



Residential and SME Forum Report

Report prepared for CitiPower, Powercor and United Energy

June 2018

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Executive Summary

Across CitiPower, Powercor and United Energy (CPPCUE), there is a strong commitment to engaging with customers to help develop future priorities and directions for the three networks. As planners and managers of the electricity grid, the distributors place a high priority on understanding what customers define as 'value' and what they see to be most important in planning the future electricity network.

Customers' opinions and feedback are currently being sought to develop regulatory proposals for the next Electricity Determination Price Review (EDPR). The Energised 2021-2025 program involves four key phases for engagement from January 2017 to July 2019 and beyond. Phase 3 of the program includes: community opinion leader forums, a region-wide customer survey, interviews with large customers plus a series of deliberative engagement forums (the subject of this report).

Resident and SME Forums

The Resident and SME Forums hosted by CPPCUE in May-June, 2018 gave participants an opportunity to: think about the energy future they want, their energy values and experiences (e.g. with connections, renewable energy, reliability, quality and safety), and discuss future value propositions, network improvements and related investment.

Close to 200 residents and small to medium business enterprises (SMEs) participated in the forums held across CitiPower (Melbourne), United Energy (Pinewood) and Powercor (Ballarat) areas. Participating customers had diverse demographic backgrounds and insights to energy. While a small number of residents had a high level of interest in energy and were well informed, in general, energy literacy was low. Customers from the Powercor area were somewhat better informed, but limited energy exposure and knowledge was evident among those attending the CitiPower and United Energy forums.

Energy Values

Understanding the values that impact customer views about their electricity supply was the starting point for all three deliberative forums. CPPCUE's interest in customer-defined energy values is ongoing and the forums provided an opportunity to confirm the relevance of energy values identified in earlier research. Reliability and affordability were again ranked at the highest level. Environmental sustainability (an eco-efficient network), innovation and increased education, transparency and information sharing were also emphasised. Many of these observations translated directly into customers' evaluation of CPPCUE's Value Propositions for 2025.

Value Propositions for 2025

In today's energy environment, many utilities are struggling to define value propositions that include but go beyond core values of consumers (the 'givens') to deliver the 'value add' that customers want. The deliberative forums enabled CPPCUE to comprehensively test its nine (9) value propositions for the Energised 2021-2025 regulatory reset. Reflecting prior research, energy and affordability led the way in customers' ranking of the five most important propositions. Others included in Powercor and United Energy customers' top five propositions were: 'providing a safe environment for customers and workers', 'providing a safe network that mitigates bushfire risks' and 'using electricity when you want or receiving savings to reduce use'. CitiPower customers put 'making it easier to export solar and charge batteries' ahead of the electricity usage or savings option in their top five propositions.

Reflecting wider energy sector observations, CPPCUE customers also wanted their electricity distributor to go beyond the 'must dos' to show how they will deliver 'added value'. Making things simple and fast for customers was seen to be the right focus but some were looking for more. Forum attendees saw the following to be missing elements in the draft value propositions (some of which might still be injected to enhance Energised 2021-25 submissions):

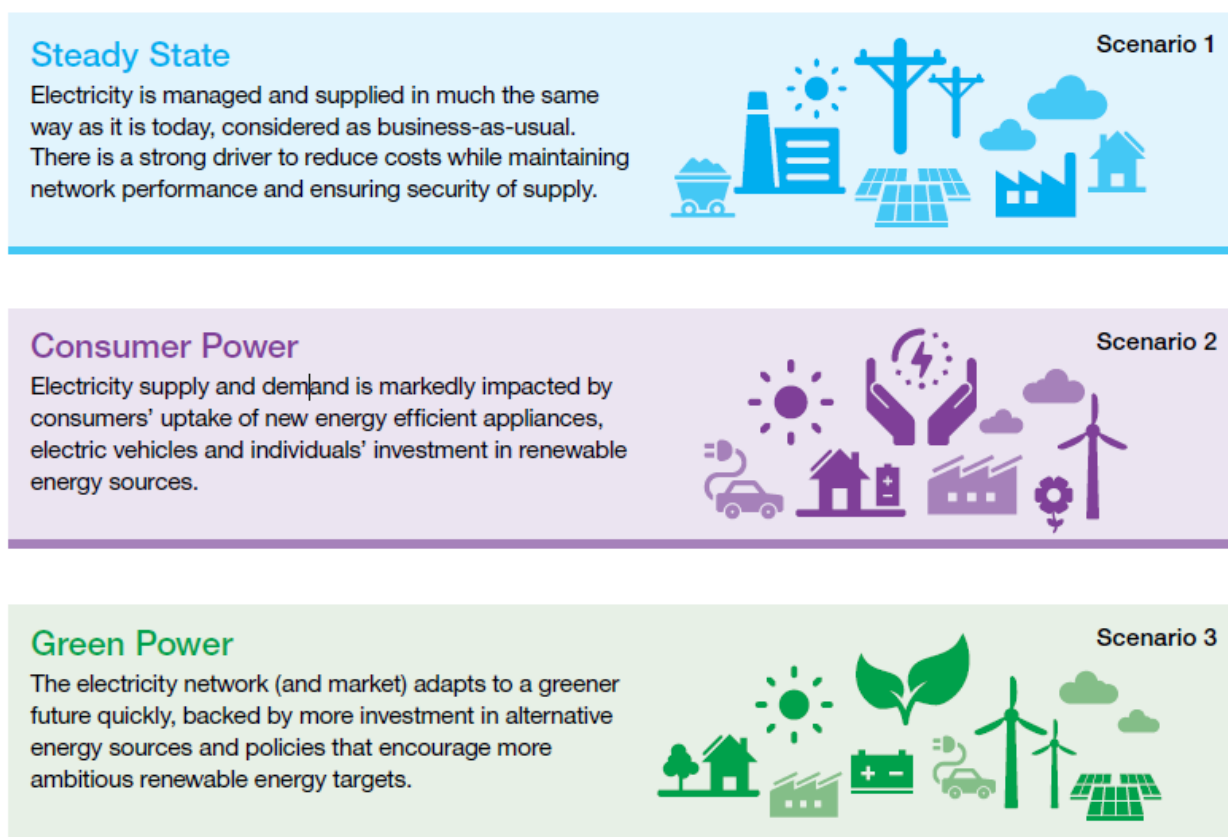
- **Providing education** – developing programs or finding ways to increase the energy literacy of residents and SMEs and provide 'easy to understand' information on tariff options.
- **Providing tailored advice on energy solutions** – a number of customers felt that customised electricity solutions or advice was needed in line with their needs (here, there was little distinction made between the roles played by distributors and retailers).
- **Innovation and related research and development** – the value propositions need to make reference to how the distributors are keeping up with changes in technology, (e.g. renewables and related grid innovations) and the benefits for customers.
- **Increased transparency and information sharing** – participants were seeking more clarity and information sharing on bills and where the money goes (distributor and retailer components) plus more communication about the distributors' future plans.
- **Distribution and retailer collaboration and learning from other states and countries** – it is not clear to customers how the networks are sharing information or knowledge across the sector and across geographic boundaries. Most felt that more collaboration is probably needed to help with the transition to renewables.

Customers preferred energy future

A starting point for CPPCUE in developing their Energised 2021–2025 plans was a Network Energy Futures Forum with stakeholders and early modelling of what type of energy future could exist in 2025. To supplement this work, residents and SMEs at the deliberative forums were also asked to think about their future energy vision and choose one of three scenarios based on its fit with their own vision.

Across the three energy scenarios discussed (see Figure 1), the Green Power scenario was viewed as most desirable by CitiPower and Powercor customers. However, the desire for a Green Power scenario was equally matched by interest in the Consumer Power scenario at the United Energy forum. The Steady State scenario, with its assumption of slower growth and renewable energy take-up, was not a ‘first choice’ scenario for customers (although some felt this could be the most likely energy scenario in the short term).

Figure 1: Green Power Scenario - Customer' preferred energy future



Making it easier to connect

Customers' experiences of arranging new electricity connections (green field sites) were limited in number across the forums. Those who had arranged a new connection said the process and timing could be improved. Delays with connections ranged from one week through to over 30 days with the greatest frustration experienced by those in building and construction. Most who had experienced delays felt that the distributor's response was 'long winded' and difficult with poor communication and limited 'buy-in' to customer concerns.

Table discussions led most customers to conclude that a fast track, 'user charge' connection option may suit large businesses, but was otherwise unacceptable. Most viewed the option as inequitable, differentiating the service available to customers on the basis of their ability or willingness to pay. Some customers also wondered how the connection timeframe could be shortened if the network was already working to full capacity and struggling to organise new connections in a timely way.

Providing a reliable energy supply

Across the forums, most residents and SMEs thought their current electricity supply was reliable (with this view held strongly in CitiPower, but less so in Powercor and United Energy). Where reliability is less than adequate (i.e. in worst served areas), most thought that the network should invest to improve reliability. Customers who attended the forums believed any investment(s) to improve reliability in worst served areas should be paid for by everyone, not just the customers impacted by lower levels of service.

Most felt that GSL payments should be made to customers for low levels of reliability, but current compensation are seen as far too low relative to the inconvenience needed to trigger payments. Many also feel that GSL payments must continue until reliability is improved. However, not all customers believed that investment should be directed towards improving the reliability of existing infrastructure. Some felt that resources should be directed towards the undergrounding of power lines and/or the integration of small and large scale renewables and battery storage to the grid (delivering safe, cost-efficient and eco-efficient energy sources in the long term).

Renewable energy: opportunities and impacts

Customers attending the forums were given valuable insights from CPPCUE leaders on the connection opportunities and challenges associated with solar power and the need for an investment in new technologies to enable all customers to have a two way energy flow (i.e. to export excess power to the grid or trade it with others). The majority of customers, regardless of whether they had solar right now, expressed an interest in solar export. Many said that the opportunity to export was a factor in their decision making about whether to get solar panels.

A key question asked at the forums was “Who should fund the investment in new technologies needed to enable a two way energy flow?” Participants were provided with four options to consider which were: (1) charging the full cost of additional investment to each new customer that triggers the need for new ‘exporting’ technologies, (2) developing a one-off standard ‘connection charge’ for all customers who connect the new technologies, (3) charging an ‘export tariff’ for all exported electricity (per kilowatt) or (4) obtaining funds from the Australian Energy Regulator and recovering the costs from all customers (solar and non-solar), in the same way other network costs are already recovered. In each forum, the preferred funding option was different, but across all the forums, the majority said distributors should charge a one off standard connection fee (Option 2).

About half of all forum attendees were interested in the concept of peer to peer trading (e.g. selling or buying excess power on a virtual platform). However, there was a general lack of clarity among customers about how this would work in practice and who would manage it. Key concerns were the regulation of trading arrangements that impact pricing, reliability of supply, potential neighbourhood disputes and who would own and manage the power lines between neighbours. While there was strong support for the idea, it was conditional on many factors not yet explored.

Managing network safety

Customers’ views about the safety of the electricity networks and strategies to mitigate safety were high priority topics at the deliberative forums. Customers showed strong support for the networks continuing to unlock capacity in AMI meters to detect and replace potentially faulty assets e.g. Dog bones (see Appendix 2g for explanation) and to move underground poles in traffic black spots. There was strong support in the Powercor area for the business to cover or underground high-voltage powerlines in high fire risk areas somewhat earlier than 2040 (the date recommended by the Victorian Bushfire Royal Commission). A faster transition to underground power assets for safety reasons other than bushfires was also supported in the United Energy and CitiPower areas (with customers recognising that this would come at a higher cost in the short term).

At the United Energy forum, there was strong support for installing more REFCLs if the distributor believes that the benefits of doing so outweigh the cost. There was also strong support in the Powercor area for REFCLs to be operated in full fire-safety mode on days other than total fire ban days, despite the costs and reliability implications.

Vegetation management (Bushfire mitigation)

While there is a genuine interest in protecting native species and more sensitive pruning of trees and vegetation, United Energy and Powercor customers supported the removal and replanting of some vegetation in favour of selective planting of more favourable vegetation types. However, this approach was not supported at the CitiPower forum. Discussions about the vegetation trimming

cycle led most attendees to conclude that the frequency and severity of trimming should stay the same (except in Powercor where there was a slight preference for trimming more frequently and less severely).

Energy data access, data sharing and demand management

Across all three forums, customers were interested in participating in demand response programs i.e. trials or programs where they could receive a financial incentive or reward to reduce consumption at peak times when asked by the distributor. The majority also said that, if installed, they would be likely to use a real time energy use monitor in their home or business to make decisions on their electricity usage. However, remote intervention by the electricity distributor to adjust energy use (e.g. switching off or adjusting appliances like air conditioners) was firmly rejected. Most felt this was too controlling and could lead to an abuse of power in future.

There was borderline support across the forums for customers' de-identified electricity usage data to be given to third parties to develop new products or services linked to their needs – those that did support the idea said their support depended on who the third parties are, the purpose of sharing the data and the tangible benefits on offer for energy consumers.

Customers' views on the forum and their distributor

Forum evaluations

Customer evaluations of their forum experience overall were positive with one third of Powercor attendees rating their forum as excellent and just under half of CitiPower and United Energy attendees giving their forum an 'excellent rating'. Over 90% of forum participants (across all networks) felt that they were able to express their views in a supported way and between 80-90% felt like they were heard and had a 'voice' (key requirements to obtain rich engagement data).

When asked if they were confident that the outcomes of the forum would be considered, 78% of Powercor attendees said that they were. Among United Energy participants, 63% were confident their views would be used and 60% of CitiPower attendees held the same view. The organisation, content and range of experiences in the forums received positive feedback. In addition, the majority agreed that the venue and catering arrangements were satisfactory at all three events.

Customer ratings of their distributor

At the beginning (and again at the end of each deliberative forum), participants were asked to rate their distributor (on a zero to ten scale) on 'having customers' interests at heart', 'listening to customers' and on their own 'attitude towards the distributor'. Scores on these attributes were not expected to be high given that distributors have far less exposure to energy consumers than

retailers. However, scores were sound. Powercor achieved scores between 6 and 7 on all three attributes at the start of the forum and customers rating of Powercor rose to 7.7 out of 10 by the end of the forum. CitiPower and United Energy achieved scores around 6 out of 10 and customer ratings of both distributors rose marginally to 7.4 and 6.8 after the evening's discussion.

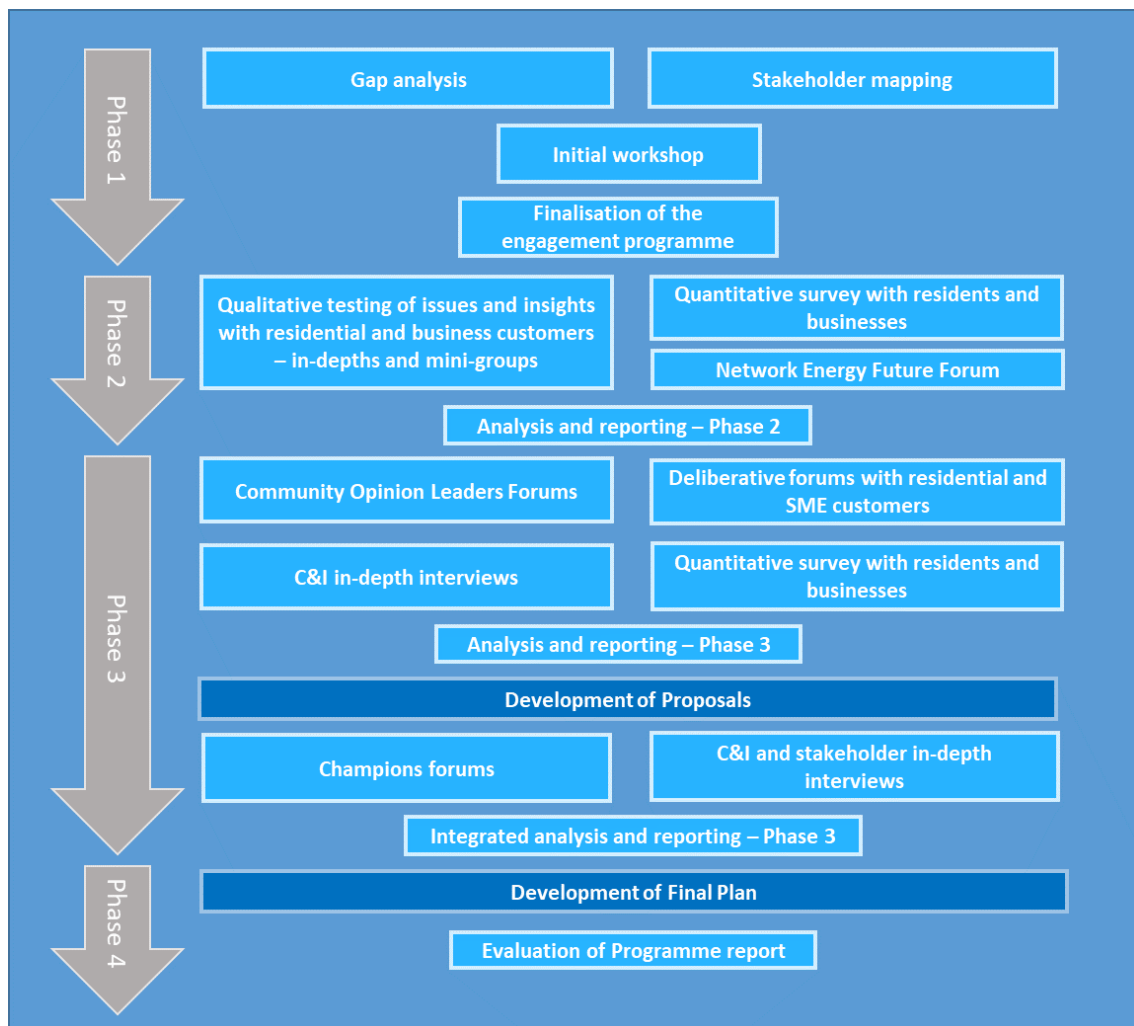
1.0 Introduction

CitiPower, Powercor and United Energy are required to provide regulatory proposals to the Australian Energy Regulator (AER) every five years, detailing their predicted expenditure and revenue requirements over the regulatory period. The businesses are currently developing their proposals for the 2021-2025 regulatory period.

Woolcott Research and Engagement is contracted to conduct customer research to support the preparation of the regulatory proposals as part of the Energised 2021-2025 program. This program involves four key phases for engagement from January 2017 to July 2019 and beyond.

Figure 2 presents the overview of the research program that supports engagement as part of Energised 2021-2025. We are currently in Phase 3 of the program.

Figure 2: Components of the research program for the regulatory reset



2.0 Methodology

Resident and SME Forums using deliberative engagement techniques have become an important inclusion in the customer and stakeholder engagement programs of energy distributors. In line with ‘best practice’ across the energy sector, CPPCUE chose this technique to inform its Energised 2021-25 submissions. For distributors, a key advantage is the ability to share information and educate energy consumers about pivotal issues and questions before they engage in facilitated discussions, report backs and deliberative polling.

Three deliberative forums were hosted by CitiPower, United Energy and Powercor over May-June, 2018 at the locations and times shown below:

- Melbourne CBD (CitiPower) – Monday 28th May 5.30-9.30pm.
- United Energy (Pinewood) – Tuesday 29th May 5.30-9.30pm.
- Powercor (Ballarat) – Wednesday 6th June 5.30-9.30pm.

This report discusses key findings from the forums that involved customers in a meaningful and wide ranging dialogue on their energy values and experiences, their preferred energy future and alternative approaches to network management and investment over 2021-25.

As shown below, a total of n=198 residents and SMEs attended the forums. Small businesses were few in number with some finding they were unable to attend, despite their interest and commitment to do so.

Figure 3: Forum Participation

Distributor	Residents	SME's*	Total
CitiPower	50	5	55
United Energy	66	7	73
Powercor	63	7	70

*This included both business owners and decision makers in small businesses

Customer forums using deliberative methods go considerably further than traditional consultation methods to elicit the depth of insight needed to develop regulatory proposals. The forums consisted of a mix of table discussions, presentations/films/speakers from the front, and participant response and feedback sessions from tables.

Woolcott Research provided a Lead Facilitator, who chaired the forums, and sufficient table facilitators for each of the forums. Participants spent most of the time working on tables in small

groups each with a table facilitator from Woolcott to guide the discussion and record the main points raised. The agenda is included in Appendix A.

1. Each facilitator was equipped with a laptop to record time-coded storage of all qualitative data - available for download into grids for subsequent detailed analysis

Keypad polling was also included with participants using a handheld device to answer or vote on questions shown on screen, and results given in real time. After each vote the data from keypads was collated and downloaded for analysis.

2.2 Forum recruitment

Recruitment for the forums took place two to three weeks before each forum. Participants were recruited through stratified random sampling from the areas surrounding the forum locations. Quotas were set on age, gender and cultural and linguistic diversity (CALD). However, reflecting wider trends in forum recruitment, it proved difficult to attract CALD customers to the forums.

People were telephoned randomly within the communities and asked for their interest in attending. Those who expressed an interest in attending then completed a short screening questionnaire. This resulted in the inclusion of people 'off the street' who were not generally engaged in the electricity industry. They were all emailed to confirm participation.

Confirmation telephone calls were made in the days leading up to each event and followed up by email. More than one hundred participants were recruited for each forum.

Detailed forum findings

3.0 CitiPower – Forum findings

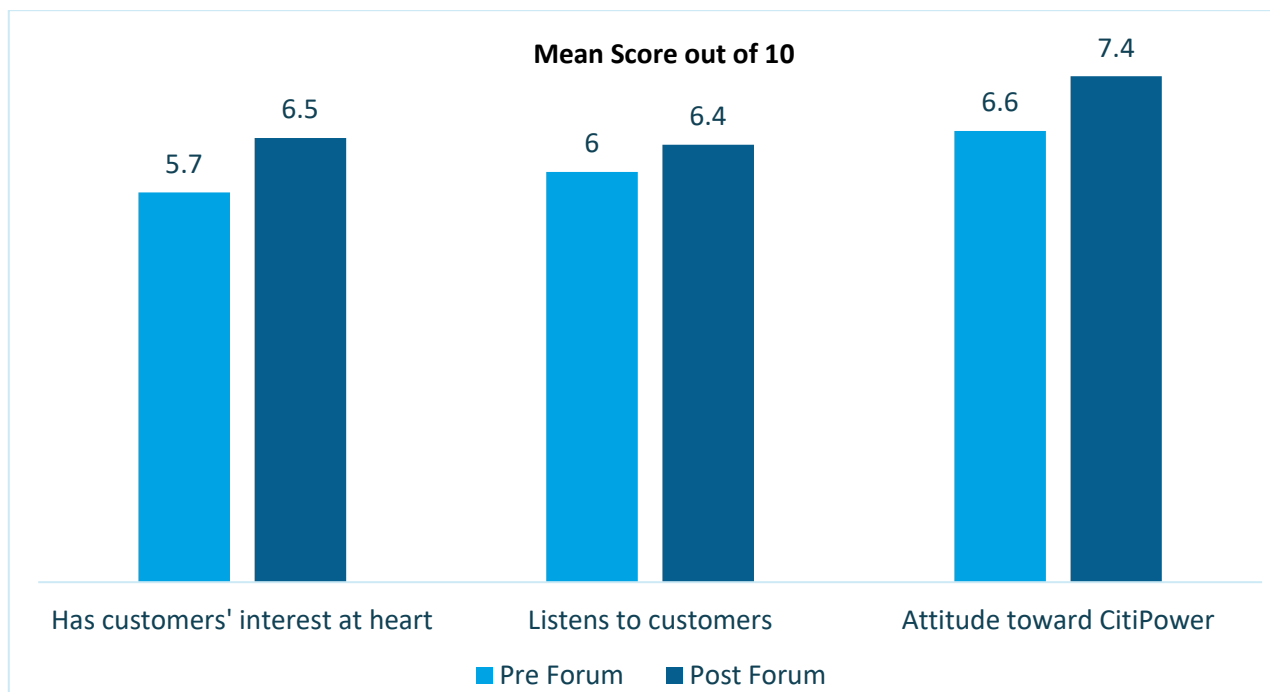
3.1 Perceptions of CitiPower

To stimulate early participation and set the scene for further discussions, Woolcott Research opened the CitiPower forum with a short series of questions to obtain top line views on the distributor and its customer orientation. At the beginning (and again at the end of the forum), participants were asked to rate CitiPower (on a zero to ten scale) on, 'having customers' interests at heart', 'listening to customers' and their overall attitude to CitiPower.

On average, customers gave CitiPower a score of 5.7 on 'having customer's interest at heart', and this improved over the forum to reach a mean score of (6.5) at the end of the forum.

As shown in Figure 4 below, there was a slight increase in participant's pre and post forum ratings for 'listens to customers' (with the score rising from 6.0 to 6.4). However, there was a marked change in overall attitudes towards CitiPower at the end of the night (with the mean score rising from 6.6 to 7.4).

Figure 4: Perceptions of CitiPower



How would you rate CitiPower on the following?
Base: CitiPower (n=55)

3.2 Energy values

Understanding the values that impact customer views about their electricity supply is a sound basis for interpreting their wider perspectives and preferences. Customers' trust in their electricity distributor and opinions on its services are formed by connecting their experiences with their values and ideas.

At the CitiPower forum, outcomes of earlier survey research (in Phase 2 of the engagement program) were shared to stimulate discussion about the values of most importance. A handout was also provided showing the unprompted values identified by residents and SMEs (see Appendix 2a). Based on the insights presented, participants were asked to identify which of the energy values they felt CitiPower should focus on in future and discuss how their views aligned or differed with the earlier findings (shown in the figure below).

Figure 5: Energy values identified in phase 2 research

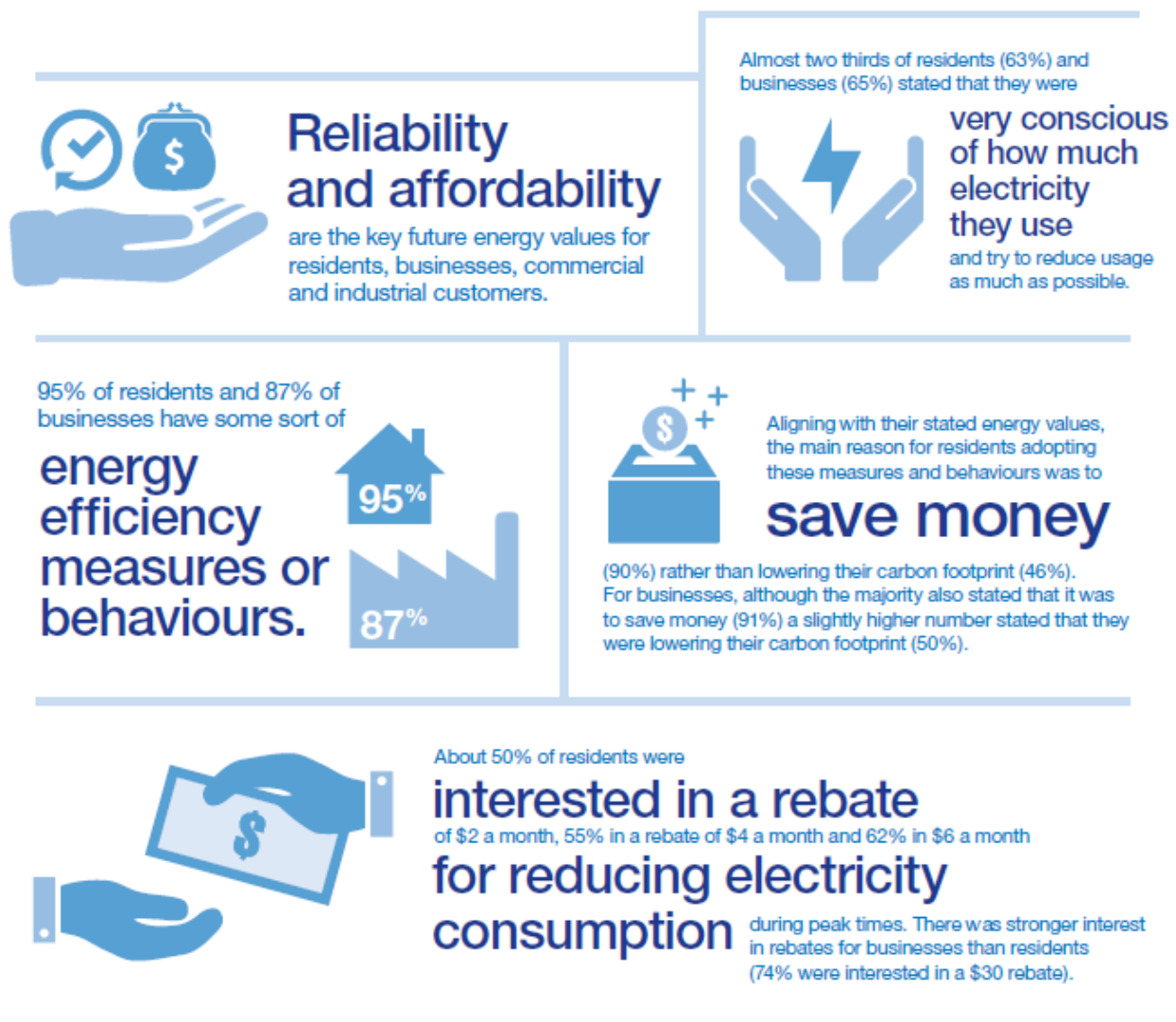


Figure 5: Energy values identified in phase 2 research continued



The majority of residents were in favour of
**grid-wide and home-based
renewable generation of electricity**

Solar panels on homes (74% of residents in favour) and large-scale renewables on the network for generation (59% of residents in favour). CitiPower residents were particularly in favour of large-scale renewables (67%). CitiPower residents and businesses were also significantly more in favour of electric vehicles than those in other network areas (58% residents and 67% businesses).



Businesses were more favourable than residents towards

large and small-scale renewables

Solar on homes and businesses (85%), large-scale renewable electricity generation (66%), batteries (62%) and electric vehicles (54%).

Around a quarter of residents already had solar panels

5% a central system, 4% batteries and 4% electric vehicles.



Just under a third of residents and businesses who did not currently have solar panels stated that they would be likely to install them in future.

Most commercial and industrial customers expected to use more renewable sources in the future

and are looking to the distributors to assist in the transition.

They expect more flexibility and innovation from distributors to facilitate multi-way energy flow and allow users to benefit from any excess electricity they generate.

32% of residents and 28% of businesses indicated that they

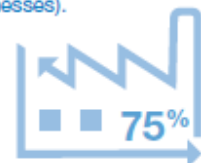
intended to purchase or implement the green energy measures in the next 2 years.

For many, a 3–5 year timeframe was more realistic (42% residents and 45% businesses).



Saving money is the most popular incentive for purchasing/installing green energy options (85% residents and 84% businesses).

Businesses also aimed to be more self-sufficient



There were mixed views about

time of use pricing

with a very slight preference towards anytime pricing.

Based on these insights, forum participants were asked to provide their top of mind observations on the findings, including any surprises or issues of primary interest to them.

Overall, participants agreed that reliability and affordability were the highest priority values, a finding which aligned with the previous survey research. They wanted a reliable network at the most affordable price possible. Comments made during table discussions emphasised that CitiPower should not ‘gold plate’ the network – it should simply maintain and upgrade it, as required. Illustrative quotes were:

“Value for money – if I am paying I expect it to be reliable. Expect it to work when I flick the switch. I agree with those values.”

“Want to find a good balance between investment and affordability.”

Expectations of good customer service were also evident in the discussion about values. Customer service was viewed as the next most important value for the business to focus on after reliability and affordability. Most acknowledged that they do not have as much contact with the distributor as the retailer, but when there are outages or issues to address, good customer service is expected. Some were surprised that participants in the prior research (Phase 2) on energy values did not give a higher level of importance to customer service. A typical comment was:

“I’m slightly surprised that customer service is that low – not enough listening to customers.”

The environmental impact of network operations was a key consideration for some forum attendees and again, some felt that customers in the earlier research had underplayed its importance. However, interest in sustainability among attendees did not extend to a willingness to pay more for any related network costs. A related comment was:

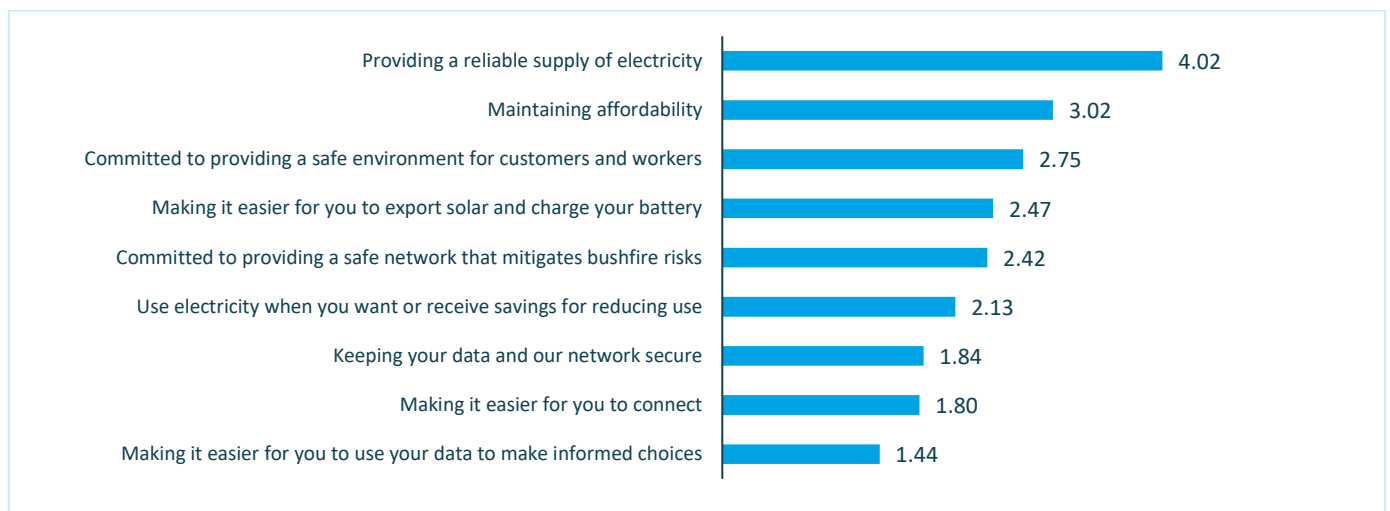
“Sustainability and forward thinking...while I do care about the environment I don’t want to pay too much extra for sustainability.”

3.3 Value Propositions for 2025

At the CitiPower forum, nine value propositions (statements of key benefits to be delivered over 2021-25) were tested to confirm their inclusion in the Energised 2021-2025 submission. These value propositions (see Appendix 2b) were shown to participants who then deliberated on whether the propositions covered the right topics or issues and whether there was anything missing.

Overall, most thought that the list of value propositions did cover the most important benefits or outcomes sought by customers. Participants were then asked to select the top five value propositions and rank them on their keypads. Figure 6 shows outcomes of this ranking.

Figure 6: Ranking of Proposed Value Propositions (Mean score*)



*Mean score out of 6

Higher scores indicate greater importance

Please choose the top five that are most important to you, and rank them 1 to 5 (1 being the most important, 5 the least important) N.B. A rank 1 = 6, rank 2 = 5 and so on. A 0 ranking was allocated as 1. Base: CitiPower (n=55)

‘Providing a reliable supply of electricity’ was ranked highest (4.02/6 mean score). This was followed by ‘maintaining affordability’ (3.02/6 mean score). The next two rankings were ‘committed to providing a safe environment for customers and workers’ (score) and ‘making it easier for you to export solar and charge your battery’ (2.75/6 mean score). Finally, ‘making it easier for you to use your data to make informed choices’ was ranked the lowest (1.44/6 mean score).

When asked if they thought there was anything missing from the value propositions, participants mentioned a variety of topics. While some said that nothing significant came to mind, there was a general feeling that the value propositions were not very “visionary”. Some participants noted that several of the value propositions seemed to be givens. For example, many felt that providing a ‘safe network for workers and consumers’ was a ‘given’ and questioned whether it needed to be stated as a ‘value’.

Summary viewpoints from this discussion were:

- Distributors should take an active interest in connecting renewables to the grid. Related to this some believe that developing energy clusters or hubs deserves a higher priority.

- The distributor should play a role in customer education on electricity technology and how to use electricity usage information (similar to banks educating small businesses about finance).
- There needs to be greater transparency on the electricity pricing structure (both the distributor and retailer components).

3.4 Customers' preferred energy future

To supplement CitiPower's internal planning; residents and SMEs at the deliberative forums were also asked to think about the future of energy. In particular, they were asked to decide which of three scenarios (Steady State, Consumer Power and Green Power shown in Appendix 2c) they would prefer to see in 2025 and how that scenario would be different, if at all, to now.

Many who attended the forum said that they would like to see a greener future. Hence, most felt that the Green Power scenario provided the energy future that was most closely aligned to their own vision (63%), followed by the Consumer Power scenario (22%). However, some saw the Green Power scenario unfolding over a longer time span, whereas Consumer Power was more likely to emerge in the short term as a stepping stone towards a Green Power scenario.

"Philosophically I would like green power. I think this is a long term vision but shorter term it would be Consumer. Consumer power 50%, green power 30%, steady state 20%."

Some forum participants did see an overlap between the Green Power and Consumer Power scenarios, although in its original form, the Green Power scenario was viewed as having a greater impact on the environment.

In thinking about the future, participants shared a number of ideas and interests. For example, some had an active interest in alternative generation from nuclear as well as renewable energy sources. These customers wanted a mix of different types of renewable generation that could switch automatically depending on the weather. A system of this nature would mean they would not be relying too much on one energy source.

They also wanted to see more cost savings for taking up energy saving behaviours and there was a strong appetite for obtaining more usage information in order to be able to understand, control and plan their own energy usage.

"I don't mind paying for electricity but I would like to believe that what I am doing is impacting on my electricity bill. Sometimes we are not even home for a couple of weeks but the electricity bill is the same still. Why is that? I'm not seeing the benefits for my electricity saving behaviours."

“Measurements should be taken by each power point, how much electricity is being used at each socket in the house. You need a breakdown week by week by power point.”

Some customers expressed an interest in leaving the grid in the future and setting up smaller distribution networks (i.e. microgrids and peer to peer trading).

“I would like to have a little distribution network. I have an apartment and I own the roof so could put solar panels on it and then the downstairs units could buy it off me.”

“Could do what they do in Europe and form little clusters – small cells, for example 10 clusters in an area and share power. Could purchase one battery and share this.”

3.5 Making it easier to connect

The connection experience is the first interface with the distributor for most customers and impressions formed at this time can be long lasting. For their Energised 2021-25 submission, CitiPower wanted to gauge the views of customers about their connection experience and also test the possibility of a ‘fast track charge’ where customers needing or wanting a faster connection process would cover the costs involved.

As a preface to this discussion, CitiPower outlined their interest in ‘greenfield’ or new connections rather than customers who are simply moving to another residence where provisions are already in place. An explanation was also given about the way in which the distributor recovers the cost of connections right now. Participants were then given a chance to discuss their connection experiences.

3.5.1 Connection experiences

At the CitiPower forum, the majority of attendees had not had first-hand experience of a new connection. However, there was an expectation that it would be a smooth process. In terms of timing, it was expected that it would take around 2-3 weeks (unless new poles and wires were needed). Some felt that if there were poles and wires in place on the street that it was a relatively easy process to connect a wire to the house and then ‘turn it on’.

Most envisaged that CitiPower would be given sufficient notice of the customer’s need to connect (and the timing) to be able to do it on the day required. Here, some noted that the electricity connection would be an item in the building schedule for a new house and hence, they’d expect that advance notice would be given to CitiPower.

“I would imagine that this would be something the builder would do – and make sure it’s connected in time.”

“Making sure there is power would be one of the first steps. I feel like it would be something you would do early in the process. Builders need to plug power tools in.”

“It’d be silly not to have planned ahead and incorporated whatever timeframe it is into your building schedule. If you gave them advanced notice of a couple weeks then it should absolutely be ready for you when you move in.”

There was a general view that the price of an electricity connection would be the same for everyone in the city area. However, some thought that connections could be more expensive if they were on the outskirts of the city or in a more remote location.

“I would expect it to cost the same for everyone. The process is similar for everyone.”

As mentioned, few participants had experienced the connection process and the timeframe was 6 weeks or more. A common view was that almost two months to achieve a connection was too long. However, upon further discussion, participants agreed that it wasn’t the length of time that mattered (if organised and known about in advance), it was more the accuracy and reliability of the timeframe.

“If they tell you it’ll take a month then it’ll take a month and if it is harder then it could take 2 months but it better take 2 months as long as you know up front.”

Overall there was little knowledge of the process, and few were clear what steps were involved in arranging a new connection. Most assumed that if it was a ‘new build’, the builder would be across it and they personally would not need to do much, if anything, to arrange their connection.

3.5.2 Fast track connection option

The concept of a ‘fast track option’ giving faster connectivity to those willing to pay a premium price was also discussed. There were mixed reactions to this proposal. Some felt this concept made sense – *“it’s like getting a passport faster.”* However, many felt that this was simply queue jumping, forcing others even further down the list and resulting in a general profit increase for the supplier. There was also some scepticism over whether the timeframe could really be shortened if the distributor was properly utilising its resources already.

“It could be okay if they are using the money to pull resources from extra places that they wouldn’t otherwise access.”

“We shouldn’t have to pay more – they should just do their job.”

After the table discussion, forum participants were asked to vote on whether they thought the fast track 'user pays' option should be adopted. Responses reflected the ambiguity in the room with 40% of participants supporting the fast track option, and 58% opposing it.

3.6 Providing a reliable energy supply

To set the scene for the discussion about reliability levels, CitiPower delivered a presentation that highlighted CitiPower's performance with regard to the frequency and duration of outages (and its related performance in a national context). Information on current outage compensations e.g. Guaranteed Service Level (GSL) compensation payments for those who have experienced lower levels of reliability was also given. Participants were then asked about their own experiences and perceptions of energy reliability.

3.6.1 Current reliability levels

Participants in the CitiPower area had little to no experience of outages. Those who had experienced an outage said it had only been for a relatively short period of time (a few hours on average). Some had also experienced planned and were generally satisfied with CitiPower's forward communication about these events. Most outages discussed had occurred in the context of extreme conditions such as a power overload during a heat wave, large storms, or as the result of a fire. In this context, most saw the reliability of the network to be adequate with no real need for improvement.

3.6.2 Guaranteed Service Levels (GSLs) and reliability in worst served areas

In general, the forum participants thought that GSL payments are a good idea. However, many believed that the amount was potentially inadequate for the number or length of incidences that are needed to qualify for compensation.

"The scheme itself doesn't sound beneficial. I don't think it would be effective in actually helping customers. There really needs to be some kind of accountability."

The idea of investing the money used for GSL payments to improve the reliability of the network for those living in worst served areas was supported. This was evident in keypad voting with 67% indicating CitiPower should invest more to improve reliability. However, most felt CitiPower should provide some compensation while still investing in improvements to minimise outages.

"People understand that accidents happen, but they should be investing the money back into the system."

Many participants felt that everyone deserved a high level of reliability, and were therefore willing to take on the costs of upgrades collectively. This was reflected in the keypad voting with 49%

indicating the cost should be spread across all customers. Only 18% felt that the costs should be paid for by those living in worst served areas.

3.7 Renewable energy: opportunities and impacts

3.7.1 A two-way energy flow

Among those residents who had installed solar panels or were planning to do so, having a two way energy flow was a high priority. Participants were asked to discuss their attitudes towards solar panels and the possibility of a two way flow. The idea of exporting excess energy derived from solar was appealing to most people (with some already doing so). However, others questioned whether they would generate enough energy to have an excess, unless they were on holidays.

When participants were asked whether they had solar, 22% claimed to have it installed, and many in the room were interested in installing panels in the future. There were a number of participants however, where installing solar was not an option for several reasons. There were:

- **Cost** – there was a perception that it was costly to install, although there was a feeling that costs are coming down.
- **Return on Investment** - the perceived return on investment was felt to be too long which became a barrier, particularly for older people.
- **Having no choice** – renters and those in high and medium density housing claimed they were unable to have solar even if they wanted to. A related comment was:

“A lot of apartments can’t have solar. Too difficult to manage it currently but should get this in the future.”

A key question posed in this session was “Who should fund the investment in new technologies needed to enable a two way energy flow?” Participants were provided with four options to consider which were:

1. Charging the full cost of additional investment to each new customer that triggers the need for new ‘exporting’ technologies;
2. Developing a one-off standard ‘connection charge’ for all customers who connect these new export technologies;
3. Charging an ‘export tariff’ for all exported electricity (per kilowatts); or
4. Obtaining funds from the Australian Energy Regulator (AER) and recovering the costs from all customers (solar and non-solar) in the same way other network costs are already recovered.

The funding options presented generated considerable discussion. Option 1 was unanimously seen to be unfair because the first customer to trigger the need for export technologies would have to outlay the most money (and subsequent users would simply benefit from the up-grade).

"I don't like the first option at all the idea that one person has to pay for the whole lot and others get to piggyback off this."

Option 2 held slightly more appeal, with a one off standard fee seen to be a somewhat fairer system. However, some argued that there should be an incentive for people to move toward renewables and that a fee for connection could become a disincentive depending on the price. There was also the question of who would pay the shortfall for the upgrade if there were not enough people taking up the new exporting technology.

"It seems fair – a user pays system."

"This defeats the purpose of selling back to the grid because it then costs you to sell back to the grid! – it's a disincentive!"

Option 3 made sense to some participants i.e. if a customer was making money from exporting electricity then there was some justification for having to pay in order to have that capability.

"I think if you are already getting paid for exporting then it makes sense. It seems most straightforward and fairest because if you are only exporting a bit you should have to pay less than if you are exporting more."

The fourth option appealed in that it seemed as though funding was being generated from elsewhere (the AER) and not from the customer. However once properly explained, some felt that it was appropriate to smear the cost across all customers, whilst others felt that it was unfair for those without solar to have to pay more.

"Not everyone will get solar so that's a tricky one."

"People not being able to use solar panels shouldn't have to fund other people's solar panel projects."

A small number of participants felt that it was CitiPower's responsibility to upgrade the network to be able to cope with new technologies and to enable customers to use renewables to help reduce their own electricity costs, but others were quick to point out that this would be costly.

"It's an essential service, and if they want to be in the game they have a duty to keep on improving and be able to cope with the new technologies."

After this discussion, participants were asked to vote for their preferred option. Voting outcomes showed that the third option (charging an export tariff) was preferred by 35% of the participants. However, this was only slightly ahead of the fourth option which was chosen by 33% of attendees i.e. to get funding from the AER and recover the costs across all customers (solar and non-solar).

The second option of developing a one-off standard 'connection charge' for all customers who connect new exporting technologies was selected by 20% of participants. Only 12% of CitiPower participants wanted to have the full cost of additional investment charged to each new customer who triggers the need for new 'exporting' technologies.

3.7.2 Impact of renewables on power quality

Within the CitiPower area, few participants complained of surges, outages or brown outs, with most believing the quality of electricity to be very good in their area. However, quality of supply was viewed as important and no one was willing to put up with poorer quality caused by an increased use of solar by residential customers. As a result, most felt that the distributor (CitiPower) should invest to ensure the network can cope with the increase in solar uptake. However, again, there was some disagreement as to who should be funding the investment.

When asked whether the cost should be spread across all customers or paid for only by customers with solar panels, the room was divided. Here, 46% of participants claimed that connections should be 'paid for by customers with solar panels', 35% said that connections should be 'paid by customers with solar panels', and 19% were unsure who should pay.

3.7.3 Peer to peer trading (P2P)

Peer to peer trading was an interesting concept to most participants, with many seeing both 'pros and cons' of letting people trade their excess electricity. The potential benefits of peer to peer trading identified by forum participants were:

- It could become a source of income for people.
- It could reduce electricity bills for those who are buying from their neighbours.
- It could be an income generating component for large commercial businesses and contribute to their profits.
- It would help rural communities who reliability is not as good.
- It would take it away from the retailers which was seen to be a good thing.

There were however, a number of concerns, one of which was the quality of relationships that people have with their neighbours. Many participants suggested that trading between neighbours could lead to arguments. There were lots of questions about how the process would work in practice. Who would set the price? Who would ensure the deal would carry on if the neighbour moved? What if you fought with the neighbours and they turned off your electricity? Who would pay for the maintenance of the powerline that would inevitably need to run between the houses or premises? Some also noted that they had no idea of the cost implications.

“None of us have would have any notion of how much it would cost.”

At the CitiPower forum, a suggested approach to peer to peer trading was a ‘body corporate’ type arrangement at local level that would be set up to make it happen and manage the recovery of the costs. Most also saw a role for the distributor i.e. CitiPower at some level, but nobody was able to articulate the type of role that distributors would play.

At the end of this discussion, participants were asked to indicate their level of interest in peer to peer trading on a four point scale. Over two thirds (64%) of participants claimed they would be interested, with 35% being ‘very’ interested and 29% being ‘quite’ interested. Among the attendees, 11% were not that interested and a further 18% were ‘not interested at all’. A very small number (7% of attendees) were unsure.

3.8 Managing network safety

Network safety was a priority topic for discussion and a presentation on a range of safety considerations was given by CitiPower in advance of the table deliberations. Key topics included: network safety information and statistics, vegetation management (including trimming cycles), and proactive replacement programs. The latter programs included CitiPower’s use of AMI meters to monitor service line/neutral deterioration, the undergrounding of power lines, and the process of replacing ‘dog bones’. Participants were given the opportunity to discuss CitiPower’s commitment to network safety and offer their views on investment in each of these areas.

3.8.1 Safety perceptions

There was a general feeling that the network is safe and CitiPower appeared to be ‘doing their job’ in managing network safety overall.

“All workplaces require a safe environment. Customers and workers should be safe as part of the OH&S standards...”

“They shouldn’t really be commended for protecting the assets that they own – they should just do this.”

There were a few isolated references made to maintenance and safety issues, however they were thought to be attended to in a timely manner.

3.8.2 Vegetation management

Forum attendees were mixed in their views about the way vegetation should be managed. Many were disappointed to hear that CitiPower needed to cut back trees during the trimming cycle. However, it was acknowledged that this was possibly the only way to manage vegetation effectively and keep costs down. This was reflected in the subsequent keypad voting with over a third of participants (36.5%) indicating that trimming should remain at the same level and the frequency of CitiPower's trimming should also stay the same.

Some suggestions to try and preserve the appearance of trees included reinforcing the electrical wires to improve safety and having a professional arborist on the CitiPower team.

"I don't like the ridiculous shapes... but I like cheaper costs so I'll put up with how they look."

The idea of replacing vegetation with more manageable species was generally disliked amongst CitiPower network participants (as was reflected in the keypad voting with a total of 36.5% strongly disagreeing with this proposal). Some felt strongly about keeping the look and feel of the city, especially keeping old, large trees, to maintain the 'look and feel' of the area. Rather than remove trees that were already in place, it was thought that more strategic planting should occur in any future streetscapes.

3.8.3 Proactively replacing risky assets

There was a strong call for AMI meters to be used to their full capacity in order to keep consumers and the network safe. This was reflected in the keypad voting with 88.7% of participants voting 'yes' to using AMI meters to detect potential faulty assts.

Replacing faulty assets on the network (e.g. dog bones) was also thought to be a 'no brainer' with 92.7% indicating they should be proactively replaced. There was some concern about the cost of these replacements. Many felt that the supplier should take on this cost themselves (i.e. there would be no added cost for this work) because it was their duty to maintain the safety of the network.

"Why are we being asked this? If anyone is in danger they should be immediately alerting them."

"This is common sense, I don't get why this is up for discussion."

The concept of undergrounding was perceived to be a great idea to improve safety. However, many were also realistic in understanding that this wasn't economically or structurally possible across the whole network. Participants were therefore happy to prioritise the use of undergrounding in select

areas e.g. black spots or 'danger' and areas where new infrastructure is being installed. Undergrounding was also thought to be a good idea in the long term to minimise the need for vegetation trimming cycles.

3.9 Energy data access, data sharing and demand management

The final presentation and discussion topic focused on energy usage data and customers' participation in demand management. Participants were given insights to the concept of demand management and their opportunity to access and use real time usage data to manage their power usage.

The idea of allowing third parties to access their usage data to gain additional benefits was also posed alongside the potential to improve energy and technology use. Participants were assured of their data security with continuous updates of system security over time. They were then asked to discuss these topics including demand management strategies at their tables.

3.9.1 Demand management

The overall concept of demand management was well received by participants who all expressed some degree of interest in taking active steps to manage their own demand. Some felt they were already attempting to manage their demand on the network and believed that having access to more data would help them be more effective.

"I look at my accounts now and a year ago to see if usage is the same as last year. That is all I do. I feel a bit in the dark at the moment."

"I would be very interested in using my data. I want to know what I am using, how I am being charged... What difference it makes if I don't have my TV on for a week."

Others felt that they were already managing their demand adequately and that data would not give them any additional value.

"I already try to do things peak or off peak so I don't think it will make much difference."

Participants wanted an assurance that the data they were given would allow them to make clear and concise choices about their usage, rather than having to figure things out 'by themselves'. They felt that the information they received currently was not enough or too confusing to help them to manage their own demand.

"It [The data] can all be a bit confusing on the bill... I don't understand it. I don't even know what the unit of measurement is."

Many participants felt that the savings you received on your electricity bill was already sufficient as an incentive to manage demand. Yet most agreed there is potential to stimulate further demand management if financial incentives are given that ‘make a real difference’ to their bill. This was reflected in the keypad voting with 85% indicating that they would be interested in participating in trials or programs to reduce consumption at peak times if they receive a suitable financial incentive or reward.

3.9.2 Real time access to data and customer privacy

Overall, the participants in the CitiPower network area liked the idea of having access to real time data. They envisioned being able to see easy-to-understand data that displayed information about their power usage of separate appliances within the home plus time-of-day statistics and pricing. This in turn could potentially lead to lifestyle changes (i.e. changing their times of washing laundry) and the purchase of more efficient energy appliances. The likelihood of actually utilising this data to change behaviour varied greatly, with some very interested in utilising the data and others relaying that it wouldn’t impact their behaviour at all.

Those in larger households were more likely to use the data, and it was also noted that this data could be very useful for ‘share households’. Keypad voting showed that interest in using real time energy use was high, with 73% indicating they were ‘very’ or ‘quite’ likely to do so. However, comments did suggest agreement was conditional for some participants.

“Only if it’s easy to use... it needs to be effective!”

“I’m a single person so I don’t think there is much potential for change.”

In general, the idea of third party data sharing was well-received by CitiPower customers. People are broadly willing to share their energy use data. Most participants were unperturbed by the proposed concept as long as their data was de-identified and customers received additional benefits plus energy saving tips and ideas. When voting, participants were asked if they would want to be included in new products or programs offered by third parties in exchange for their data. Here, only 48% said ‘yes’. Given the positive response during table discussions, the polling result may have been impacted by the hypothetical incentive to participate (i.e. it is likely that the incentive used in the question was not high enough).

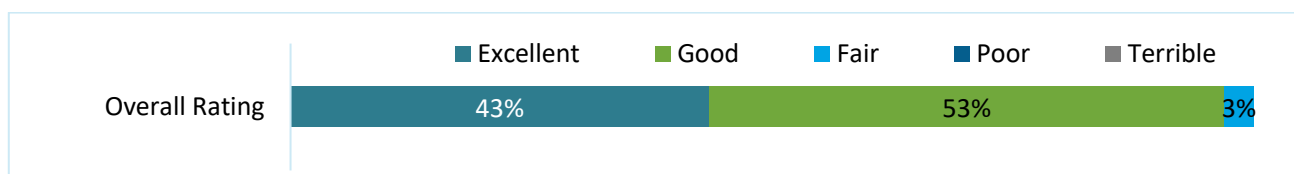
Having control over both their data and energy usage was a priority for CitiPower participants. The idea of the supplier being able to adjust their energy use remotely was heavily disliked - it felt too much like a ‘big brother’ situation. Over half (56% of participants) voted against this idea in the session. For some, it opened up the prospect of experiencing safety and cyber security problems linked to hacking, loss of control over their time and ultimately the abuse of power by suppliers.

“What if I want to use one of my appliances but they have decided that it’s not the best time for me to do so... that’s ridiculous.”

3.10 Forum Evaluation Results

At the end of the forum, all participants were given an evaluation sheet which enabled them to give feedback on the engagement session. Overall, the CitiPower forum was ranked highly (see Figure 7) with two in five participants rating the forum as ‘excellent’.

Figure 7: Overall rating of CitiPower Forum



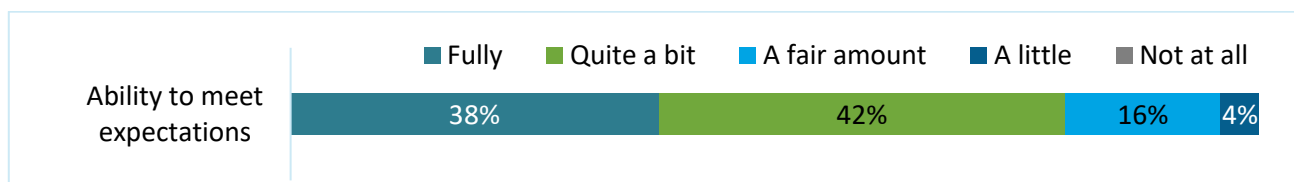
Overall, how would you rate the forum?

Base: CitiPower (n=55)

While many participants were unsure what to expect when invited to the forum, the feedback shows that most had their expectations met ‘fully’ (38%) or ‘quite a bit’ (42%).

“I didn’t know what to expect. It was very informative. I had expected a big push but am pleasantly surprised with effort.”

Figure 8: Expectations of the CitiPower Forum

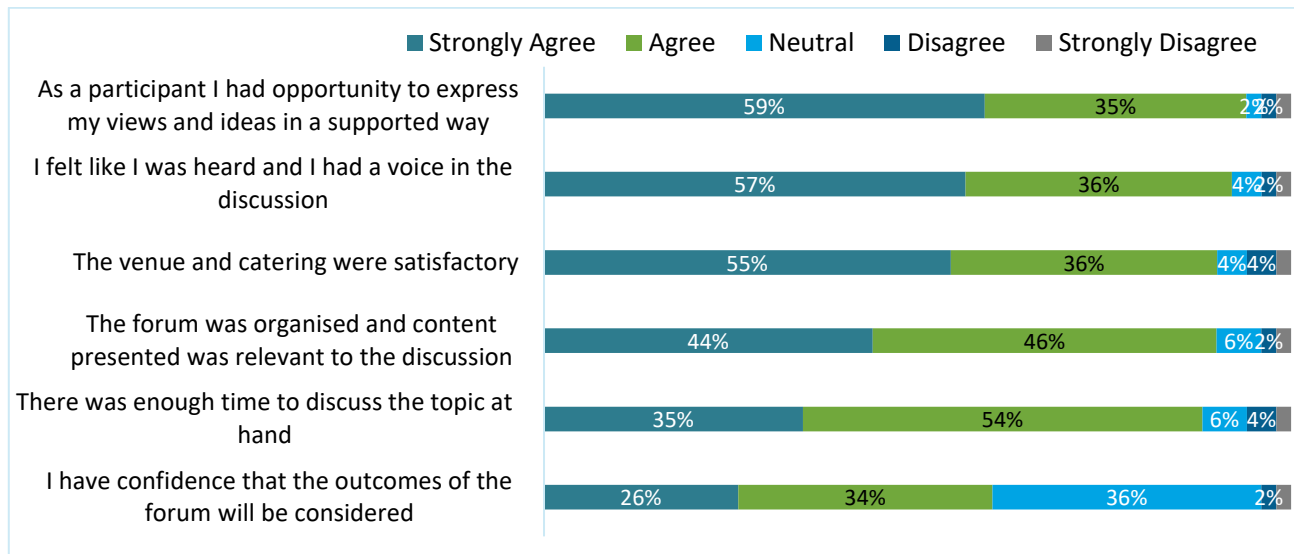


How much did the forum live up to your expectations?

Base: CitiPower (n=55)

Participants were also asked to indicate their level of agreement with a number of statements regarding the forum outcomes, the running of the forum and their overall participation. Figure 9 shows that nearly all participants (94%) felt they were able to ‘express their views in a supported way’, and that they ‘felt heard and had a voice in the discussion’ (94%). Just over a third (36%) of participants were ‘neutral’ about whether the outcomes from the forum would be considered, however 60% agreed that they would be.

Figure 9: CitiPower Forum Agreement Statements



Please read the statements below about the forum and select the response with which you most agree, from 1 = strongly disagree to 5 = strongly agree

Base: CitiPower (n=55)

Overall, CitiPower's engagement with the community about its plans for 2021-25 was well received. Participants left the forum with more positive sentiments towards CitiPower overall and were glad to have contributed to their energy future and learned more about their energy supplier.

"It was a good opportunity for all group members to express views."

"I enjoyed the discussion and education from the company."

While it is important for CitiPower to understand the community's opinions in all areas, it was felt that there were some sections (e.g. choices related to safety) that were 'no brainers' and some questions required a little more time or focus in the deliberative sessions.

"Sometimes the options were a bit too black and white."

"I'd like more time for table discussions... but it would be great if it could be condensed."

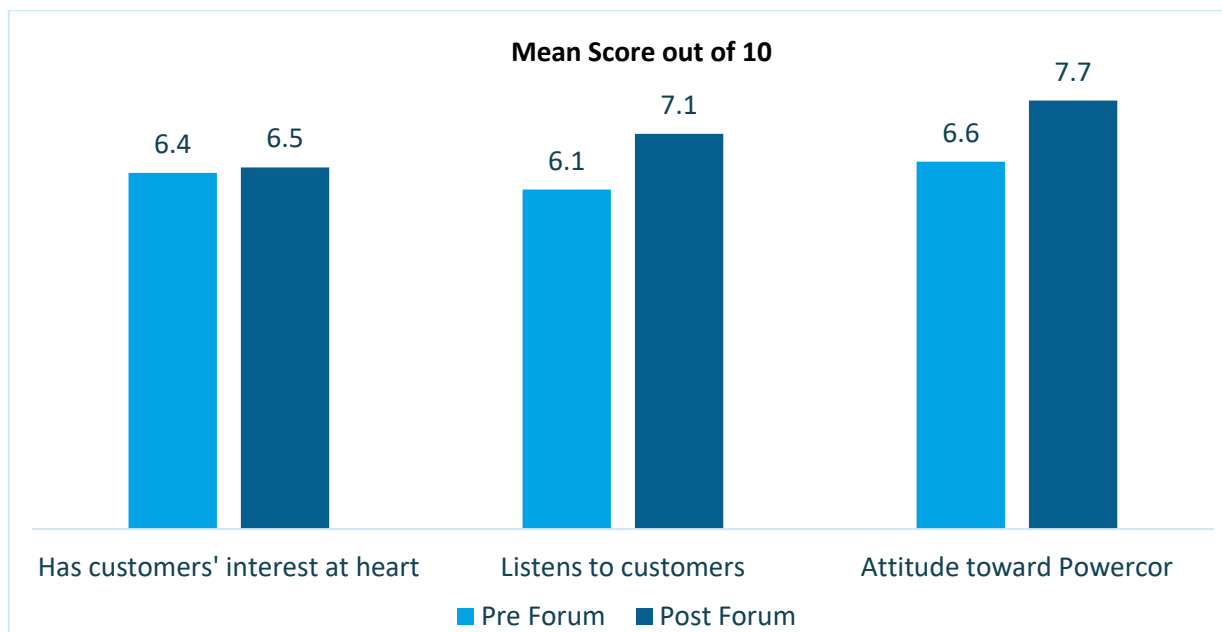
4.0 Powercor – Forum findings

4.1 Perceptions of Powercor

To stimulate early participation and set the scene for further discussions, Woolcott Research opened the Powercor forum with a short series of questions to obtain top line views on the distributor and its customer orientation. At the beginning (and the end of the forum), participants were asked to rate Powercor (on a zero to ten scale) on 'having customers' interests at heart', 'listening to customers' and 'their overall attitude' towards the distributor.

As shown in Figure 10, on average, the participants gave Powercor a score of 6.4 on having customer's interest at heart and this did not change significantly by the end of the forum (with a mean score of 6.5). Over the course of the evening, however, participants' other views about Powercor did improve. At the end of the evening, they rated Powercor more positively on 'listens to customers' (with the score shifting from 6.1 to 7.1). The mean score also increased for customers' overall attitude towards Powercor moving from 6.6 to 7.7.

Figure 10: Perceptions of Powercor



How would you rate Powercor on the following:
Base: Powercor (n=70)

4.2 Energy values

Understanding the values that impact customer views about their electricity supply is a sound basis for interpreting their wider perspectives and preferences. Customers' trust in their electricity distributor and opinions on its services are formed by connecting their experiences with their values and ideas.

At the Powercor forum, outcomes of earlier survey research (in Phase 2 of the engagement program) were shared to stimulate discussion about the values of most importance. A handout was also provided showing the unprompted values identified by residents and SMEs (see Appendix 2a). Based on the insights presented, participants were asked to identify which of the energy values they felt Powercor should focus on in future and discuss how their views aligned or differed with the earlier findings (shown in the figure below).

Figure 11: Energy values identified in phase 2 research

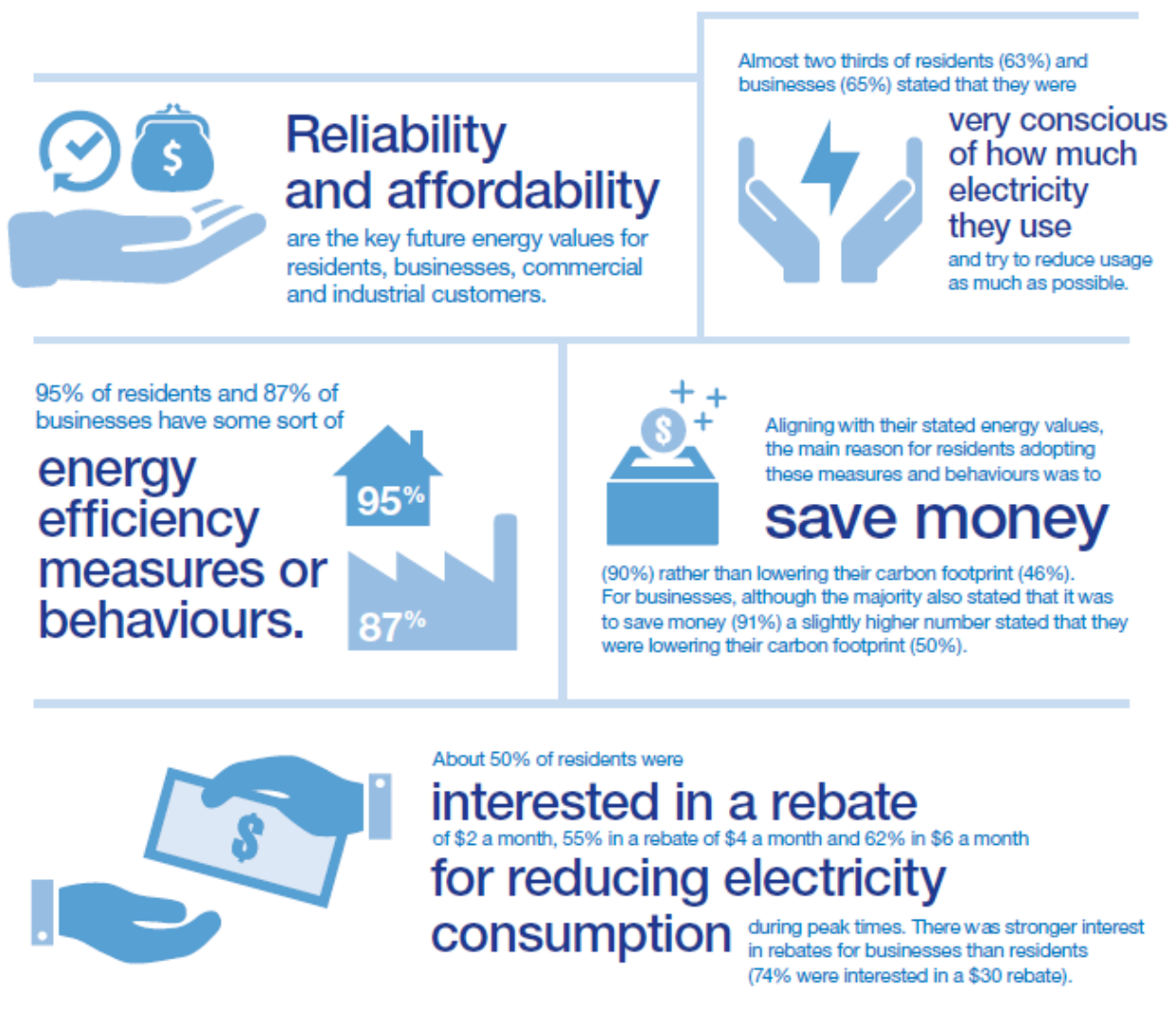


Figure 11: Energy values identified in phase 2 research continued



The majority of residents were in favour of
**grid-wide and home-based
renewable generation of electricity**

Solar panels on homes (74% of residents in favour) and large-scale renewables on the network for generation (59% of residents in favour). CitiPower residents were particularly in favour of large-scale renewables (67%). CitiPower residents and businesses were also significantly more in favour of electric vehicles than those in other network areas (58% residents and 67% businesses).



Businesses were more favourable than residents towards

**large and small-
scale renewables**

Solar on homes and businesses (85%), large-scale renewable electricity generation (66%), batteries (62%) and electric vehicles (54%).

Around a quarter
of residents
already had solar
panels

5% a central system,
4% batteries and
4% electric vehicles.



Just under a third of residents and businesses who did not currently have solar panels stated that they would be likely to install them in future.

**Most commercial and industrial customers expected
to use more renewable sources in the future**

and are looking to the distributors to assist in the transition.

They expect more flexibility and innovation from distributors
to facilitate multi-way energy flow and allow users to benefit from any excess electricity they generate.

32% of residents and 28% of businesses indicated that they

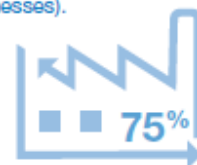
**intended to purchase or
implement the green energy
measures in the next 2 years.**

For many, a 3–5 year timeframe was more realistic (42% residents and 45% businesses).



Saving money is the most popular incentive for purchasing/installing green energy options (85% residents and 84% businesses).

**Businesses also
aimed to be more
self-sufficient**



There were mixed views about

**time of
use pricing**

with a very slight preference
towards anytime pricing.

Based on these insights, forum participants were asked to provide their top of mind observations on the findings, including any surprises or issues of primary interest to them.

Specific comments were made about the needs of key customer segments. For example, reliability was thought to be particularly important for regional business operations in the Powercor area and a fast response to outages by the distributor was praised. Other participants were very conscious of consumer vulnerabilities and the need to consider both reliability and affordability in the context of challenges they might face.

“With what has happened in South Australia, reliability should be at the top of the list.”

“Older people in particular are very price conscious, but reliability is probably still more important.”

Many placed a high level of importance on environmental sustainability. They wanted to see more proactive efforts and direct encouragement for people to install solar panels and make transition to renewable generation (at an affordable price).

“More solar panels and wind generation. Helping people use more renewables – there should be loans to people to get these.”

Education was also viewed as a ‘value’ that Powercor should consider in preparing its future plans i.e. customers need to have better insights to their electricity bill and they also need know more about data they can obtain from their smart meters.

4.3 Value Propositions for 2025

At the Powercor forum, nine value propositions (statements of key benefits to be delivered over 2021-25) were tested to confirm their inclusion in the Energised 2021-2025 submission. These value propositions (see Appendix 2b) were shown to participants who then deliberated on whether the propositions covered the right topics or issues and whether there was anything missing. Overall, most thought that the list of value propositions did cover the most important benefits or outcomes sought by customers. Participants were then asked to select the top five value propositions and rank them on their keypads. Figure 12 shows outcomes of this ranking.

Overall, most thought that the propositions did cover the topics and issues that are most important to them. Attendees found it challenging to think of anything missing from the current value propositions. However, some issues and needs highlighted in discussions included:

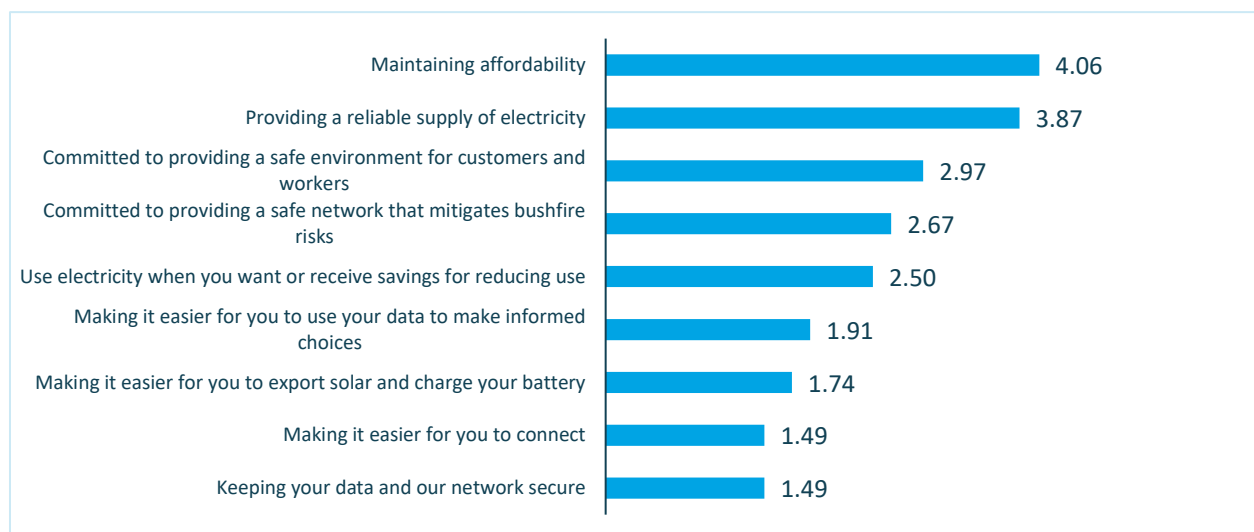
- A need for greater price transparency e.g. what the difference in energy pricing is between peak and off time times.
- More transparency about what Powercor is doing now and what they are planning to do in the future e.g. plans that already exist to maintain and replace old infrastructure.

- More insight to what is happening with research and development. Here, some attendees thought that the organisation should be keeping up with industry and market trends and should be responding to the latest innovations and breakthroughs (particularly with regard to renewable technologies and battery storage).
- More education about the benefits of smart meters and how those benefits can be better understood and leveraged by electricity customers.
- An improved line of sight about how the distributor and others are looking after vulnerable customers, e.g. pensioners or others who are experiencing vulnerability.
- A focus on knowledge sharing - collaboration with other businesses and learning from other states.

To gain a deeper understanding of resident and SME thoughts on the top five value propositions, forum attendees were also asked to rank these on the keypads. Polling results showed that 'maintaining affordability' was ranked highest (with a mean score of 4.06/6), followed by 'providing a reliable supply of electricity' (mean score of 3.87/6).

As shown in Figure 12, other value propositions were ranked much lower. Ranked third and fourth on the list were: ‘committed to providing a safe environment for customers and workers’ (a mean score of 2.97/6) and ‘committed to providing a safe network that mitigates bushfire risks’ (mean score of 2.67). ‘Making it easier for you to connect’ and ‘keeping your data and our network secure’ were ranked lowest (both with mean scores of 1.49/6). However, these ratings do not mean that these propositions were viewed as unimportant – instead, they were seen as ‘givens’ (actions that you would just expect the distributor to take).

Figure 12: Ranking of Proposed Value Propositions (Mean score*)



*Mean score out of 6

Higher scores indicate greater importance

Please choose the top five that are most important to you, and rank them 1 to 5 (1 being the most important, 5 the least important) N.B. A rank 1 = 6, rank 2 = 5 and so on. A 0 ranking was allocated as 1.

Base: Powercor (n=70)

4.4 Customers' preferred energy future

To supplement Powercor's internal planning; residents and SMEs at the deliberative forums were also asked to think about the future of energy. In particular, they were asked to decide which of three scenarios (Steady State, Consumer Power and Green Power shown in Appendix 2c) they would prefer to see in 2025 and how that scenario would be different, if at all, to now.

The majority of participants believed that the Green Power scenario had the best fit with their own vision (60%), followed by the Consumer Power scenario (29%). Powercor attendees placed considerable importance on achieving an environmentally sustainable future. Most customers wanted to see more renewable energy generation by individual businesses and households and at the network level (plus more storage potential). They also wanted to see more varied use of

renewables i.e. a mix of solar and wind with some hydro or tidal power. One or two participants suggested the use of nuclear power in the future but this was contentious i.e. many disagreed that this would be a good option.

There was general agreement that Powercor should embark on further network investment to cope with more customers generating and exporting power. South Australia's planning approach was seen to be a good point of reference for Powercor. Related comments were:

"Investing in better solar technology, our technology is outdated."

"Nuclear power fission – the UK has combined elements to make clean renewable power."

"If everybody in Victoria suddenly connected to solar and had batteries then Powercor would be in trouble. Maybe they need to own the solar and batteries."

"Would like it to be like South Australia where houses have battery and solar."

Those attending the Powercor forum also believed that the future should include more localised energy distribution i.e. more energy generation at the community level rather than large scale coal powered energy networks. Some were intent on moving off the energy grid in future.

"A more community based system, more localised way of energy harnessing and distribution."

4.5 Making it easier to connect

The connection experience is the first interface with the distributor for most customers and impressions formed at this time can be long lasting. For their Energised 2021-25 submission, Powercor wanted to gauge the views of customers about their connection experience and also test the possibility of a 'fast track charge' where customers needing or wanting a faster connection process would cover the costs involved.

4.5.1 Connection experiences

Some builders and contractors who attended the Powercor forum had been exposed to the current process of connecting new homes. They believed the process was expected to take 20 days, however their experience was that the time frame was rarely met and exceeded the 20 days. Experiences in liaising with Powercor amongst these participants were described as poor with a lack of timely communication and proactive management contributing to very negative experiences and lengthy building delays.

Among those who did not have any direct experience, it was thought that the duration of the connection time and process would be about 30 days and this would be factored into the building development time frame. However, most thought that bigger developments (e.g. apartment buildings) would potentially take longer to connect than houses, with more planning required.

“If you are building on a six month timeframe then you would assume they were informed and that they would get the process happening along with the building project.”

4.5.2 Fast track connection option

In the discussions about new connections, the idea of a ‘fast track option’ was also canvassed to speed up the connection process for those who are willing to pay a premium price. Many participants felt that this was an acceptable option for those willing to pay, especially for businesses on a tight time frame to start up and start operating to recoup their costs.

“If you are willing to pay the extra money then you deserve to get that service.”

However, there was some negativity towards the proposal with participants indicating that it was the role of Powercor to both effectively and efficiently connect everyone within a reasonable timeframe, regardless of money.

“You don’t want to have the ‘haves and the have nots’. If they can do it quick then they should do it. Equity is very important.”

After the table discussion participants were able to vote on whether they thought there should be a fast track ‘user pays’ option for customers wanting to speed up their connection processes. Powercor residents were most likely to be opposed to the fast track option (52.2%), however over a third (37.3%) were supportive of the idea.

4.6 Providing a reliable energy supply

To set the scene for table discussions on energy reliability, Powercor delivered a presentation on the network’s reliability performance. Included were: statistics on the frequency and duration of outages, differences in reliability across networks nationally, and details of current energy outage compensations. Participants were given specific insights on Guaranteed Service Level (GSL) compensation payments to those with reliability levels that fall short of GSL requirements.

4.6.1 Current reliability levels

While participants were generally quite happy with the levels of reliability, there was a general feeling that things ‘could always be improved’. There was a common understanding that sometimes

outages were out of the suppliers control, however if outages were related to poor maintenance and/or problems with infrastructure, it was thought that these aspects should be improved.

“They can’t do anything about cars running into poles, but if the outage is due to poor maintenance then they should be acting.”

Form participants reported some instances of ‘brown-outs’ plus outages that lasted for an extended period (5+ hours) and some small scale outages. However, most felt that reliability issues were quite well managed and they were able to access information on a telephone hotline or online to minimise their concerns.

4.6.2 Guaranteed Service Levels (GSLs) and reliability in worst served areas

There was a mixed reaction to GSL payments. Most Powercor attendees saw the level of compensation payment to be minimal. This was reflected in the keypad voting with nearly two-thirds (63.8%) indicating that GSL payments should be increased.

“[GSL payments] aren’t enough to compensate for the loss and the inconvenience of having the power go out.”

The circumstances in which a consumer would qualify to receive a GSL payment were thought to be quite extreme, and therefore almost unattainable. The dollar amount was viewed as insufficient to compensate for the level of inconvenience experienced. Some attendees suggested that businesses should be compensated for their proven loss of income, rather than receiving a set amount (especially in rural areas where someone’s livelihood could depend on running power).

“It seems meaningless – nobody would qualify to get this. It’s very unusual to experience outages of these lengths.”

“Businesses lose a lot of money if there are extended outages. It would also vary greatly depending on the type of business.”

Participants supported the idea of putting money towards improving reliability in lower service areas. However, they still believed that compensation was necessary. Keypad voting confirmed these views with 57% indicating that smaller GSL payments could only be given if there was some investment to improve network reliability. A further 23% felt that investment should just be made to improve reliability and 19% thought that current GSL compensations were adequate.

Overall, Powercor attendees concluded that reliability needs to improve in the worst served areas. Keypad voting showed that 66% of attendees thought this cost should be taken on collectively i.e. spread across all customers, with the assumption that there is no profit margin for the distributor.

4.7 Renewable energy: opportunities and impacts

4.7.1 A two-way power flow

The need for new technologies to enable a two way flow of energy (e.g. solar export) and the decline in reliability that will occur without this investment were discussed in this session. Powercor was interested in forum views on solar power and their response to different payment options or charges for those who have solar and want a two way energy flow (putting excess power back into the grid).

In an overall sense, customers were very open to solar and saw the possibility of exporting as something that they may benefit from in the future. When asked how many in the room had solar panels installed, 28% within the Powercor region claimed they did. Many were exporting their power back to the grid. However, there were some complaints that the amount they received back had reduced significantly.

“It used to be sixty six cents and nowadays it is eight cents.”

Some attendees were interested in getting solar panels installed. However, those who did not have solar but could, said it was expensive and you have to be young to get your money back.

“You have to wait 20 years to get your money back.”

Others suggested that if and when the price of batteries came down they would seriously consider solar, however currently it was cost prohibitive. A key question posed in this session was “Who should fund the investment in new technologies needed to enable a two way energy flow?” Participants were provided with four options:

1. Charging the full cost of additional investment to each new customer that triggers the need for new ‘exporting’ technologies;
2. Developing a one-off standard ‘connection charge’ for all customers who connect these new export technologies;
3. Charging an ‘export tariff’ for all exported electricity (per kilowatt); or
4. Obtaining funds from the Australian Energy Regulator and recovering the costs from all customers (solar and non-solar) in the same way other network costs are already recovered.

The options presented generated quite a bit of discussion, with participants having disparate views about the most appropriate approach. Option 1 was not seen to be viable particularly for those who happened to be the first one to trigger the need in an area. It was also thought that this option could be a disincentive to install solar panels (which was not a desired result).

Option 2 was a lot more appealing as this was a system that people felt they were used to in paying for other services i.e. paying a one off standard fee as a base rate and then having a regular fee for usage.

“People are used to paying for things this way.”

Charging an export tariff made sense to some, but many felt that that this option defeated the point of having solar panels (i.e. conserving power and drawing less from the grid in order to also better manage electricity costs). Some felt that this option (Option 3) made sense simply because those who would be charged would also be receiving the benefits.

“They are the ones who will get the benefit so it seems logical to dock their benefit a little bit to pay for it.”

Option 4 was also well regarded, with customers believing a move to solar power is inevitable and that in time, all customers will benefit from solar panels. It was also felt that Powercor should be actively encouraging the take-up of renewables to reduce reliance on coal. However, some discounted Option 4 on the basis that it was unfair that solar users would be subsidising non-solar users.

“Eventually everyone will have solar so number 4 makes the most sense to me.”

Polling of viewpoints after this discussion showed that the Option 2 (developing a one off standard ‘connection charge’ for all customers who connect new exporting technologies) was most preferred (chosen by 54% of forum participants). Only a few participants (6%) preferred to have the full cost of additional investment charged to each new customer that triggers the need for new ‘exporting’ technologies (with this amount varying customer to customer).

4.7.2 Impact of renewables on power quality

The majority of participants felt that the quality of their power supply was very good in their area, with few complaining of surges, outages or brown outs. However, reliability of supply was considered extremely important particularly for older people, hospitals and small business owners. It was agreed that people shouldn’t have to suffer power surges that damage their appliances.

The increase in solar panel usage and its effect on power quality was news to most attendees at the Powercor forum. It was agreed that the network should invest more to maintain consistency of supply given that this is a core value and responsibility. However, it was difficult for people to reach a singular view on who should pay for the investment as most felt it should be a Powercor responsibility. They saw this investment as a cost of doing business and did not equate the cost of a network upgrade with dollars that customers would ultimately pay.

Key pad voting was undertaken to determine whether Powercor attendees thought the cost should be spread across all customers or paid for only by customers with solar panels. As expected, views were divided with 41% claiming that it should be paid by customers with solar panels', 43% opting for costs to be 'paid by customers with solar panels and 16% of participants still unsure about who should pay for this investment.

4.7.3 Peer to peer trading (P2P)

Peer to peer trading was an interesting concept to most participants, with many seeing it working well at local level, especially in small rural communities. However, there were a number of concerns or key questions such as:

- Who manages it?
- Who will maintain the power lines?
- How will neighbourhood disputes or issues be managed when a party to the agreement can't provide power at a critical time? Would there be a backup?
- Who would regulate energy pricing?
- What happens if there is no sun/ not enough power?

Dealing directly with neighbours to trade excess power was viewed as problematic. Many people were concerned about the potential for neighbourhood disputes, a lack of rules and regulations and the likelihood that some households could experience poor reliability. A typical comment was:

"It could be like neighbours not agreeing on fencing."

After round table discussions, keypad polling was used to determine participants' level of interest in peer to peer trading on a four point scale. Around half (54%) indicated that they would be interested, with 17% 'very' interested and 37% 'quite' interested. However, 14% of attendees were 'not that interested' and 30% were 'not interested at all'. Across all of those who voted, limited knowledge of how the system would work and a lack of 'checks and balances' meant that the vote was conditional (dependent on much greater exploration).

4.8 Managing network safety

To set the scene for table discussions on safety, Powercor staff delivered a presentation on the network's current safety performance, some ongoing network safety issues and related investment options.

These options included proactive replacement programs – more specifically using AMI meters to monitor service line/neutral deterioration and replace 'dog bones' – and bushfire safety mitigation.

Bushfire mitigation options were discussed in the context of vegetation management, the level and timing of investment to underground powerlines and the installation of Rapid Earth Fault Current Limiter (REFCL) technology to 'cut' the power to prevent a fire start. The subsequent round table discussions explored customers' views on these options (and their related investment and timing).

4.8.1 Safety perceptions

Most forum attendees felt that safety is a 'given' (probably too essential to be a 'value' and difficult to trade-off in considering business options). However, the majority had a high level of satisfaction with safety in the Powercor network area. Some noted that safety was an 'out of sight, out of mind' concept for them. The general consensus was that safety should continue to be maintained and improved wherever possible across the network.

4.8.2 Proactively replacing risky assets

Proactively utilising the full capacity of AMI meters was felt to be an efficient and effective way to manage network safety risks. This was supported heavily in the keypad voting (97% voting 'yes' to using AMI meters to detect potentially faulty assets and take related action).

Similarly, most attendees thought that Powercor should proactively replace assets such as 'dog bones' that posed an increased safety risk. Again, this was supported by forum polling, with 96% voting 'yes'.

Among attendees, there was some concern about costs, with many indicating that they see it as the distributor's responsibility to foot the bill to maintain a high level of safety (given that they 'own' the network).

"We have already paid for the smart meters ourselves, so this time it is the company's [supplier's] responsibility to figure out how to best use them."

4.8.3 Vegetation Management

Around the forum tables, there was a mixed reaction to the current vegetation trimming cycle. Many attendees had small complaints about the aesthetics of vegetation trimming and most wanted to preserve the health of the trees and ecosystem. There was a call to cut more often and less severely and this was supported by keypad voting at the end of the discussion. Voting results showed that 39% preferred a more frequent cutting cycle and 31% were happy with the current frequency of vegetation trimming. Related comments during discussions were:

"They're cutting the trees in weird shapes and leaving the tree unbalanced."

“If we start removing all these trees then we are going to have an even greater impact on the environment.”

The concept of replacing existing problem vegetation with more suitable species was well received by Powercor forum attendees. While some talked about undergrounding as a way of leaving the current vegetation in place, overall, they wanted the most cost effective and environmentally friendly option to be implemented. This was reflected in the keypad voting with 59% either agreeing or strongly agreeing with the idea of selectively replanting vegetation as needed.

4.8.4 Undergrounding and coverage of HV conductors

Some participants mentioned that undergrounding had already occurred in their area, or in newly developed areas around them. Forum attendees liked the idea of undergrounding more power assets and believed that this program should continue to roll out across the Powercor network.

“High-risk areas should be undergrounded first, but at the end of the day there can be a fire anyway so it’s all important.”

“It’s a golden opportunity for undergrounding when they are installing the NBN...”

Keypad voting supported Powercor taking the initiative to bring the 2040 goal forward with 73% voting ‘Yes’ to undergrounding or covering powerlines in high fire risk areas at a slight increase in cost to customers.

4.8.5 Operation of Rapid Earth Fault Current Limiter

REFCL technology was also well received with many participants feeling that it would be extremely beneficial to Victoria’s regional areas and farming community. There was even a call to utilise REFCLs on days that were not regarded as ‘total fire ban days’ in order to increase safety, which was reflected in the keypad voting (56% voting ‘yes’ for this additional bushfire protection).

“There are only so many total fire ban days each year, so it’s not that much of an inconvenience overall.”

“They should be operated on other days either side of the total fire ban day. It should be operated every day. Or at least during fire season because it’s a safety risk not to have them on.”

However some Powercor customers were wary of the levels of impact it could have on their power reliability and questioned the need to run REFCLs in full fire-safety mode when it is not absolutely necessary. This view was expressed among the 34% of attendees who voted ‘no’ to running REFCLs on days either side of total fire ban days.

“A bit of sense has to be used... it’s just a call to balance common sense with the risk.”

4.9 Energy data access, data sharing and demand management

The final presentation and discussion topic focused on energy usage data and customers’ participation in demand management. Participants were given insights to the concept of demand management and their opportunity to access and use real time usage data to manage their power usage.

The idea of allowing third parties to access their usage data to gain additional benefits was also floated alongside the potential to improve energy and technology use. Participants were assured of their data security with continuous updates of system security over time. They were then asked to discuss these topics including demand management strategies at their tables.

4.9.1 Demand management

The overall concept of demand management was well received by participants who generally expressed some degree of interest in taking active steps to manage their own demand. Some felt they were already attempting to manage their demand on the network and believed that having access to more data would help them to become more effective at doing so. Some business people also welcomed the idea of having more data to work out where they were wasting power.

“There should be an app to see this on a day by day basis. I was so surprised that they didn’t have one. When we moved house we wanted to look at our consumption changes.”

Others felt that they were already managing their demand adequately and that any further data would not give them added value.

“We’re trying to be as cost effective as we can anyway. What margin is there for improvement?”

“I’ve used smart meter in the work situation – and reduced our bills in the workplace effectively. But in my personal situation I am a bit more blasé about it.”

A number of participants wanted significant financial remuneration for participating in trials and managing their demand. Some suggested discounts or ‘freebies’ such as solar power subsidies and/or installation that would ultimately benefit both the consumer and the supplier by taking pressure off the network. This was again reflected in the keypad voting where 79% indicated they were interested in participating in a trial or program where there is a financial incentive or reward.

4.9.2 Real time access to data and managing customer privacy

Participants in the Powercor network area welcomed the idea of having access to real time data. Keypad voting showed that over half (55% of forum attendees) were 'very' likely to use real time data and another 24% were 'quite' likely to do so. Being able to identify the biggest costs (or most draining appliances) was thought to be the primary use of this data in the short term. Over the long term, participants felt that any usage data would have to provide very clear advice on options to better manage demand at the level of the individual household or business premise.

The idea of third party data sharing, as long as it was de-identified, was also well-received. Here, 61% showed support for this idea during keypad voting. However, some forum attendees were a bit sceptical regarding the motives of third parties and what the implications might be for their own data security.

"There is an ethical concern that you have to address in this hypothetical; who are these third parties and what are their business models?"

"I think it seems reasonable to give them the information. But you never know what is around the corner. It can go off the rails."

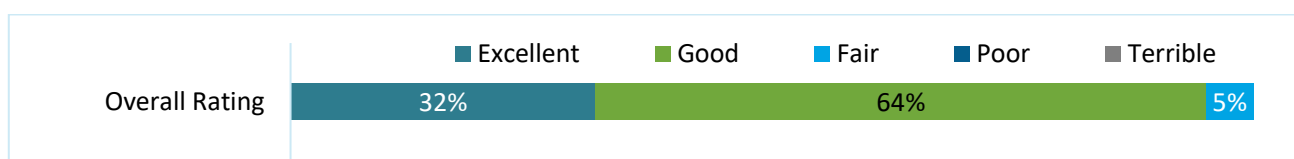
Allowing Powercor to be able to adjust power remotely was not well received, with 68% saying 'no' to this option in keypad voting. Most felt that this strategy would put too much control in the distributor's hands, and labelled it as a 'big brother' idea. However, it was suggested that Powercor could send out a warning or opt in/out text message that informed you of their intentions and why they wanted to turn your power 'down'. The biggest perceived benefit of remote intervention was the ability of the distributor to switch off power remotely at business and office sites.

"There's a lot of lighting out there at night that's not needed. Businesses keep all of their lights on."

4.10 Forum Evaluation Results

At the end of the Powercor forum, participants were given an evaluation sheet which enabled them to give feedback on the engagement session. Overall, the forum was well rated (see Figure 13) with nearly a third (32% of participants) rating the forum as 'excellent'.

Figure 13: Overall rating of Powercor Forum

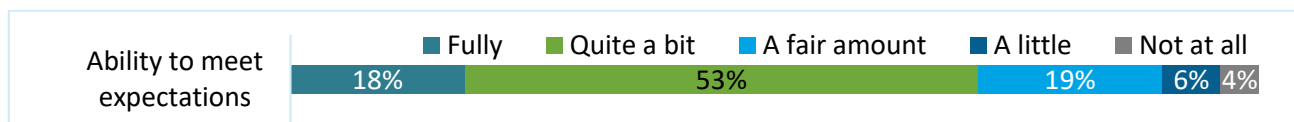


Overall, how would you rate the forum?
Base: Powercor (n=70)

While many participants were unsure what to expect when invited to the forum, the feedback shows that the majority of Powercor forum participants had their expectations met 'fully' (18%) or 'quite a bit' (53%).

"It wasn't sure what to expect. I learnt a lot and found it very interesting."

Figure 14: Expectations of the Powercor Forum



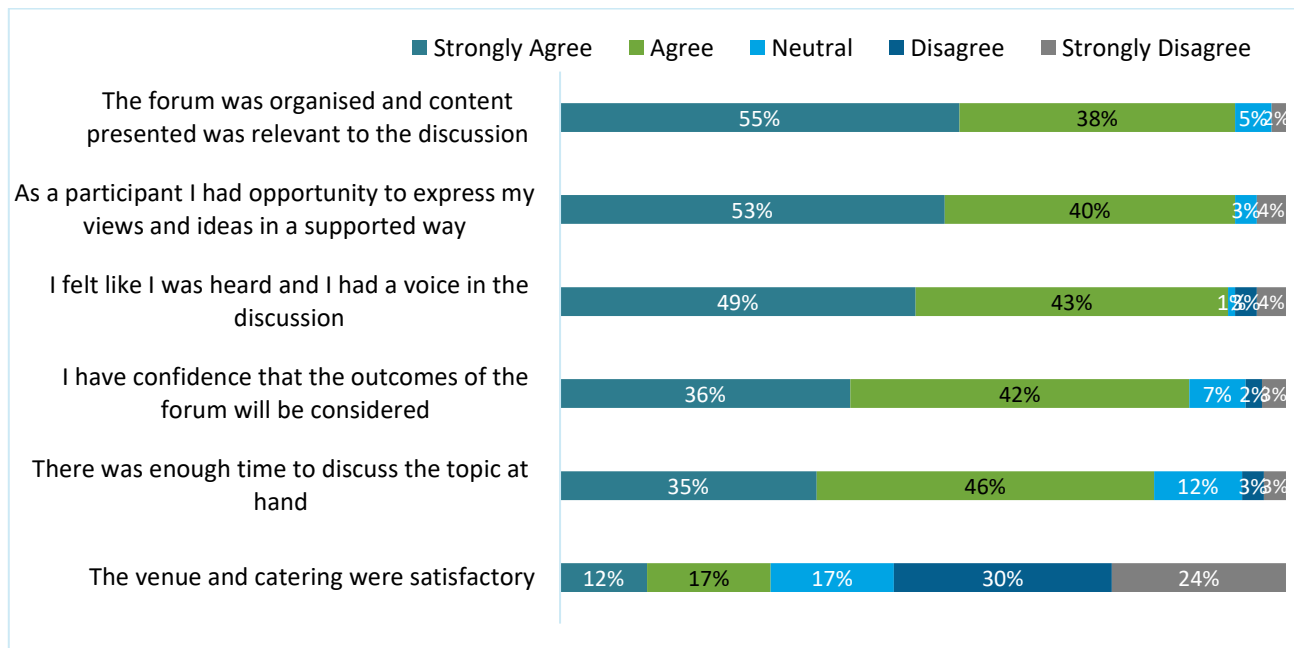
How much did the forum live up to your expectations?

Base: Powercor (n=70)

Participants were also asked to show their agreement with a number of statements regarding the forum outcomes, the running of the forum and their overall participation.

Figure 15 shows that nearly all participants (93%) felt they were able to 'express their views in a supported way', and that they 'felt heard and had a voice in the discussion' (92%). Over three-quarters (78%) of participants agreed that the outcomes from the forum would be considered by the distributor.

Figure 15: Powercor Forum Agreement Statements



Please read the statements below about the forum and select the response with which you most agree, from 1 = strongly disagree to 5 = strongly agree

Base: Powercor (n=70)

Overall, it was clear that the efforts of Powercor to engage with the community about their plans for 2021-25 were well received. Participants left with a positive opinion of Powercor and were glad to have contributed to their energy future and to have also learned more about their energy distributor. Many participants felt they wanted to know more, opening the door for Powercor to seek further input or communicate more widely with customers in a later phase of planning. A final sample of comments from participants is shown below.

“I had a great group to work with and I enjoyed the presentation.”

“The information was open and uninhibited.”

“It’s very interesting to know what the future holds.”

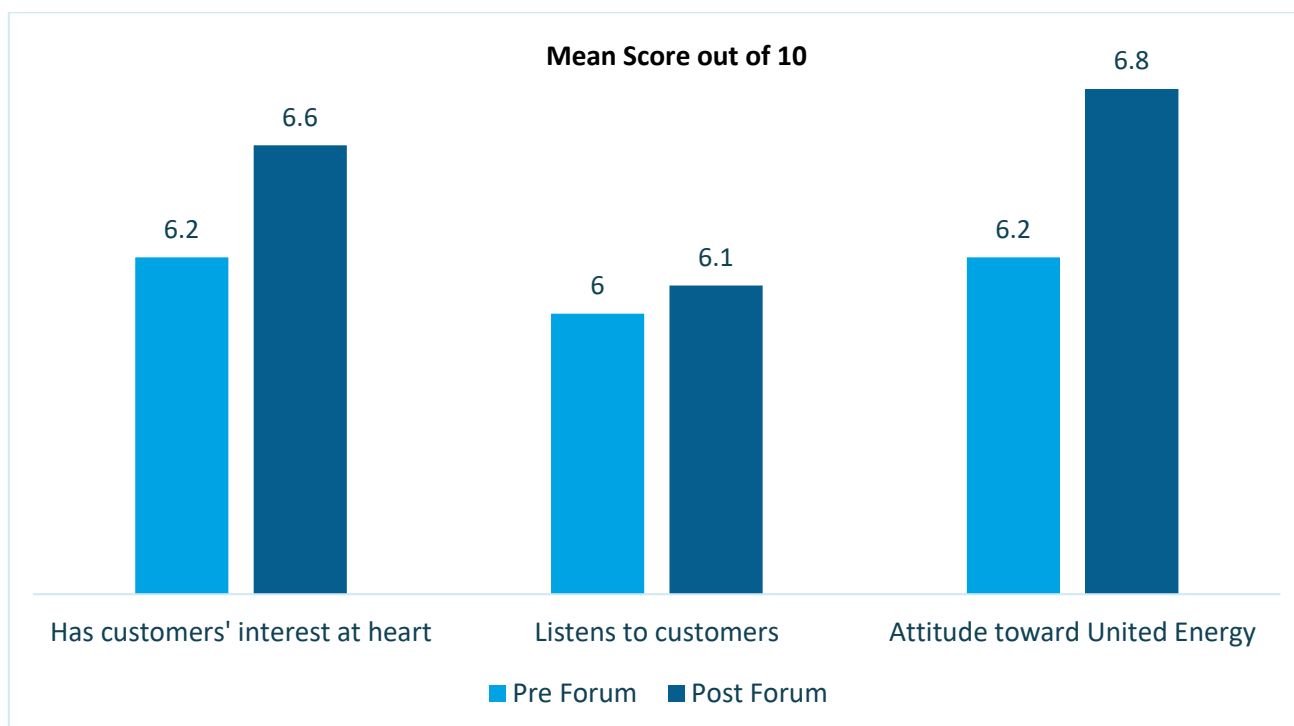
5.0 United Energy - Forum findings

5.1 Perceptions of United Energy

To stimulate early participation and set the scene for further discussions, Woolcott Research opened the United Energy forum with a short series of questions to obtain top line views on the distributor and its customer orientation. At the beginning (and at the end of the forum), participants were asked to rate United Energy (on a zero to ten scale) on , 'having customers' interests at heart', 'listening to customers' and their overall views of CitiPower.

As shown in Figure 16, on average, customers gave United Energy a score of 6.2 on having customer's interest at heart and this improved during the evening to reach a mean score of (6.6) at the close of the forum. There was only a slight increase in participant's pre and post forum ratings of United Energy's willingness to 'listen to customers' (from 6.0 to 6.1). However, there was a marked change in attitudes towards United Energy overall (with a rise in the score from 6.2 to 6.8).

Figure 16: Perceptions of United Energy



How would you rate United Energy on the following?

Base: United Energy (n=73)

5.2 Energy values

Understanding the values that impact customer views about their electricity supply is a sound basis for interpreting their wider perspectives and preferences. Customers' trust in their electricity distributor and opinions on its services are formed by connecting their experiences with their values and ideas.

At the United Energy forum, outcomes of earlier survey research (in Phase 2 of the engagement program) were shared to stimulate discussion about the values of most importance. A handout was also provided showing the unprompted values identified by residents and SMEs (see Appendix 2a). Based on the insights presented, participants were asked to identify which of the energy values they felt United Energy should focus on in future and discuss how their views aligned or differed with the earlier findings (shown in the figure below).

Figure 17: Energy values - Findings from phase 2 research

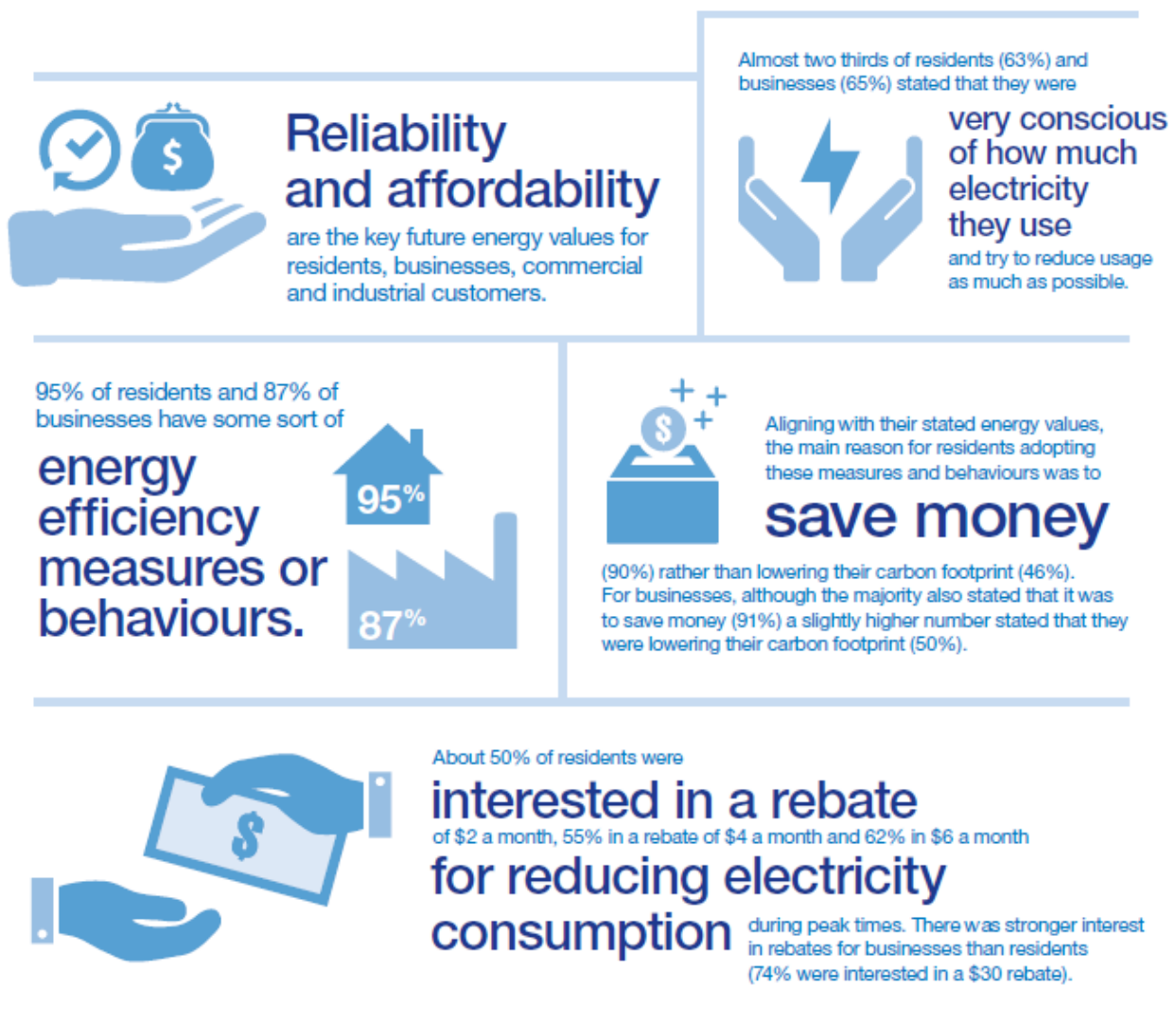
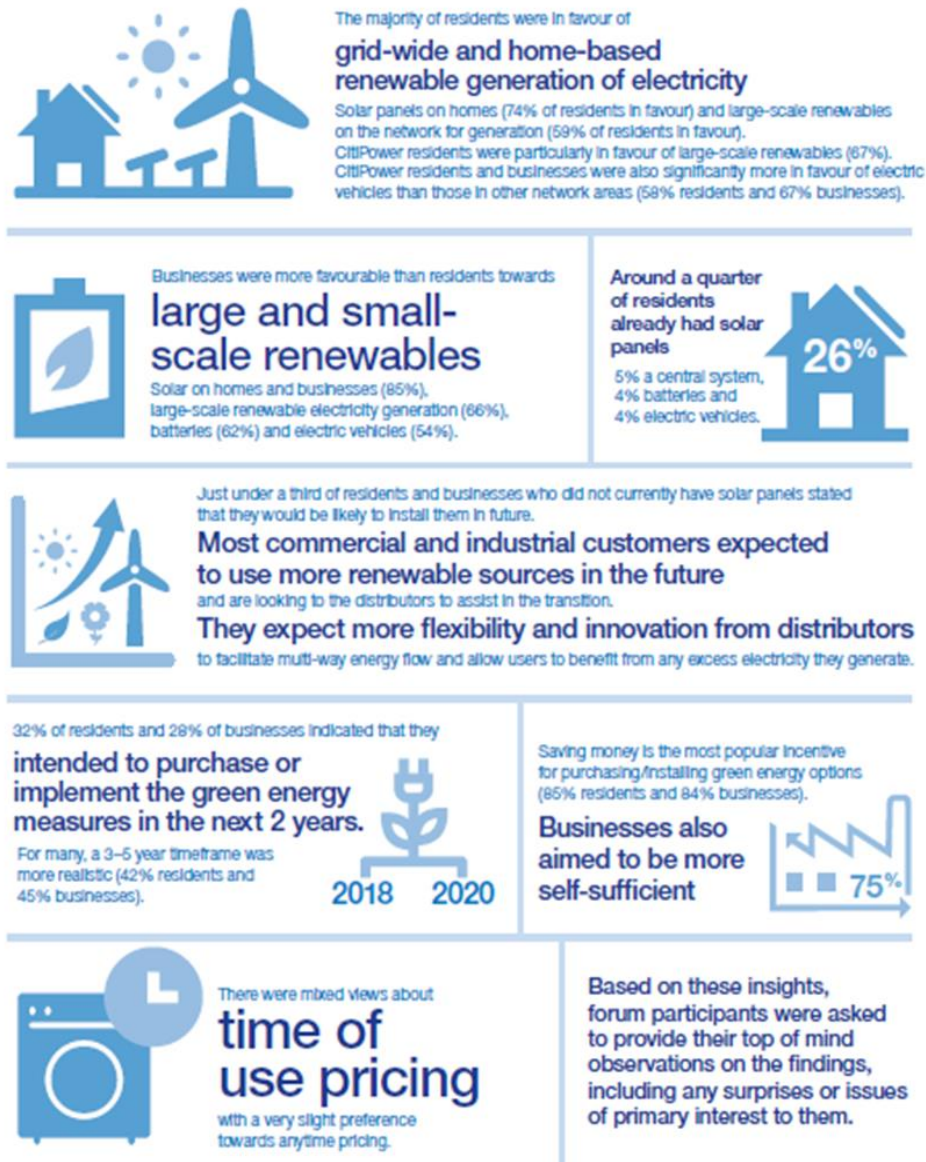


Figure 17: Energy values - Findings from phase 2 research continued



They were also provided with a handout showing the unprompted key values mentioned by residents and SMEs in the survey research (see Appendix 2a).

Key questions at the tables then sought to understand resident and SME views on the key energy values that United Energy should focus on in the future and how those values align, if at all, with the findings from the previous survey research. Overall, the forum participants believed that the values of reliability and affordability identified as most important in the previous research matched their own values and expectations.

The SME customers also agreed that reliability and affordability were the most important values. They were particularly concerned about reliability. However, these participants also noted that some businesses have a generator as a back-up. Related to reliability, they thought that quality of power, in the form of spikes or surges, was important as this can damage household and business equipment. When there are issues with reliability, a fast response is highly valued by SMEs.

In general, forum participants felt that customer service was not as important as reliability and affordability because customers don't deal with United Energy as much as they do with the retailers.

"Customer service is not as important as we don't really deal with them much we deal with the provider. It's only on rare occasions."

In their discussion of affordability, United Energy attendees focused directly on electricity pricing pressures. However, there was considerable variation in understandings of the topic matter across the tables. Customers wanted United Energy to put pressure on the retailers to ensure pricing is more transparent, easier to understand and to provide consumers with more control over costs.

"Should be a change in structure. Control the pricing so the consumer knows the pricing level."

The affordability discussion was vigorously pursued by some participants who made a range of comments about tariff structures. There was robust criticism of demand tariffs in other states where businesses are charged for their peak load (with implications for the Victorian distributors).

"You might only use the energy for one second of the day at the peak and you get charged for this the whole time."

Some attendees suggested that electricity pricing should have a lower fixed charge and more of a variable charge to manage the costs better. Here, some confusion was evident in comments made underlining the energy literacy issues that exist among consumers (with regard to the content, meaning and implications of their energy bill). An illustrative comment was:

"Usage doesn't seem to make a difference. All the cost seems to be in the supply charge."

More vocal attendees asked the distributor to advocate and strive for greater transparency across all parties in the supply chain on energy pricing. A small group of attendees claimed that the sector needed to address these issues to avoid a national enquiry.

Alongside reliability and affordability, some forum participants placed considerable importance on ensuring that network upgrades and maintenance activities are environmentally sustainable. These customers emphasised that the environment should be high on the distributor's list of energy values.

“The most important is eco-friendly and it is becoming more and more important!”

5.3 Value Propositions for 2025

During the forum, United Energy personnel shared nine value propositions (see Appendix 2b) that the distributor plans to include in its Energised 2021-25 submission. Participants were asked whether they thought the list of propositions (and values and benefits within them) covered the right areas and whether there was anything missing from the list.

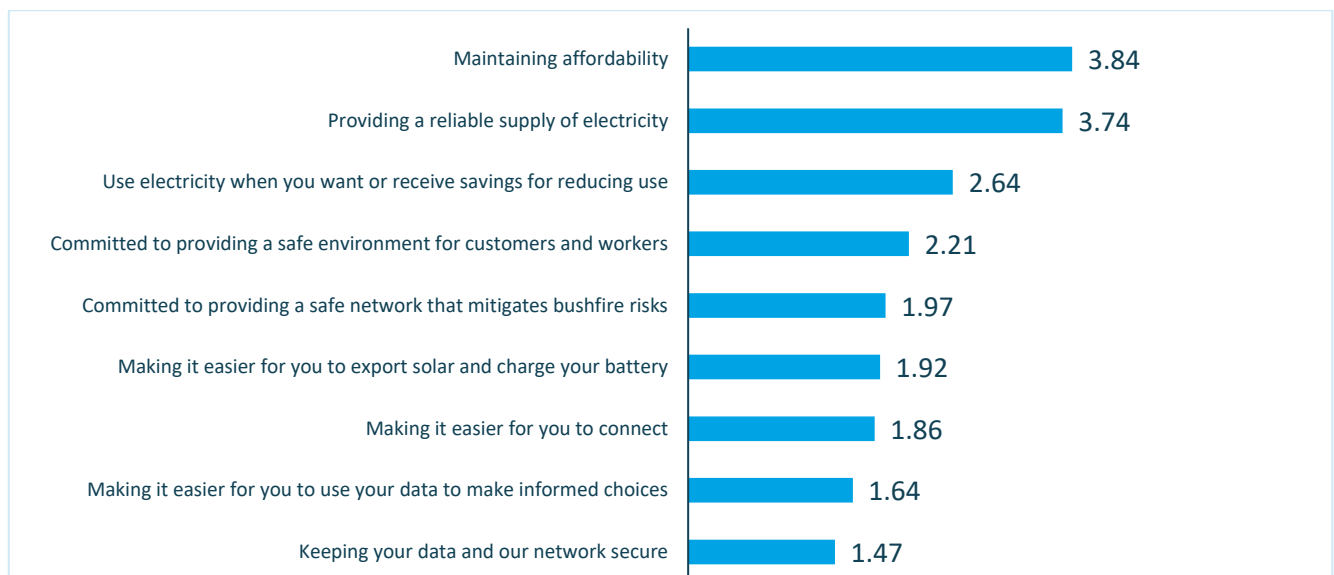
The forum attendees concluded that their highest priorities were covered in United Energy’s value propositions. Most found it hard to think of anything that was missing. However, some global suggestions were made about the role of the distributor in consumer awareness raising, sector wider partnerships and advocacy. In general, participants were seeking:

- More transparency, particularly in the area of pricing, to ensure that customers understand their usage and how that relates to what they are being charged.
- Increased advocacy to achieve greater scrutiny of retail energy prices – some attendees were concerned that pricing was now unable to be influenced by consumers (out of their control). The retailer’s margin was seen to be far too high and some argued that some kind of central control or enquiry will be needed to bring down the margins.
- More education on developments in the electricity industry in general and in particular on energy efficiency so people can benefit from reducing their electricity use.
- Maintaining good customer service, e.g. providing timely notifications and information when there is a power outage.
- Continuing to explore and explain the concept of peer to peer trading (to properly harness all the solar panels that exist in a community).
- Ensuring that vulnerable customers are properly considered and supported.
- Encouraging more collaboration between all parties in the supply chain and other organisations in the energy industry to make a faster transition to renewables and address the price escalation at retail level.
- Increasing cost-efficiencies by reducing the use of sub-contractors (here, some attendees were single minded about the distributor using full time employees versus contract staff (in the belief that contract staff will cost more).

After this round table discussion, participants were invited to select the top five value propositions on the list provided and rank them on their keypads. Findings in Figure 18 show that ‘maintaining affordability’ was ranked highest (with a mean score of 3.84/6) followed by ‘providing a reliable supply of electricity’ (with a mean score of 3.74/6).

The remaining value propositions achieved much lower scores. The value proposition ranked third was ‘using electricity when you want or receive savings for reducing use’ (mean score of 2.64/6). ‘Keeping your data and our network secure’ was ranked lowest (with a mean score of 1.47). However, the low score for data security does not mean that attendees saw this as unimportant. Instead, this proposition was among those that were seen as a ‘given’ or ‘must do’.

Figure 18: Ranking of Proposed Value Propositions (Mean score*)



*Mean score out of 6 - Higher scores indicate greater importance

Please choose the top five that are most important to you, and rank them 1 to 5 (1 being the most important, 5 the least important) N.B. A rank 1 = 6, rank 2 = 5 and so on. A 0 ranking was allocated as 1.

Base: United Energy (n=73)

5.4 Customers' preferred energy scenario

To supplement United Energy's thinking and modelling of future scenarios, the residents and SMEs attending the forum were also asked to think about the future of energy and which of three scenarios they would prefer to see in 2025. These scenarios (i.e. the Steady State scenario and the Consumer Power and Green Power scenarios - see Appendix 2c) were outlined in a presentation before the table deliberations. Participants were also asked to consider which of the scenarios had the closest fit to their own energy vision.

At the United Energy forum, the attendees concluded that both the Consumer Power and Green Power scenarios aligned with their vision for 2025 (with 43% choosing Consumer Power and 41% opting for Green Power).

In thinking about their energy vision and preferred scenario, participants felt it was highly likely that the future would bring more environmentally friendly, energy generation based on solar, wave and wind power. They expected to see the cost of batteries reduce paving the way for a higher uptake of battery storage at household and community levels. Microgrids were also seen as pivotal in future energy solutions.

Australia was thought to be lagging behind other countries in making the transition to solar energy. Some forum participants asked why countries with less solar potential are able to generate more solar energy than we are currently generating here. One or two felt that there are too many obstacles and 'red tape' impeding our transition to renewables. Related comments were:

"We used to be world-leaders but now we lag behind. Look at all the sun we have in the outback, the coastlines for wave power. You could be placing batteries within the core structure of high-rise buildings, in order to power the building and supply back to the grid."

"I think these ideas are de-incentivised because the money has disappeared from CSIRO and other organisations, now our best minds are overseas. It is a political issue."

The discussion also focused on ways that customers will monitor their energy usage in the future e.g. tapping into new technology and apps to try to reduce demand. A small number of participants already had apps to monitor usage and thought that other customers without solar should have similar information.

"I have an app that lets me monitor usage and make decisions about when to use appliances. MyEnlighten is the name of the app. It attaches to converters on the panels. We have changed our whole household behaviour based on this app. It shows what we are generating and what we are using. We run appliances when it is on solar (daytime) rather than when we are on the grid."

5.5 Making it easier to connect

At the start of the session on electricity connections, United Energy personnel outlined key issues that impact the connection process and the differences between connecting a premise or household in a new area (with little to no energy infrastructure) versus simply moving house. Explanations were also given about the way in which connection costs are recovered. Forum facilitators then turned their attention to table level discussions about connection experiences.

5.5.1 Connection experiences

Some participants had previously organised a connection to a new home, with some also noting that they had installed solar panels. A mix of experiences were reported with some including solar installations in their critique alongside standard electricity connections. For some, the process to arrange a new connection ranged from only seven days (e.g. for solar) to around one month. There were also some instances where an electricity connection had taken up to six weeks. Those who had experienced a longer connection time were generally far more dissatisfied. When problems arose, most felt that United Energy had limited communication with them and ownership of problems, leaving them frustrated and confused. This was damaging when building works were delayed.

"They couldn't tell us why they couldn't do it."

"They would say they were coming so I'd take time off work... and then they wouldn't show up."

"Maybe if people knew the process they'd be happy to wait."

Overall, the United Energy participants felt that greater transparency and a lot more education about the process of connecting and reasons for lengthy delays is needed.

5.5.2 Fast-track connection option

Also canvassed in this session was the concept of a 'fast track option' to speed up the connection process for those who are willing to pay a premium price. Some felt that it was 'fair enough', and good to 'have the option' if you needed it. However others concluded that United Energy must have the capacity to deliver more quickly if it was considering this option.

"When a two tiered system starts to disadvantage the regular customer. If you can get it done quickly then why wouldn't you do so?"

There was also some push back from participants who referred to the option as 'queue jumping' and inequitable. Some noted that those who are vulnerable or are in lower incomes would have no access to this fast track process.

"Are you going to have a pensioner without power in their house because they can't afford to have it installed in the 'fast lane'?"

Mixed sentiments about the fast track 'user pays' option was evident in the keypad voting after the table discussions. Ultimately, 47% supported the fast track option and 49% were against it.

5.6 Providing a reliable energy supply

United Energy delivered a presentation on the network's reliability performance in advance of table level discussions. Topic matter included: the frequency and duration of outages, the differences in reliability performance across networks nationally and details of outage compensations for those experiencing low levels of reliability. Guaranteed Service Level (GSL) compensation payments were also explained (including their application in worst served areas of the network). Forum attendees then discussed their own reliability experiences and responses to options and trade-offs proposed for network reliability.

5.6.1 Current reliability levels

Forum attendees had a range of different experiences with energy reliability and outages. Some reported a high level of reliability while others had experienced short and longer, planned and unplanned outages. For a small number of attendees, brown-outs were a common occurrence, with many seeing weather events (e.g. heat waves) and road accidents as key contributors.

In general, United Energy customers felt that reliability needs to improve across the network, with some people (especially SMEs) indicating that they had been forced to purchase backup generators to help compensate for related losses (past and potential).

5.6.2 Guaranteed Service Levels (GSLs) and reliability in worst served areas

Compensation payments linked to the distributor's inability to fulfil the GSLs were seen to be appropriate. However, the amount received was thought to be minimal.

"GSL's are pathetic... They should be compensating at a higher basis and it should come out of their profits."

"It's a service that they should be providing, so if they don't [provide it] they should cough up. What they're giving is peanuts."

Many felt that all customers deserved the same level as reliability and there was a strong belief that the distributor should take steps to improve reliability in the worst served areas. Keypad voting saw just over half of attendees (52%) vote for an investment in improving the network in worst served areas. However, 41% of United Energy participants argued that a combination of GSL payments and an investment in reliability should be explored.

Among the United Energy attendees, some felt that either the distributor or the government should be paying to improve network reliability (with no flow-on costs to customers). However, in keypad voting, 65% of participants agreed that this network investment should be paid for by all customers,

with only 20% saying it should be paid for by customers living in those areas. A summary comment was: *"You shouldn't be punished for where you live."*

5.7 Renewable energy: opportunities and impacts

5.7.1 A two-way power flow

The need for new technologies to enable a two way flow of energy (e.g. solar export) and the decline in reliability that will occur without this investment were in focus in this session. United Energy was also interested in discovering customers' views on payment options or charges for those who have solar and want to benefit from a two way flow (selling power back to the grid).

When asked if anyone had solar panels on their home or business, 37% claimed to have solar installed and many in the room were interested in installing panels in the future. There was a feeling amongst older participants that installation costs were still prohibitive. The payback time for solar panels was felt to be far too long to be worth it.

"The upfront cost is a big barrier. It takes a long time to get your money back."

Some participants claimed that incentives that were originally in place for solar panels have been reduced to such an extent that they are not encouraging people to get solar anymore.

"I put in a solar system four years ago and it was the thing to do and now the rebate is six cents."

Nonetheless, there was a feeling that the use of renewables such as solar was going to increase and that customers needed to be incentivised to install panels in order to save the environment and help reduce electricity costs.

"I've heard of a new company that makes it more affordable, you can pay for it gradually."

The discussion around exporting electricity was met with mixed views. Some were already doing it and were happy with the sixty six cents per kilowatt return. Others however, were not on such a good deal anymore and questioned why they should bother.

"We have 12 panels and export, but only get a small amount – eleven cents a kilowatt."

"We get sixty six cents a kilowatt but I am not allowed to increase my capacity"

On balance, many of the participants came to the conclusion that battery storage for excess power produced from solar panels was their best options, however, again this was seen to be cost prohibitive at the moment.

A key question posed in this session was “Who should fund the investment in new technologies needed to enable a two way energy flow?” Participants were provided with four options:

1. Charging the full cost of additional investment to each new customer that triggers the need for new ‘exporting’ technologies;
2. Developing a one-off standard ‘connection charge’ for all customers who connect these new export technologies;
3. Charging an ‘export tariff’ for all exported electricity (per kilowatt); or
4. Obtaining funds from the Australian Energy Regulator and recovering the costs from all customers (solar and non-solar) in the same way other network costs are already recovered.

The first option (1) was seen to be unfair by most, with many suggesting that it was a disincentive to connecting new technologies, especially if you were the first.

“Why should the first customer pay more, there is no incentive for being the first.”

“No one would want to invest. No one wants to be the first one! Why would you unless you had the money. It’s not fair! And now they have dropped the amount they are paying you to sell back to the grid too!”

In that regard, Option 2 was perceived to be a much fairer system, although depending on the fee some questioned whether this would become a disincentive to connect.

“Yes number 2 sounds much fairer. A standard connection fee is better.”

“But number 2 might put people off solar. I guess at least you know how much it is.”

Option 3 appealed to some and not to others. Those already selling back to the grid did not agree with an export tariff and felt it was unfair, while others saw it as logical that those putting added pressure on the network should pay.

“If you are allowed to enter this system and sell energy, then you should be the one paying.”

Option 4 appealed on the grounds that the cost was being shared across all customers. However, some of the non-solar participants were not happy with funding something they were not using. A few participants suggested different alternatives that revolved around the Government helping to fund the investment for the good of Victoria. Related comments made by Forum attendees included:

“Should this be one or another, or should we have multiple methods for funding this investment that is primarily weighted towards the people doing it themselves.”

“This is a highly technical problem, and the government should have a hand in it. We’d like them [United Energy] to lobby the government heavily for what the engineers say is the correct course of action.”

“We are all going to have to move to that model eventually, if they want people to move to solar we should all pay for it.”

Based on the round table discussions, participants voted on their preferred option. The polling showed the second option (developing a one-off standard ‘connection charge’) to be the most preferred (attracting 44% of the vote). The next most popular option was to recover the costs across all customers (solar and non-solar) with 30% nominating this option. A further 21% of attendees chose the option of an export tariff, and a negligible percentage were in favour of Option 1 (charging the full cost to each new customer that triggers the need).

5.7.2 Impact of renewables on power quality

Although United Energy attendees felt that worst served areas should be upgraded (as per earlier comments), only a small number complained of power surges, outages or brown outs.

On the question of whether to upgrade the network to maintain power quality, most agreed that something should be done as solar is the way of the future and will continue to impact the grid. However, the participants noted that they had no real clarity about the cost involved and how it should be recovered. Some felt that solar panel users needed to pay as they were the ones using it but others felt it was unfair to recover the money only from solar panel users who were investing in a more environmentally friendly future.

Key pad voting was used to clarify viewpoints i.e. whether the cost should be spread across all customers or paid for only by customers with solar panels. The room was divided on this question: 47% of participants felt that it should be ‘paid by all customers, 46% that it should be ‘paid by customers with solar panels’, and 7% of participants were unsure who should pay.

5.7.3 Peer to peer trading (P2P)

Peer to peer trading was an interesting concept for United Energy attendees, but the likelihood of actively engaging with it attracted a mixed response. Key benefits were seen to be:

- Giving customers the opportunity to move away from the price structures of retailers to a more cost-efficient approach (pending what is involved).
- The likelihood that peer to peer trading would lead to increased use of solar and lead to more environmentally friendly energy outcomes.

- The potential to bring people together with a common interest in buying and selling their excess power e.g. networks of people with an interest in community energy trade.
- The potential to take a further power load off the network to enable it to work more efficiently.
- The likely impacts of peer to peer trading on mainstream energy prices and the ability to get a better price for your solar energy.

There was however a level of confusion (and a number of concerns and questions) about the logistics of peer to peer trading (i.e. how it would work). These included:

- How do people protect themselves from being “ripped off”?
- Will people still be connected to the grid in order to have energy back up?
- Would there be rules in place to stop disagreements or manage trading arrangements that go awry between neighbours?
- How will people continue to harness the benefits when they move house?
- Can regulations or a level of protection be put in place to protect the vulnerable e.g. the elderly and others from being disadvantaged or falling prey to unscrupulous peer to peer trading arrangements?

Keypad voting was used to test the level of interest in peer to peer trading on a four point scale. Nearly half (46%) of forum attendees claimed they would be interested, with 36% being ‘very’ interested and 10% ‘quite’ interested. However, support was clearly conditional given that there is a lot more exploration to come. Those who were ‘not that interested’ comprised 21% of the vote, 19% of attendees were ‘not interested at all’, and 14% were unsure.

5.8 Managing network safety

A range of issues and approaches to network safety were outlined in a United Energy presentation at the beginning of this session. Topics included: network safety statistics, vegetation management (including trimming cycles) and proactive replacement programs – more specifically using AMI meters to monitor service line/neutral deterioration and undergrounding of power assets. Bushfire management and reliability using REFCL technology was also explained. Participants were then given the opportunity to discuss United Energy’s proposals for network safety.

5.8.1 Safety perceptions

Many participants felt that the safety of the network was already at a high standard. There were a few incidents where customers felt safety problems with infrastructure had not been attended to in a timely manner. However, these issues and comments were few in number.

5.8.2 Vegetation management (bushfire mitigation)

United Energy forum participants agreed that trimming cycles were adequate as they were. Even though many felt that some trees were cut excessively creating an 'eye sore', most attendees didn't want to pay more for a shorter trimming cycle. This was reflected in the keypad voting with over a third (39%) voting in support of the current trimming cycle.

Many were quite concerned about 'natural species' (native plants) and some pre-existing trees that they felt should not be removed, but the concept of replacing 'problem' vegetation was not discounted. A related comment was:

"Sometimes councils put trees there that are not appropriate... there should be more guidance on what trees should be planted there."

This was seen to be an obvious solution to ensure that safety and cost efficiencies work hand in hand over the long term. Subsequently, the keypad vote supported this approach with nearly half (49%) signalling their agreement to selectively replant some vegetation and another 26% agreeing (only 14% disagreed/strongly disagreed).

5.8.3 Undergrounding power lines and replacing risky assets

At the forum, there was a strong call for AMI meters to be used to their full capacity in order to keep consumers and the network safe. This was reflected in the keypad voting with 91% of participants voting 'yes' to using AMI meters to detect potential faulty assets.

Again, replacing assets with an increased safety risk was felt to be a 'no brainer' with 97% of attendees indicating that those assets should be proactively replaced.

The concept of undergrounding was seen to be the best solution for many safety issues, and many thought that underground power already featured in most new developments.

There was a strong view at the United Energy forum that any assets that were not already underground should be progressively moved on a priority basis, with poles and wires in 'black spots' and other high risk infrastructure being the first assets to be replaced. Nearly two-thirds (65%) of the participants had a strong preference for network undergrounding (albeit at a higher cost to customers).

5.8.4 Operating Rapid Earth Fault Current Limiter (REFCLs)

Participants were enthusiastic about REFCL technology and were glad to hear that United Energy had already installed one at Frankston South and planned to install another two at the Mornington and Dromana Zone Substations.

“Anything that can save lives is worth putting money into.”

“I’m glad they’re being proactive about it - we can’t just leave it up to the Government.”

Some participants were curious as to whether undergrounding of power assets would be more cost effective and might therefore eliminate the need for REFCLs. There was some concern about the reliability of supply if REFCLs were to become faulty or cut off power too frequently, causing issues in these areas.

Subsequent keypad voting reflected support for REFCL installation, with 86% supporting installation where the benefit of doing so outweighed the cost.

5.9 Energy data access, data sharing and demand management

The final presentation and discussion topic focused on energy usage data and customers’ participation in demand management. Participants were given insights to the concept of demand management and their opportunity to access and use real time usage data to manage their power usage.

The idea of allowing third parties to access their usage data to gain additional benefits was also posed alongside the potential to improve energy and technology use. Participants were assured of their data security with continuous updates of system security over time. They were then asked to discuss these topics including demand management strategies at their tables.

5.9.1 Demand management

The concept of demand management was well received by participants who generally expressed some degree of interest in taking active steps to manage their own demand. Some felt they were already attempting to manage their demand on the network and liked the idea of receiving a financial incentive, rebate or discount for continuing to do so. Others felt that they were already managing their demand adequately and that further data would not add value.

“An incentive, rebate or discount would be good for me being a student. It would only need to be 5-10 dollars off.”

Participants wanted clarity and assurance that the energy usage data would allow them to make clear and concise choices, for example the ability to opt in to potential dollar amount savings, rather than having to figure things out ‘by themselves’.

“Tell me what the benefits would be and I’ll do it.”

5.9.2 Real time access to data and managing customer privacy

Forum participants in the United Energy network welcomed the idea of having access to real time data. Keypad voting outcomes indicated that 74% were either ‘very’ or ‘quite’ likely to use real time energy data to make decisions on their energy use. However, because many participants were already active in trying to reduce their demand, there was scepticism about the benefits that the data would deliver.

“We need to be better educated about these things so we can take advantage of it.”

Minor doubts about the efficacy of data did not have a marked impact on interest in demand management participation. Polling showed that 73% of participants were interested in participating in trials or programs where a financial incentive or reward was offered to reduce consumption at peak times.

Third party access to customers’ energy usage data had a mixed reaction. Here the response was split in keypad voting with 45% prepared to share their data and 47% rejecting the idea. The call for a high level of transparency about customers’ data usage was strong. Forum participants made it clear that they wanted accurate insights and input to any plans for data sharing i.e. who would have access and for what purposes. Ideally, the data would be used to benefit them as energy consumers. However, there was underlying support for data sharing if benefits could be demonstrated.

“If it’s anonymous and might help in some way, why not?”

Having control over both the data and energy demand were two key benefits for United Energy customers. Opt in schemes were seen as the key to giving customers a clear choice. However, giving the distributor remote access to adjust energy use remotely was generally disliked. Most saw this to be too much like a ‘big brother’ form of control. Nearly three quarters (74%) of participants voted against this approach. Some suggested that there may be more sense in allowing distributors to control some appliances and not others i.e. leaving those that are more ‘essential’ in the consumer’s control.

However, the concept of remote control did prompt concerns about data safety or cyber security. Some attendees were concerned about hacking and loss of control of their own energy demand management over time if there was an abuse of power by suppliers.

"I need it when I need it."

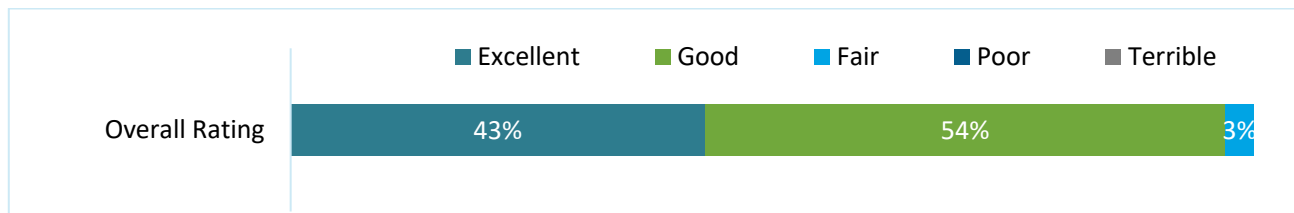
"I'm already very careful with when I use my air conditioner. It's pleasurable to control it myself. But something like a pool pump could be controlled."

"If you are going overseas for a month then that might be okay."

5.10 Forum Evaluation Results

At the end of the forum, participants were given an evaluation sheet which enabled them to give feedback on the engagement session. Overall, the United Energy forum was ranked highly (see Figure 19) with just under half (43%) of participants rating the forum as 'excellent'.

Figure 19: Overall rating of United Energy Forum



Overall, how would you rate the forum?

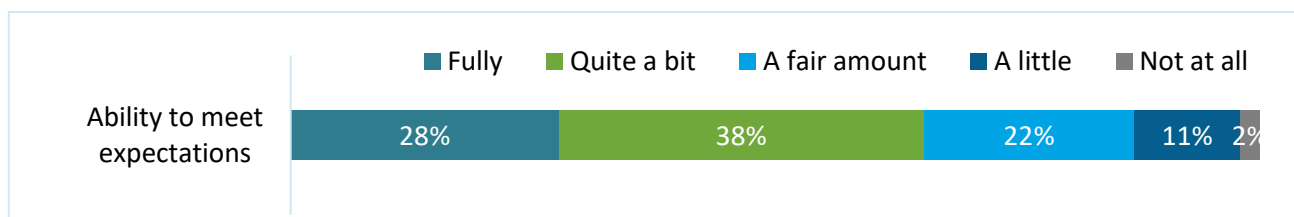
Base: United Energy (n=73)

While many participants were unsure what to expect when invited to the forum, the feedback shows that the majority of United Energy forum participants had their expectations met 'fully' (28%) or 'quite a bit' (38%).

"I had an open-mind but found some of the issues engaging. I had loads of fun."

"I hadn't expected the table discussions... I really thought it would be less interactive."

Figure 20: Expectations of the United Energy Forum

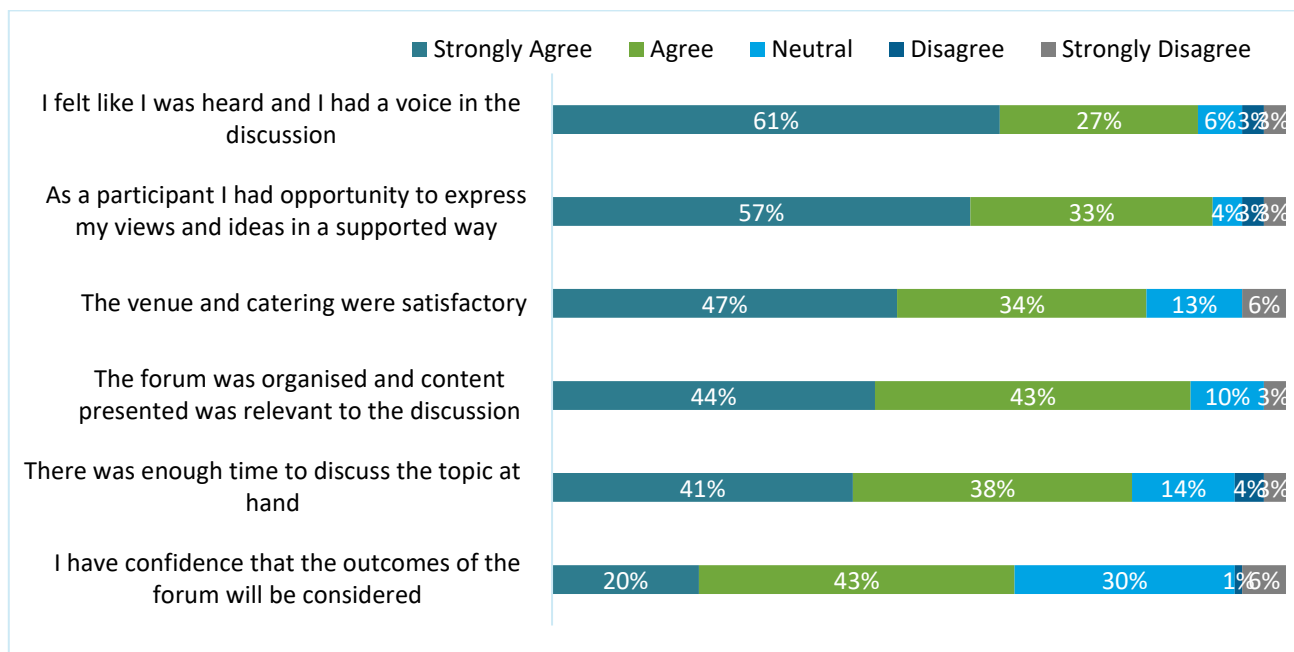


How much did the forum live up to your expectations?

Base: United Energy (n=73)

Participants were also asked to show their agreement with a number of statements regarding the forum outcomes, the running of the forum and their overall participation. Figure 21 shows that nearly all participants (90%) felt they were able to ‘express their views in a supported way’, and that they ‘felt heard and had a voice in the discussion’ (88%). Participants were unsure if the outcomes from the forum would be considered (30% indicating ‘neutral’), however 63% agreed that they would be.

Figure 21: United Energy Forum Agreement Statements



Please read the statements below about the forum and select the response with which you most agree, from 1 = strongly disagree to 5 = strongly agree
Base: United Energy (n=73)

Overall, United Energy’s use of the deliberative forum to inform its Energised 2021-25 submission was well received. Participants left with a very positive attitude towards United Energy and were glad to have contributed to their energy future and to simultaneously have learned much more about their energy supplier. Many participants left wanting to know more, opening the door for United Energy to extend its engagement with them.

“I liked the variety of engagement, e.g. discussion, presentations and voting.”

“It was a good opportunity for broad, solid discussions and feedback.”

Appendix 1: Agenda

Time	Session details	Responsibility	Materials
5.30-5.32pm	Welcome and Introduction <ul style="list-style-type: none"> Woolcott Research Lead Facilitator to welcome and thank participants for coming and introduce opening speaker 	WR Lead Facilitator	
5.32-5.37pm	Introduction <ul style="list-style-type: none"> CITIPOWER representative to welcome and thank for coming. Give context to the engagement – Regulatory Reset: Key goals are to inform and involve energy consumers’ right across the network as we plan ahead for 2021-25. Explain objectives and purpose of this Forum: <ul style="list-style-type: none"> To understand what customers want and value most in relation to energy and services provided by their DB. To obtain feedback on some of the different business options and benefits we hope to deliver by 2025. Importance of the forum to CitiPower/Powercor/UE to respond to unique drivers of change and customer needs in this network. 	Renate	PP slides
5.37-5.40pm	How the session will run <ul style="list-style-type: none"> Woolcott Research Lead Facilitator to give overview of forum agenda and approach, the key sessions, guidelines and housekeeping. Location of toilets and evacuation in emergency. 	WR Lead Facilitator	PP slides

5.40-5.50pm	<p>Introduction to keypads</p> <p>Lead facilitator to introduce keypads and do warm up questions.</p> <p>PRACTICE QUESTION (Results shown on screen):</p> <p>Q. How did you travel to the forum today?</p> <ol style="list-style-type: none"> 1. Car 2. bus 3. train 4. on foot 5. helicopter 6. other <p>Q. How reliable do you think your electricity supply is?</p> <ol style="list-style-type: none"> 1. Very reliable 2. Quite reliable 3. Neither reliable or unreliable 4. Quite unreliable 5. Very unreliable 6. Don't know <p>Q. Have you got solar panels on your home (or business for SME customers)?</p> <ol style="list-style-type: none"> 1. Yes 2. No <p>Q. How would you rate CitiPower on the following, on a scale of 0-10 where 0 is very poor and 10 is excellent:</p> <p>Q. Has customers' interests at heart 0 1 2 3 4 5 6 7 8 9 10 dk</p> <p>Q. Listens to customers 0 1 2 3 4 5 6 7 8 9 10 dk</p> <p>How would you rate your overall attitude to CitiPower on a scale of 0-10 where 0 is very negative and 10 is very positive? 0 1 2 3 4 5 6 7 8 9 10</p>	WR Lead Facilitator	PP slides and Keypads
5.50-6.00pm	<p>Presentation: The CITIPOWER Business</p> <ul style="list-style-type: none"> • Our role and our customers • Our performance • Where we fit into the energy value chain • Outline what we have heard so far – <ul style="list-style-type: none"> ○ Briefly outline energy values from previous research ○ Future scenarios – Green Power, Consumer Power, Steady State (very brief on a single slide, no assumptions) 	CITIPOWER	PP slides

6.00-6.15pm	<p>Table discussion 1: Values and preferred energy future</p> <p>Give out handout 1</p> <ul style="list-style-type: none"> What do you think are the key energy values that CitiPower should focus on in the future – how do they align with those from the previous research? What would your preferred energy future in 2025 look like in this city or region? How would it differ to now in this region? <ul style="list-style-type: none"> How would electricity be generated, used and stored by 2025? <p>Ask them to look at handout 2 (on the back of handout 1)</p> <ul style="list-style-type: none"> Which of the three scenarios is most similar to your vision for 2025? (This will be a keypad question after this discussion). 	WR Table facilitators	HANDOUT 1 and 2: Energy values and scenarios
6.15pm	<p>Keypad question</p> <p>Q. Which of the following scenarios aligns best with your preferred energy future by 2025?</p> <ol style="list-style-type: none"> Steady State Consumer Power Green Power Don't know 		
6.15-6.25pm	<p>Presentation: CITIPOWER –Value Propositions for 2025</p> <ul style="list-style-type: none"> Present the value propositions that have been created by CitiPower for 2021-25. These will be presented as a list of high level statements. 	CITIPOWER	PP slides
6.25-6.40 pm	<p>Table Discussion 2– Value Propositions for 2025</p> <p>Give out handout 3</p> <ul style="list-style-type: none"> What are your initial thoughts on these Value Propositions or priorities for 2025? Are these the key things that CitiPower should be focusing on to ensure customers are satisfied? Which are the most important Value Propositions and why? Which are least important and why? <i>Give out ranking sheet and ask them to pick their top 5 and rank - explain that we will ask them to input into the keypads later. They may decide to change their rankings as the discussions progress tonight.</i> Is there anything that is missing from these Value Propositions? I.e. anything that you think they should be focussing on to move towards your 2025 vision that is not included? Write missing ones on flipchart 	WR Table Facilitators	<p>HANDOUT 3: list of Value Props</p> <p>Flipcharts</p>

	<i>A nominated spokesperson at each table is chosen to feedback their table's views on any missing Value Propositions (1 minute each to present feedback).</i>		
6.40-6.50pm	Quick table feedback <ul style="list-style-type: none"> Feedback invited from all tables on any missing Value Propositions that they consider to be important to them with regard to electricity supply. Lead facilitator to explain that we will take these away and add to the Value Propositions after the forum. 	WR Lead Facilitator	Flipcharts
6.50 - 7.10pm	DINNER BREAK		
7.10-7.15pm	Presentation on first Value Proposition: 'Making it easier to connect' <ul style="list-style-type: none"> Outline the issues that relate to the questions in the discussion session below: <ul style="list-style-type: none"> Explain the process of connecting and what we mean by connecting (i.e. new developments rather than moving house) Explain how connection costs are recovered at present 	CITIPOWER	
7.15-7.25pm	Table Discussion 3- 'Making it easier for you to connect' <p>Connection Experience</p> <ul style="list-style-type: none"> What impressions do you have, if any (based on your own experience/ stories of others) of the timeframe for arranging an electricity connection with CitiPower? How long do you think it would take? <i>This is not about moving house but about NEW connections e.g. when building a house.</i> What impressions do you have of the process of connecting a new house/premises? What do you think this is? What positives and/or negatives can you share about yours or others experience of the process? How could the distributors improve the process, if at all? Or, if there is no prior experience or perceptions, what expectations of the timeframe and process would you have (as a resident or SME)? How long do you think it should take? <p>Fast Track Option</p> <ul style="list-style-type: none"> What are your views on a fast track 'user pays' option for customers wanting to speed up the process for connecting to the grid? (CitiPower already has this) 	WR Table Facilitators	
7.25-7.30pm	Presentation on 'Providing a reliable supply of electricity' <ul style="list-style-type: none"> Outline the challenges for reliability that relate to the questions in the discussion session below: <ul style="list-style-type: none"> Stats on frequency and duration of outages across the network area 	CITIPOWER	

	<ul style="list-style-type: none"> ○ Explain differences in reliability across the network and how customers are compensated currently (GSLs for affected customers) ○ Explain postage stamp pricing ○ Explain calculation that goes into calculating reliability 		
7.30-7.40pm	<p>Table Discussion 4: 'Providing a reliable supply of electricity'</p> <p>Current reliability levels</p> <ul style="list-style-type: none"> • What are your views on the current reliability of your electricity supply (in terms of frequency and duration of outages)? • How frequently has anyone experienced an outage? How long have they tended to go on for? • Is the reliability level about right or does it need to increase in some areas in your view? <p>Guaranteed Service Levels (GSLs) or improving reliability in worst served areas?</p> <ul style="list-style-type: none"> • GSLs are like compensation payments to those in areas with lower reliability (i.e. the worst performing areas). What do you think of the distributors providing GSL payments – is this a good system? Why/why not? • Or instead should CitiPower invest more into improving reliability for those in the worst performing areas? Why/why not? • If you think CitiPower should invest, should this cost be recouped across all customers (without creating a significant impact on average bills) or paid for only by those in the worst served areas? Why? • If all customers, how much more would you be willing to pay for worst-served areas to get improved reliability? 	WR Table Facilitators	
7.40-7.45pm	<p>Key Pad Voting – Questions relating to Table Discussion 3 and 4</p> <p>Q. Do you think there should be a fast track 'user pays' option for customers wanting to speed up their connection processes?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know <p>Q. Should the distributors continue to provide GSL payments to customers who experience more than a certain number of outages/hours of outages per year or should they invest more resources to improve reliability in the worst performing areas?</p> <ol style="list-style-type: none"> 1. Provide GSL payments (compensation) to customers 2. Invest more resources to improve reliability in worst performing areas 	WR Lead Facilitator	

	<p>3. Don't know</p> <p>Q. If there is more investment into those worst performing areas, should this cost be spread across all customers or paid for only by those in the worst served areas?</p> <ol style="list-style-type: none"> 1. Paid for by all customers 2. Paid for by those living in worst served areas 3. Don't know 		
7.45-7.50pm	<p>Presentation on 'Making it easier for you to export solar and charge your battery'</p> <ul style="list-style-type: none"> • Outline how the network is changing and what issues might arise from new technologies on the network: <ul style="list-style-type: none"> ○ Customer interest in exporting electricity from solar and battery storage is expected to grow (at the moment this is not always possible - explain what constraining is). ○ Two Way Power Flow - In order to accommodate unconstrained export of electricity, further investment in power quality and capacity on the network will be needed. ○ Potential options for funding additional investment from solar and other technologies – 4 options. ○ Peer to Peer Trading 	CITIPOWER	
7.50-8.10pm	<p>Table Discussion 5: 'Making it easier for you to export solar and charge your battery'</p> <p>Two Way Power Flow</p> <ol style="list-style-type: none"> 1. How many of you have solar panels currently? Do you export electricity currently and how much? 2. Are any of you thinking about getting solar in the future? What is the likely timeframe for this? 3. If you have solar, or are considering getting it in the next 3-5 years, what is your level of interest in exporting (selling) power back to the grid in the short or longer term? <p>Give out handout 4</p> <ol style="list-style-type: none"> 4. Explore reactions to the 4 options presented for paying for this upgrade to enable customers to export electricity (two way flow): <ol style="list-style-type: none"> a. charging the full cost of additional investment to each new customer that triggers the need for new 'exporting' technologies (i.e. this will vary customer to customer and it means that even though the customer pays, other solar customers may be able to 'piggy back' of the additional capacity provided by the paying customer) 	WR Table Facilitators	HANDOUT 4 on 4 options

	<ul style="list-style-type: none"> b. developing a one-off standard 'connection charge' for all customers who connect new exporting technologies c. charging an 'export tariff' for all exported electricity (per kilowatt) d. get funding from the Australian Energy Regulator and recover the costs across all customers (solar and non-solar), in the same way other network costs are recovered from all customers. <p>Impact of increased renewables usage on power quality</p> <ul style="list-style-type: none"> • Are you satisfied or dissatisfied with the quality of your power supply (e.g. surges, flickering, brown outs)? • How important is the quality of electricity supply to you? • A greater use of solar by residential customers can impact quality of power supply – it results in voltage variations. Should distributors be investing to manage quality issues (voltage variations) that will arise with increased renewable usage or continue to constrain customers from exporting? • If distributors have to invest, who should pay for this investment? All customers (shared cost of quality) or just solar generating customers? Why? <p>Peer to Peer Trading of Electricity Turn over page to handout 5 (it is on the back of handout 4)</p> <ul style="list-style-type: none"> • What level of interest could exist among customers to engage in peer-to-peer trading of electricity? • What benefits would customers expect to receive by engaging in 'peer to peer trading'? • What concerns could arise from peer to peer trading? 		HANDOUT 5 on peer to peer trading
8.10- 8.15pm	<p>Key Pad Voting – Questions relating to Table Discussion 5</p> <p>Q. More investment is required to maintain consistency in power quality due to an increase in solar connections. Should this cost be spread across all customers or paid for only by customers with solar panels?</p> <ol style="list-style-type: none"> 1. Paid by all customers 2. Paid by customers with solar panels 3. Don't know <p>Q. Which is your preferred option for funding the investment that is required for exporting electricity (please choose one option):</p> <ol style="list-style-type: none"> 1. charging the full cost of additional investment to each new customer that triggers the need for new 'exporting' technologies (i.e. this will vary customer to customer) 2. developing a one-off standard 'connection charge' for all customers who connect new exporting technologies 	WR Lead Facilitator	

	<p>3. charging an 'export tariff' for all exported electricity (per kilowatt)</p> <p>4. get funding from the Australian Energy Regulator and recover the costs across all customers (solar and non-solar).</p> <p>Q. What is your likely level of interest in peer to peer trading in the future?</p> <ol style="list-style-type: none"> 1. Very interested 2. Quite interested 3. Not that interested 4. Not interested at all 5. Don't know 		
8.15-8.25pm	DESSERT – participants to bring back to tables		
8.25-8.30pm	<p>Presentation on Safety – 'Committed to providing a safe network that mitigates bushfire risks' and 'Committed to providing a safe environment for customers and workers'</p> <ul style="list-style-type: none"> • Outline key issues for discussion: <ul style="list-style-type: none"> ○ Safety ○ Vegetation ○ Proactive replacement programmes <ul style="list-style-type: none"> ▪ Using AMI meters to monitor service line/neutral deterioration ▪ Undergrounding ▪ Replacing 'dog bones' 	CITIPOWER	
8.30-8.50pm	<p>Table Discussion 6– 'Committed to providing a safe network that mitigates bushfire risks' and 'Committed to providing a safe environment for customers and workers'</p> <p>Safety</p> <ul style="list-style-type: none"> • What are your views on the overall safety of the electricity network and safety of workers and residents in your community or region? <p>Vegetation Management</p> <ul style="list-style-type: none"> • Do you have any views about vegetation management in this network area? What do you think CitiPower should focus on? • Do you have views on the discussed trimming cycle? Should they trim the trees more or less often (more often means they cut less severely each time)? <ul style="list-style-type: none"> ○ What are the pros and cons of cutting more frequently but less • Should CitiPower permanently remove some vegetation and selectively replant it, rather than continue to cut it? <ul style="list-style-type: none"> ○ What are the pros and cons of this? 	WR Table Facilitators	

	<ul style="list-style-type: none"> ○ In what cases would this be deemed necessary or acceptable? <p>Proactively undergrounding and replacing risky assets (all DBs) Give out handout 6</p> <ul style="list-style-type: none"> ● In what areas should the distributors be proactive in replacing assets that appear to be ongoing safety risks? E.g. <ul style="list-style-type: none"> ○ Should CitiPower continue to unlock capacity in AMI meters to detect potentially faulty assets and reduce the risk of electric shocks? ○ Undergrounding delivers benefits to customers but costs more than traditional poles and wires. What are your views on undergrounding the network? <ul style="list-style-type: none"> ▪ Are there specific areas/situations where you would like to see undergrounding? ▪ Should we underground assets or move poles that are in road accident black spots? ○ Should CitiPower proactively replace assets that have an increased safety risk e.g. dog bones? (Only asked at the CitiPower and Powercor participants) <p>REFCLs (Only asked to United Energy and Powercor participants)</p> <ul style="list-style-type: none"> ● A REFCL is a protection device that can significantly reduce the risk of powerlines starting a fire. Although the government has mandated REFCLs in bushfire prone areas they are not mandated in United Energy's network. UE have installed one at Frankston South and are planning to install REFCLs at the Mornington and Dromana zone substations, as there are significant safety and reliability benefits. What are your views on this? Should there be more REFCLs – how much of a priority is this? ● Should we be operate REFCLs in the same way on either side of total fire ban days or just total fire ban days? (Only asked to Powercor participants) 		HANDOUT 6 on risky assets
8.50-8.55pm	<p>Keypad voting – Questions related to Discussion 6</p> <p>Q. Do you think vegetation should be trimmed:</p> <ol style="list-style-type: none"> 1. More frequently but less severely than it is now (at a slightly higher cost) 2. Less frequently but more severely than it is now (at a slightly lower cost) 3. The same level and frequency as it is currently 4. Don't know 	WR Lead Facilitator	

	<p>Q. Costs could also be reduced if vegetation was permanently removed and more appropriate types of vegetation selectively replanted. To what extent do you agree or disagree with this?</p> <ol style="list-style-type: none"> 1. Strongly agree 2. Agree 3. Neither agree or disagree 4. Disagree 5. Strongly disagree 6. Don't know <p>Q. Should the distributors continue to use AMI meters to detect potentially faulty assets?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know <p>Q. Should the distributors proactively replace assets that have an increased safety risk (e.g. dog bones)?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know <p>Q. Should the distributors move poles or underground assets that are in road accident black spots?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know <p>Q. Would you prefer to see more of the network underground (albeit at a higher cost)?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know 		
8.55-9.00pm	<p>Presentation on data and demand</p> <ul style="list-style-type: none"> • Outline key issues for discussion: <ul style="list-style-type: none"> ○ Explain what demand management is ○ Real time access to usage data ○ Use of data by third parties to assist customers in demand management and other ways of improving energy and technology use ○ Ensuring data security through updating systems security over time 	CITIPOWER	
9.00-9.15pm	<p>Table Discussion 7–‘Making it easier for you to use your data to make informed choices’, ‘Keeping your data secure’ and ‘Using electricity when you want or receive savings for reducing use’</p> <p>Demand management</p>	WR Table Facilitators	HANDOUT

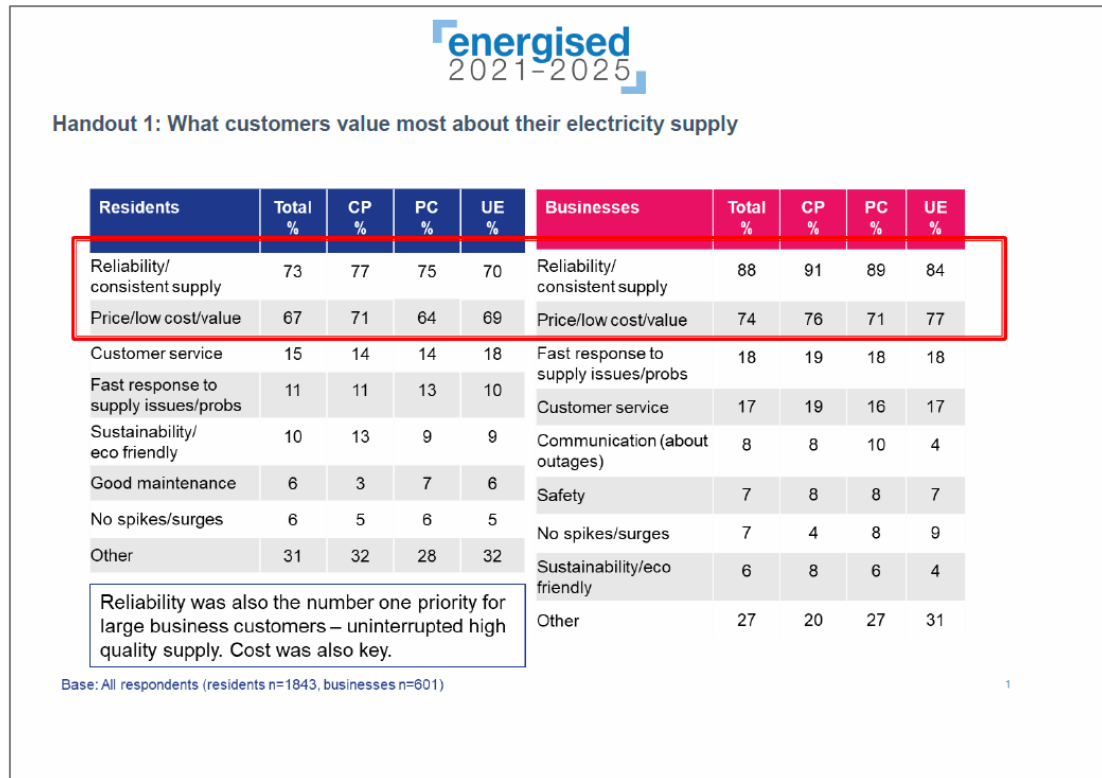
	<ul style="list-style-type: none"> • What are your views on demand management? How interested would you be in taking active steps to manage your own demand? • What type of incentives (tariffs, rebates or others) would further stimulate your interest in demand management (at home or in your business)? <p>Real time access to data and managing customer privacy</p> <ul style="list-style-type: none"> • What benefits do you think customers would get from having real time access to their energy usage data (e.g. using a real time energy use monitor to monitor energy use or solar power exports at your home/business) • How likely are you to use a real time energy use monitor to make decisions on your electricity usage or whether to invest in new technologies? • Would you prefer to have control at the household level only OR would you opt to have your energy use remotely adjusted by CitiPower (i.e. 'farm out' the demand management role) (or both) • Do you think customers would participate in energy saving programs or electricity export programs that includes for their de-identified electricity usage data (no names, addresses) to be given to 3rd parties? <ul style="list-style-type: none"> ○ What benefits, if any, would make this data sharing worthwhile? 		
9.15-9.25pm	<p>Keypad voting – Questions related to Discussions 7</p> <p>Q. Would you be interested in participating in trials or programs where you can receiving a financial incentive or reward to reduce consumption at peak times when asked by the distributor?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know <p>Q. If available, how likely would you be to use a real time energy use monitor in your home or business to make decisions on your electricity usage?</p> <ol style="list-style-type: none"> 1. Very likely 2. Quite likely 3. Not that likely 4. Not likely at all 5. Don't know <p>Q. Would you be interested in receiving an incentive to allow the distributor to adjust your energy use remotely for appliances such as air conditioners?</p>	WR Lead Facilitator	

	<p>4. Yes 5. No 6. Don't know</p> <p>Q. Would you willing for your de-identified electricity usage data to be given to 3rd parties for them to be able to include you in their new products or programs, such as paying you for your solar electricity exports when needed or including you in demand saving programs for a reward?</p> <p>1. Yes 2. No 3. Don't know</p> <p>Q. Now we have discussed the value propositions to 2025, please choose the top 5 that are most important to you, and rank them 1 to 5 (1 being the most important, 5 the least).</p> <p>1. Making it easier for you to connect 2. Providing a reliable supply of electricity 3. Making it easier for you to export solar and charge your battery 4. Committed to providing a safe environment for customers and workers 5. Committed to providing a safe network that mitigates bushfire risks 6. Making it easier for you to use your data to make informed choices 7. Keeping your data and our network secure 8. Use electricity when you want or receive savings for reducing use 9. Maintaining affordability</p> <p><i>Ian: I'm just going to ask the same questions again as we did at the beginning to see if your views have changed at all:</i></p> <p>How would you rate CitiPower on the following, on a scale of 0-10 where 0 is very poor and 10 is excellent:</p> <p>Q. Has customers' interests at heart 0 1 2 3 4 5 6 7 8 9 10 dk</p> <p>Q. Listens to customers 0 1 2 3 4 5 6 7 8 9 10 dk</p> <p>Q. How would you rate your overall attitude to CitiPower on a scale of 0-10 where 0 is very negative and 10 is very positive?</p>		
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	0 1 2 3 4 5 6 7 8 9 10		
9.25-9.30pm	<p>Summing up, thank you</p> <p>CitiPower closing remarks – what CitiPower will take from today and confirmation of next steps, encouragement of future participation.</p> <p>WR will also contact all attendees after the forum to encourage participation in next forum.</p>	CITIPOWER	
9.30pm	<p>CLOSE</p> <p>Woolcott Research Lead Facilitator – thanks and reminder to fill in end of session questionnaire on tables.</p> <p><i>Ask participants to fill in end of session feedback, give incentives and make sure they have signed keypad sheet.</i></p> <p><i>Facilitators to collect feedback forms.</i></p>	WR All	End of session feedback, incentives and signing sheet

Appendix 2: Materials

Appendix 2a



Appendix 2b



Handout 3: Proposed Value Propositions for 2021-2025

Please choose the top 5 Value Propositions that are most important to you, and rank them 1 to 5 (1 being the most important, 5 the least). We will ask you to input into the keypads later...

Value Proposition	Ranking
1: Making it easier for you to connect Streamline connections processes. Accommodate more renewable generator connections	
2: Committed to providing a reliable supply of electricity Our commitment is to maintain a reliable (and safe) electricity supply Explore how we can manage reliability with the update of renewables	
3: Making it easier for you to export solar and charge your battery Removing network constraints; allowing you to export the solar power you generate	
4: Committed to providing a safe environment for customers and workers Safety is our first priority. We continue to adopt best practices on managing safety, including the update of data and analytical tools as they become available, to manage safety risks.	
5: Committed to providing a safe network that mitigates bushfire risks We will continue to meet our bushfire mitigation obligations	
6: Making it easier for you to use your data to make informed choices Providing wider access to data (for customers who allow it) will allow you to participate in new markets, including demand response and market trading Real time data should be easily accessible	
7: Keeping your data and our network secure As data availability increases, data security and managing privacy becomes of utmost importance Continue to evolve our practices to meet our obligations to securely store data	
8: Use electricity when you want or receive savings for reducing use Different pricing options to allow you to reduce your electricity costs Demand response programs that provide rebates or other incentives for reducing usage at certain times	
9: Maintaining affordability Affordability remains a priority. Initiatives that allow us to reduce costs include: <ul style="list-style-type: none"> • using data analytics to minimise waste and better understand the condition of our network • embracing technology to make smarter network decisions • finding the best value contractors • use a mix of employees and business partners to ensure our resourcing levels are flexible 	

Appendix 2c

Steady State

Electricity is managed and supplied in much the same way as it is today, considered as business-as-usual. There is a strong driver to reduce costs while maintaining network performance and ensuring security of supply.



Scenario 1

Consumer Power

Electricity supply and demand is markedly impacted by consumers' uptake of new energy efficient appliances, electric vehicles and individuals' investment in renewable energy sources.



Scenario 2

Green Power

The electricity network (and market) adapts to a greener future quickly, backed by more investment in alternative energy sources and policies that encourage more ambitious renewable energy targets.



Scenario 3

Appendix 2d



Handout 4: Funding options for exporting of electricity

Our network has limited capacity for electricity export (reverse flow)

- reverse flow on the network creates voltage variations that worsen the quality of electricity supply
- currently we may constrain electricity export from consumers where the local distribution transformer already has solar PVs at 30% of its capacity

Investment is required for unconstrained two-way flow:

- distribution regulators on the network need to be updated to bi-directional regulators as solar penetration increases
- various voltage management practices need to be implemented
- overloaded local distribution transformers need to be upgraded to a higher capacity

Which is your preferred option for funding the investment that is required for exporting electricity? *Please discuss*

1. Charging the full cost of additional investment to each new customer that triggers the need for new 'exporting' technologies (i.e. this will vary customer to customer and it means that even though the customer pays, other solar customers may be able to 'piggy back' off the additional capacity provided by the paying customer)
2. Developing a one-off standard 'connection charge' for all customers who connect new exporting technologies
3. Charging an 'export tariff' for all exported electricity (per kWh)
4. Get funding from the Australian Energy Regulator and recover the costs across all customers (solar and non-solar), in the same way other network costs are recovered from all customers.

Appendix 2e

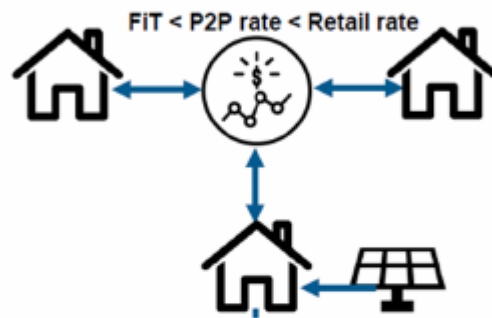


Handout 5: Peer to peer trading

P2P trading would allow neighbours to exchange electricity at lower prices, by reducing the need for retailers

How it works:

- solar generation is consumed and/or traded with neighbours, without involving a retailer
- energy trading transactions are facilitated via a P2P platform through a digitalised method
- electricity is physically transported through the existing network



However today P2P trading is not practically available due to the absence of necessary metering, IT systems and market settlement arrangements

Appendix 2f



Handout 6: Proactively undergrounding and replacing risky assets

Using AMI meters to detect faults

- Faulty equipment at home or a place of work can cause injury from electric shock
 - for example, a 'neutral' is a conductor that carries current between the meter and the street transformer
 - if the neutral is faulty, this can cause electricity to be conducted unsafely and result in electric shock on contact
- We monitor abnormalities in voltage and current at the neutral remotely through smart meters
- This allows us to detect issues early on and replace potentially unsafe neutrals before incidents occur

Q: Should CitiPower continue to use AMI meters to detect potentially faulty assets?

Undergrounding

Underground assets deliver significant benefits to consumers

- improving network safety and reliability by removing the risk of direct contact with network assets, particularly poles in traffic 'black spots'
- a network with substantial lengths of underground cable requires lower maintenance costs than a network with a bare wire overhead lines
- visual amenity

Q. What are your views on undergrounding the network?

Q: Should CitiPower move poles or underground assets that are in road accident black spots?

Appendix 2g

CitiPower & Powercor:



Replacement of dog bones

- 'Dog bones' are metal rods coated in plastic that attach grey overhead service lines to the pole and the customer's home or business
- This method was used during 1970's and 1980's with ~ 30% of all overhead services currently using dog bones
- There have been a number of faulty dog-bones reported recently
- We are implementing a targeted inspection program to identify unsafe installations

Q: Should CitiPower proactively replace assets that have an increased safety risk e.g. dog bones?

Powercor & United Energy:



Rapid Earth Fault Current Limiter (REFCL)

- A REFCL is a network protection device that can significantly reduce the risk of powerlines causing a fire.
- As a result of the 2009 bushfires the Victorian Government has mandated installation of REFCLs at 45 zone substations in bushfire prone areas.
- REFCLs are not mandated in United Energy's network but we have installed one at Frankston South. We are planning to install REFCLs at the Mornington and Dromana zone substations.
- The benefits from the REFCL technology depend on the selected operating mode.
- On high fire risk days the REFCL is operated to prioritise network safety but can have an adverse impact on reliability.
- On other days the REFCL is operated to maintain reliability.

Q: Should there be more REFCLs – how much of a priority is this?