Electricity Authority survey of residential electricity consumer perceptions 2021/22

Introduction

In May and June 2022, the Electricity Authority (Authority) commissioned AK Research & Consulting (AKR) to conduct a survey of a nationally representative sample of 1030 New Zealanders aged 18 years and over.[1] The survey focused on electricity consumers perceptions on a range of questions relating to the Authority's statutory objectives.

We acknowledge consumers' responses and thank them for taking the time to provide their valuable feedback. Results of the survey have been included in the Authority's Annual Report 2021/22, and the feedback provided will continue to shape the Authority's Annual Corporate Plan as we focus on our purpose of enhancing New Zealanders' lives, prosperity, and environment through electricity.

The feedback we received represented a wide range of views from consumers and covered a wide range of topics. Some consistent themes emerged, and these have been summarised and responded to below.

Results from this perception survey have been included in the Authority's Annual Report 2021/22 as part of our performance measures. The Authority uses performance measures to assess progress against our outcomes of competition, reliability and efficiency. A range of measures and data sources may be used to assess an outcome. The consumer perception survey is used alongside a participant perception survey and internally held data.

The use of multiple data sources allows the Authority to consider performance from a variety of angles, and these sources work together to paint an overall picture of performance. As such, individual performance measures should be considered in the wider context of the outcome to which they relate.

Cost of electricity and state of competition in the market

We received considerable feedback about the cost of electricity and state of competition in the retail electricity market. Consumers expressed views that electricity prices were expensive. Views on the competitiveness of the market were mixed. Some respondents reported that there was increased competition in the market, with more options available for them to choose from. Others considered the market to only be superficially competitive, with similar or minimal pricing differences and confusing pricing models that made it difficult to compare between providers. For a small number of respondents there was little or no choice in electricity providers because of where they lived (for example in an apartment complex, retirement village, or rural area).

Consumer centricity and thriving competition are two of the Authority's strategic ambitions that aim to address these issues. The Authority has committed to putting consumers front and centre of what we do and how we do it. When decision-making across the industry is centred around consumer outcomes more diverse needs can be met. Market competition is key to delivering a better energy future – driving progress, affordability, efficiency, and valuable outcomes for New Zealand.

As part of this, the Authority is continuing work to raise awareness of Powerswitch and Utilities Disputes services, which will lead to better informed and empowered consumers who can make good choices for their needs. This drives retailers to innovate, provide better services and access to more competitive pricing. From 1 April 2021, retailers have been required to include information on both Powerswitch and Utilities Disputes on communications with their customers.

[1] AKR is an independent research company, offering qualitative and quantitative research services.

Both awareness and usage of Powerswitch increased between 2021 and 2022. Awareness of Powerswitch increased from 59% to 63% and usage increased from 40% to 44%.

The Authority encourages participants to use the Electricity Information Exchange Protocols (EIEPs). Use of the EIEPs provides consistency and enables comparative websites, such as Powerswitch, to compare electricity retailer information more accurately. In turn, this improves transparency in pricing and allows consumers to make more informed decisions on their electricity providers.

The Authority is also reviewing competition in the wholesale electricity market. Initial findings from this review showed the New Zealand Aluminium Smelter was offered low electricity prices to stay in New Zealand, and this resulted in other consumers having to pay more. The Authority estimates that this could add up to $200 to household electricity bills each year.

This concern was outlined in more detail in a second paper, *Inefficient price discrimination in the wholesale market – Issues and options*, released as the first step in the Authority's response to the review. In August 2022, the Authority urgently imposed a temporary restriction on very large electricity contracts that can shift market prices. This is intended to address concerns about inefficient price discrimination in large contracts, including consumers effectively subsidising these contracts through higher electricity bills. The Authority is consulting on a permanent solution, with submissions due in October 2022.

The Authority is implementing changes arising from the Electricity Industry Amendment Act 2021 (EIA Act), which received Royal Assent in August 2022. The EIA Act introduces an additional statutory objective and function to protect the interests of residential and small business consumers in relation to their electricity supply. The EIA Act will further embed the Authority's consumer centricity and trust and confidence ambitions by providing clearer powers to protect the interests of small electricity consumers and increasing our ability to hold participants to account through improved enforcement provisions.

Reliability of electricity supply as New Zealand transitions to a low-emissions future and the impact as demand on the electricity system increases

Respondents raised concerns about the reliability of future power supply with the shift to low-emissions, renewable generation. They felt that low-emissions electricity would not meet the increased demand from greater electrification, particularly with the renewable generation's reliance on favourable weather conditions and lake levels. These conditions could be impacted by climate change, and increased outages from adverse weather events were also of concern.

Despite this, there was significant support for low-emissions energy, particularly moving away from thermal generation such as coal, and increasing the supply of renewable energy sources.

Facilitating an efficient transition to a low-emissions economy is one of the Authority's key strategic ambitions for the sector, alongside maintaining trust and confidence in the reliability of the system through this transition. The Authority has several significant and transformational workstreams underway to support this transition. This includes work to examine wholesale market operation, both currently and under a 100% renewable supply, and future security and resilience in the face of technological and other changes.

Improved price signals for both consumers and generators are a key component to encouraging investment in renewable generation and electrification of industrial processes – both of which are necessary for the transition to low-emissions energy. The Authority decided on a new Transmission Pricing Methodology (TPM) in April 2022, which comes into effect in April 2023, and will introduce Real-Time Pricing (RTP) later in 2022. The new TPM will improve certainty for investment in new renewable generation and support the right investments being made at the right time and in the right places. RTP will help future-proof the system to meet increasing demand and use of distributed energy resources, like electric vehicles (EVs), batteries and smart appliances. Both projects will ultimately benefit consumers through lower prices and more generation at peak times when it is most valued.

A critical part of building trust and confidence in the reliability of the electricity sector is reviewing how the system works in response to challenging events, and effectively implementing recommendations from those reviews.

In the lead up to winter 2021, New Zealand faced a dry year event with constrained electricity supply due to low hydro inflows and the tight gas market. Following the dry year event, the Authority commissioned an independent review of how the event was managed and identify any opportunities for improvement. The review showed that the system worked as intended and demonstrated the resilience of New Zealand's electricity market mechanisms. Work is currently under way to improve certainty and transparency during similar events in future.

On 9 August 2021, approximately 34,000 customers across New Zealand experienced an electricity cut without warning. The Authority has since used its statutory powers to launch a two-phase review in response to the event. Transpower and the Ministry of Business, Innovation and Employment (MBIE) also conducted their own reviews.

The Phase 1 review (published in September 2021) focused on the system operator's demand allocation tool and communication processes and protocols. The Phase 2 review (published in April 2022) was wider in scope and provided a final summary of the various investigations, observations and recommendations which have been conducted by the Authority, Transpower and MBIE.

Progress against the recommendations is reported to the Minister on a quarterly basis and published on the Authority's website.[2] The response included making sure the main causes were addressed before winter 2022.

Cost and effectiveness of new technology

Respondents showed some interest in investing in new technologies, however most expressed hesitancy about new technology including EVs and distributed power generation such as solar. Concerns raised included the quality of available technology, and whether technology such as EVs were fit for their needs as consumers. A major concern was the up front and ongoing maintenance costs of solar panels and EVs. Some respondents spoke about their property not being suitable for solar technology because of the positioning of their house in relation to the sun.

The Authority works to unlock the full benefits of and opportunities for innovation for consumers by making sure regulatory settings are conducive to innovation and industry success. Having the right information can empower consumers to make choices that will benefit them in the long run. To assist consumers, the Authority has published information on our website to help demystify what consumers need to know about solar panels and generating their own electricity.[3] There is also a wealth of information on creating energy efficient homes and moving

[2] https://www.ea.govt.nz/monitoring/enquiries-reviews-and-investigations/2021/electricity-authority-review-of-9-august-2021-event-under-the-electricity-industry-act-2010/

[3] https://www.ea.govt.nz/consumers/how-do-i-generate-my-own-electricity/solar-panels/, https://www.ea.govt.nz/consumers/how-do-i-generate-my-own-electricity/

to energy efficient transport on the Energy Efficiency and Conservation Authority's (EECA) website.[4]

Globally, and in New Zealand, the quantity of distributed electricity resources (DER) (such as EVs, solar panels, wind turbines and batteries) connected to the power system is set to increase significantly in coming decades. It is important that the full value and benefits of these resources are realised not just for those that own and operate the DER, but also for those consumers who do not and cannot own DER.

The Authority is progressing work on the potential issues relating to distribution networks from DER and potential regulatory options that may be needed to support an effective transition to a low-emissions economy, and ensure consumers benefit from the changes in technology. As part of this programme, the Authority is also progressing reform of distribution pricing, and published a revised Distribution Pricing Practice Note in December 2021. The Authority's work to achieve better distribution pricing signals will help ensure the transition to low emissions is as efficient as possible, supporting the lowest overall cost to consumers

To make the most of the potential electricity flexibility available through DER, owners and operators of DER will need to see clear price signals in real time so they can respond with confidence. The Authority's RTP project will promote the integration of DER into the power system.

AKR report provided to the Authority

The remainder of this document contains AKR's report to the Authority. The report includes the survey results and AKR's high-level analysis. All results presented are the perceptions of the survey respondents, and do not necessarily reflect the views of the Authority.

[4] https://www.eeca.govt.nz/

Survey of residential electricity consumer perceptions

2021/22

Prepared for The Electricity Authority

ak research & consulting

Contents

1. Executive summary

Competitive businesses

There was a decline in perceived competitiveness across all businesses tested in the recent monitor. The largest decline in competitiveness was recorded for supermarkets which dropped 15% to 32% compared to the previous year.

Respondents considered Internet providers the most competitive businesses, with 45% (down 2%) of respondents saying they were competitive. Telephone companies followed at 41% (down 4%).

Electricity retailers rated third in terms of total competitiveness, similar to electrical good stores (including mobile phone services), both on 38%, with electricity retailers falling by 6% and electrical good stores down 3%.

The least competitive businesses were banks on 28% (down 6%) and petrol stations on 29% (down 9%).

Experience

Decision making – 89% (down 2%) said they were responsible for paying the electricity bill in their household or had a say in who their electricity provider was.

Being approached to switch electricity providers - In the past two years, nearly half (45%, down 8%) of all respondents had been **approached by an electricity retailer/power company at least once** about switching electricity providers. While 18% (down 2%) said they had been approached only once, 16% (down 1%) had been approached twice and 11% (down 5%) three or more times.

Choosing an electricity provider (Competition)

Respondents identified several key themes when describing their experience of having a choice of electricity provider, finding a power company that met their needs and finding a fair price.

While some respondents considered that New Zealand's electricity market was more competitive than it had been in the past, having more choices and options, this was tempered by others who considered the marketplace was only superficially competitive.

- 82% agreed (down 2%) they had a choice in their electricity provider.
- 72% agreed (down 1%) they could find a power company that met their needs.
- 64% agreed (down 4%) that having a choice of power companies meant they could find a fair price.

Those who considered the market superficially competitive commented that pricing models continued to be confusing, making it difficult to compare prices between suppliers. It was also considered that retailers adapted their prices to match the competition, so it was more about the extras than price.

There were a few that suspected that, in reality, all providers charged similar prices and that switching provider was not always worthwhile.

Notwithstanding, some respondents were satisfied with their providers, believing they received good service at a fair price and would not contemplate switching.

Electricity reliability

The main concerns raised about electricity reliability in New Zealand related to future power shortages and power outages. Reliability was increasingly seen to be impacted by increasing electricity demand from a growing population and responding to climate change impacts.

Other concerns raised were a lack of long-term planning and infrastructure development in the electricity sector required by increased demand resulting from higher uptake of EVs as part of New Zealand's climate change strategy. These future demands on electricity supply may impact negatively on reliability, resulting in increasing future electricity outages and more outages during peak usage.

- 72% (unchanged) agreed that they rarely experienced an unplanned power cut.
- 63% (down 3%) agreed that if there was an unplanned power cut, it got fixed quickly.
- 49% (down 4%) agreed there is enough electricity to keep New Zealand powered.

These concerns highlighted the importance of considering and developing alternative, sustainable power options and consumers taking more personal responsibility for their own power consumption.

Most respondents expressed no concerns, while a significant proportion currently experienced few, if any, power outages. Across those that had experienced outages, outages due to maintenance or upgrades, or unforeseeable events were understandable. There was little allowance for outages due to poor infrastructure management, however.

Connection and prices (Efficiency)

The main issues raised about connection and prices, related to confusing pricing plans and structures from retailers. This made it difficult to make comparisons between retailers or to decide whether the price was fair.

Similar to previous years, concerns around pricing continue with respondents feeling electricity prices (lines and power) were unfair and too expensive in New Zealand. While the opportunity to change provider existed, in practice respondents felt there was little difference in price among retailers.

- 74% (down 6%) agreed electricity providers were easy to find and connect.
- 44% (down 4%) agreed the prices on their electricity bill fairly represented the actual cost of their electricity use.

It was noted that some respondents were satisfied with the current situation, the information available, pricing and provider options and their ability to switch providers; and others had little or no interest in switching providers.

New Technology

Nearly a third (32%, down 1%) said they had looked into new technologies for generating electricity.

When asked to identify barriers that stopped them looking into new technology (***excluding cost***), the most common barriers, were the cost of installation, maintenance, and upgrades to new technology. Also mentioned were the poor return on investment (specifically, the low buyback price for surplus electricity generated and the inability to sell back to the grid).

There were also concerns about the technology itself, in particular EV battery life (lifespan and kilowatts per charge) and solar panel lifespan, coupled with perceived reliability and technical specifications of the technology generally. Some respondents were biding their time, waiting for future improvements in the technology and cost reductions.

When looking at installation, the perceived time and effort required dealing with administration, compliance, logistics and lack of options or technology available for their specific circumstances was a deterrent. In addition, there were concerns about finding skilled and experienced installers and the belief that there was still restricted charging infrastructure for EVs in New Zealand.

This year several mentioned the environmental concerns they had regarding the recycling of batteries at the end of their life and also the mining process as part of their manufacture.

There were also a few that were unable to source the technology they required due to their individual requirements such as location, positioning of equipment and suitability for their home.

Also noted were some respondents who stated they experienced no barriers as they planned their investment in new technologies.

Others, while open minded, were still unsure and required further information and advice (technical and general) before proceeding or said their personal circumstances were not conducive to new technology right now.

Utilities Disputes

Awareness of the Utilities Disputes service remained low with 12% (down 1%) saying they were aware of the service.

Among those who had heard of it, this had mainly been from TV (30%, down 9%), their power provider (22%, up 3%) or from their power bill (21%, up 9%).

Just over a fifth (22%, down 1%) that were aware of the Utilities Disputes service said they had used it.

Powerswitch

Nearly two-thirds (63%, up 4%) said they had heard of Powerswitch.

Among those who had heard of it, the most frequent sources mentioned were TV (40%, up 3%), Google/ Internet search (27%, unchanged), word of mouth (16%, down 3%) and Consumer NZ (15%, down 1%).

Just over two-fifths (44%, up 1%) of respondents who were aware of Powerswitch said they had used the service.

2. Introduction and Methodology

2.1 Introduction

The Electricity Authority (Authority) is an independent Crown entity responsible for overseeing and regulating the New Zealand electricity market.

The Authority regulates the electricity market by developing and setting the market rules, enforcing, and administering them and monitoring the market's performance. It also places a strong emphasis on voluntary market facilitation measures.

As an independent Crown entity, the Authority is free to adopt its own work programme provided it promotes competition, reliability, and efficiency for the long-term benefit of consumers.

This report covers the responses received via a survey of residential electricity consumers' perceptions, commissioned by the Electricity Authority. Opinions expressed throughout this report are based on the verbatim comments provided by the survey respondents on their perceptions of a variety of topics, and do not necessarily reflect the views of the Electricity Authority.

2.2 Methodology

Results in this report are based on an online survey of a nationally representative sample of 1030 New Zealanders 18 years of age and over.

Fieldwork was conducted from the 23rd of May to the 2nd of June 2022.

The margin of error for sample size of 1030 for a 50% figure at the '95% confidence level' is ±3.0%.

At the request of the Authority, figures have been standardised to avoid the totals not adding to exactly 100%. This has been done by 'adding' or 'subtracting' 1 percentage point to the rounded unsure or N/A figures where the total appears to add to 99% or 101%.

Reporting of verbatim feedback

Respondents were invited to make additional comments about:

- Their experience of choosing an electricity provider.
- Their experience about finding and connecting with an electricity provider and prices on electricity bills fairly representing the actual cost of electricity they used.
- Connection and pricing.
- New technologies.

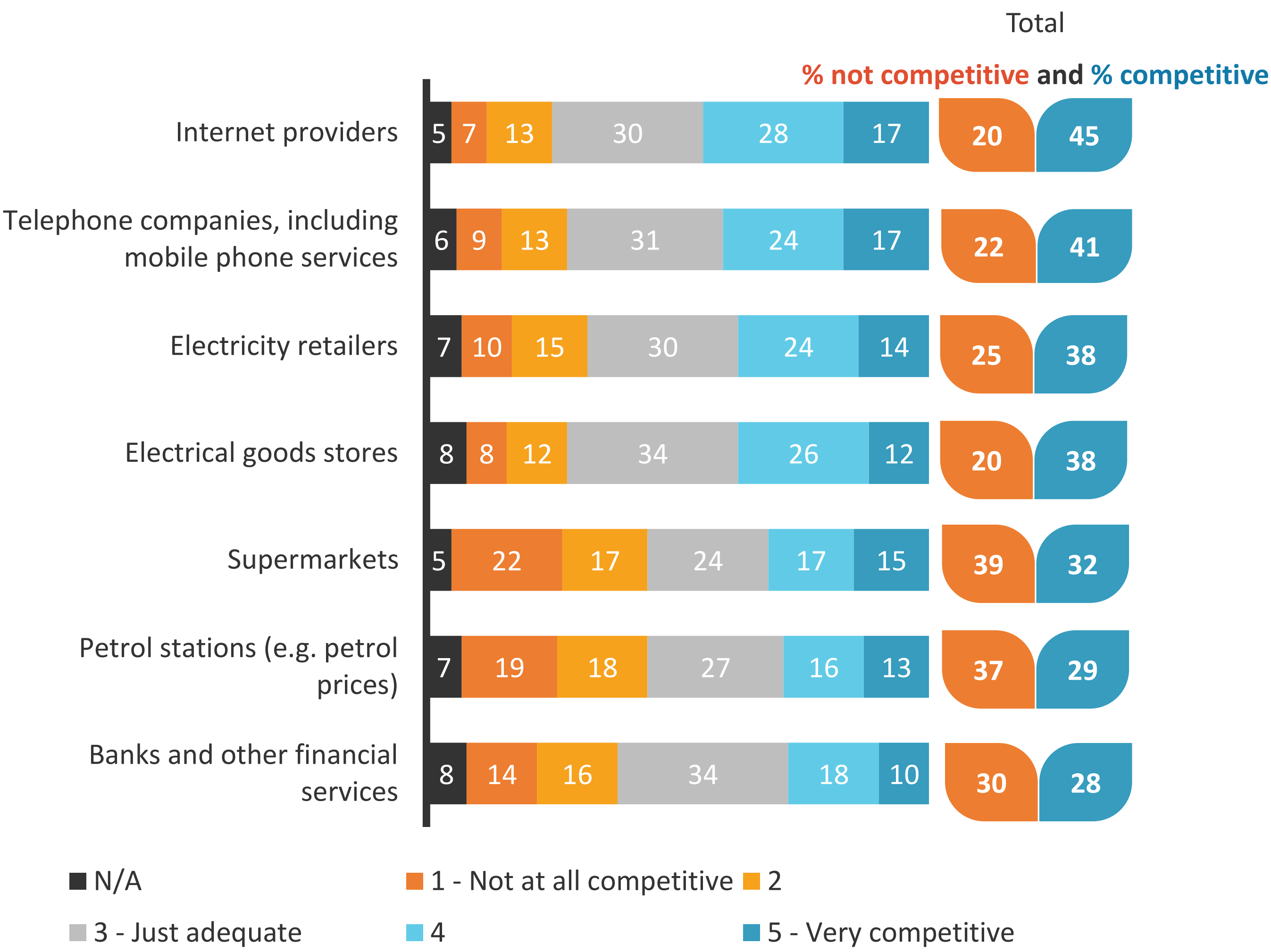
Key themes are discussed in the relevant sections of this report, supported by verbatim comments.

3. Competitive businesses

Respondents were asked how competitive a range of businesses were in terms of working to get their business (i.e. offering them the best deals):

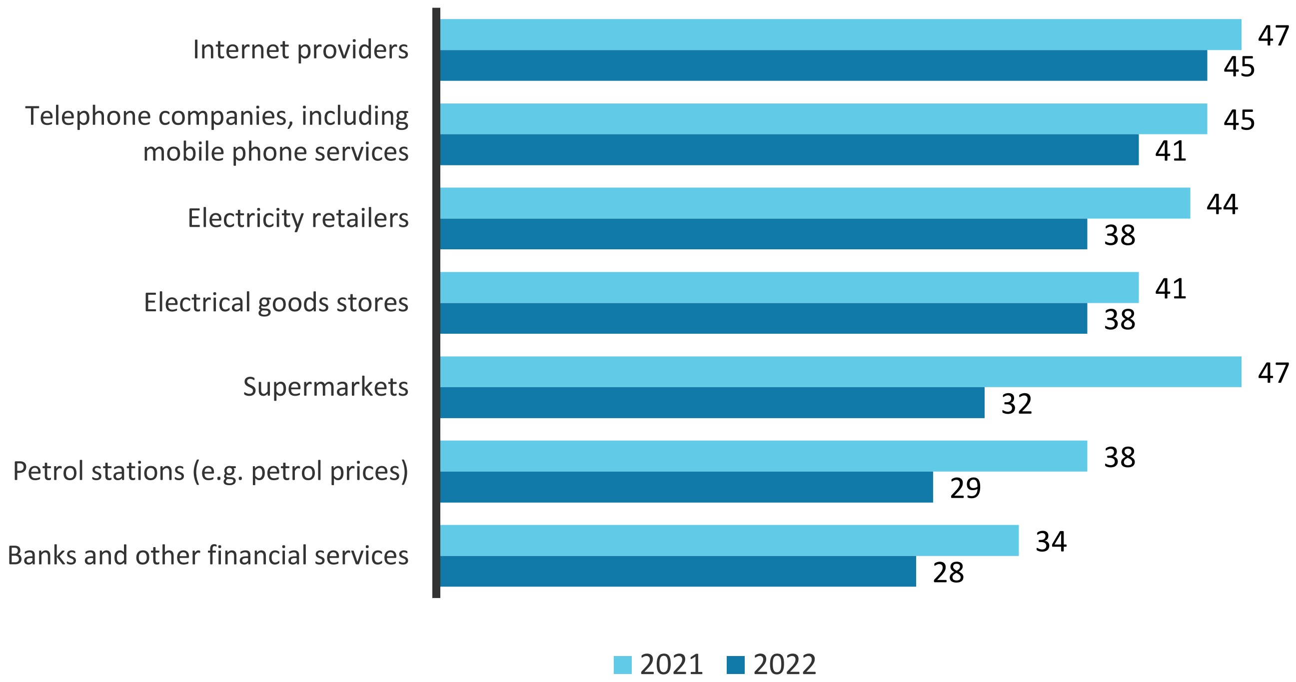
- Internet providers were felt to be the most competitive with 45% (down 2%) of respondents saying they were competitive (4 and 5 on a five-point scale). Telephone companies were rated similarly with 41% (down 4%) saying they were competitive.
- Electricity retailers rated third in terms of total competitiveness (38%, down 6%).
- The businesses viewed to be least competitive were banks where 28% (down 6%) said they were competitive and petrol stations, 29% (down 9%).
- Overall, there was a decreasing trend across all business' competitiveness. One major change to note is supermarkets dropping to 32% in competitiveness (down 15%) compared to the previous year.

Q: How competitive are the following businesses in terms of working to get your business (e.g. offering you the best deals) If you are unsure, please select N/A? (%)



Base: All respondents (n=1030).

Q: How competitive are the following businesses in terms of working to get your business (e.g. offering you the best deals) If you are unsure, please select N/A? (% total competitive)



Base: All respondents (approx. n=1000 per survey).

4. Experience choosing an electricity provider

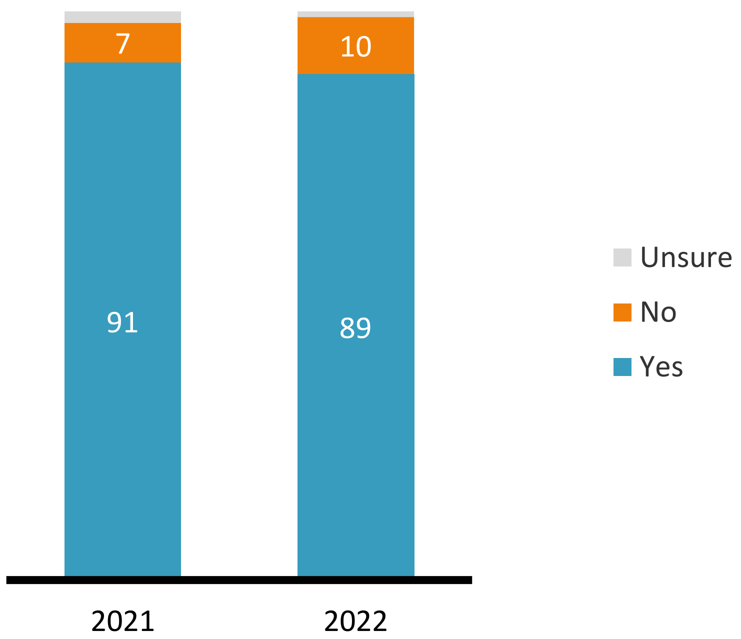
4.1 Decision maker

Similar to last year the majority of respondents (89%, down 2%) said they were responsible for paying the electricity bill or had a say in who their electricity provider was.

Demographic differences

Respondents aged 60+ years (94%), those living in the Canterbury region (95%) and homeowners (95%) were more likely to say they were responsible.

Q: Are you either responsible for paying the electricity bill in your household or have a say in who your electricity provider is? (%)



Base: All respondents (approx. n=1000 per survey).

4.2 Being approached to switch electricity providers

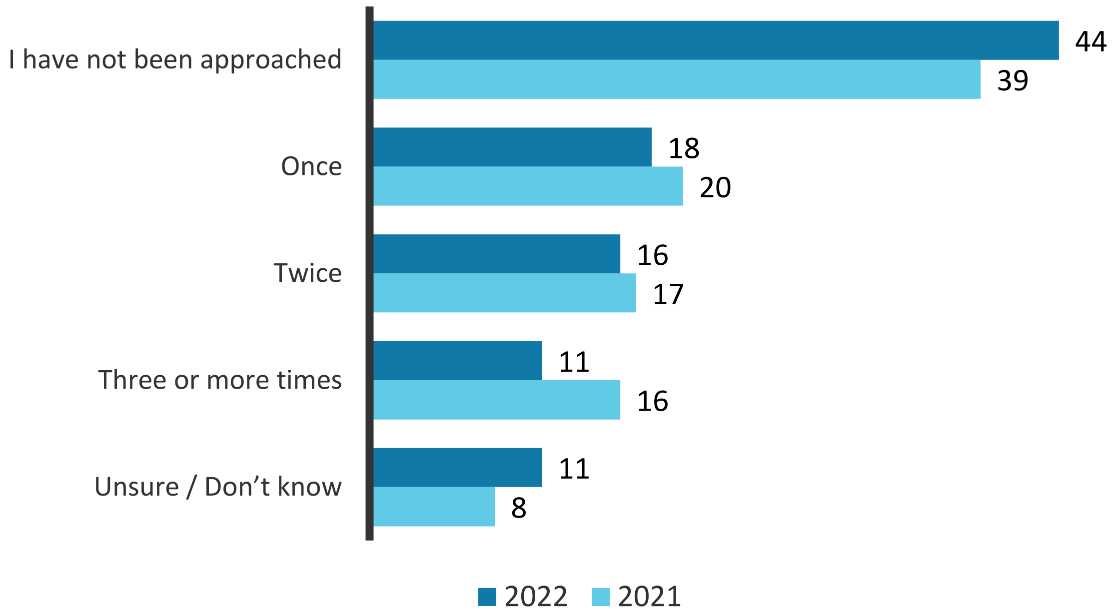
When asked how many times in the past two years an electricity retailer has approached them about switching electricity provider:

- 45% of all respondents had been approached by an electricity retailer/power company at least once (down 8%).
- 18% said they had been approached only once (down 2%).
- 16% had been approached twice (down 1%).
- 11%, three or more times (down 5%).
- 44% said they have not been approached (up 5%) and 11% said they were unsure (up 3%).

Demographic differences

Respondents who identified as Asian (57%), those who had household incomes ranging from 50-100k (54%), fulltime workers (51%) and those with dependent children (55%) were more likely to have been approached at least once.

Q: In the past two years, how many times has an electricity retailer/power company approached you about switching electricity providers? (%)



Base: All respondents (approx. n=1000 per survey).

4.3 Choosing an electricity provider

When asked to rate three statements about their experience of choosing their electricity provider:

- 82% agreed (down 2%) they had a choice in their electricity provider.
- 72% agreed (down 1%) they could find a power company that met their needs.
- 64% agreed (down 4%) that having a choice of power companies meant they could find a fair price.

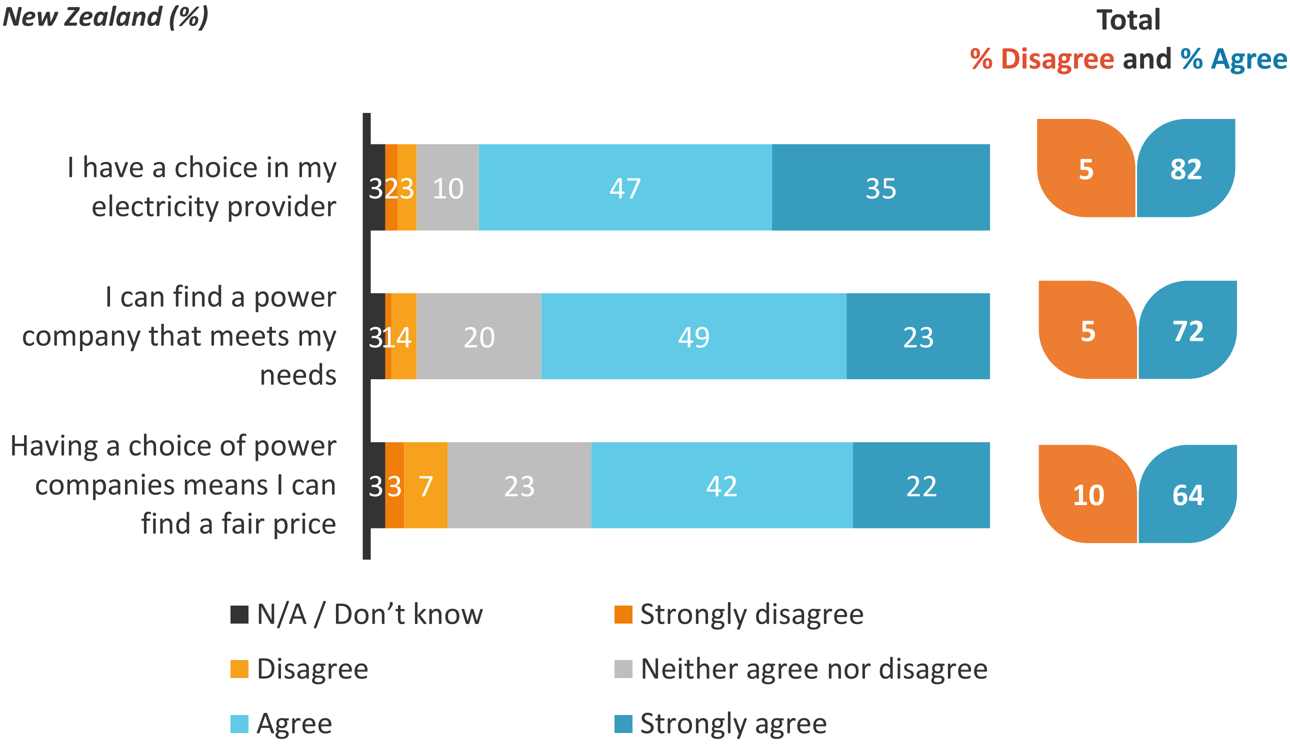
Demographic differences

Respondents aged 60+ (88%) and Canterbury respondents (93%) were more likely to agree that they had a choice.

Those in Canterbury were more likely to agree that they can find a power company that meets their needs (80%).

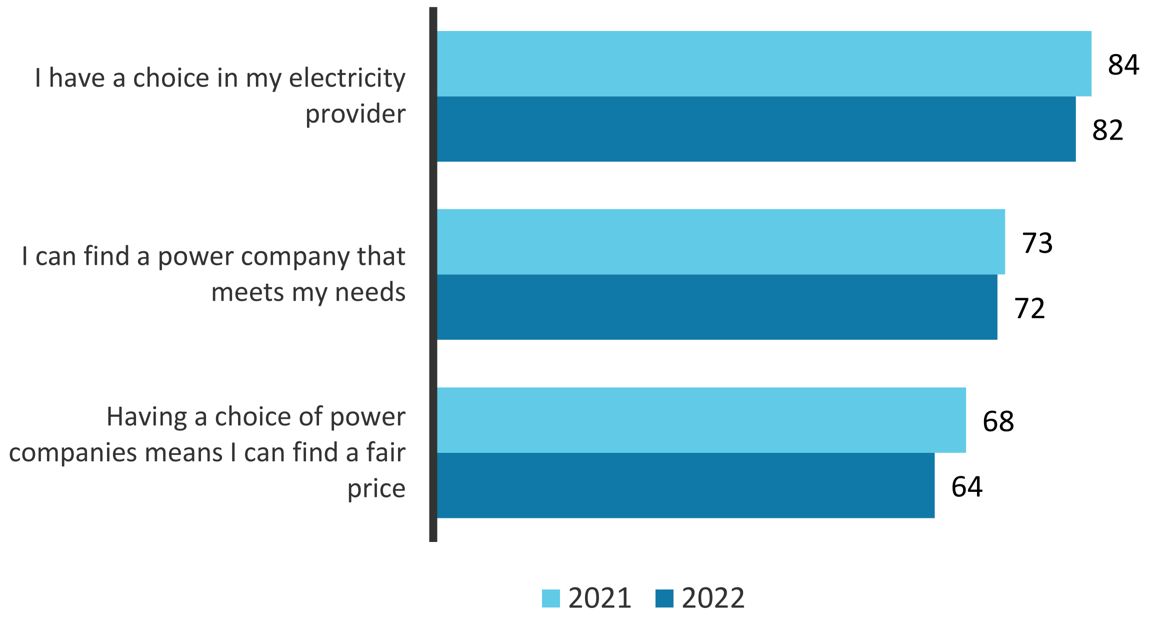
Respondents aged 30-44 were more likely to agree that having a choice of power companies means they can find fair prices (71%).

Q: Please rate the following statements about your experience of choosing your electricity provider in New Zealand (%)



Base: All respondents (n=1030).

Q: Please rate the following statements about your experience of choosing your electricity provider in New Zealand tracking (% total agree)



Base: All respondents (approx. n=1000 per survey).

4.3.1 Verbatim feedback

Respondents were invited to make additional comments about their experience of choosing an electricity provider. Key themes are discussed below, supported by verbatim comments.

Several respondents commented that New Zealand's electricity market was much more competitive than it had been in the past. Both more choice of provider and options were supporting competitiveness.

Respondents commented that power companies were keen to attract new customers and were offering competitive deals and service bundles. Also apparent was the ease of switching providers which gave some bargaining power to negotiate with their existing supplier for a better deal.

> *There are many power companies operating in New Zealand, and it is relatively easy to compare them at powerswitch.co.nz and using your present electricity usage kW per year gives you the best comparisons.*
>
> *Sites like 'What's my number' have made it a lot easier to compare power companies. I am sure this has made them a bit more competitive.*
>
> *I do agree wholeheartedly that I do have a choice and the options available are good.*

Conversely there were a segment of respondents who experienced the opposing view. For them the marketplace was only superficially competitive with pricing plans difficult to compare between retailers.

> *I had to do some serious analysis and developed a spreadsheet to find a better supplier.*
>
> *It is too difficult and confusing to try comparing deals from power companies. I chose my current supplier over 20 years ago, and I don't remember the reason I chose them - except that I most often choose solely on price for almost anything.*

This resulted in a frustrating process for respondents with many concluding that prices were all similar.

Competition is still very limited. Lots of special offers to join - all I want is the best price - no gimmicks.

I have a choice but there isn't much difference between the power companies

Companies only vary a little but some use other things to draw your business. They used to be interested in retaining your business but that does not seem so anymore.

A number of respondents considered that business retailers were there to be profitable and as such kept an eye on the competition adapting their pricing to match. It was more about the 'extras' to attract new customers than price.

TBH they are all pretty much the same they all have people in place who decide where their market share demographic is going to be targeted from and tweak their deals accordingly.

At the end of the day all power companies are the same, they are there to make money for the shareholders and not friends. One may have a lower rate for power, but the daily chargers are dearer.

As mentioned earlier, some had found switching relatively easy, however some respondents commented they had not found it an easy process. Main concerns encountered when looking to switch were not wanting to be locked into long-term contracts or finding the process a hassle. Finding the perfect provider was not possible and trade-offs would always be required (which some were not willing to do).

Except for a 12-month contract I am free to change.

Having a 5-year contract I don't feel I can change companies easily

Time consuming to look up providers and different ways they show their pricing. I recall Powerswitch gave some odd results.

I find that a lot of electricity providers make it purposefully difficult to figure out who can give me the cheapest rate of power.

A number of respondents considered there was still no choice or competition where they lived and that the current provider was their only option.

I live in a rural area, and we only have one electricity provider and a different provider for the internet. I think you can get a fair price if you have a choice of providers, but we don't and that's why I've answered the way I have.

I live in a Lifestyle Village and have no input into the electricity provider; however, I do pay the account for my Villa.

Many respondents considered the price of power was too high, attributing blame to the government, the wholesale price of electricity and collusion among power companies to maintain high prices.

The wholesale price of electricity is far too high in New Zealand, so even fair-minded companies like Electric Kiwi are not able to provide power at reasonable prices

*Used to have a good deal with provider until the government poked their nose in and decided that if you use b****r all power you should subsidize those who use heaps and can't pay for it now making it so we will barely be able to pay for our power.*

I am appalled that the government is going to delete the low user fee as it will increase my power bill. We are only on superannuation.

It may appear we have a choice to get a fair price, however, I believe prices are fixed by the electrical companies that are still very high and expensive. Part of this is done by having a confusing system of who gets paid what, which really means nothing to the ordinary person/consumer.

However, some were happy with their provider; stating they received good service and a fair price.

Each year I review other company's prices and terms and then make a decision on whether I stay with my current provider or move to another. I have chosen to stay with my current provider for the past 2 years and for the new year but can switch at any time at no cost to myself.

These respondents were loyal to their current provider and would not consider switching.

I have not changed power companies for many years as they serve my needs very well.

I have been a customer of Trustpower for over 40 years, and I am very satisfied with them and wouldn't consider changing.

5. Experience of electricity reliability

5.1 Electricity reliability

Respondents were asked to rate three statements about their experience with electricity reliability in New Zealand:

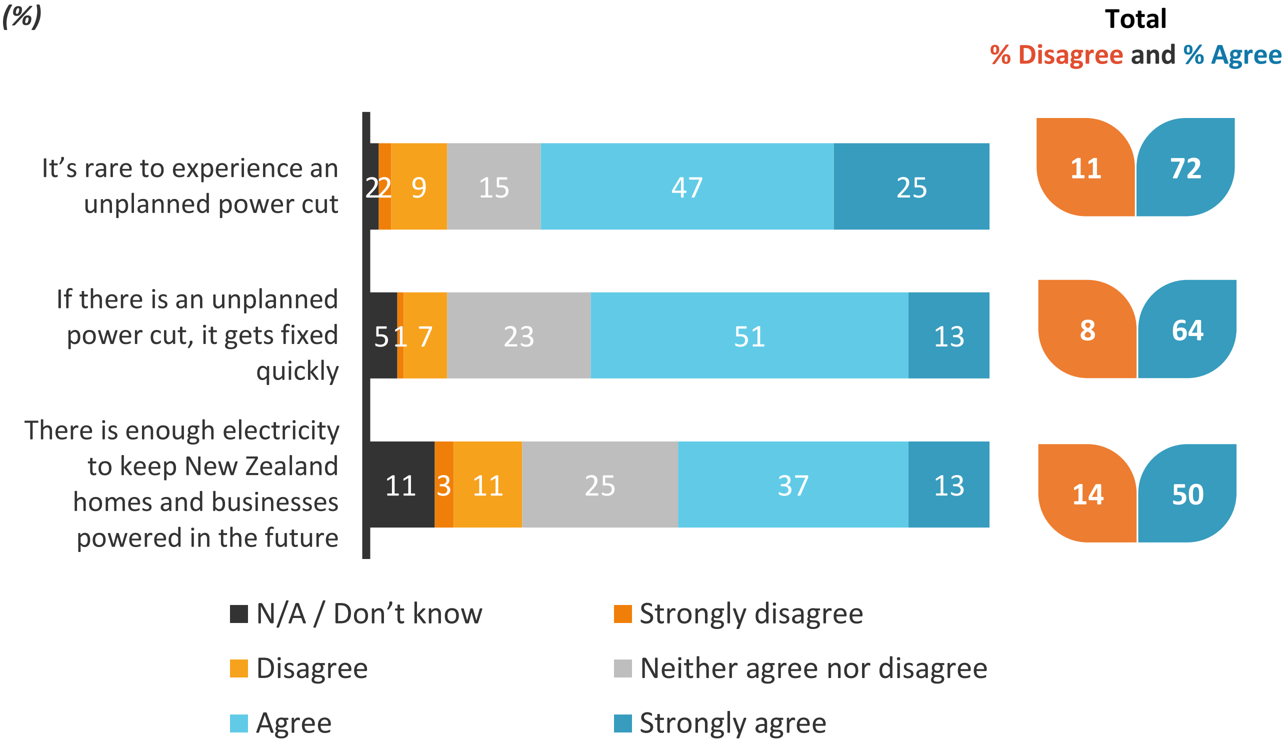
- 72% of respondents agreed (unchanged) that they rarely experienced an unplanned power cut.
- If there was an unplanned power cut, 64% (down 3%) of all respondents agreed that it got fixed quickly.
- The lowest agreement was for if there is enough electricity to keep New Zealand powered in the future; 50% agreed (down 4%).

Demographic differences

Those aged 60+ (78%), Canterbury respondents (82%) and home owners (75%) were more likely to agree that they rarely experienced an unplanned power cut.

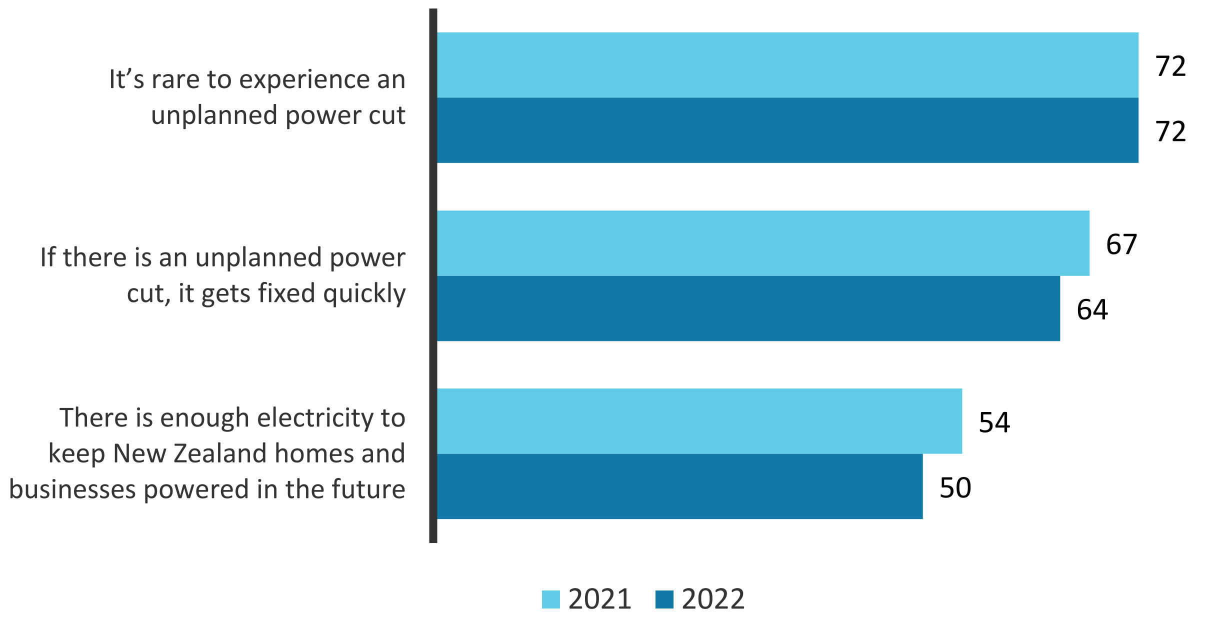
Males were more likely to agree there is enough electricity to keep New Zealand powered in the future (56%), compared to females (43%).

Q: Please rate the following statements about your experience with electricity reliability in New Zealand. (%)



Base: All respondents (n=1030).

Q: Please rate the following statements about your experience with electricity reliability in New Zealand. (% total agree)



Base: All respondents (approx. n=1000 per survey).

5.1.1 Verbatim feedback

When invited to make additional comments about their experience with electricity reliability in New Zealand, the main concerns mentioned were in relation to future power shortages and potential power cuts. New Zealand's increasing power demands due to increased population and their associated power requirements were the main driver.

It was thought there was a need to respond to climate change impacts and invest in more renewable energy. Respondents were concerned that reliability would be impacted with pressure to reduce coal powered generation (noting New Zealand is reliant on imported coal currently) unless there was more hydro dam storage, investment in alternative energy and long-term planning and investment in infrastructure.

> *I'm not sure about the trend to EVs in terms of electricity generation. In most things in life some compromises are necessary, and we have to make the best decision we can from available options. ….. Can we build more hydro in NZ? It's more reliable than wind and requires no rare earths but are we willing to lose one valley's ecosystem to do so?*

> *Renewable and sustainable energy needs to be increased to get rid of coal and cope with the increase in demand e.g., electric cars.*

> *New Zealand is burning imported coal for electricity, totally nuts, we have our own coal and hydro capacity, just need to allowing digging for coal and new hydro dams for future use or go Nuclear*

This investment in more renewable energy was fuelled by the push to have more EVs in usage across the population.

> *But if EV vehicles increase, I wonder if there's enough power for them?*
>
> *There is not enough electricity now with the emergence of electric cars, we do not have the facilities to supply households and vehicles.*
>
> *Electrical output/Infrastructure will not support an electrical vehicle society*
>
> *If the Government's plan of 50% EV ownership becomes reality, NZ will require around double its current MW output; no, there is not enough being generated.*

A few respondents suggested more effort be put into developing alternative, sustainable power options and supporting consumers to take more personal responsibility such as home generation via solar panels.

> *Every new house build should have solar either as panels and battery for some storage or at the very least solar assisted hot water. If private house doesn't use it goes back into the grid, so there needs to be allowance for more storage on the grid.*
>
> *I think solar energy should be developed further to make it more affordable to more people & should be developed for the automobile industry as well.*

There was a segment of respondents with few or no concerns about electricity reliability – they had experienced few if any outages and were complimentary. For them the current management of their power supply was working well attributing their reliability to the Huntly coal fired power station.

> *Yes, plenty of electricity companies to choose from and with upgrades to the power grid etc I rarely if ever experience a power cut in my area.*
>
> *Power cuts are very uncommon*
>
> *There is enough electricity to power the country, but only thanks to Huntly! We need more power stations.*
>
> *There is enough power in NZ because of the vast amount of Indonesian coal we are importing to keep Huntly power station working.*

However, there were some respondents experiencing an unreliable power supply. Outages were frustrating but respondents were however understanding of planned outages for maintenance, upgrades, or unforeseen events (weather). Conversely there was little understanding and allowance for outages resulting from poor infrastructure investment and lack of maintenance.

> *We live rural and quite frequently get power cuts which can sometimes take hours to fix.*
>
> *Weather pays a major factor now as more extreme conditions are becoming more frequent. Floods, gusty high winds, and many extreme storms are coming. We also seem to sometimes have a shortage of power especially in summer and or drought conditions.*
>
> *Where we live the power can cut out very easily (and usually does in a storm) and can take anything from 1 - 8 hours to be fixed.*
>
> *We all know that the providers will need to turn off the supply for regular servicing, this should be done in the off-peak time 11pm-6am. With an unplanned power cut due to environment issues this is nothing anyone can foresee it and we have just got to live with it.*

6. Experience of connection and prices

6.1 Connection and prices

When asked to rate their experiences with electricity in New Zealand:

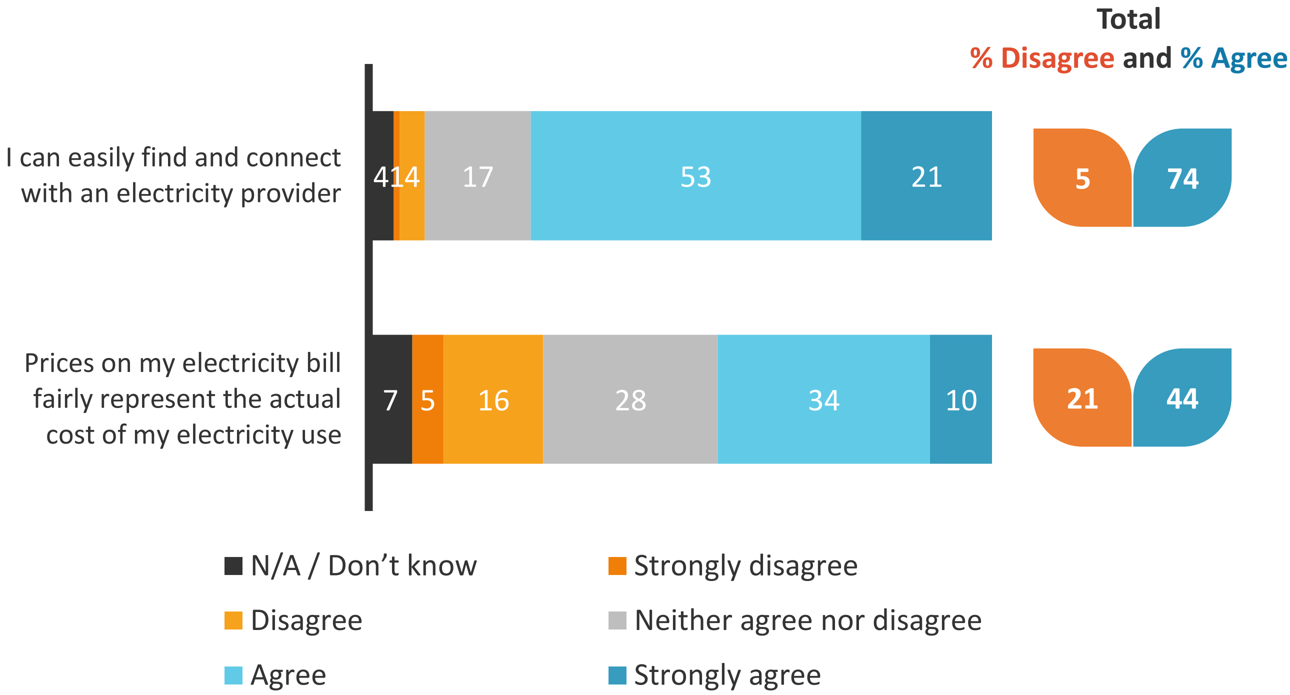
- 74% (down 6%) of respondents agreed electricity providers were easy to find and connect with.
- 44% (down 4%) agreed the prices on their electricity bill fairly represented the actual cost of their electricity use.

Demographic differences

Homeowners (78%) and NZ Europeans (77%) were more likely to agree they can easily find and connect with an electricity provider while those with household incomes less than 50k were less likely than those with higher household incomes (64%).

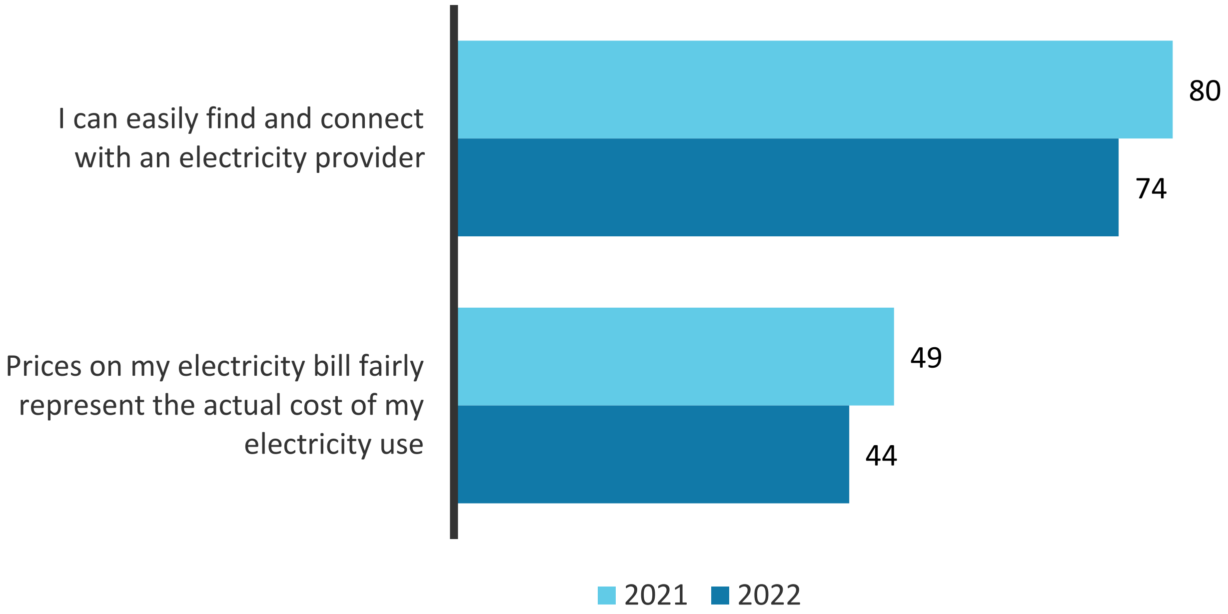
Those living in Auckland were more likely to agree that prices on my electricity bill fairly represented the actual cost of their electricity use (53%), as were those aged 30-44 (50%)

Q: Please rate the following statements about your experience with electricity in New Zealand. (%)



Base: All respondents (n=1030).

Q: Please rate the following statements about your experience with electricity in New Zealand. Tracking (% total agree)



Base: All respondents (approx. n=1000 per survey).

6.1.1 Verbatim feedback

When asked to provide comments on their experience about finding and connecting with an electricity provider and prices on electricity bills fairly representing the actual cost of electricity they used, several respondents commented they found individual retailers' pricing plans and structures confusing and difficult to understand. This made it difficult to make comparisons between retailers or to decide whether the price was fair.

> *It is difficult to make sure I actually get charged for what I use.*

> *I have no way to evaluate whether the prices are fair as don't know how much electricity generation and supply costs are for the companies involved - it seems high, but may well be fair*

Some respondents found it was difficult to work out how the pricing worked, including their power usages and charges and any unexpected charges. For some this made them wary of pricing charges and potentially distrustful of retailers and made them query who was providing oversight of the power industry and pricing structures.

> *Why there is so much difference in price between suppliers begs the question on just how much we are getting charged and should be investigated.*

> *I could probably find one and connect with them fairly easily if I really wanted to, but I can't be bothered. They don't list all their costs the same way so it's such an effort to compare deals. One time when I did think about switching, I backed out of it when I read it more closely but they had gone ahead and switched us over and it took ages to*

get it sorted out so I can't be bothered doing that again. I'll only get a new power company when I move house.

Power prices were seen as high for both lines and electricity. And while there was an ability to switch providers and seek the best deals, respondents were deterred by the perception that there was little difference between providers.

My lines company is putting unfair charges on me that other lines companies in NZ do not put on us like taxes on those who choose to go solar. If I could, I would like a choice to change line providers.

Just because I can find an electricity provider, does not mean that I can afford them. I have been cutting back on electricity use for decades and cannot cut back anymore. The cheapest option is all there is. There is nowhere to get a cheaper rate

It's rather expensive compared to other countries.
Power is getting expensive but little difference by suppliers.

There were some respondents who had a more positive view and were satisfied with the current situation; including the current communications, pricing options, choice of providers and plans and ability to switch providers.

I have a regular fortnightly payment that works well for me.

A very good company to deal with and with great prices.

Yes, I can connect with my electricity provider easily online to communicate and while I can't control the prices of electricity with the app, I can see how much I am using and the cost of it and find ways to save on electricity.

7. Experience of new technologies

7.1 Looked into new technologies

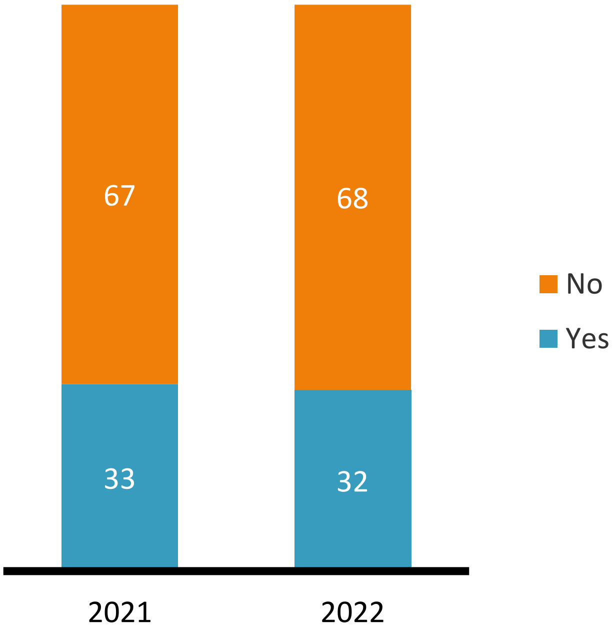
When asked if they have ever looked into connecting or operating new technologies for generating electricity:

- 32% said they had looked into these (down 1%).

Demographic differences

Males (39%), respondents with dependent children (40%) and homeowners (38%) were more likely to say they have looked into these.

Q: Have you ever looked into connecting or operating new technologies for generating electricity?



Base: All respondents (approx. n=1000 per survey).

7.1.1 Verbatims feedback

When respondents were asked if, other than cost, they had come across any barriers to connecting or operating this new technology and, if so, to explain these, some respondents identified no barriers inhibiting them looking into new technologies. They were already interested in trialling new technology, and some had actively invested in it.

> *I have a basic solar setup as power backup and to reduce my main power bill.*
>
> *No, went and installed solar.*
>
> *No problem we installed solar panels and ordered a hybrid vehicle.*

For those respondents open to exploring new technologies there were still some questions and specifically some of the more technical issues. These included:

- Reassurance around **warranty and maintenance**/ technical queries

> *Hard to understand exactly what I need to get it started.*
>
> *The uncertainty of warranty and maintenance.*
>
> *Not knowing how to set it up.*
>
> *Not so much info available.*

- **Concerns about the specific technology** (EVs battery life, both lifespan and kilometres per charge; solar panel lifespan, reliability, and specifications of the technology generally):

> *I was concerned about the efficiency of solar panels and doubted they would be able to power much of my home.*
>
> *Unsure of the longevity of the products and whether the potential return is worth the huge investment.*
>
> *Have questioned what happens with batteries when their life span finishes.*

- **Environmental concerns** regarding battery recycling of new technologies and the mining components required for electric vehicles.

> *Concerns about the environmental impact of the supposedly environmentally friendly batteries.*
>
> *From an environment perspective there seems little thought has been given to the disposal of batteries, etc.*
>
> *Lack of research on the environmental cost of electric vehicles including mining for components and the future for expired batteries.*

A key barrier however was in relation to cost. Queries on the **tangible costs and expenses** were mentioned.

> *Looking to maybe purchase EV but cost and stock available is going to delay my purchase.*
>
> *Mainly cost - $20,000dollars to get solar panels*
>
> *Price - it's way too expensive.*
>
> *Yes. It appears I would still have to pay line charges, so it's a complete waste of time.*

Return on investment was also a concern. Currently there was a lack of incentive to invest in new technology as there were no guaranteed returns or only poor returns.

> *Having constant power and the ability to sell back to the grid.*
>
> *Suitability for our use and excess power return to the grid.*
>
> *Poor returns if selling electricity back to the provider.*
>
> *We looked into solar, but the payback wasn't going to be worth it for the set-up cost etc.*

Also difficult was addressing **individual circumstances** with some respondents unable to source the technology they needed for their specific requirements. The choice or options available were not suitable for their location, roof, or house style. Also, some were renting.

> *Solar power panel set up not suitable for the house design*
>
> *Home was not suitable for solar, cost recovery much too long.*
>
> *My roof is also not ideal for solar because it's oriented NE rather than due N or NW.*
>
> *Our house is badly positioned for solar.*
>
> *We get winds of 165km, and a lot of salt so solar panels aren't practical and we're too close to neighbours for turbines. Priced out electric cars etc but far from economical given our km and their cost - a low km fuel efficient Renault petrol will see us through until either solid state batteries are here in 3-4 years or preferably hydrogen.*

Finding **skilled and local installers** to install and service / maintain the technology was difficult, especially when coupled with needing specific individual circumstances to be accounted for. Also, some respondents found it difficult to navigate what was needed.

> *Availability of competent tradesmen to produce the work and skills to install and service the equipment. Also, some of the technology is new and untried.*
>
> *The company at the time said that we didn't qualify to get them and that we didn't use enough power, but this has changed now so we are looking into it again.*
>
> *Not enough personal knowledge on solar electricity.*
>
> *Solar panels - complicated to install and unknown life expectancy and yes cost.*

Also mentioned was the perception New Zealand lacked a reliable charging structure for EVs and lack of EV stock.

> *Lack of good fast electrical infrastructure, i.e., recharging cars when away from home.*
>
> *Availability. Waiting for more electric vehicles to be available that suit our requirements*
>
> *Looking at a new car (hybrid). But the one I want is unavailable until next year.*

8. Utilities Dispute service

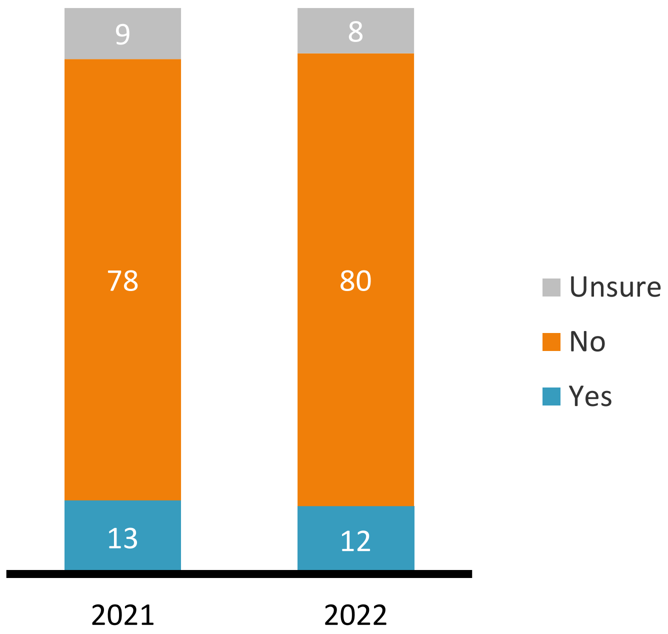
8.1 Awareness of Utilities Dispute

When asked if, before now, had they ever heard if the Utilities Dispute service, 12% said they were aware (down 1%)

Demographic differences

Males (15%) and fulltime workers (15%) were more likely to say they have heard of the service.

Q: Before now, had you ever heard of the Utilities Disputes service? (%)



Base: All respondents (approx. n=1000 per survey).

8.2 Where heard about Utilities Dispute

Respondents who had heard of the Utilities Dispute service were asked where they had heard about it:

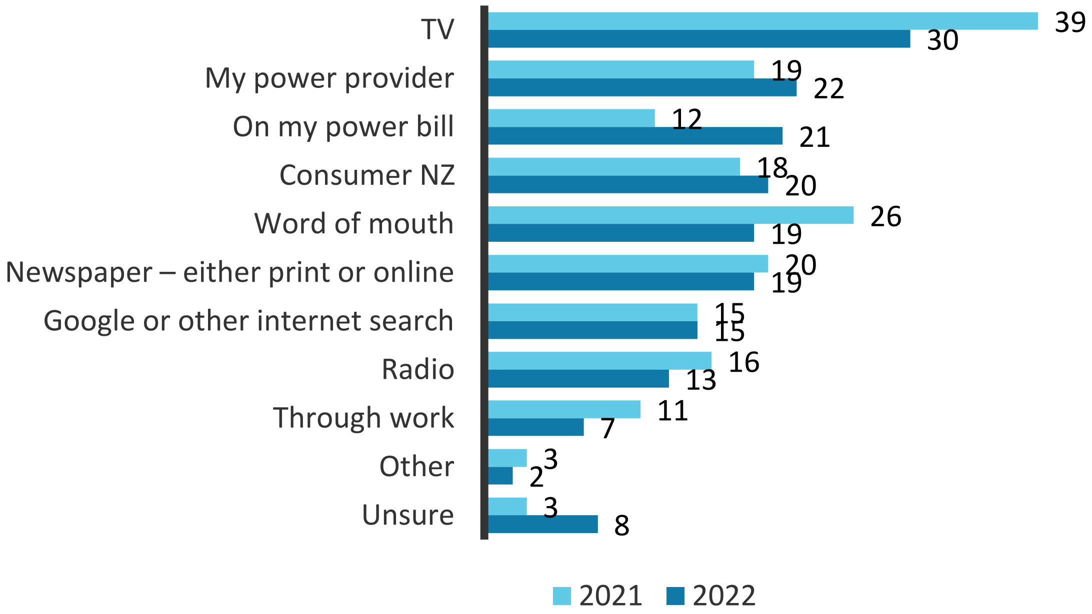
- 30% (down 9%) recalled it from TV.
- 22% (up 3%) from their power provider.
- 21% (up 9%) from their power bill.
- Between 13-19% of respondents mentioned hearing about the Utilities Dispute Service from Consumer NZ, word of mouth, newspaper, or Google or another internet search.

Least common was hearing about the Utilities Disputes service through:

- Radio at 13% (down 3%).
- 7% through work (down 4%).

49% had heard about the service from a single information source, while 22% had heard about it via two channels and 21% via three or more channels.

Q: Where did you hear about it? (%)



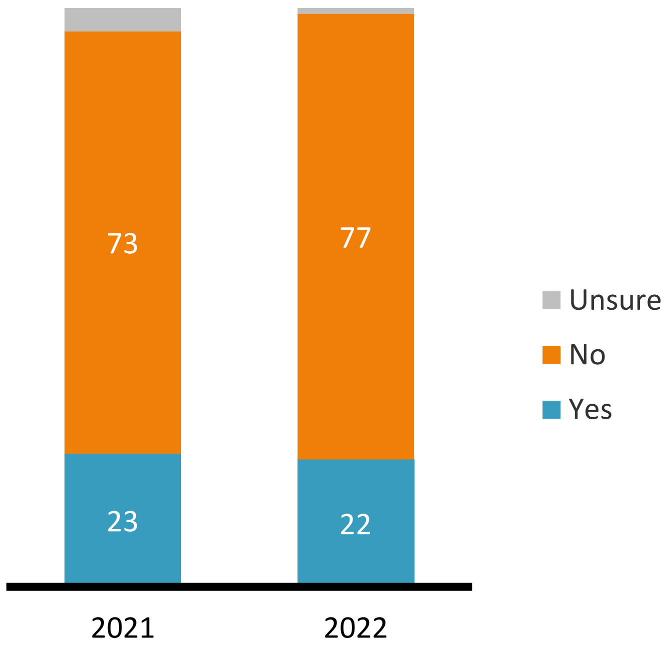
Base: Have heard of the service (approx. n=100)

8.3 Usage of Utilities Dispute

Among respondents who were aware of the Utilities Dispute service, 22% said they had used the service (down 1%)

There were no significant and meaningful demographic differences.

Q: Have you ever used the Utilities Disputes service? (%)



Base: Have heard of the service (approx. n=100)

9. Powerswitch

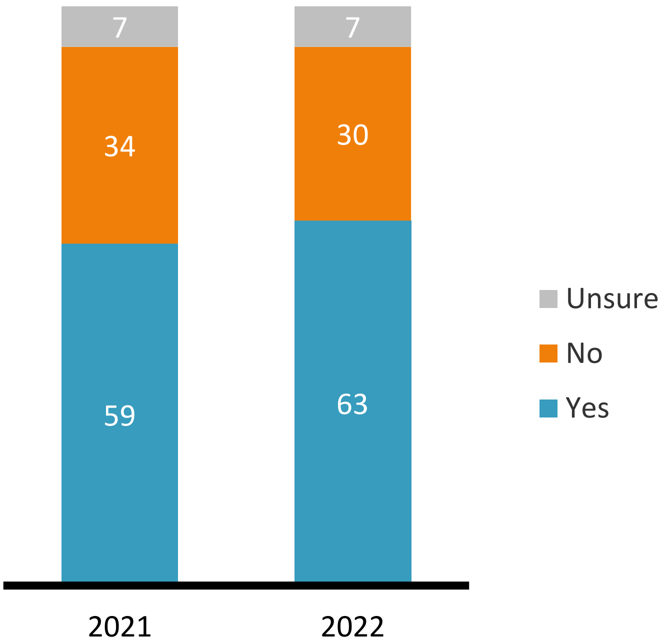
9.1 Awareness of Powerswitch

When asked if, before now, they had ever heard of Powerswitch, 63% said they had heard of Powerswitch (up 4%).

Demographic differences

Those more likely to say they have heard of it included respondents aged 60+ years (72%), NZ Europeans (68%), homeowners (69%) and electricity decision makers (66%).

Q: Before now, had you ever heard of Powerswitch? (%)



Base: All respondents (approx. n=1000 per survey).

9.2 Where heard about Powerswitch

Respondents who had heard of Powerswitch were asked where they had heard about it:

- Most frequently mentioned was TV at 40% (up 3%) and 27% for Google or other internet search (unchanged).
- These were followed by word of mouth at 16% (down 3%) and Consumer NZ at 15% (down 1%).
- Between 2% and 8% of respondents mentioned other channels, including radio, newspaper, power provider, work, and on their power bill.
- 15% could not recall where they had heard about it (up 3%).

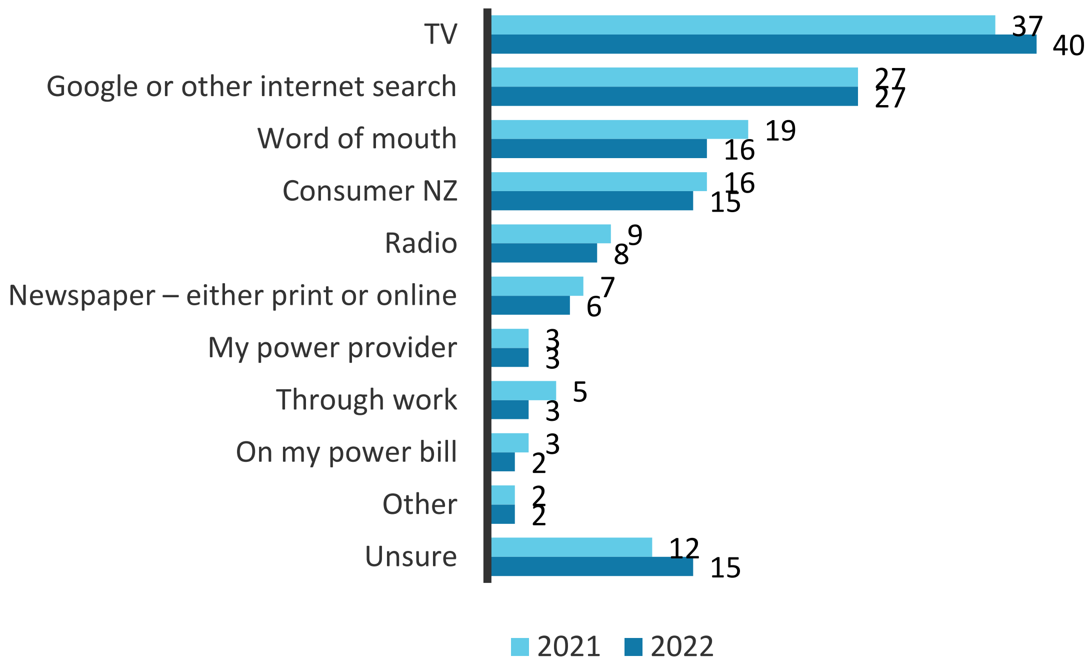
Demographic differences

Males were more likely to say they heard about Powerswitch through Google or other internet searches (33%) compared to females (22%).

Respondents aged 60+ years were more likely to have heard about Powerswitch from Consumer NZ (25%).

62% had heard about the service from a single information source, while 15% had heard about it via two channels and 9% via three or more channels.

Q: Where did you hear about it? (%)



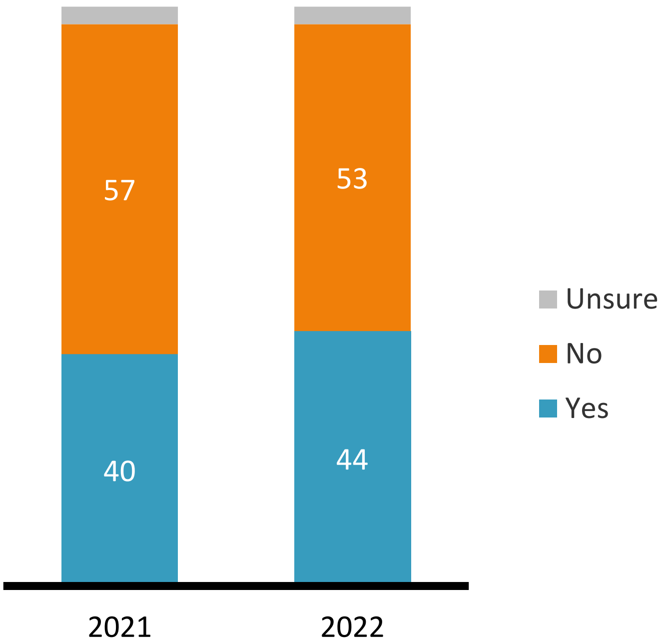
Base: Aware of Powerswitch (approx. n=600).

9.3 Usage of Powerswitch

Among respondents who were aware of Powerswitch, 44% said they had used the service.

There were no significant and meaningful demographic differences.

Q: Have you ever used Powerswitch? (%)



Base: Aware of Powerswitch (approx. n=600).