Trade-Off Evaluations Report

Produced for CitiPower

June 2024

CitiPower

Forethought® Outcomes

Contents

1. Background

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Introduction

Regulatory reset proposal program

To support the development of the regulatory reset proposal, a foundational program of community engagement was conducted in 2022 and the early part of 2023. This broad and wide engagement program identified the key needs and preferences of customers and identified three themes:

1. Affordability and equity
2. Reliability, resilience, and safety
3. Energy transition

The network is now at the 'Test and Optimise' stage, which seeks to understand the trade-offs being made between discretionary initiatives.

These discretionary initiatives have been developed by CitiPower and built from earlier engagements (since 2022), solving for the needs and preferences of the community.

Following a detailed examination of the community feedback, the insights will feed into the subsequent phases of the 2026-2031 regulatory reset proposal development.

Image above: Glen Thomson – General Manager, Electricity Networks, CitiPower.

Involvement of Forethought®

Forethought is an independent marketing, analytics and strategy organisation, with teams that specialise in research and engagement within multiple industries, including energy.

Forethought has significant experience in the energy industry, including conducting customer and stakeholder research and engagement with organisations across the full value chain, including electricity generation, distribution, transmission and retail services. It partners with clients to provide an independent customer voice, ensuring that the customer is always at the forefront of organisational decision-making.

Forethought was selected for this program based on their expertise across utilities, as well as research and engagement capability to independently design and facilitate engagement forums and objectively report back on the needs and preferences of customers across the network.

Image above: Tim O'Brien – Director, B2B and Essential Services from **Forethought**.

Engagement Context

Potential influences prior to and within the consultation period were events that took place in both the lives of customers and within the wider electricity sector. We hypothesise these events impacted customers' preferences and perceptions.

Some customers referenced several of these events throughout the discussions at the roundtable:

2023

- Continued cost of living increases for Victorians announced in July 2023 with over a million households hit with power bill increases of up to $361 a year.[1]
- The State Electricity Commission was reinstated in October 2023 and is set to lead Victoria's renewable energy transition across the next 10 years.[2]
- 117 councils around Australia declared their regions in states of climate emergency in response to global climate change impacts and commitments to restore a safe climate by transforming the economy to net zero emissions.[3]
- War in Ukraine with the Russian invasion impacting Australian energy prices.[4]
- Gas prices were expected to increase considerably as the updated Gas Substitution Road Map forecasted decreasing production and pressure to switch to electricity.[5]

2024

- Severe storms across CitiPower, Powercor and United Energy networks on 13th February 2024, and October 2020 that resulted in a significant number of customers off supply.[6,7]
- The Essential Services Commission decided to reduce the base rate for solar feed-in tariffs by 32%, to 3.3 cents a kilowatt hour.[8]
- Victoria's gas distribution networks could no longer provide rebates or incentives to purchase new gas appliances, following the plan from the Gas Substitution Roadmap Update in December 2023.[9]
- Most Victorians would consider replacing a few gas appliances while just 52% said they would consider disconnecting from gas completely. Meanwhile, almost 90% are using gas appliances and supply gaps continue to increase. Rebates under the Victorian Electric Upgrades program began at the start of 2024 to help houses move away from gas.[10]

Note: References are reflected in the appendix

2.1
Program Overview
Overall Objectives and Approach

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Objectives

Organisational objective
Develop a regulatory reset proposal that aligns with the needs and preferences of a diverse range of customers.

Program overview
This program engaged with residential and small-medium business (SMB) customers both qualitatively and quantitively to understand the trade-offs being made between proposed discretionary initiatives.

The discretionary initiatives tested in this program have 3-4 proposed improvement levels with an additional cost associated with each level. These costs would impact the average annual energy bill for residential and SMB customers.

Trade-Off evaluation program objectives
Engagement with a range of residential and SMB customers across CitiPower to:

- Understand the trade-offs customers make between their willingness to pay for discretionary initiatives and the respective outcomes of service level improvements
- Support CitiPower in refining investments being built into their regulatory proposal based on customer preferences

IAP2 spectrum
Customer participation was intentionally high, falling under 'Involve' in the IAP2 Spectrum as we wanted to understand their initiative improvement level preferences and explore their reasonings behind decisions.

Image above: Adrian – **Forethought** Qualitative Facilitator.

Approach Summary

Below is an overview of the program developed to achieve the program objectives. This includes a series of qualitative focus groups, one mass engagement forum, and a quantitative online survey.

Qualitative Engagement

Approach:

Online pre-education boards*
(April 22nd – May 5th)
n = 32

Mass forum
(May 4th, 2024)
n = 32
CPPALUE Stakeholders
CAP were invited to observe

Methodology:
Qualitative, deliberative

Engagement length:
1 x 8-hour Mass forum (in-person)

Location:
Face-to-face and online

Participation**

Residential	Business
n = 28	n = 4

Quantitative Program

Quantitative survey
(incl. pre-education section*)
(April 26th – May 17th)
n = 514

Methodology:
Menu-based choice model

Survey length:
15mins

Location:
Online

Participation**

Residential	Business
n = 406	n = 108

*See appendix for further detail on pre-education components
** Recruited via market research panel
CAP : Customer Advisory Panel

Overview of Proposed Discretionary Initiatives

The following initiatives are considered ‘discretionary’ by the network. This means they must demonstrate customer support when seeking approval from the Australian Energy Regulator for investment in improvements. They have been built anchored to the feedback from earlier community engagements.

Initiative and description	Option overview
Sustainability Initiatives designed to reduce forecast carbon emissions over 2026-31, including: replacing petrol vehicles with electric vehicles across the network’s fleet, reducing greenhouse gas emissions, and installing solar panels and battery storage at each network depot.	1.Service maintenance – no investment 2.Medium service improvement – moderate investment 3.Large service improvement – highest investment
Supporting additional solar power Allow residential customers and business to export more excess energy produced from small scale energy generation units.	1.Service maintenance – no investment 2.Medium service improvement – moderate investment 3.Large service improvement – highest investment
Electrification Stability and customer experience of EV integration.	1.Service reduction – Slight investment 2.Medium service improvement – moderate investment 3.Large service improvement – highest investment
Customers experiencing vulnerability Initiatives designed to alleviate the burden on customers experiencing vulnerability due to energy poverty. The package includes community outreach programs, web-based resources, energy advisory services, First Nations programs and enhanced outage notification service for vulnerable and life support customers.	1.Service maintenance – no investment 2.Medium service improvement – moderate investment 3.Large service improvement – highest investment
Reliability Improving the annual minutes of supply experienced by the average customer.	1.Service reduction – negative investment / rebate 2.Service maintenance – no investment 3.Service improvement – highest investment

2.2
Program Overview
Qualitative Methodology

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Qualitative Overview

Qualitative engagement objectives

The qualitative engagement sought to achieve the following objectives.

Engagement with a range of residential and SMB customers across the CitiPower network to:

- Understand customer perceptions and attitudes towards outlined discretionary initiatives, their willingness to pay for various service level improvements and the reasons behind their preferences to support CitiPower in refining investments built into the regulatory proposal

How it will be used to determine results:
To provide essential context and highlight additional considerations to inform a comprehensive understanding of preferences.

Approach

The deliberative approach is useful in understanding the "why", gaining in-depth insights into the reasons behind participant preferences, and capturing detailed nuances and motivations.

The mass forum was attended by both residential and SMB CitiPower customers. Prior to this engagement, all participants had engaged in an online education board to help them develop an understanding of the energy industry context as well as the regulatory process. This allowed participants to have a more informed conversation in the forum, a key element to the deliberative approach utilised.

CitiPower representatives also attended these engagements to listen and help answer questions from the participants without biasing or leading the conversation. The following staff attended the forum and/or focus groups:

- Glen Thomson – General Manager, Electric Networks
- Jeff Anderson – Head of Regulatory Strategy
- Genevieve Hart – Regulatory Engagement Manager

Additionally, the forum was also attended by members of CitiPower's Customer Advisory Panel (CAP) who were invited to attend in a viewing-only capacity.

Recruitment
There were two methods used to recruit participants for this program.

1. **Panel:** Participants were recruited through an external qualitative panel partner. This was chosen to ensure that a diverse range of customers were able to participate in this program.

2. **Social media:** Social media was also used to share the consultation details and provide access to a link to sign up for this consultation.

Qualitative Participant Overview

Judgement sample of CitiPower customers
A qualitative judgement sampling design was utilised in order to maximise differences and obtain the preferences and needs of a range of CitiPower customers.

Participants engaged qualitatively were reflective of the CitiPower customer base

Key demographics

Residential customers (n = 28)

Gender	Age
Male: n = 13 Female: n = 15	18 - 34: n = 9 35 - 49: n = 8 50+: n = 11

SMB customers (n = 4)

Gender	Age
Male: n = 3 Female: n = 1	35 - 49: n = 2 50+: n = 2

Other characteristics

The Qualitative sample had a mix of:

- Employment status
- Household status
- Household income
- Renters vs owners
- Culturally and linguistically diverse (CALD) individuals

A proportion of customers engaged fell into the following categories:

- Vulnerable customers
- Customer impacted by extreme weather event
- Solar owners
- Electric vehicle (EV) owners

Qualitative Pre-Education Board Overview

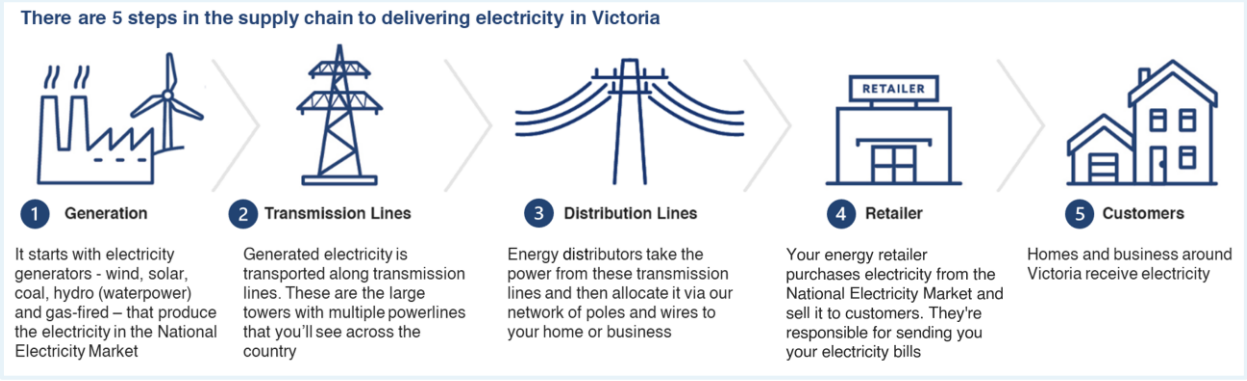
Prior to attending a forum or focus group, all qualitative participants provided the opportunity to engage in an online pre-education board to help develop an understanding of the energy industry and regulatory process. This allowed participants to have an informed conversation and detailed discussion at their allocated engagement.

The pre-education board was open from the 22nd of April to the 5th of May, with participants committing 45 minutes each day for 3 days.

Day 1
The pre-education boards began with an introduction to the energy industry, providing participants with an overview of general energy terminology including:

- Overview of the energy supply chain
- The role of the energy distributors
- Inspecting your energy bill
- Exploring the energy transition
- Understanding the regulatory reset
- Examining electricity charges

Participants completed activities after each topic. For example, a grouping exercise to match bill terms to its definition after completing reading energy bill terminology



Example Qualitative Board Reading Task for Participants (Day 1)

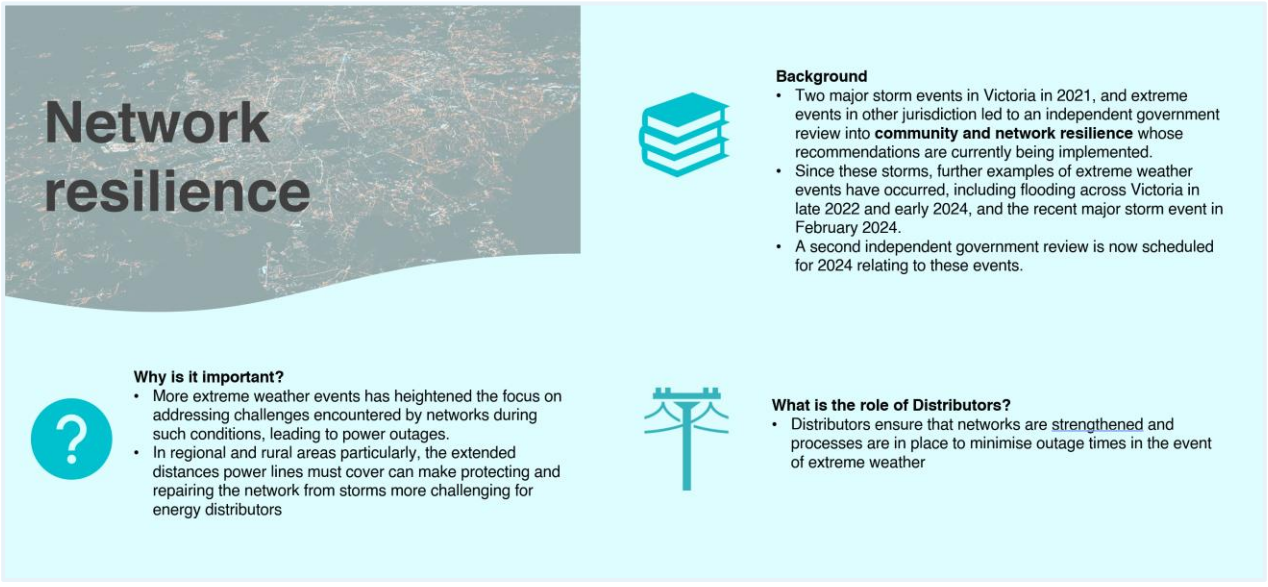
Qualitative Pre-Education Board Overview cont.

Day 2 and 3
The following days were focused on the relevant discretionary initiatives per network to be discussed with future engagements.
For each initiative, the following was presented to the participants:

- Background context – i.e. Recent major events impacting that initiative
- An explanation of the role of the distributor in relation to the initiative
- An explanation of the importance of the initiative
- Key terminology surrounding the initiative
- A breakdown of the initiative and how the distributor could implement changes

After each initiative, a comprehension check activity was conducted involving questions relevant to each initiative, allowing participants to reflect on their learnings and foster further engagement with the content.

At the end of each day, participants were able to ask questions and queries in an open response box for moderators to respond to throughout the engagement period.



Example Qualitative Board Reading Task for Participants (Day 2)

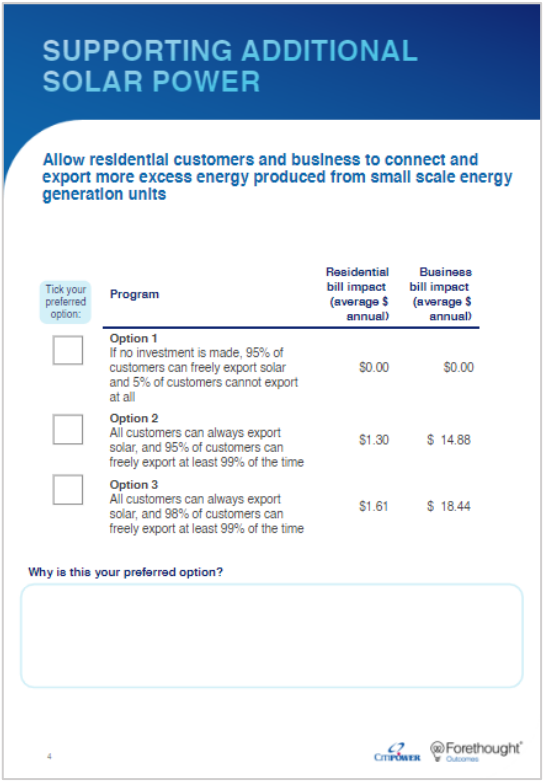
Mass Forum Methodology Overview

Each session began with an introduction conducted by **Forethought** and a scene setting undertaken by CitiPower representatives to inform customers about the context and purpose of the discussion. The representatives also gave a short education session about discretionary versus compliance initiatives, the value stacking concept, and average bill increases.

The discretionary initiatives were showcased individually to participants, providing insights into the improvement option levels of each, its development rationale, and addressing any questions from participants. This ensured everyone had a clear understanding of the initiative before the discussion.

Each participant was required to complete a booklet containing a page on each of the eight initiatives. An example of this activity is referenced on the right.

Participant booklet sample page



SUPPORTING ADDITIONAL SOLAR POWER

Allow residential customers and business to connect and export more excess energy produced from small scale energy generation units

Tick your preferred option:	Program	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
☐	**Option 1** If no investment is made, 95% of customers can freely export solar and 5% of customers cannot export at all	$0.00	$0.00
☐	**Option 2** All customers can always export solar, and 95% of customers can freely export at least 99% of the time	$1.30	$ 14.88
☐	**Option 3** All customers can always export solar, and 98% of customers can freely export at least 99% of the time	$1.61	$ 18.44

Why is this your preferred option?

4

The page included a description of the initiative and each option, and the price associated at an annual residential and business bill impact level. Participants were directed to choose which improvement level option they would be most willing to pay for and articulate ‘why’ in their booklets.

To gain a deeper understanding of customer preferences and considerations, a group discussion was held on which options they chose per initiative and their reasons why. These discussions were carefully facilitated to ensure that all participants had equal opportunity to express their perspectives and provide feedback.

Mass Forum Methodology Overview cont.

After the discussions of each individual initiative, participants were asked to reflect on their responses and conversations, select which improvement level option they were willing to pay for, and calculate their total discretionary bill impact. Participants also had to rank the initiatives from:

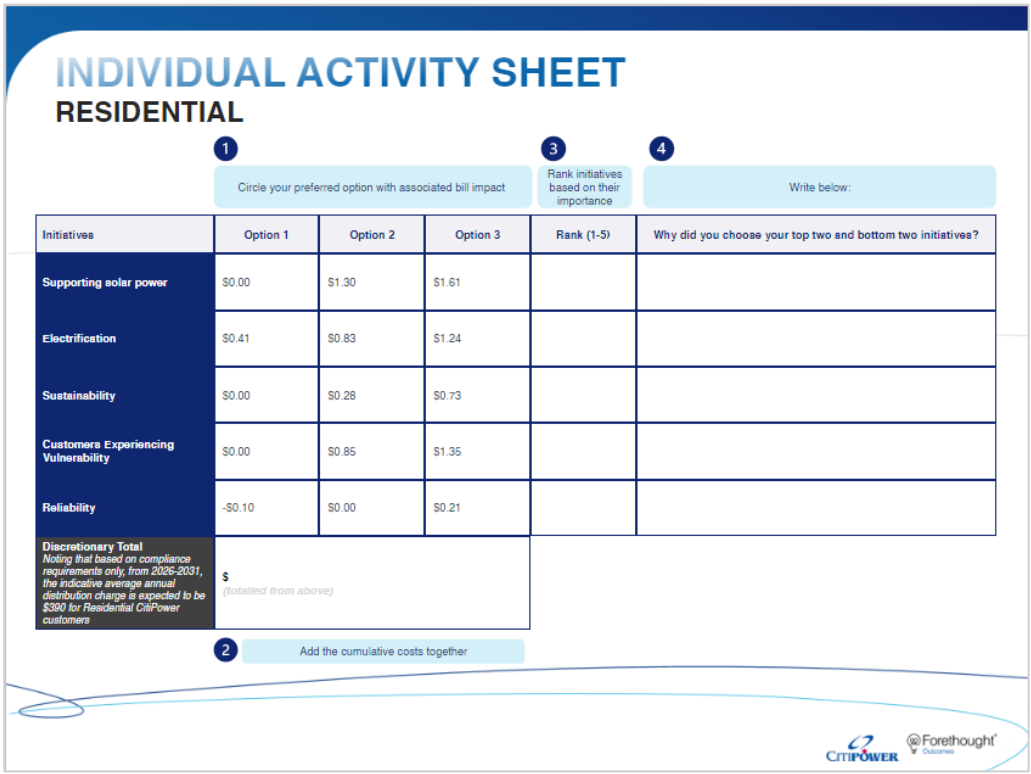
- what was most important to,
- what was least important to invest in.

Participants then added a rationale on why they gave those rankings.

This was completed in their booklets on the page shown below.

The session was concluded with a group discussion on the participants' two most and two least important initiatives and their reasons why. Facilitators played a crucial role in moderating these conversations, allowing for the dissemination of information to help find a consensus where possible and identify differences across the group.

Participant booklet sample page



INDIVIDUAL ACTIVITY SHEET

RESIDENTIAL

1 Circle your preferred option with associated bill impact

3 Rank initiatives based on their importance

4 Write below:

Initiatives	Option 1	Option 2	Option 3	Rank (1-5)	Why did you choose your top two and bottom two initiatives?
Supporting solar power	$0.00	$1.30	$1.61		
Electrification	$0.41	$0.83	$1.24		
Sustainability	$0.00	$0.28	$0.73		
Customers Experiencing Vulnerability	$0.00	$0.85	$1.35		
Reliability	-$0.10	$0.00	$0.21		
Discretionary Total *Noting that based on compliance requirements only, from 2026-2031, the indicative average annual distribution charge is expected to be $390 for Residential CitiPower customers*	$ *(totalled from above)*				

2 Add the cumulative costs together

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Image above: Jeff Anderson – Head of Regulatory Strategy, CitiPower.

Image above: Genevieve Hart – Regulatory Engagement Manager, CitiPower.

2.3
Program Overview
Quantitative Methodology

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Quantitative Overview

Quantitative objectives

The quantitative program sought to achieve the following objective.

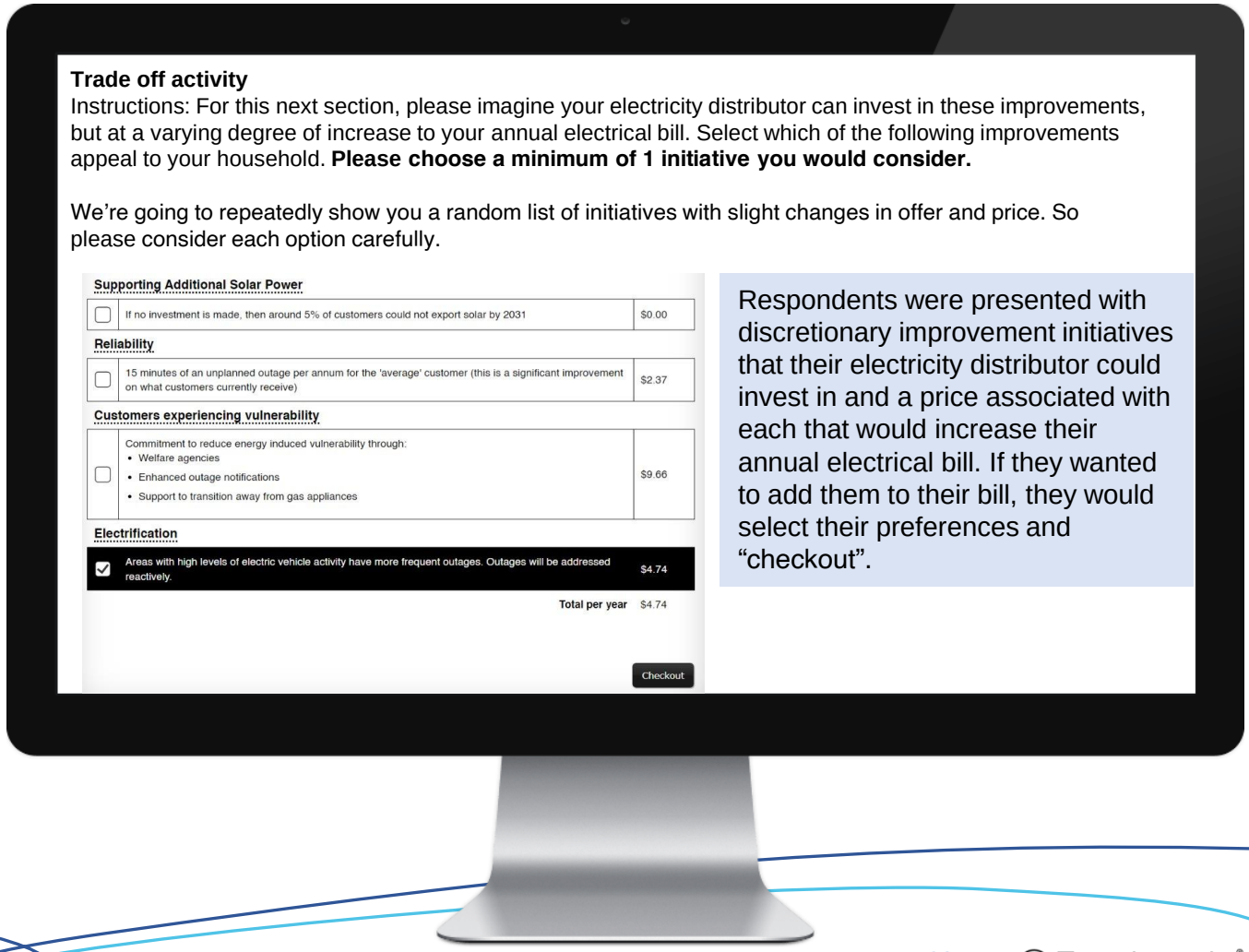
- Quantitatively prioritise the appeal and adoption likelihood of discretionary initiatives for CitiPower.

How it has been used to determine results: Quantitative modelling is the most robust analysis to determine willingness to pay for proposed initiatives, and therefore is used to determine final preferences.

Approach

The Menu-based Choice Modelling methodology is a robust analysis that determines the willingness to pay for proposed initiatives and is therefore used to determine consumer preferences.

Menu-based Choice Modelling helps to understand decision-making processes by presenting participants with a set of choices (or a "menu") from which they select their preferred options. This method is particularly useful for determining the willingness to pay for different features or levels of a product or service.



Respondents were presented with discretionary improvement initiatives that their electricity distributor could invest in and a price associated with each that would increase their annual electrical bill. If they wanted to add them to their bill, they would select their preferences and "checkout".

Quantitative Participant Overview

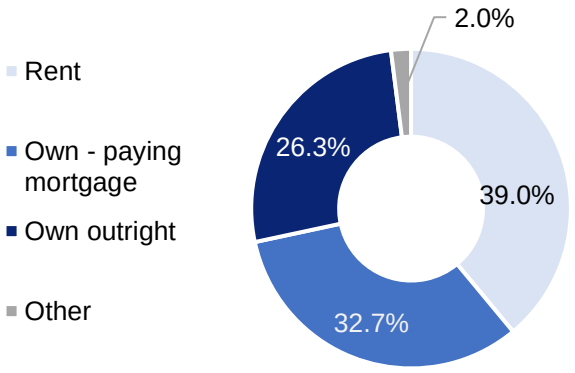
Below is an overview of the weighted residential participation.

Residential Sample (n = 406)

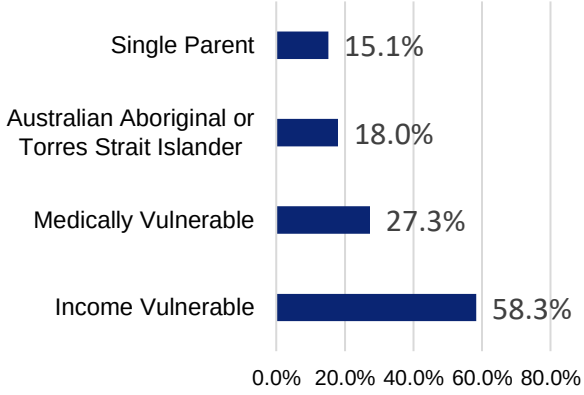
Gender		Age	
Male	49.9%	18 – 34 years	29.7%
Female	49.2%	35 – 49 years	28.6%
Other	0.9%	50+ years	41.7%

Electric Vehicle Owner		Solar Panel Owner		Experienced an extreme weather event?	
Yes	8.0%	Yes	18.9%	Yes	24.5%
No – considering within 5 years	48.1%	No	81.1%	No	75.5%
No – not considering	43.9%				

Rent / Own (n = 397)



Vulnerable customers (n = 107)*



Note: *indicates that vulnerable customers could be in multiple categories, so the results may not sum to 107.

Quantitative Participant Overview cont.

Below is an overview of the SMB participation:

Small-Medium Business Sample (n = 108)

Gender		Age	
Male	55.6%	18 – 34 years	35.2%
Female	41.7%	35 – 49 years	44.4%
Other	2.8%	50+ years	20.4%

Industry (n = 105)	
Professional, Scientific and Technical Services	22.9%
Administrative and Support Services	10.5%
Retail Trade	9.5%
Education and Training	8.6%
Financial and Insurance Services	6.7%
Accommodation and Food Services	5.7%
Health Care and Social Assistance	5.7%
Wholesale Trade	5.7%
Information Media and Telecommunications	4.8%
Arts and Recreation Services	3.8%
Construction	3.8%
Rental, Hiring and Real Estate Services	3.8%
Other	8.6%

Business Revenue (n = 87)	
Less than $50,000	4.6%
$50,000 - $200,000	10.3%
$200,001 - $500,000	2.3%
$500,001 - $750,000	5.7%
$750,001 - $2,000,000	12.6%
$2,000,001 - $5,000,000	20.7%
$5,000,001 - $10,000,000	13.8%
$10,000,001 - $20,000,000	10.3%
$20,000,001 - $25,000,000	5.7%
$25,000,001 or more	13.8%

Quantitative Participant Overview cont.

Small-Medium Business Sample (n = 108)

Electric Vehicle Owner		Solar Panel Owner		Experienced an extreme weather event?	
Yes	7.4%	Yes	37.0%	Yes	26.9%
No – considering within 5 years	68.5%	No	63.0%	No	73.1%
No – not considering	24.1%				

Recruitment
The following elements are an overview of the program data collection process.

Recruitment source
Recruitment for this program was sourced by an external panel.

Addressable market
Respondents were 18+ Victorians in the CitiPower network who were either the main or joint decision-makers for household or SMB.

Fieldwork dates
Qualitative data was collected over the 26th of April 2024 – 17th of May 2024.

Weighting approach
The weighting information was used to ensure that the overall sample is demographically weighted to ABS statistics in Victoria. The weight, age and gender are weighted first if needed (and state, but this is not applicable for this program).

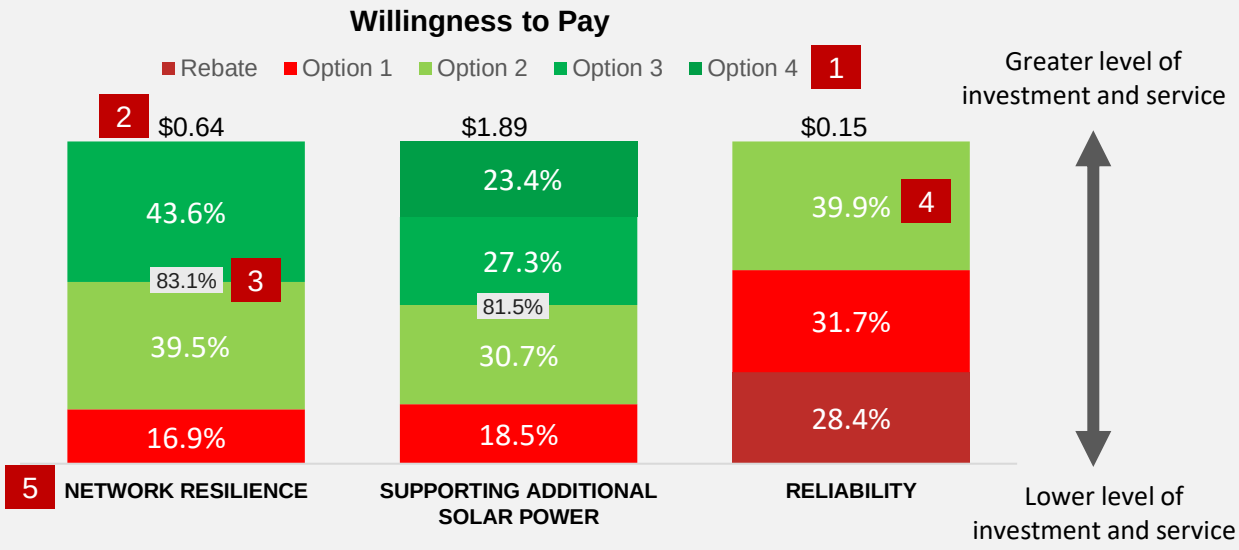
Once this demographic weight was applied, we confirmed that the other demographic variables such as area, income etc. were closely aligned with the targets and within acceptable parameters. If any additional weighting was needed, this was then applied on top of the initial Dem weight.

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

How to read a Willingness to Pay chart

The chart below illustrates the inferred preferences of customers regarding improvement levels across initiatives. To generate the willingness to pay charts, customers were asked the following:

“Please imagine your electricity distributor can invest in these improvements, but at a varying degree of increase to your annual electrical bill. Select which of the following improvements appeal to your business/household”. Please choose a minimum of 1 initiative you would consider.”



1 This key represents the improvement level options where ‘rebate’ is a reduced investment and a service deterioration, Option 1 is no investment and service maintenance (or the lowest investment and slight service improvement for Electrification), and Options 2, 3 and 4 are progressively higher levels of investment and service level improvements.

2 These prices represent the total average investment that customers are willing to make for the initiative.

3 The percentage in the middle of the chart represents the proportion of customers willing to invest any positive amount into an initiative.

4 The percentages represent the proportion of customers willing to invest in this improvement level. The total percentages by initiative sum to 100%.

5 Each discretionary initiative is listed at the bottom of the bar chart. (See Appendix for detailed initiative description)

3.
Executive Summary

Key Findings

1. The majority of customers were in support of improving service levels of each initiative presented, except Reliability. Customers wanted reliability to be maintained, as they were satisfied with current reliability service.

2. Compared to residential customers, SMB customers were often less willing to invest, preferencing ‘zero cost’ options more consistently. SMB customers were generally more selective in what they were willing to invest in.

3. Overall, there was an even willingness to pay across levels of investment for residential and SMB customers.

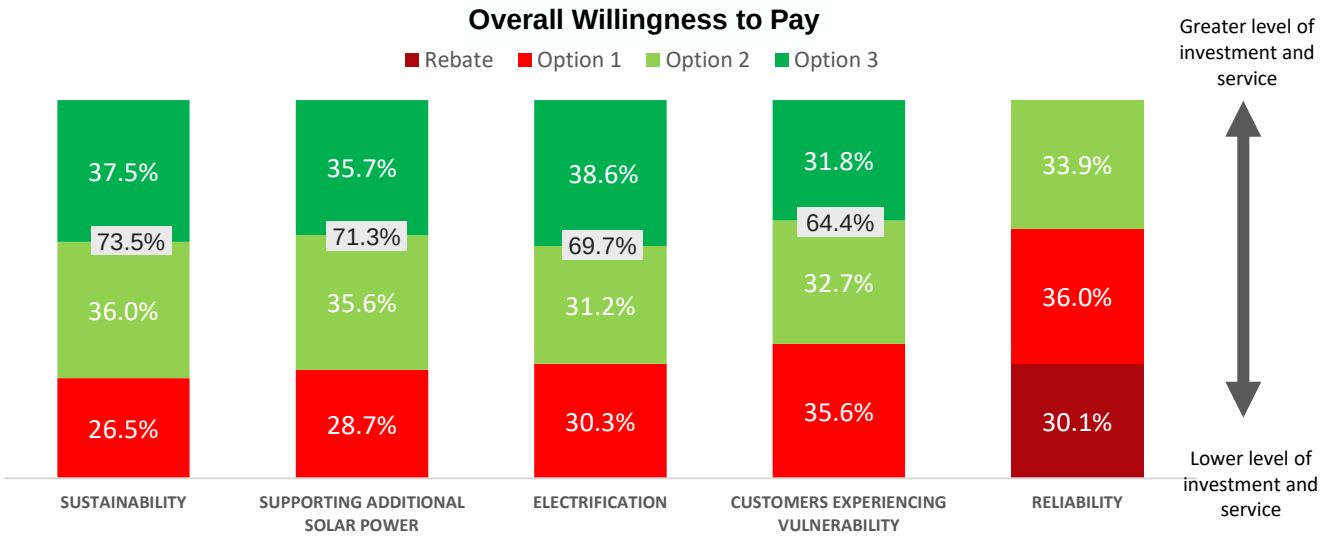
4. Residential and SMB customers recognised the value of investing in discretionary initiatives beyond compliance costs to achieve service level improvements. However, they were unwilling to invest in the proposed maximum bill impacts associated with the highest level of improvement across initiatives.

5. Qualitatively, customers voiced strong support for initiatives that supported renewable energy, particularly Supporting Additional Solar and Electrification. However, within in the quantitative insights there were no significant differences in sustainable vs. non sustainable initiatives.

6. Whilst customers supported the Customers Experiencing Vulnerability initiative, it was believed that it was the responsibility of the state and federal government to implement this service. Customers felt that there were other agencies who were better equipped to manage the necessary support, when compared with CitiPower.

The majority of customers were in support of improving service levels of each initiative presented

The exception was Reliability where there was a mixed response quantitatively. Within forums, customers expressed the desire to maintain reliability service levels as they were satisfied with the current standards.



Customers were most willing to invest in Sustainability and least in Customers Experiencing Vulnerability, excluding Reliability, where only 33.9% were willing to invest in improving service levels.

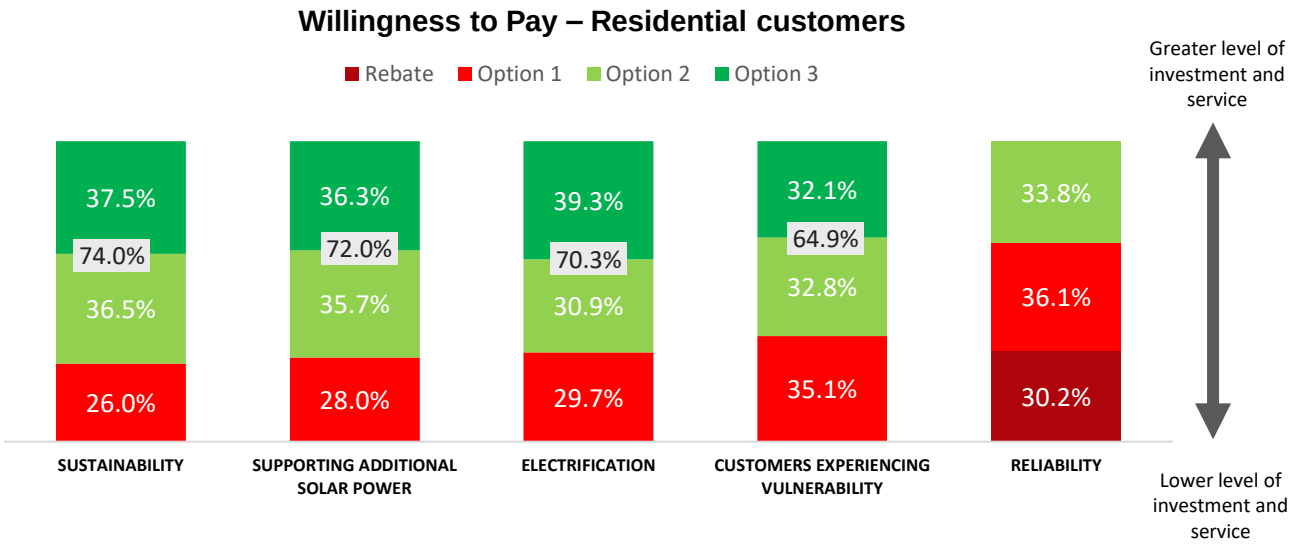
Customer attitudes shaping initiative preferences

- There was strong support for environmental and future-focused initiatives. Some preferred these initiatives over others due to strong personal values rather than the actual service level improvements presented.
- Although all initiatives were deemed important amongst customers, generally we saw qualitatively that younger customers had clearer preference for environmental future-proofing initiatives. In contrast, older customers and SMB customers were also focused on reliability and immediate practical benefits.
- There were concerns about the effectiveness of programs aimed at Supporting Vulnerable Customers and Sustainability. Customers questioned how funds would be utilised. Customers Experiencing Vulnerability customers felt this initiative would be more effectively delivered by the State or Federal government.
- Given the generally satisfactory state of reliability, many customers did not prioritise further investments in reliability improvements. Rather, they wanted to maintain current levels.

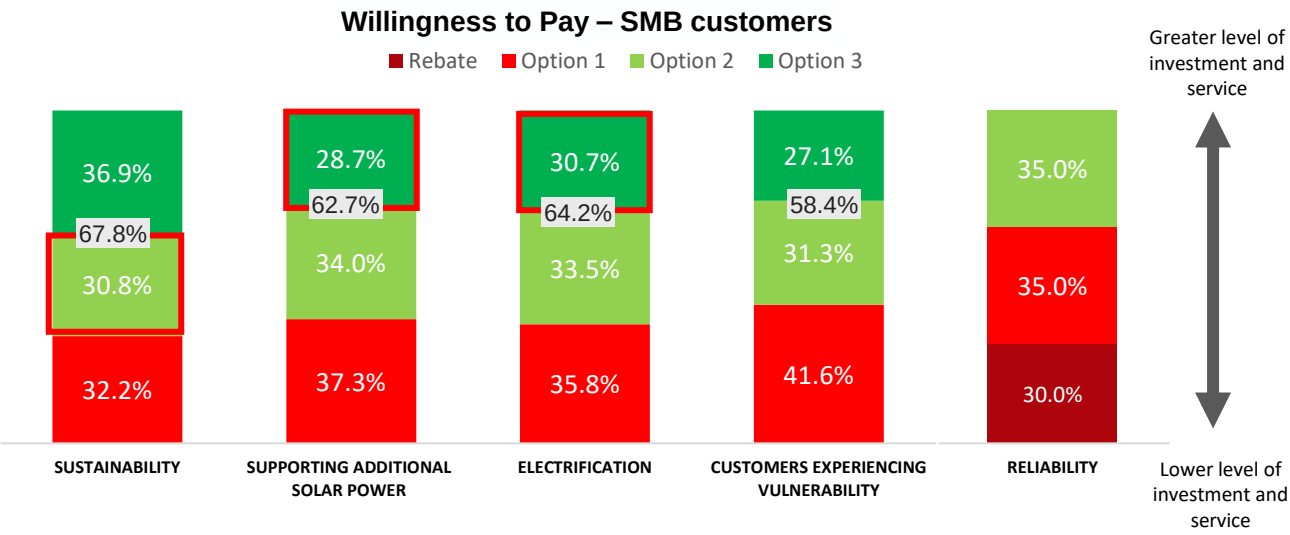
Digging deeper, both residential and SMB customers were willing to invest in all initiatives except Reliability

A larger proportion of SMB customers preferred a minimal service level improvement, given greater impacts to bills associated with other option levels.

Between 64.9% - 74.0% of residential customers indicated they were willing to invest in discretionary improvements across four of the five initiatives



Between 58.4% - 67.8% of SMB customers indicated they were willing to invest in discretionary improvements across four of the five initiatives



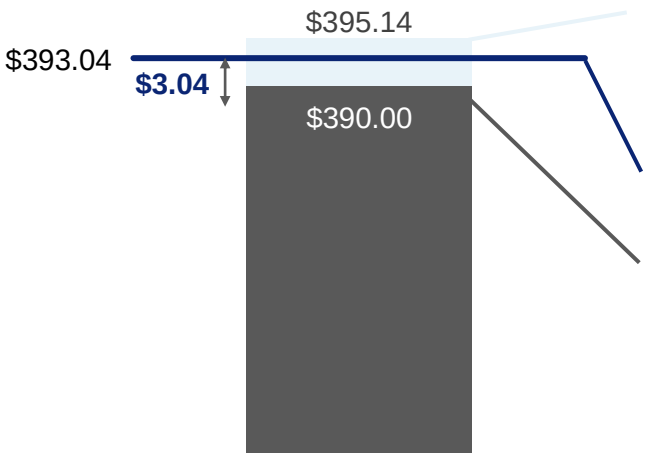
SMB customers were significantly less likely to invest in Option 2 of Sustainability and Option 3 of Supporting Additional Solar Power and Electrification residential customers

Note: Significance testing was conducted between residential and SMB Powercor across option levels. Significant differences are highlighted on the SMB chart with a Red outline which means the SMB option was significantly lower than the residential option

Customers were unwilling to invest in the proposed maximum bill impacts associated with the highest level of improvement across initiatives

Residential and SMB customers were willing to invest an additional $3.04 and $31.32, respectively, beyond indicative compliance costs across initiatives

Average Annual Residential Distribution Bill (2026 -2031)

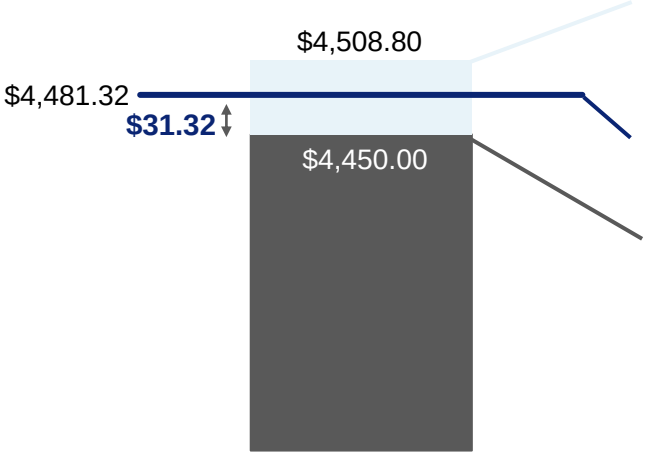


The maximum discretionary total for all proposed initiatives is $5.14 with a total bill impact of $395.14

Customers were willing to spend an additional $3.04, with a total bill impact of $393.00

The indicative compliance cost is $390.00

Average Annual SMB Distribution Bill (2026 -2031)



The maximum discretionary total for all proposed initiatives is $58.80, with a total bill impact of $4508.80

Customers were willing to spend an additional $31.32, with a total bill impact of $4,481.32

The indicative compliance cost is $4,450.00

Total indicative compliance costs

The total indicative cost of all compliance-based initiatives mandated by the energy regulator. Implementations may have a bill impact which customers and electricity distributors cannot alter.

Maximum discretionary costs

The totaled maximum indicative costs of all proposed discretionary initiatives to be performed at Powercor's discretion, adding to the compliance-based portion of the electricity bill.

Total WTP

CitiPower customer's maximum willingness to pay for discretionary initiatives, based on quantitative modelling

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Image above: Participant from the mass engagement forum.

Image above: Glen Thomson – General Manager, Electricity Networks.

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4.1
Insights Deep Dive

Sustainability

Supporting Additional Solar Power

Electrification

Customers Experiencing Vulnerability

Reliability

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Sustainability

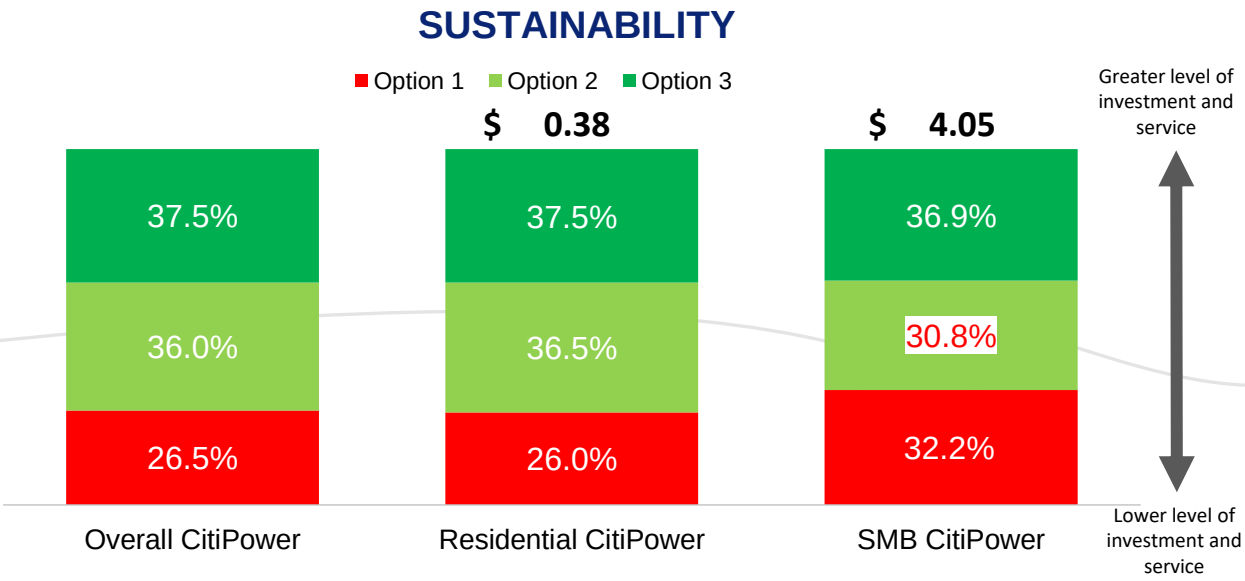
Customers were presented with the below initiative description, service level improvements and associated residential and SMB bill impacts for Sustainability.

Initiative Description

Initiatives designed to reduce forecast carbon emissions over 2026-31, including: replacing petrol vehicles with electric vehicles across the network's fleet, reducing greenhouse gas emissions, and installing solar panels and battery storage at each network depot

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 Maintain the current level of carbon emissions produced in the distribution of your electricity	$ 0.00	$ 0.00
Option 2 20% reduction in carbon emissions by 2031	$ 0.28	$ 3.17
Option 3 50% reduction in carbon emissions by 2031	$ 0.73	$ 8.32

The majority of customers wanted commitment to CitiPower's carbon emission reductions of at least 20% by 2031



74% of residential customers and 67.7% of SMB customers were willing to pay to improve Sustainability. There was significant difference seen in SMB customers who were significantly less willing to choose Option 2.

There were no other significant differences in option preferences between customer cohorts.

What we heard from customers

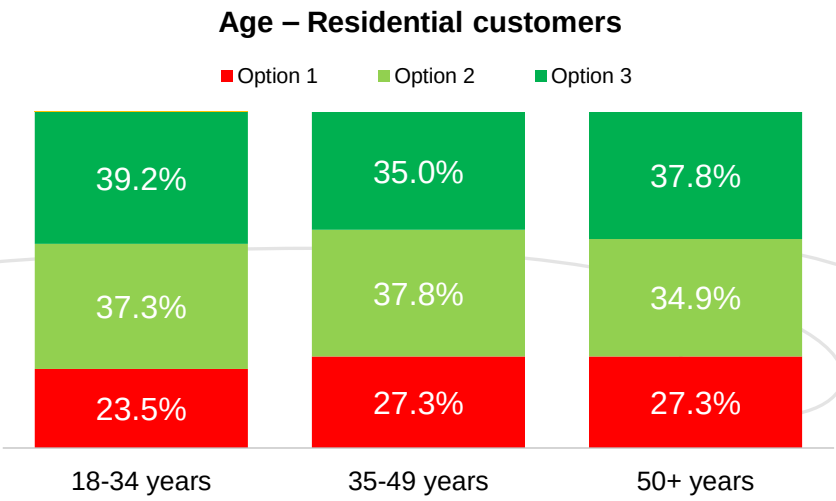
- There was a mixed response on willingness to pay for this initiative. Some customers were willing to pay and acknowledged the importance of this initiative as it aligned to their environmental values. However, customers also shared qualitatively that this investment should be funded by the network's profits.
- Sustainability was prioritised more consistently qualitatively amongst younger customers who valued reducing carbon emissions and their long-term environmental impacts.
- The reasons against investment in this initiative included:
    - Customers wanted the network to focus on more immediate tangible benefits.
    - Customers wanted more details of the initiative implementation, for example, the need to replace the networks' fleet and if this would flow onto contractors. It was felt that a car's end of life was a better reason for it to be replaced.

"Not convinced of the material impact. Given the effect overall would be negligible in terms of environmental, I would rather not impact consumers bills. Other initiatives represent greater potential impact."
Residential customer

"Not convinced of the material impact. Given the effect overall would be negligible in terms of environmental [impact]. I would rather not impact consumers bills. Other initiatives represent greater potential impact."
Residential customer

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

Quantitatively across age groups, customers shared the same level of willingness to pay across service level options



"Essential for a proactive approach and taking care of future generations."

Residential customer

"I think encouraging sustainable decisions is beneficial for all of us."

Residential customer

"We must reduce emissions or there will be no future."

Residential customer

"Happy to pay more for a safer and healthier planet in the future. Essential for a proactive approach and taking care of future generations."

Residential customer

Note: Significance testing was conducted between the mutually exclusive groups at the 5% level of significance. No significant differences were found.

4.2
Insights Deep Dive

Sustainability

Supporting Additional Solar Power

Electrification

Customers Experiencing Vulnerability

Reliability

CitiPower

Forethought® Outcomes

Supporting Additional Solar Power

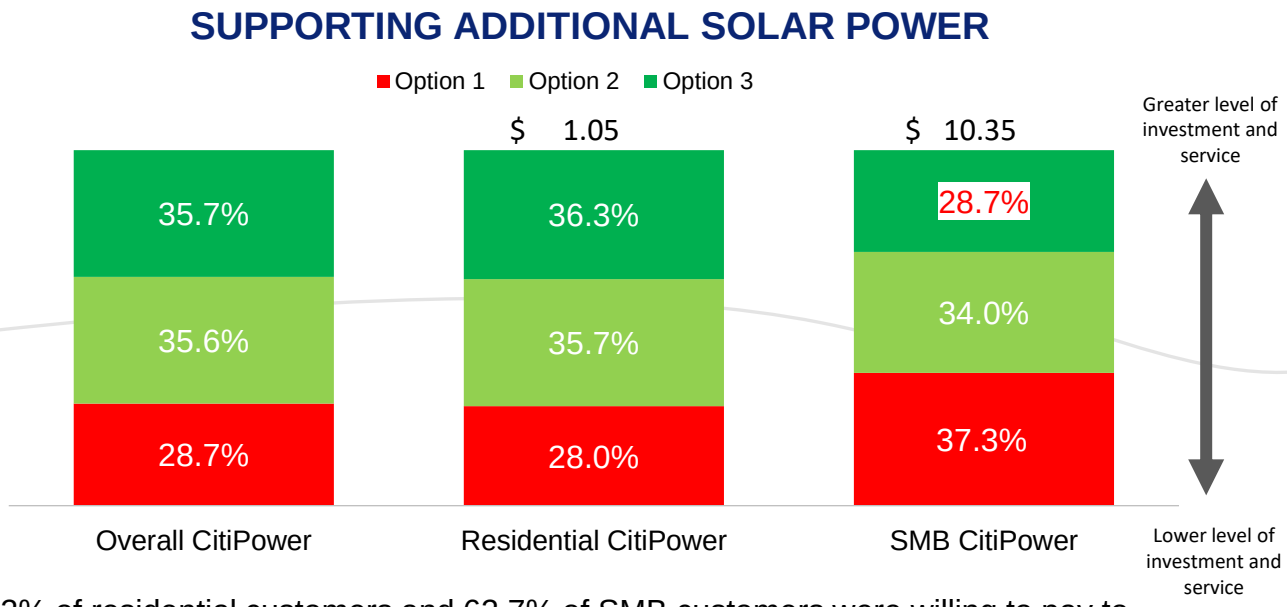
Customers were presented with the below initiative description, service level improvements and associated residential and SMB bill impacts for Supporting Additional Solar Power.

Initiative Description

Allow residential customers and business to connect and export more excess energy produced from small scale energy generation units

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 If no investment is made, 95% of customers can freely export solar and 5% of customers cannot export at all	$0.00	$0.00
Option 2 All customers can always export solar, and 95% of customers can freely export at least 99% of the time	$1.30	$ 14.88
Option 3 All customers can always export solar, and 98% of customers can freely export at least 99% of the time	$1.61	$ 18.44

The majority of customers wanted the ability for at least 95% of customers to export 99% of the time



72% of residential customers and 62.7% of SMB customers were willing to pay to improve Supporting Additional Solar Power. There was significant difference seen in SMB customers who were significantly less willing to choose Option 3.

What we heard from customers

- Customers saw this initiative as a critical step towards reducing carbon emissions and promoting green energy. Customers shared the importance of preparing the energy grid for increased renewable energy use and the transition away from fossil fuels.
- Customers questioned the fairness about the benefits of the initiative, particularly among those who would not directly benefit from this initiative and would have to pay. This included renters or those living in apartment buildings, as well as customers that believed the main benefit of solar was self-consumption.
- Some customers who questioned the initiative still supported the idea of the initiative in principle.

> "My almond latte costs more, and I buy that every day."
>
> **Residential customer**

> "The expense is minor compared to the long-term benefits of decarbonisation."
>
> **Residential customer**

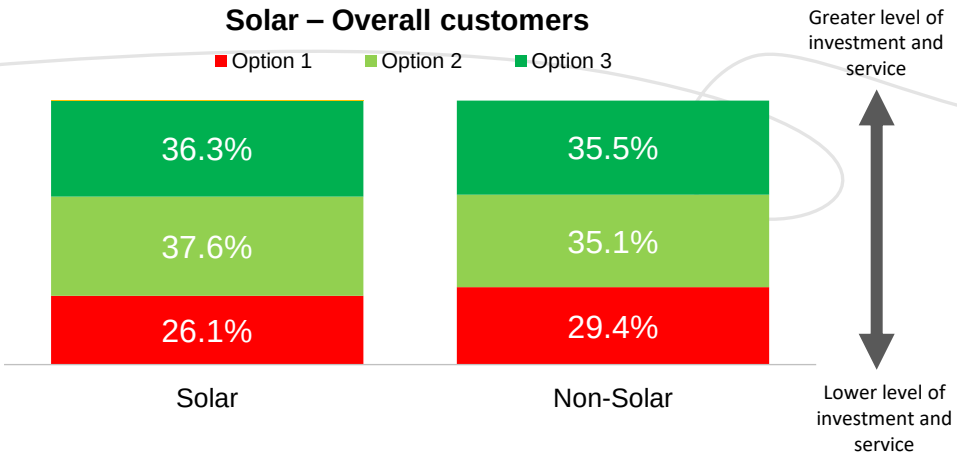
Note: Significance testing was conducted between Residential and SMB CitiPower at the 5% level of significance. Red indicates that the SMB cut result was significantly lower than the residential CitiPower result.

Renters were significantly more likely to invest in higher option levels compared to home-owners

Solar and non-solar owners shared the same level of willingness to pay across option levels.

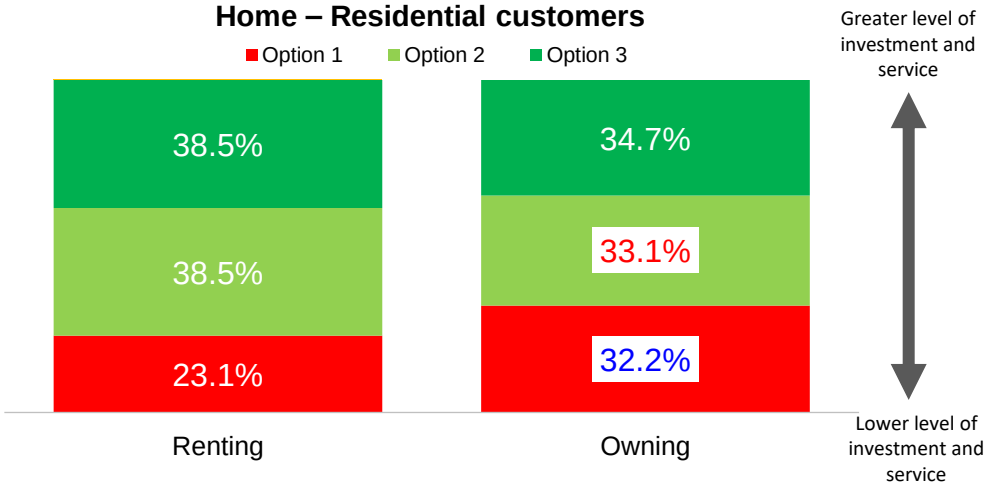
Although many customers were renters who did not have control of solar installation or did not feel they directly benefited from this initiative, they understood the importance this initiative would have for the network and a greener future. The need to reduce carbon emissions was an underlying value for customers.

"Feels like a good network standard to aspire to." **Residential customer**



Renters were significantly more likely to invest in higher option levels compared to home-owners.

Youth customers aged 18-34 years old were significantly more likely to be renters (45.9%), compared to homeowners aged 35+ (82.5% of older customers). Qualitative discussions suggested younger customers voiced stronger support for environmental and future focussed initiatives and this could provide one explanation for the significant differences seen in the chart above



Other than homeowners and renters, there were no significant differences in preferences between customer cohorts.

Note: Significance testing was conducted between the mutually exclusive groups at the 5% level of significance. Blue indicates that other group result was significantly higher than the first group result, and red indicates it was significantly lower.

4.3
Insights Deep Dive

Sustainability

Supporting Additional Solar Power

Electrification

Customers Experiencing Vulnerability

Reliability

CitiPower

Forethought® Outcomes

Electrification

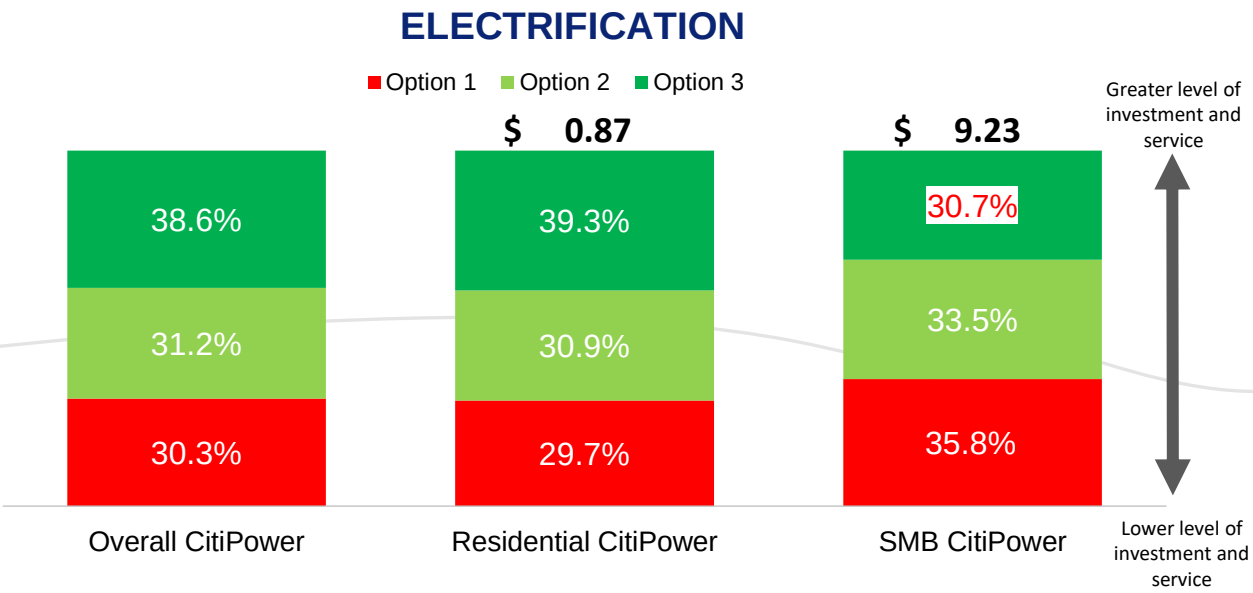
Customers were presented with the below initiative description, service level improvements and associated residential and SMB bill impacts for Electrification.

Initiative Description

Stability and customer experience of EV integration

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 Areas with high levels of electric vehicle activity have more frequent outages. Outages will be addressed reactively.	$ 0.41	$ 4.74
Option 2 Areas with high levels of electric vehicle activity have more frequent outages. Increase investments to proactively prevent problems, in addition to all outages being addressed reactively.	$ 0.83	$ 9.47
Option 3 Proactive investment to 'future proof' the network, meaning seamless evolution of more EVs onto the electricity network, noting that customers could charge their EVs anytime with minimal to no outages.	$ 1.24	$ 14.21

The majority of customers wanted increased investment to proactively and reactively address problems caused by EV uptake



70.2% of residential customers and 64.2% of SMB customers were willing to pay to improve Electrification. There was significant difference seen in SMB customers who were significantly less willing to choose Option 3.

There were no other significant differences in option preferences between customer cohorts.

What we heard from customers

- Customers felt it necessary to invest in Electrification as a step toward future-proofing the energy grid and reducing carbon emissions, and therefore they were willing to invest.
- Most customers recognised that the increase of EVs was inevitable and that there was a need for proactive infrastructure to support this transition. Customers did not want this investment (EVs) to result in outages for neighbours.
- Some customers expressed scepticism about the immediate need and practical implementation of electrification; this was demonstrated by customers questioning the high uptake forecast that was presented.
- Concerns were raised about the fair distribution of costs, especially for those who do not own EVs or were not able to afford the increased investment. This was emphasised by the younger cohort who felt the pressure of the increased cost of living they were experiencing.
- Quantitative research indicates that 8% of CitiPower customers currently own an EV, while 50% are considering purchasing one in the next five years.

> "Not fair that everyone has to pay this surcharge as many people can't afford it. Most likely the number of EVs won't increase that much."
>
> **Residential customer**

> "Gen Z are the ones losing out"… we are paying more, a lot of us are struggling to live with cost-of-living pressures."
>
> **Residential customer**

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

4.4
Insights Deep Dive

Sustainability

Supporting Additional Solar Power

Electrification

Customers Experiencing Vulnerability

Reliability

CitiPower

Forethought® Outcomes

Customers Experiencing Vulnerability

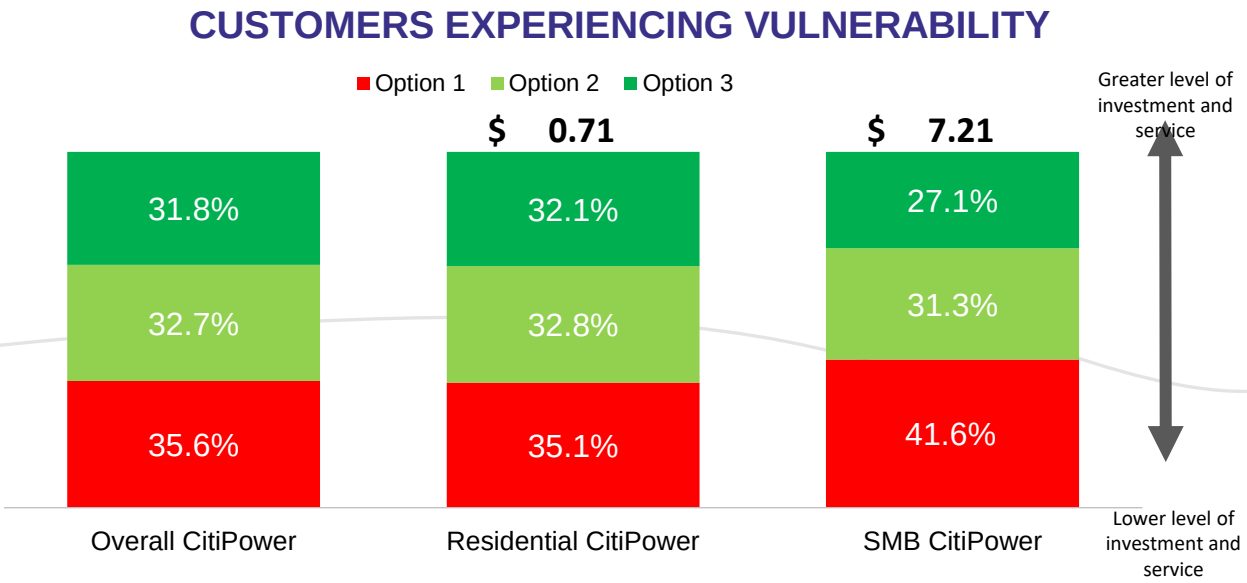
Customers were presented with the below initiative description, service level improvements and associated residential and SMB bill impacts for Customers Experiencing Vulnerability.

Initiative Description

Initiatives designed to alleviate the burden on customers experiencing vulnerability due to energy poverty. The package includes community outreach programs, web-based resources, energy advisory services, First Nations programs and enhanced outage notification service for vulnerable and life support customers.

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 Continue to meet current regulatory obligations	$ 0.00	$ 0.00
Option 2 Commitment to reduce energy induced vulnerability through a package of community outreach programs and resources for vulnerable customers	$ 0.85	$ 9.66
Option 3 Same as Option 2 with inclusion of a community energy fund to support vulnerable customers	$ 1.35	$ 15.46

Majority of customers wanted to reduce energy induced vulnerability, above regulatory obligations



64.9% of residential customers and 58.4% of SMB customers were willing to pay to improve Customers Experiencing Vulnerability.

What we heard from customers

- Many customers felt a strong moral obligation to support vulnerable members of society. This was emphasised by individuals who worked with vulnerable customers or had strong principals to help those less fortunate.
- Customers voiced that supporting vulnerable customers should not fall solely on CitiPower, and most felt that this was not the network's responsibility at all, voicing that it was the responsibility of federal or state government.
- There were concerns about the effectiveness of the funds, as other agencies or the government were felt to be better suited to support customers experiencing vulnerability.
- Generally, customers wanted more information regarding how this investment will be used to support vulnerable customers effectively.
- Some customers believed that the Government should mandate implementation or raising of minimum standards of service for customers experiencing vulnerability.

"The responsibility is with the Government, or failing that, even retailers ahead of CitiPower."

Residential customer

"CitiPower is not a front of mind household name…the fund shouldn't be their responsibility."

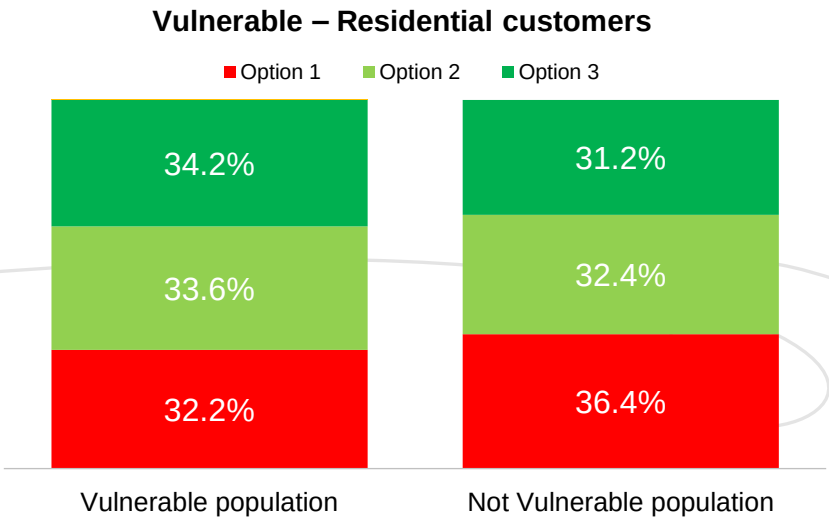
Residential customer

"I believe this is the government's responsibility and companies should be mandated. I value helping those less fortunate."

Residential customer

Note: Significance testing was conducted between the mutually exclusive groups at the 5% level of significance. No significant differences were found.

Vulnerable and non-vulnerable customers shared the same willingness to pay across service level options



There were no significant differences in preferences between customer cohorts, demonstrating strong support across both cohorts.

"In the current cost of living situation, customers will need help through welfare programs. Taking care of customers should be the priority of every brand and government."

Residential customer

"A no-brainer and something I feel passionate about. Cost of living pressures rise and disproportionally effect vulnerable people."

Residential customer

"Support those who need it and ensure funds don't get lost in administration. Vulnerable customers should be prioritised and looked after during times of hardship."

Residential customer

"All packages to reduce energy vulnerability welcomed. Although don't agree that business should cover costs, more information to access government energy policy."

Business customer

Note: Significance testing was conducted between the mutually exclusive groups at the 5% level of significance. No significant differences were found.

4.5
Insights Deep Dive

Sustainability

Supporting Additional Solar Power

Electrification

Customers Experiencing Vulnerability

Reliability

CitiPower

Forethought® Outcomes

Reliability

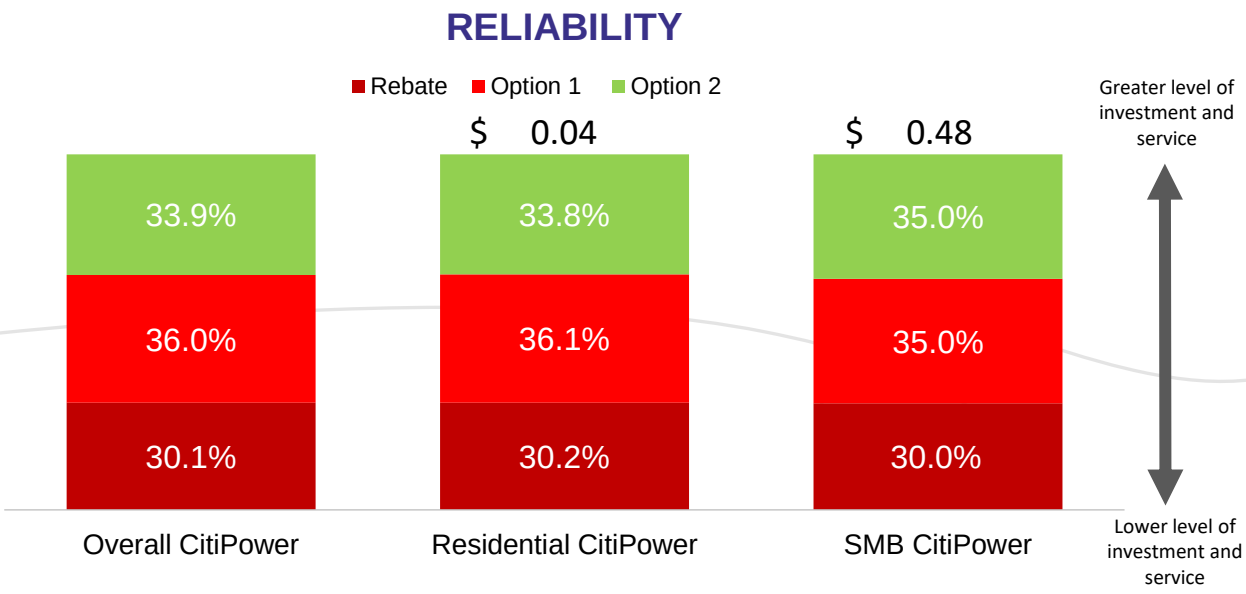
Customers were presented with the initiative description, service level improvements and associated residential and SMB bill impacts for Reliability

Initiative Description

Improving the annual minutes off supply experienced by the average customer

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 25 minutes of an unplanned outage per annum for the 'average' customer (less than customers currently receive)	-$0.10	-$1.18
Option 2 20 minutes of an unplanned outage per annum for the 'average' customer (this maintains what customers currently receive)	$0.00	$0.00
Option 3 15 minutes of an unplanned outage per annum for the 'average' customer (this is a significant improvement on what customers currently receive)	$0.21	$2.37

The majority of customers wanted to maintain current reliability service levels



33.8% of residential customers and 35% of SMB customers were willing to pay to improve Reliability.

There were no significant differences in option preferences between customer cohorts.

What we heard from customers

- Customers were satisfied with the current reliability of their power supply, noting that, outside of major events, they did not experience significant issues.
- When discussing prioritisation of this initiative and cost of additional investment against the perceived benefit, customers often concluded that while an important area, maintaining current reliability standards was sufficient. They believed this was an initiative they could afford not to invest in.
- There was an understanding of the importance of reliability for critical needs, especially for those with medical dependencies or businesses who were reliant on consistent power to operate.

> "Maintaining reliability is essential, reducing costs seems pointless as it will cost more in the long run. Don't see any value in increasing spending on already very reliable network."
>
> **Residential customer**

> "Haven't experienced many outages myself. I am considering the few who are largely impacted, particularly for prolonged periods."
>
> **Residential customer**

Note: Significance testing was conducted between the mutually exclusive groups at the 5% level of significance. No significant differences were found.

5. Discussion

How this program builds on previous studies considering customers' willingness to pay

CitiPower Forethought Outcomes

This program builds on existing knowledge and insights

As noted on page 4, this report is one input into an ongoing program of engagement conducted by CitiPower. A prior study, Customer Values Analysis, with fieldwork from 2nd January 2024 to 20th January 2024 asked customers to prioritise the relative importance of various proposed areas for service improvement. However, the associated bill impact for a proposed service improvement was **not** shown to respondents given this was earlier in the process. The values tested in the Customer Values Analysis informed the initiatives tested in the trade-off evaluations.

As different quantitative methodologies were used across studies, direct comparison is not possible at the initiative level, albeit a high-level understanding of customer preferences at the topic level can be contrasted. Consistent topics across studies provide valuable points of comparison for understanding high-level customer preferences at different times. The table below outlines areas included in both studies. Both the Customer Values and Trade-Off Evaluation study included five areas for feedback.

Topics across studies	Included in Customer Values Analysis	Included in Trade-Off Evaluations study
Supporting Additional Solar Power	✓	✓
Reliability	X	✓
Electrification	X	✓
Sustainability (reducing carbon emissions in the distribution of your electricity)	✓	✓
Ensuring any **locally generated energy** can be used to support, and grow, local community participation	✓	X
Customers experiencing vulnerability	X	✓

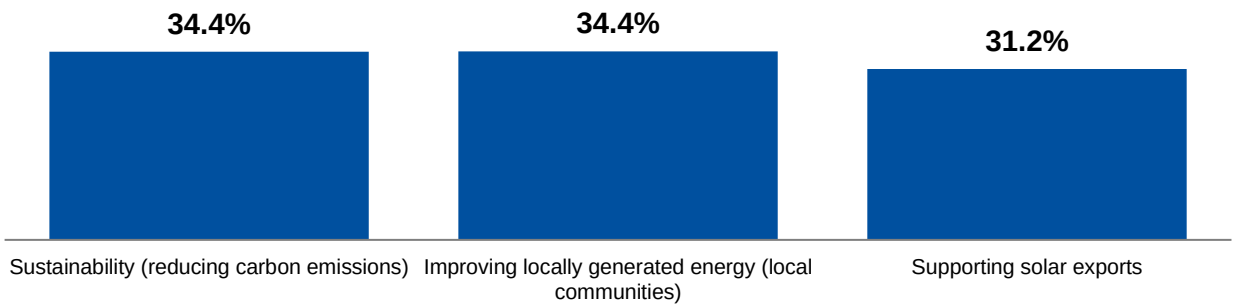
Note, the topic descriptions and service level improvements differed across studies. The above topics are indicative of those included.

This program builds on existing knowledge and insights cont.

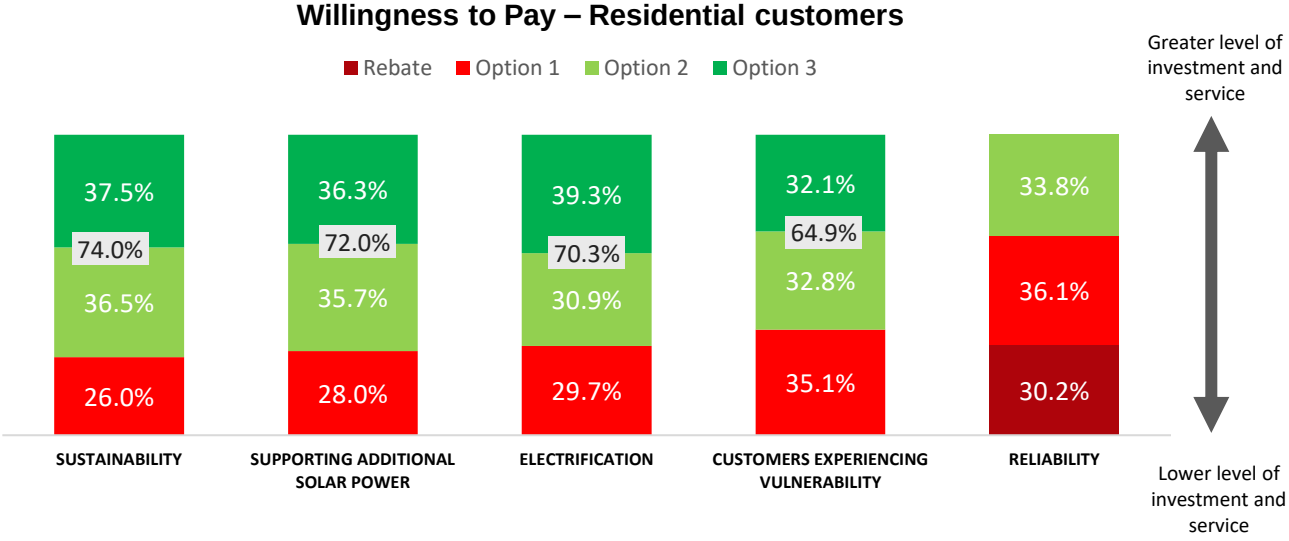
There were consistent preferences across studies from customers regarding the way they would prioritise investment to improve proposed initiatives. Across both studies, **residential customers** prioritised improvements to sustainability the highest.

Preferences for supporting the network's capacity for exporting solar were inconsistent across studies, with customers rating it lowest in Customer Values Analysis compared with second highest in the Trade-Off Evaluations. Generally, it should be noted that the ratings across preferences in the Customer Values Analysis are relatively 'flat', ranging from 31%-35%, which indicates a lack of strong preference between initiative areas for customers and provides important context for these differences between studies.

Customer Values Analysis (Jan 2024) – Residential Customers



Willingness to Pay – Residential customers

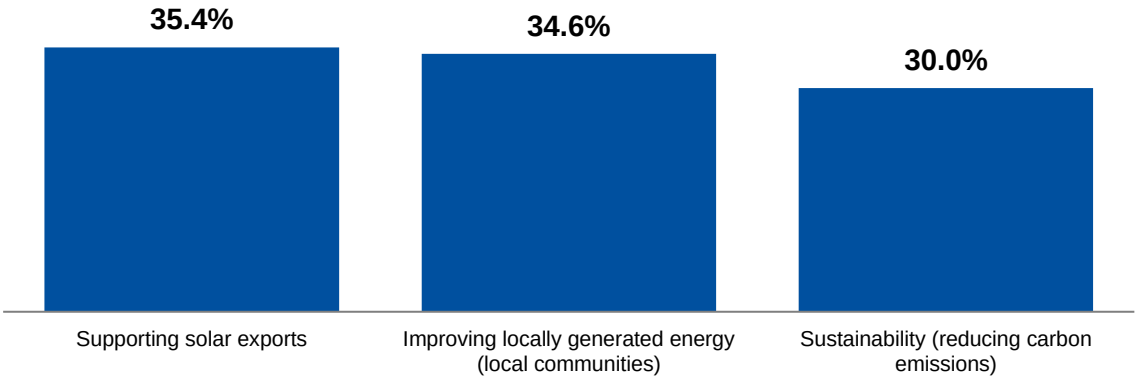


This program builds on existing knowledge and insights cont.

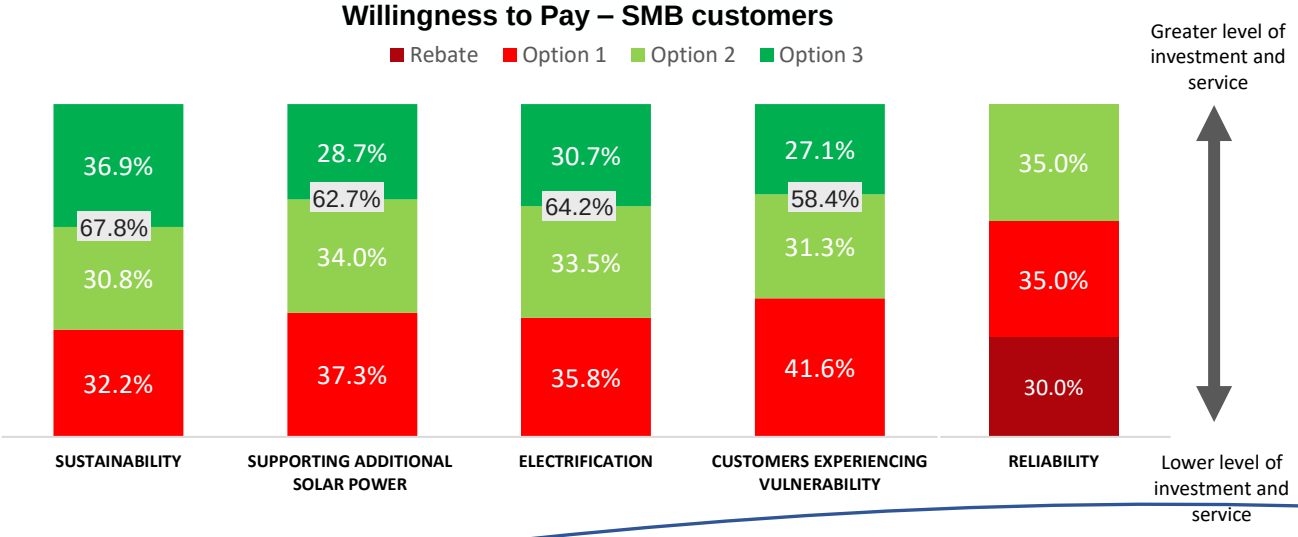
SMB customers ranked supporting improving capacity for additional solar exports highest in the Customer Values Analysis, and middling for Trade-Off Evaluations.

While sustainability is ranked lowest in Customer Values Analysis and highest in Trade-Off Evaluations, the ratings across preferences in the Customer Values Analysis are relatively 'flat,' ranging from 30%-35%, which indicates a lack of strong preference between initiative areas for SMB customers.

Customer Values Analysis (Jan 2024) – SMB customers



Willingness to Pay – SMB customers



This program builds on existing knowledge and insights cont.

Willingness to pay across studies

As part of the Customer Values Analysis, customers were asked to provide their average electricity bill. Then, considering their current bill, they were asked how much more they would be willing to pay for service improvements across the areas outlined on page 48. Following this, they were asked to prioritise those areas for improvement (results shown on pages 49 and 50).

The Customer Values Analysis indicated that residential customers were willing to pay an additional 6.3% and SMB customers an additional 14.4% more on top of their current bill.

The willingness-to-pay figure from the Customer Values Analysis is not comparable to the figures in this study. In this study, the willingness-to-pay amounts were pre-defined and provided to respondents for specific initiatives. No part of this study asked customers to indicate a **total** additional amount they would be willing to pay on top of their current net energy costs.

Image above: Participant from the mass engagement forum.

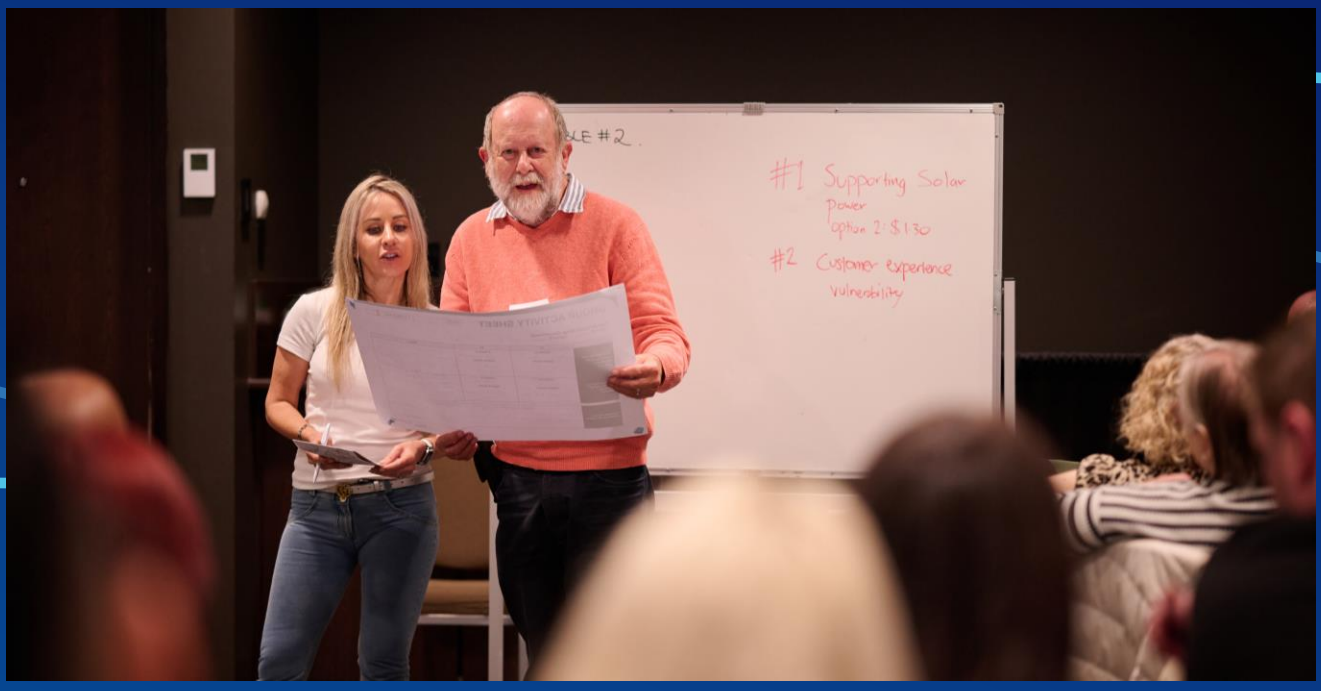


Image above: Participants from the mass engagement forum.

Image above: Jeff Anderson – Head of Regulatory Strategy.

6.
Appendix
Engagement Context

Total Summary of Initiatives

Initiative and description	Option levels	Resident-ial Bill Impact	SMB Bill Impact
Sustainability Initiatives designed to reduce forecast carbon emissions over 2026-31, including: replacing petrol vehicles with electric vehicles across the network's fleet, reducing greenhouse gas emissions, and installing solar panels and battery storage at each network depot	1. Maintain the current level of carbon emissions produced in the distribution of your electricity 2. 20% reduction in carbon emissions by 2031 3. 50% reduction in carbon emissions by 2031	$0.00	$0.00
		$0.28	$ 3.17
		$ 0.73	$8.32
Supporting Additional Solar Power Allow residential customers and business to connect and export more excess energy produced from small scale energy generation units	1. If no investment is made, 95% of customers can freely export solar and 5% of customers cannot export at all 2. All customers can always export solar, and 95% of customers can freely export at least 99% of the time 3. All customers can always export solar, and 98% of customers can freely export at least 99% of the time	$0.00	$0.00
		$1.30	$14.88
		$1.61	$18.44
Electrification Stability and customer experience of EV integration	1. Areas with high levels of electric vehicle activity have more frequent outages. Outages will be addressed reactively. 2. Areas with high levels of electric vehicle activity have more frequent outages. Increase investments to proactively prevent problems, in addition to all outages being addressed reactively. 3. Proactive investment to 'future proof' the network, meaning seamless evolution of more EVs onto the electricity network, noting that customers could charge their EVs anytime with minimal to no outages.	$0.41	$4.74
		$0.83	$9.47
		$1.24	$14.21
Customers Experiencing Vulnerability Initiatives designed to alleviate the burden on customers experiencing vulnerability due to energy poverty. The package includes community outreach programs, web-based resources, energy advisory services, First Nations programs and enhanced outage notification service for vulnerable and life support customers.	1. Continue to meet current regulatory obligations 2. Commitment to reduce energy induced vulnerability through a package of community outreach programs and resources for vulnerable customers 3. Same as Option 2 with inclusion of a community energy fund to support vulnerable customers	$0.00	$0.00
		$0.85	$9.66
		$1.35	$15.46
Reliability Improving the annual minutes of supply experienced by the average customer	1. 25 minutes of an unplanned outage per annum for the 'average' customer (less than customers currently receive) 2. 20 minutes of an unplanned outage per annum for the 'average' customer (this maintains what customers currently receive) 3. 15 minutes of an unplanned outage per annum for the 'average' customer (this is a significant improvement on what customers currently receive)	-$0.10	-$1.18
		$0.00	$0.00
		$0.21	$2.37

IAP2 Spectrum

The level of customer participation in this program was intentional and is highlighted in our depiction of the IAP2 Spectrum shown below.

Within this engagement, customers were highly involved as we wanted to understand their initiative improvement level preferences and explore their reasonings behind their decisions. This included understanding their current and future concerns and aspirations that were considered in their response.

IAP2 Spectrum of Public Participation

	Inform	Consult	Involve	Collaborate	Empower
Public Participation Goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives, and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.

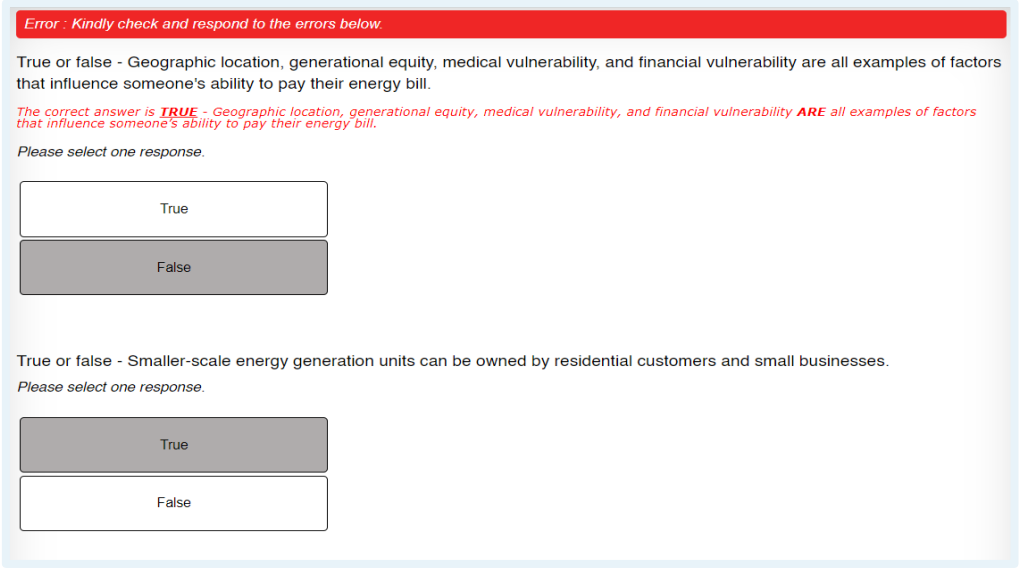
IAP2, 2018, IAP2 Spectrum of Public Participation, accessed 22 November 2022, https://iap2.org.au/wp-content/uploads/2020/01/2018_IAP2_Spectrum.pdf

Quantitative Pre-Education Overview

Prior to completing the trade-off activities, respondents were provided with pre-education videos on the initiatives to help develop an understanding of the topic. This allowed participants to make educated decisions when completing the trade-off activities.

Below is an example of a pre-education activity: On-screen visual

Respondents were then required to demonstrate their understanding of the topics they had just reviewed and were further educated if they did not comprehend the topic as shown below:



Overview of Quantitative Survey Inclusions

Survey breakdown

Length of survey: 15-minutes

Section	Detail
Introduction and Screening	• Questions to ensure we are surveying the right people.

Pre-Education Stage	• Educating participants about required information to support completing the Menu Choice Model.
	• This included:
	  • Information about discretionary versus compliance-based improvements.
	  • A video highlighting the discretionary improvement initiatives (definition and overview).
	  • Comprehension questions about the discretionary improvement initiatives (to test the respondent's understanding of the information).

Menu-based Choice Modelling	Participants see a range of discretionary initiatives and options presented side-by-side so they can select their preferred option. • This evaluates the trade-offs that individuals make by studying the joint effect of multiple attributes simultaneously, to uncover the relative importance of each discretionary initiative and respective option level.
Satisfaction	• Captures satisfaction on service level
Profiling – Energy Sources, EVs and Weather Events	• Captures what energy sources are used by customers, EV usage and their experiences with extreme weather events to contextualise findings.
Demographics	• Final questions to understand the participant's background including: who they are, who they live with, level of education, income, etc.

Engagement Context References

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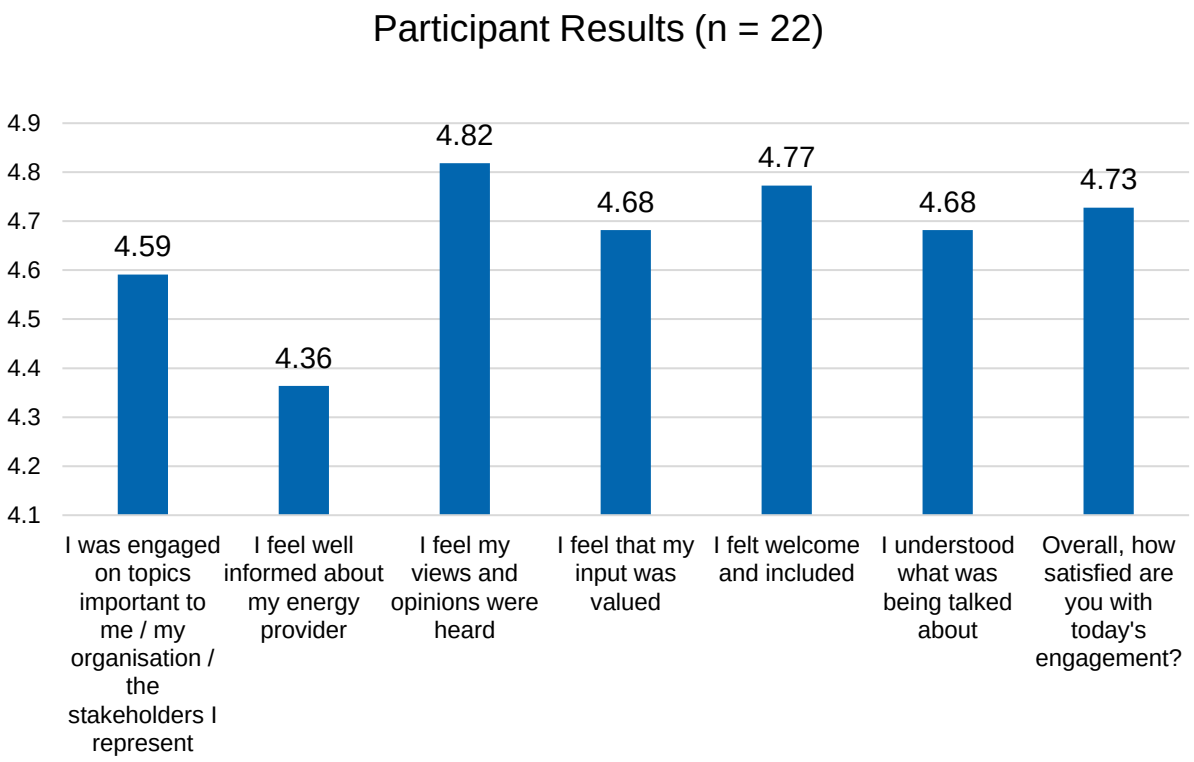
Qualitative Engagement Feedback

After the qualitative engagements, customers were asked to complete a feedback survey to support the refinement of the engagement process. The results are below.

Overall Satisfaction with engagements	4.7 / 5

Participants rated their engagements on a scale from 1-5,
where 1 was completely disagree/satisfied and 5 was completely agree/satisfied.



Participant comments

"Great session, Adrian was excellent. Well done."

"This was a great session, thank you! Would like to have learned more about the relationship between CitiPower and the retailers however I understand that this was also not the top priority for today. Still learned a lot so thank you again!"

"The session was very informative, and information disseminated clearly; the discussions felt diverse and collaborative, so ultimately, I feel that the facilitators have quality feedback to take back and prioritize for the Business Plan 26-31 going forward."

Note: A minimum sample of n=30 is recommended for an indicative result.