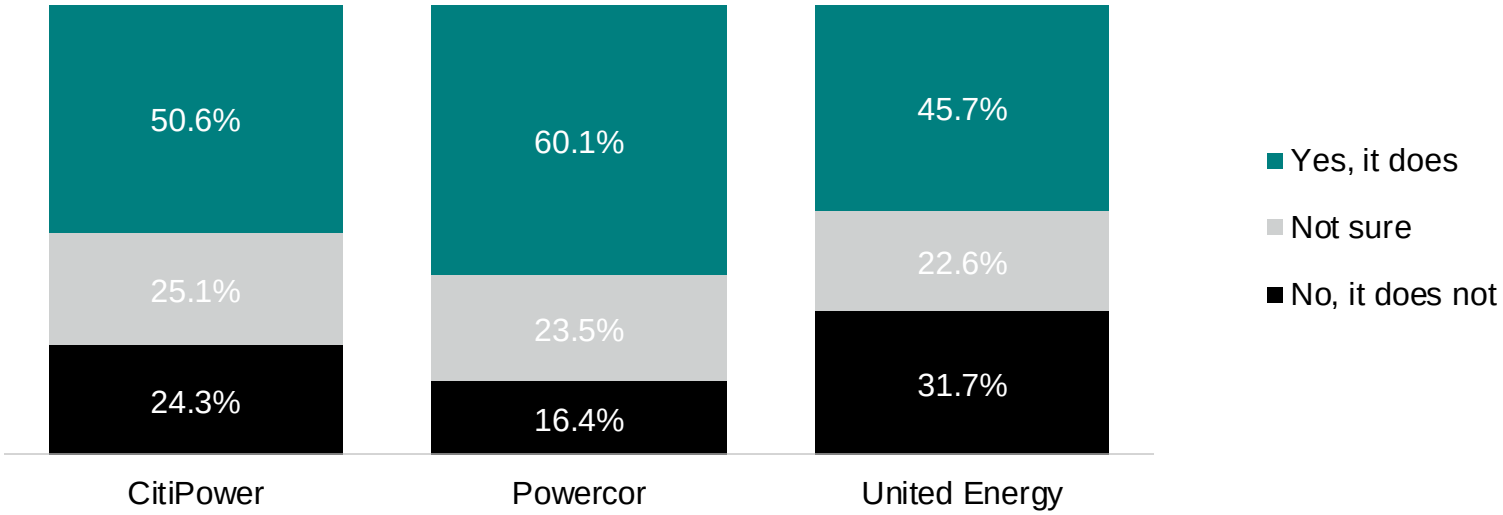
Like Residential, around half of SMB customers also felt that the bill impact from the improvements represented value for the service they received

A series of improvements on key priority areas related to reliability, capacity, sustainability and customer supports were shown to customers.

Given all these improvements to help improve your network, the total bill impacts each year from all these improvements would be the following:

- **$3 (0.1% retail bill reduction) for CitiPower customers**
- **$5 (0.1% retail bill increase) for Powercor customers**
- **$3 (0.1% retail bill increase) for United Energy customers**

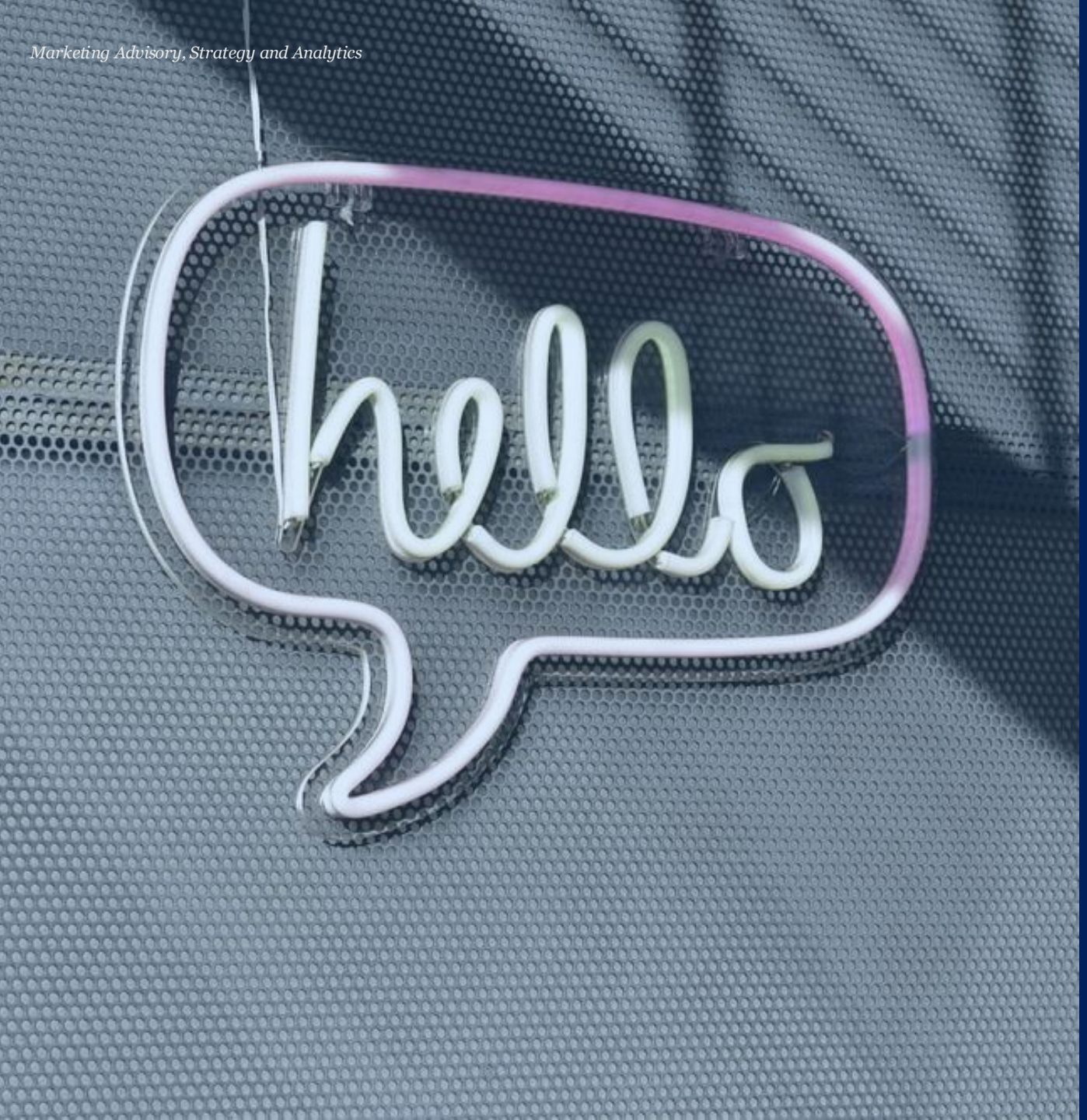
Do you feel this total bill impact represents value for the service you receive?



Similarly to residential customers, while about half of SMB customers perceived the improvements as valuable, around a quarter remained unsure. This uncertainty may stem from heightened skepticism, driven by the relatively modest bill impact or reduction, despite the improvements presented.

	CitiPower	Powercor	United Energy
(n)	117	110	104

Note: Significance testing was conducted between SMB CitiPower and other networks at the 5% level of significance. Blue indicates that the other network result was significantly higher than the SMB CitiPower result and red indicates it was significantly lower. Figures may not sum to 100% due to rounding.



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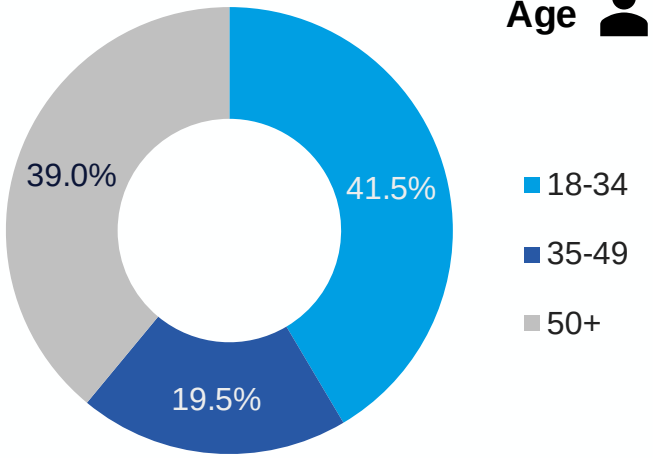
Appendix

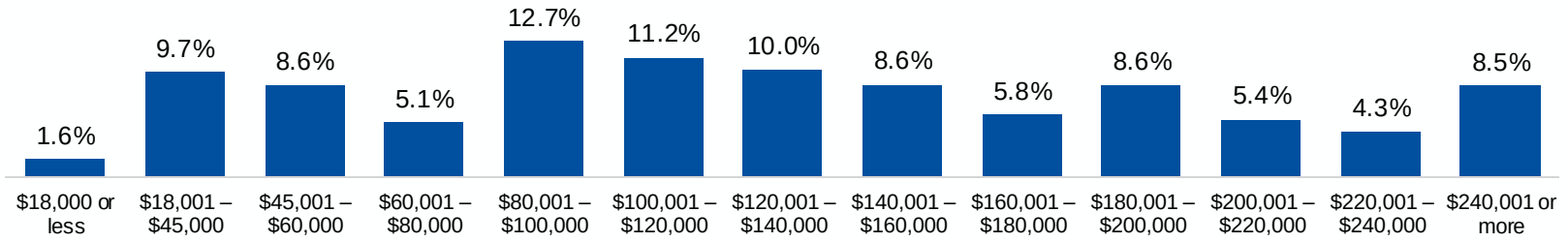
Residential and SMB: Customers profiling for each network

CitiPower **residential** Customer Profile

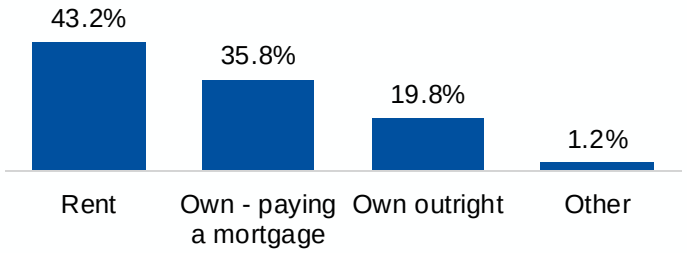
Age



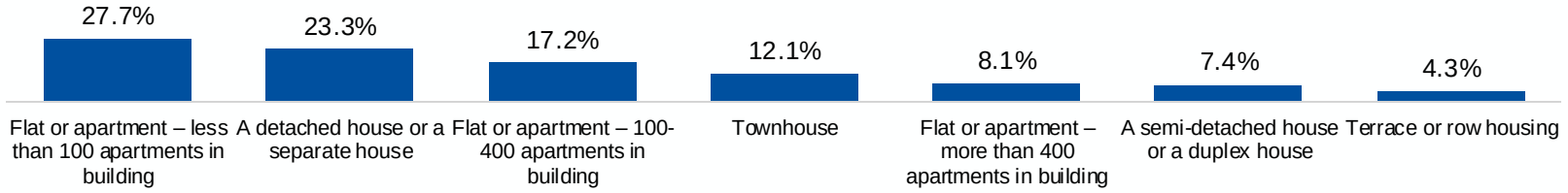
Household Income



Home Ownership



Dwelling Type

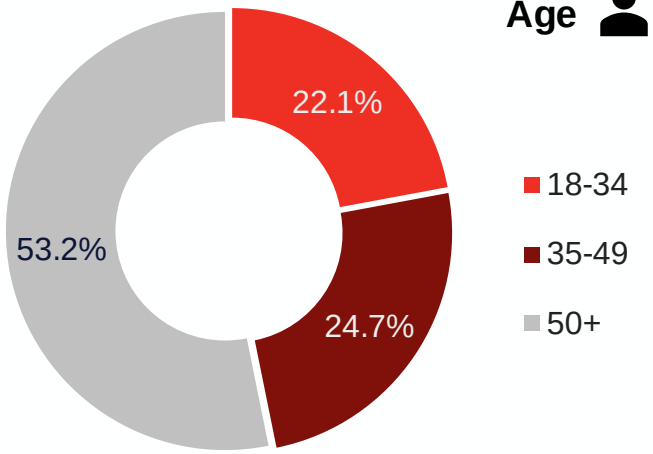


(n) 269-311

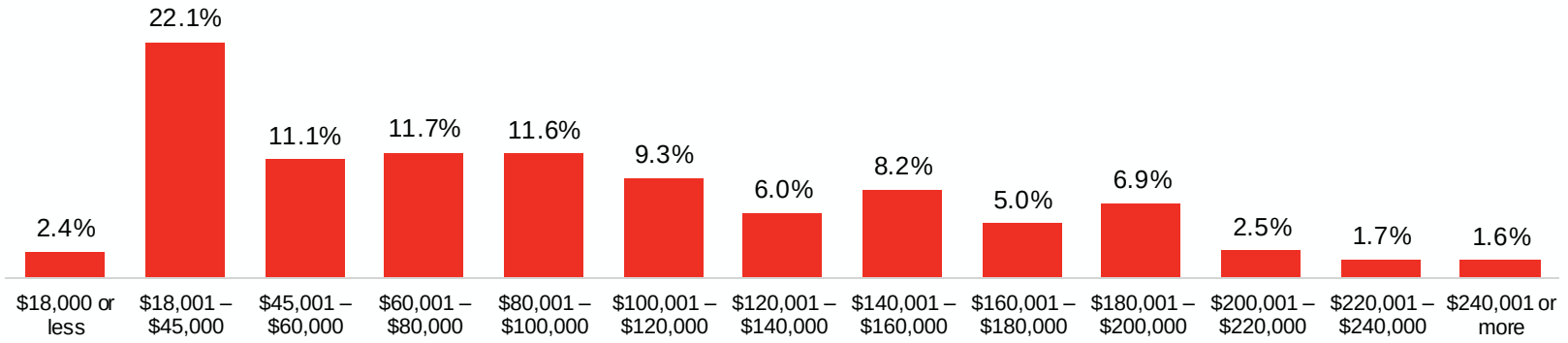
Note: Percentages may not sum to 100% due to rounding.

Powercor **residential** Customer Profile

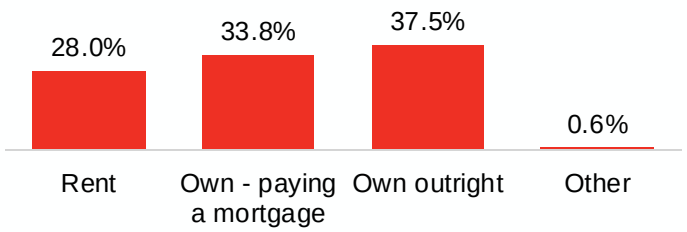
Age



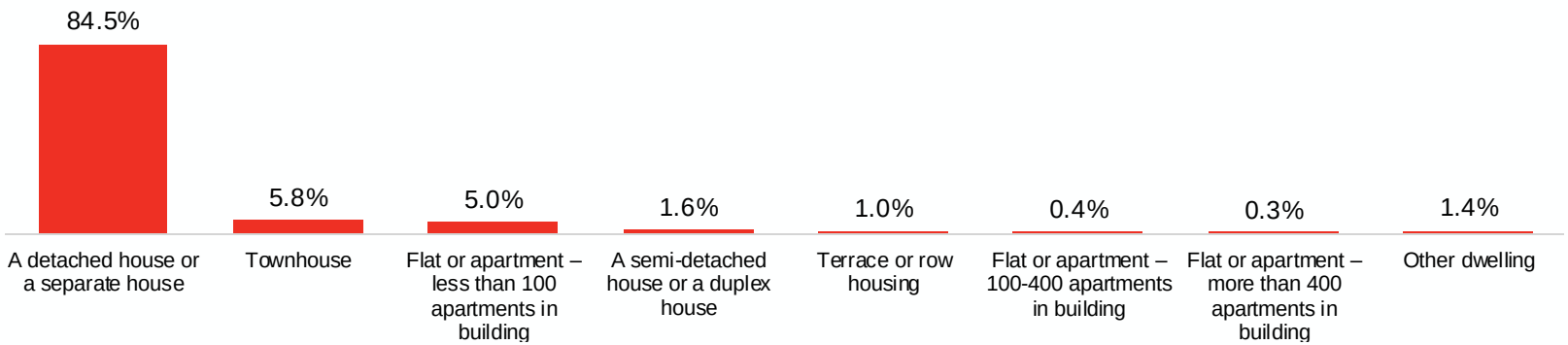
Household Income



Home Ownership



Dwelling Type

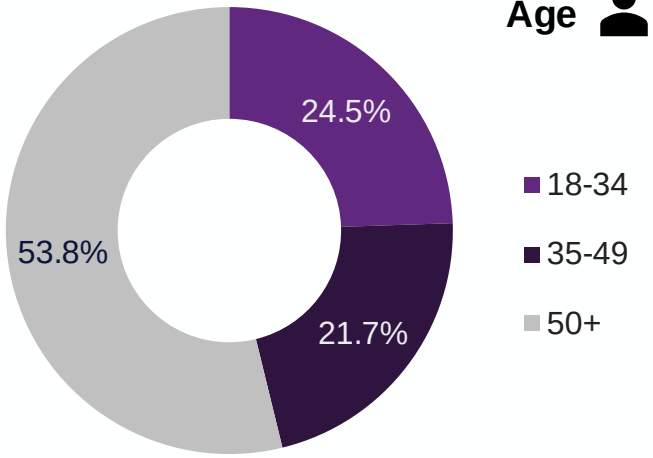


(n) 275-317

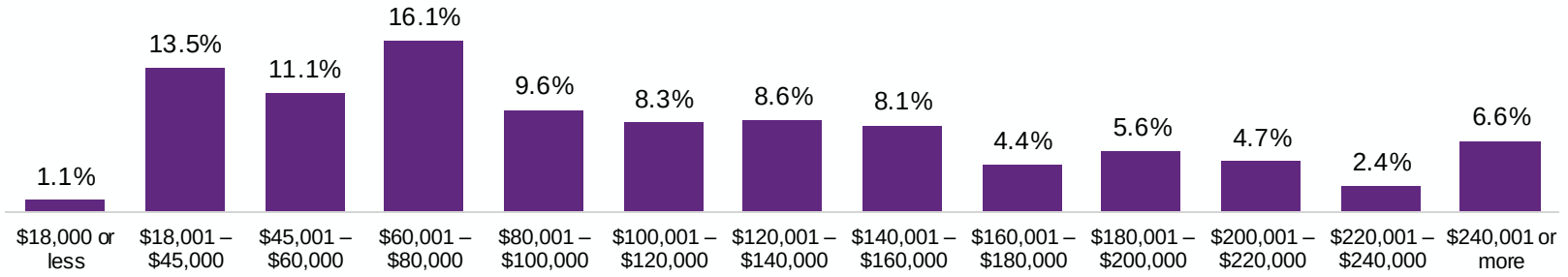
Note: Percentages may not sum to 100% due to rounding.

United Energy **residential** Customer Profile

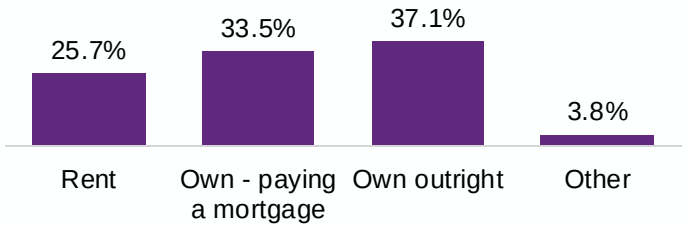
Age



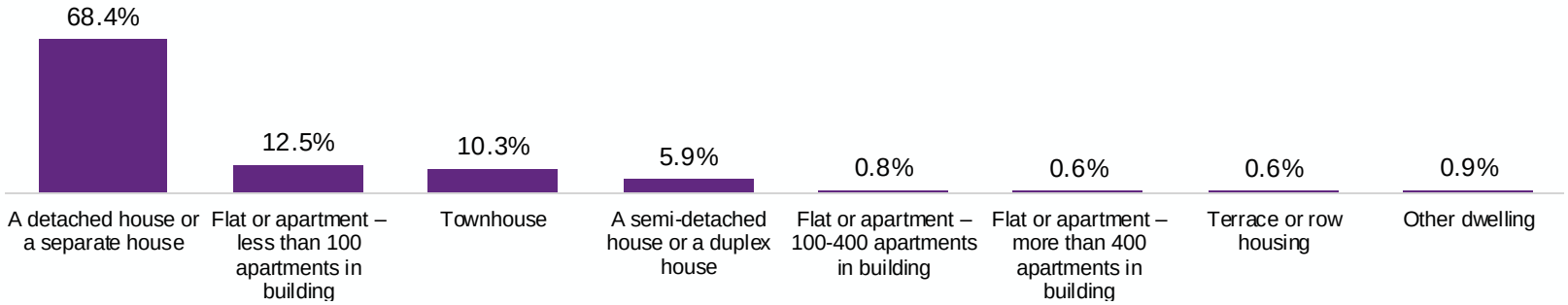
Household Income



Home Ownership



Dwelling Type



(n) 277-313

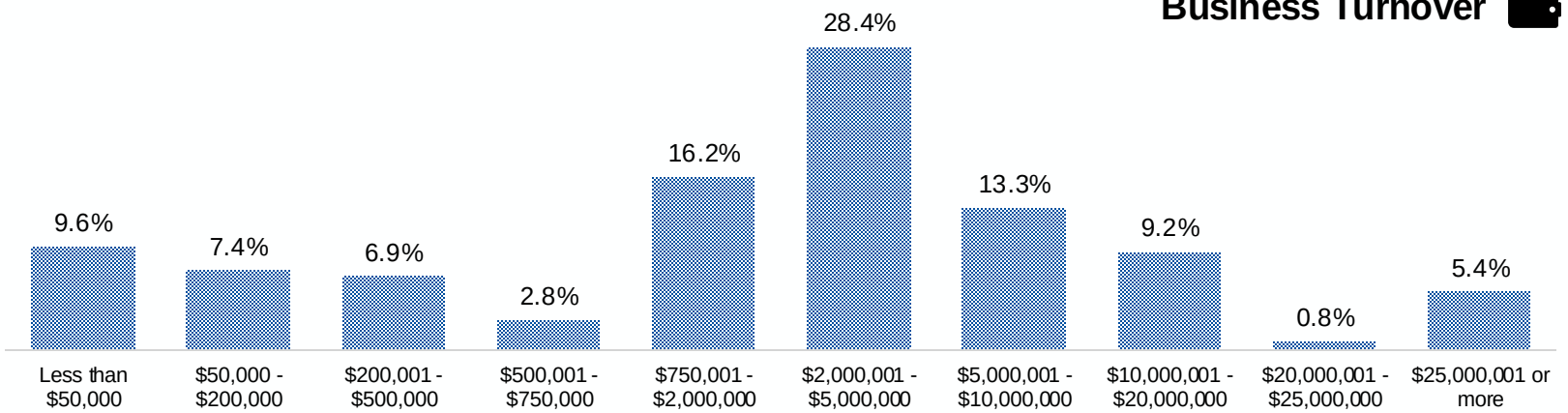
Note: Percentages may not sum to 100% due to rounding.

Profile of CitiPower **SMB** customers

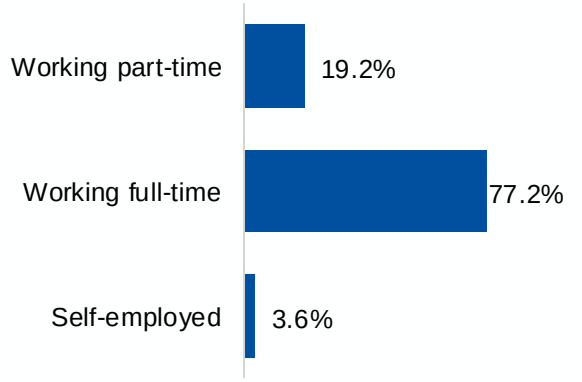
Business Size

0 – 19	26.3%
20 – 200	73.7%

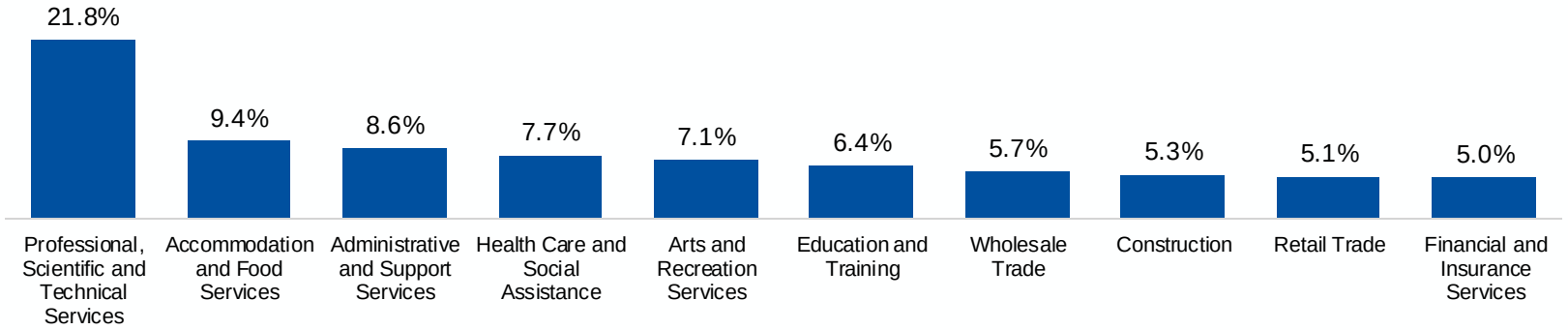
Business Turnover



Work Status



Type of Business (Top 10)



(n) 90-117

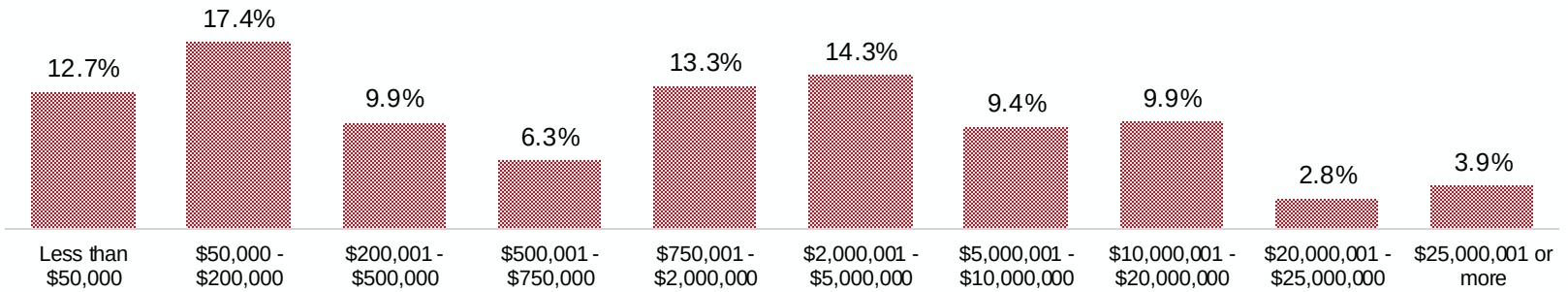
Note: Shaded bars indicate results based on small sample sizes. A minimum sample size of n=100 is recommended for an indicative result for frequencies. Percentages may not sum to 100% due to rounding.

Profile of Powercor **SMB** customers

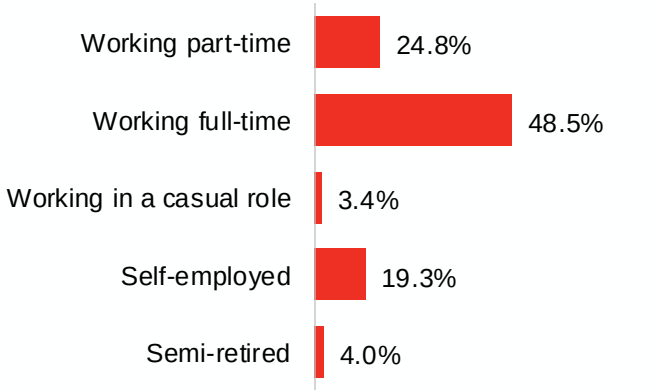
Business Size

0 – 19	48.6%
20 – 200	51.4%

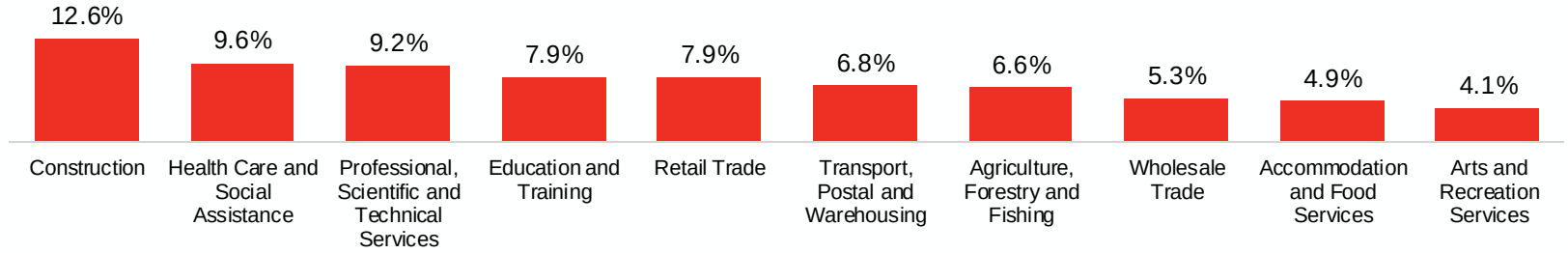
Business Turnover



Work Status



Type of Business (Top 10)



(n) 91-110

Note: Shaded bars indicate results based on small sample sizes. A minimum sample size of n=100 is recommended for an indicative result for frequencies. Percentages may not sum to 100% due to rounding.

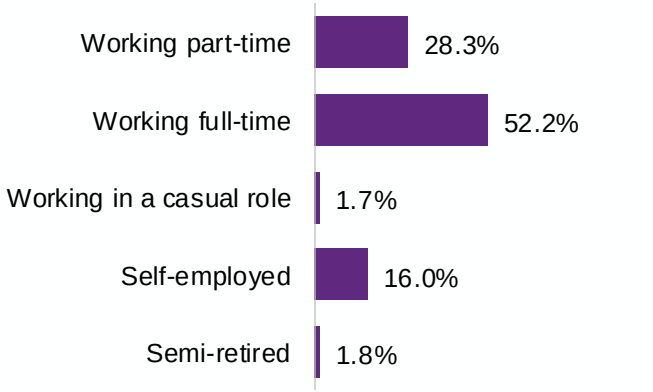
Profile of United Energy **SMB** customers

Business Size

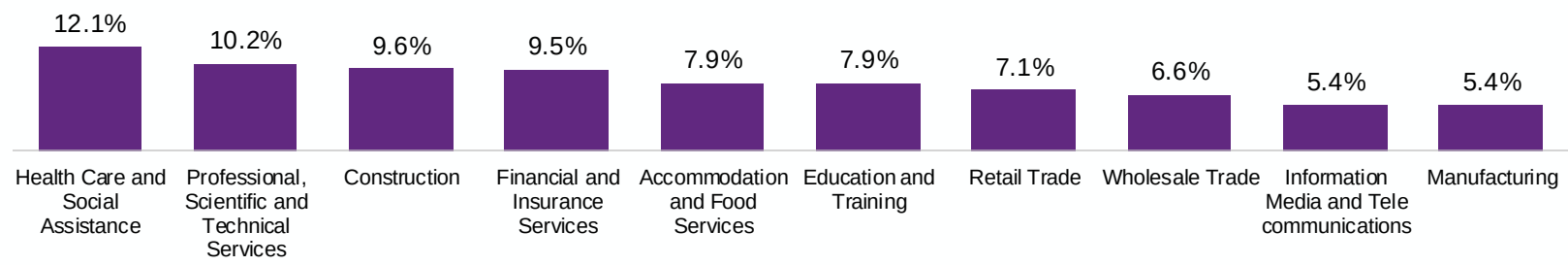
0 – 19	47.3%
20 – 200	52.7%

Business Turnover

Work Status



Type of Business (Top 10)



(n) 91-104

Note: Shaded bars indicate results based on small sample sizes. A minimum sample size of n=100 is recommended for an indicative result for frequencies. Percentages may not sum to 100% due to rounding.

Understanding effect sizing and significance testing

Throughout this report, some results have been shaded, and some results are denoted in red or blue text. This section explains the reasoning for this.

This report utilises effect sizing to understand true differences in populations

Recommended minimum Sample Size for Proportions

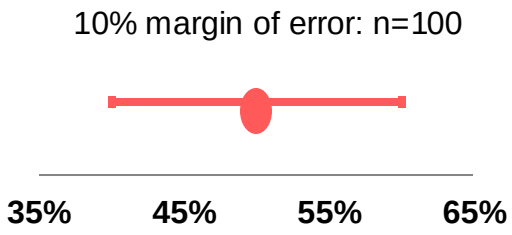
To ensure insights are more meaningful and actionable, a recommended sample of n=100 is generally used

Frequencies / Proportions — n = 100

Rationale

With n = 100, the variation of the insights is reduced to around 10% which is within the acceptable parameters. This allows for more confidence in the insights being truly reflective of the population.

The degree of variation in metrics is a function of sample size. The **higher** the sample size, the **lower** this variation will be.
For example, at n = 100 a score of **50%** may truly be between **40%** and **60%**)



Implication for this study

Any proportion results with a sample size between 30 and 100 were still shown but have been shaded and the significance testing has been removed.

Effect Sizing and Significance Testing

To ensure differences in results are not only true but of substantive difference, effect sizing is shown for means

Rationale

Significance testing refers to whether the differences observed in the dataset are likely to be due to true effects or simply due to random chance.

Meanwhile, effect sizing allows us to measure the strength of a phenomenon rather than its mere existence irrespective of sample size. It quantifies the magnitude of those differences as either small, medium or large in which it is recommended to only show medium to large based on historical benchmarks.

Implication for this study

Any substantive significance differences in means will only be indicated as **low** or **high** if the differences in the result are both significant at 0.05 and of medium to large magnitude.