Trade-Off Evaluations Report

Produced for: Powercor

June 2024

Powercor AUSTRALIA

Forethought® Outcomes

Contents

1. Background

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 Powercor 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: Renate Vogt – General Manager, Regulation, Powercor.

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: Samuel Powell – Consultant 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 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

Program Overview

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 Powercor to:

- Understand the trade-offs customers make between their willingness to pay for discretionary initiatives and the respective outcomes of service level improvements
- Support Powercor 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: Participants from the mass engagement forum.

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:

Pre-education boards*
(April 22nd – May 5th)
n = 62

Focus groups x 2
(May 2nd – May 3rd, 2024)
n = 20
CPPALUE Stakeholders

Mass forum (in-person)
(May 11th 2024)
n = 42
(n = 36 residential, n = 6 SMB)
CPPALUE Stakeholders
CAP were invited to observe

Methodology:
Qualitative, deliberative

Engagement length:
2 x 2-hour Focus groups (1 x in-person and 1 x online)
1 x 8-hour Mass forum (in-person)

Location:
Face-to-face and online

Participation**

Residential	Business
n = 56	n = 6

Quantitative Program

Quantitative survey
(incl. pre-education section*)
(April 26th – May 17th)
n = 509

Methodology:
Menu-based choice model

Survey length:
15mins

Location:
Online

Participation**

Residential	Business
n = 411	n = 98

*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 on the back of earlier community engagements.

Initiative and description	Option overview
Network resilience Targeted network hardening to reduce the likelihood of high-risk townships being off supply for extended periods using micro-grids, tie-lines and deployable generation units	1. Service reduction – 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. Larger service improvement – higher investment 4. Largest service improvement – highest investment
Worst served customers Reduce the annual minutes off supply for worst served customers through targeted network investments	1. Service maintenance – no investment 2. Medium service improvement - moderate investment 3. Large service improvement – highest investment
Regional and rural supply A package of initiatives to support regional and rural supply upgrades to homes and businesses and enable further growth opportunities in regional communities	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
Community resilience Provision of community support before, during, and after an extreme weather event	1. Service maintenance – no investment 2. Medium service improvement – moderate investment 3. Large service improvement – highest investment
Large scale renewable energy generation Network support to connect additional large-scale renewable generation capacity, lowering emissions for Victorian customers and powering homes with renewable energy	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

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 Powercor 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 Powercor 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 and two focus groups were attended by both residential and SMB Powercor customers. Prior to these, 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.

Powercor 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:

- Renate Vogt – General Manager, Regulation
- Brent Cleeve – Head of Regulatory Policy and Compliance
- Genevieve Hart – Regulatory Engagement Manager
- Belyan Matthews – Senior Regulatory Analyst
- Adam Gellie – General Manager, Network Services
- Alex Jones – Chief Information Officer

Additionally, the forum was also attended by members of Powercor'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 market research 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 Powercor customers
A qualitative judgement sampling design was utilised in order to maximise differences and obtain the preferences and needs of a range of Powercor customers.

Participants engaged qualitatively were reflective of the Powercor customer base

Key Demographics

Residential customers (n = 56)

Gender	Age
Male: n = 27	18 - 34: n = 17
Female: n = 29	35 - 49: n = 20
	50+: n = 19

SMB customers (n = 6)

Gender	Age
Male: n = 3	18 - 34: n = 1
Female: n = 3	35 - 49: n = 3
	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.

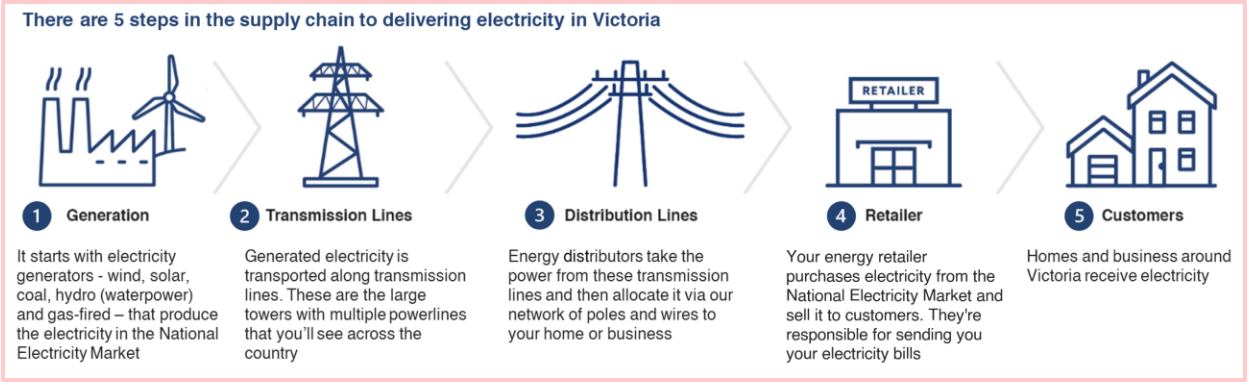
The pre-education board was open from the 22nd of April to the 5th of May, with participants committing 45 minutes each day for 3 days.

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)

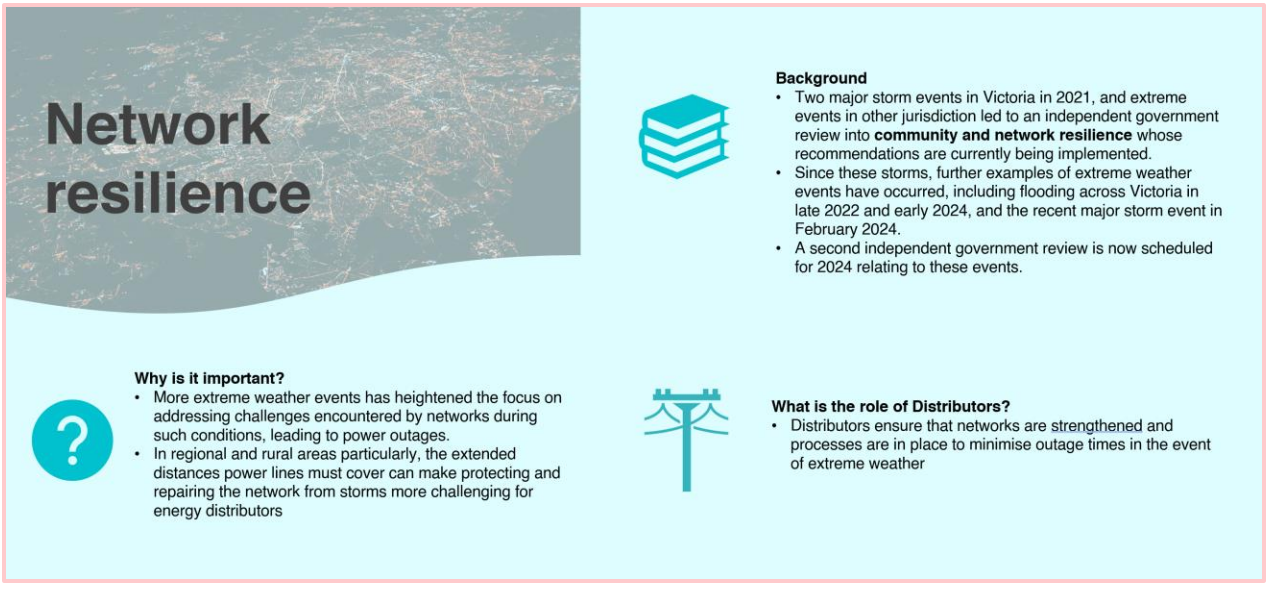
Qualitative Pre-Education Board Overview cont.

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)

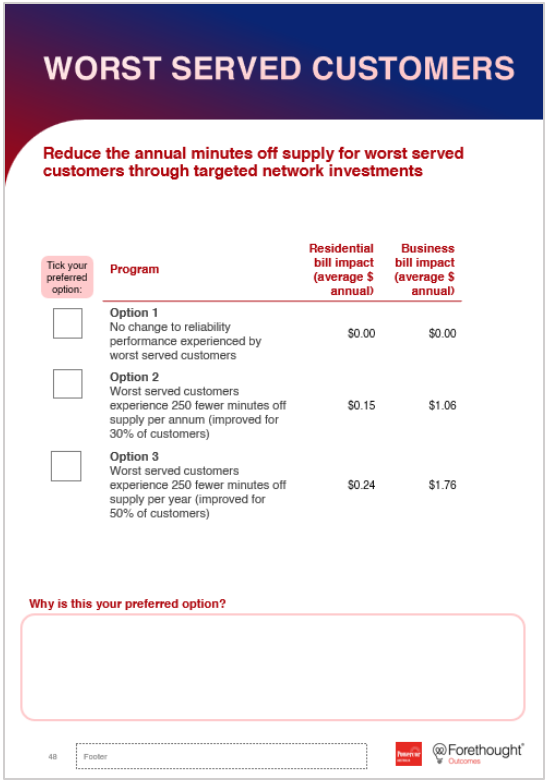
Mass Forum and Focus Groups Methodology Overview

Each session began with an introduction conducted by **Forethought** and a scene setting undertaken by Powercor 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



WORST SERVED CUSTOMERS

Reduce the annual minutes off supply for worst served customers through targeted network investments

Tick your preferred option:	Program	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
☐	**Option 1** No change to reliability performance experienced by worst served customers	$0.00	$0.00
☐	**Option 2** Worst served customers experience 250 fewer minutes off supply per annum (improved for 30% of customers)	$0.15	$1.06
☐	**Option 3** Worst served customers experience 250 fewer minutes off supply per year (improved for 50% of customers)	$0.24	$1.76

Why is this your preferred option?

48 Footer

Forethought Outcomes

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 and Focus Groups 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:

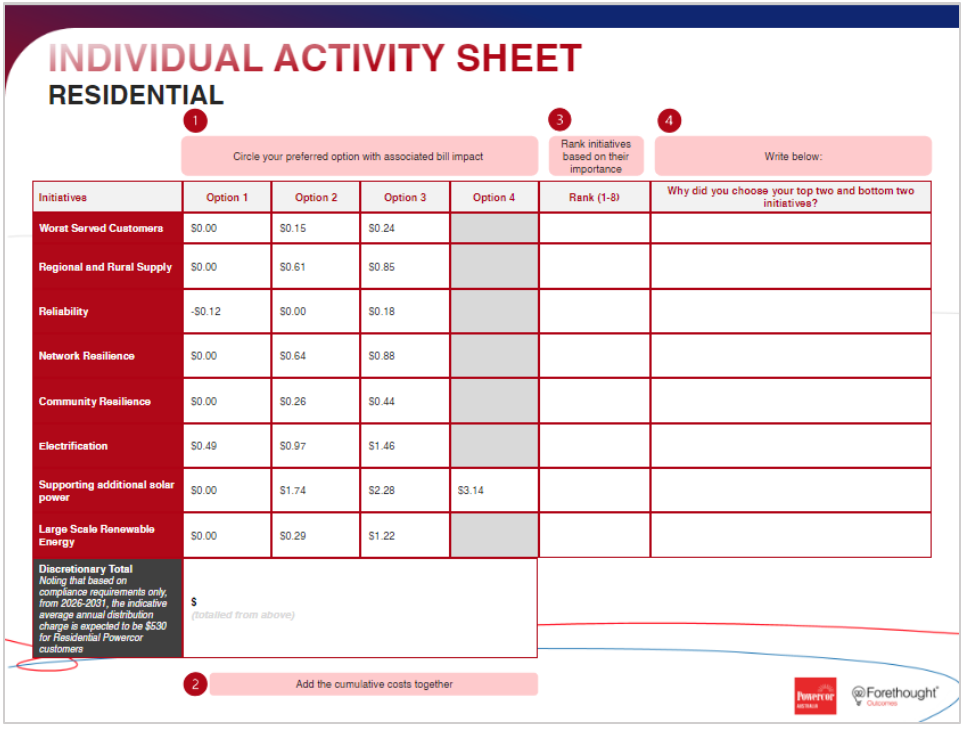
- what was most important to,
- what was least important to invest in.

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	Option 4	Rank (1-8)	Why did you choose your top two and bottom two initiatives?
Worst Served Customers	$0.00	$0.15	$0.24			
Regional and Rural Supply	$0.00	$0.61	$0.85			
Reliability	-$0.12	$0.00	$0.18			
Network Resilience	$0.00	$0.64	$0.88			
Community Resilience	$0.00	$0.26	$0.44			
Electrification	$0.49	$0.97	$1.46			
Supporting additional solar power	$0.00	$1.74	$2.28	$3.14		
Large Scale Renewable Energy	$0.00	$0.29	$1.22			
Discretionary Total *Noting that based on compliance requirements only, from 2026-2031, the indicative average annual distribution charge is expected to be $530 for Residential Powercor customers*	$ *(totalled from above)*					

2 Add the cumulative costs together

Image above: Keicha Day, Customer Advisory Panel Member, Powercor.

Image above: Adam Gellie – General Manager, Network Services, Powercor.

2.3
Program Overview
Quantitative Methodology

Quantitative Overview

Quantitative objectives

The quantitative program sought to achieve the following objective.

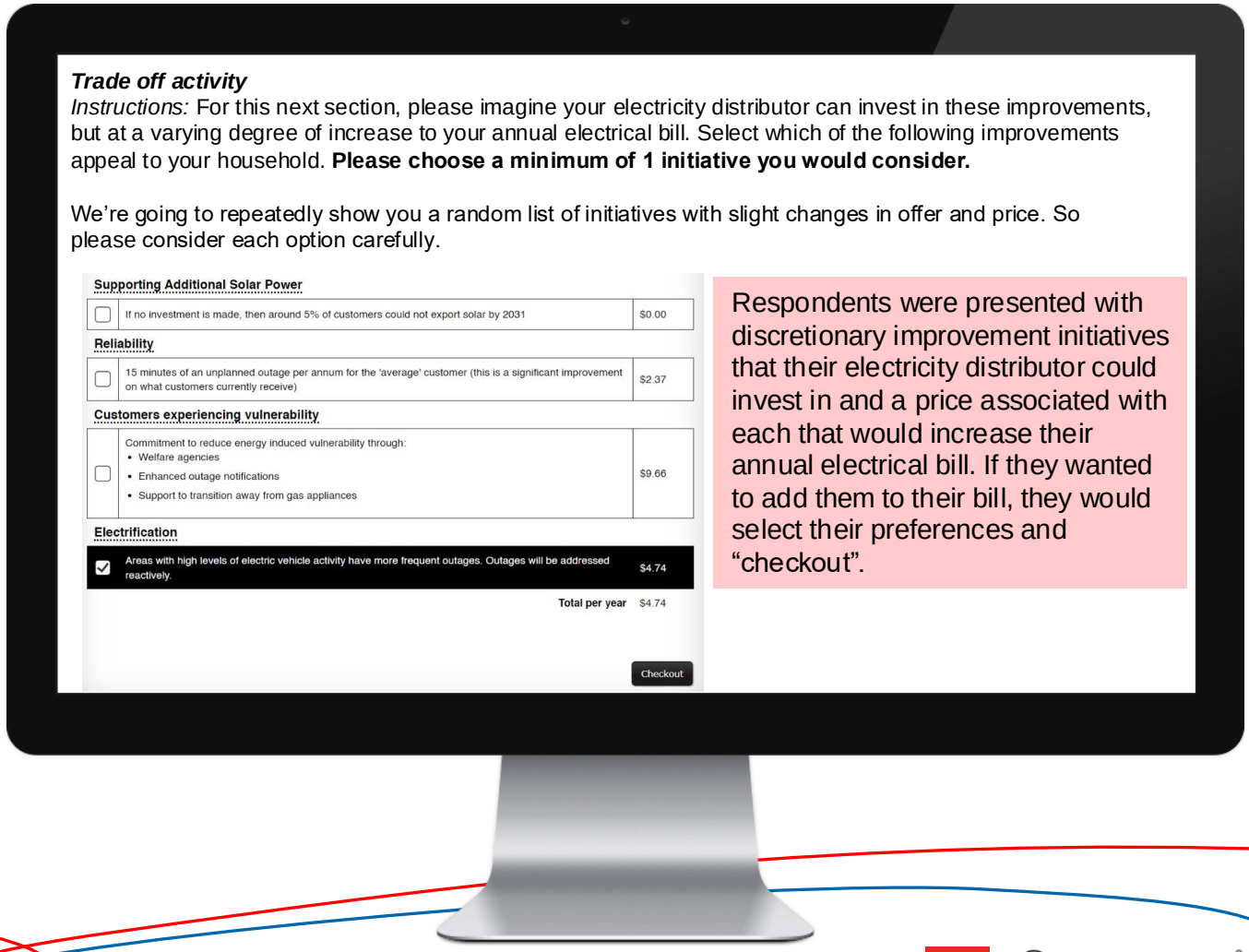
- Quantitatively prioritise the appeal and adoption likelihood of discretionary initiatives for Powercor.

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

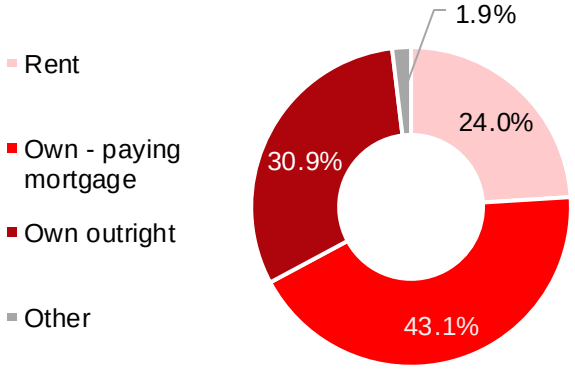
Below is an overview of the weighted residential participation.

Residential Sample (n = 411)

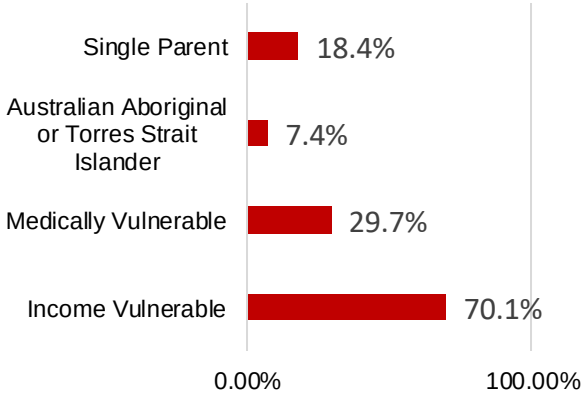
Gender		Age		Area	
Male	50.3%	18 – 34 years	29.0%	Metro	43.6%
Female	49.7%	35 – 49 years	28.9%	Rural	56.4%
		50+ years	42.1%		

Electric Vehicle Owner		Solar Panel Owner		Experienced an extreme weather event?	
Yes	6.6%	Yes	43.1%	Yes	33.5%
No – considering within 5 years	32.6%	No	56.9%	No	66.5%
No – not considering	60.9%				

Renters / Owners (n = 405)



Vulnerable Customers (n = 149)*



Note: *indicates that vulnerable customers could be in multiple categories, so the results may not sum to 149.

Quantitative Participant Overview cont.

Below is an overview of the SMB participation:

Small-Medium Business Sample (n = 98)

Gender		Age		Area	
Male	39.8%	18 – 34 years	39.8%	Metro	39.8%
Female	60.2%	35 – 49 years	32.7%	Rural	60.2%
		50+ years	27.6%		

Industry (n = 94)	
Health Care and Social Assistance	16.0%
Retail Trade	14.9%
Accommodation and Food Services	12.8%
Education and Training	9.6%
Construction	8.5%
Rental, Hiring and Real Estate Services	6.4%
Administrative and Support Services	5.3%
Electricity, Gas, Water and Waste Services	3.2%
Manufacturing	3.2%
Other	20.2%

Business Revenue (n = 83)	
Less than $50,000	19.3%
$50,000 - $200,000	22.9%
$200,001 - $500,000	9.6%
$500,001 - $750,000	8.4%
$750,001 - $2,000,000	7.2%
$2,000,001 - $5,000,000	12.0%
$5,000,001 - $10,000,000	7.2%
$10,000,001 - $20,000,000	4.8%
$20,000,001 - $25,000,000	2.4%
$25,000,001 or more	6.0%

Quantitative Participant Overview cont.

Small-Medium Business Sample (n = 98)

Electric Vehicle Owner		Solar Panel Owner		Experienced an extreme weather event?	
Yes	9.2%	Yes	34.7%	Yes	37.8%
No – considering within 5 years	45.9%	No	65.3%	No	62.2%
No – not considering	44.9%				

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 Powercor network who were either the main or joint decision-makers for household or SMB.

Fieldwork dates
Quantitative 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).

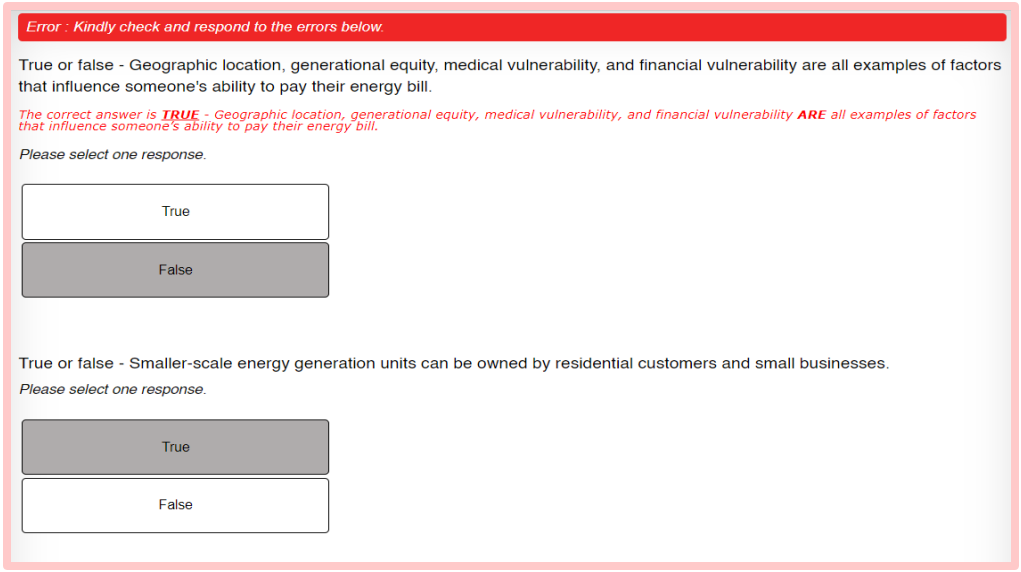
Once this demographic weight was applied, we confirmed that the other demographic variables such as area, income etc. were closely aligned with the targets and within acceptable parameters. SMB sample was unweighted due to low sample.

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.

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.

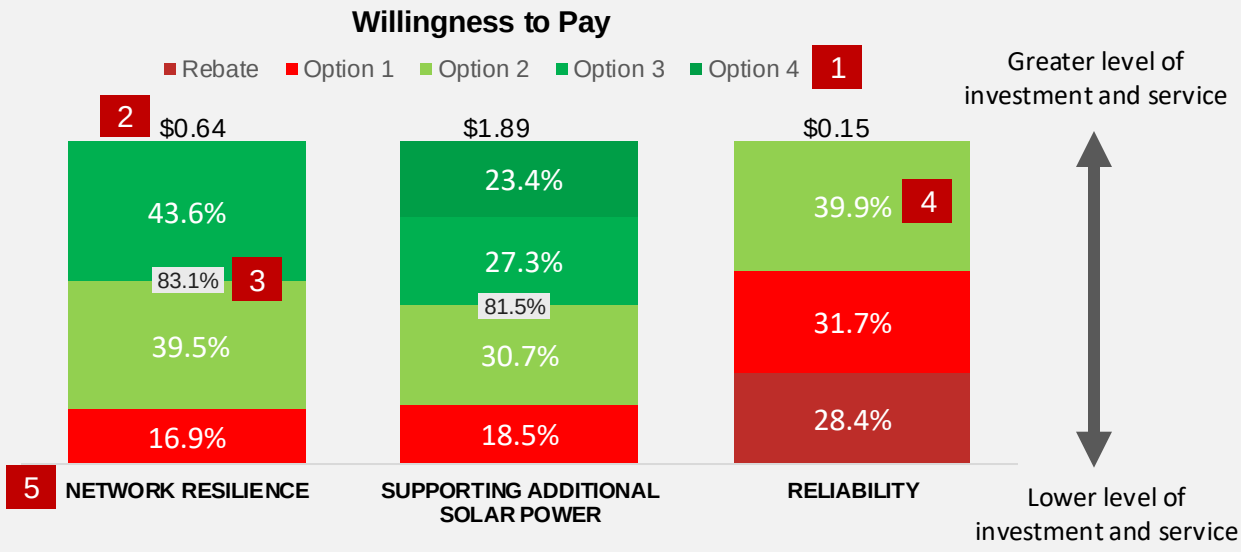
Respondents were then required to demonstrate their understanding of the topics they had just reviewed and were further educated if they did not comprehend the topic as shown below:



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. The majority of customers wanted reliability to be at least maintained, as they were satisfied with current service.

2. Compared to residential customers, SMB customers were typically more cost-sensitive with a higher proportion preferencing ‘zero cost’ options more consistently.

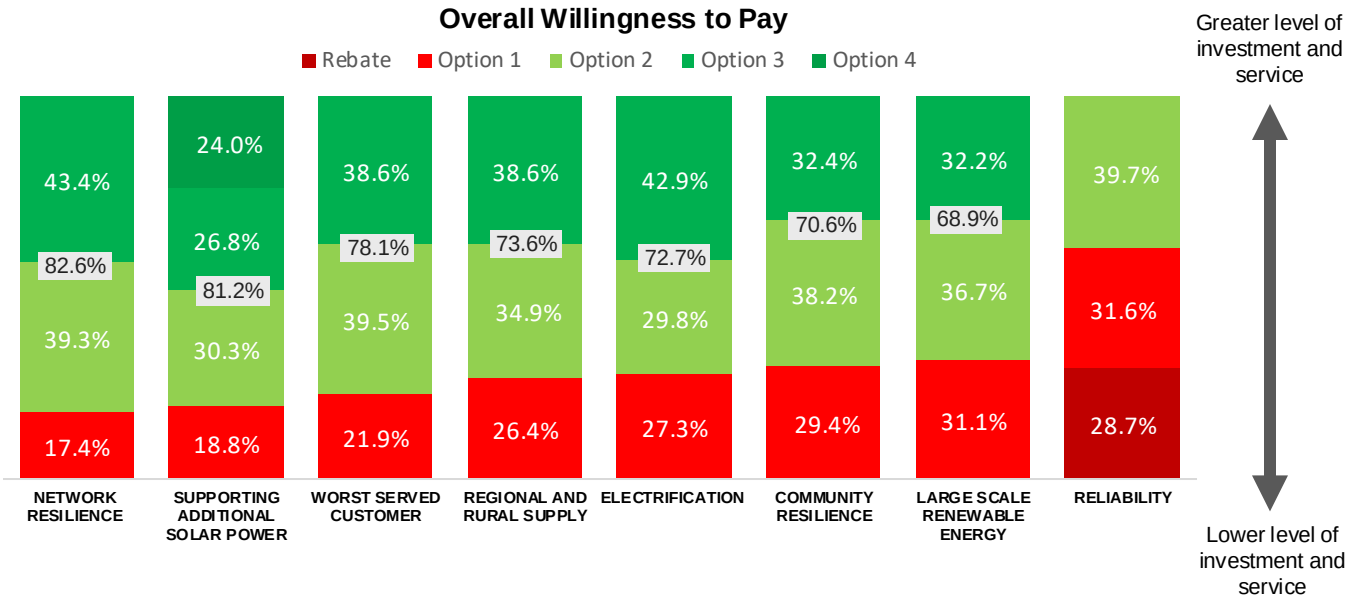
3. Overall, there was an even split between customers’ willingness to pay across outlined service levels, with most wanting improvements to some degree.

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. Customers expressed a desire for Powercor to make service level improvements that resulted in more equitable service across the community, feeling that the energy distributor was best placed in making improvements to enhance Network Resilience and improve performance for Worst Served Customers.

The majority of customers were in support of investing in each initiative presented except Reliability

There was a mixed response for Reliability quantitatively. Within qualitative engagements, customers expressed the desire to maintain reliability service levels as they were satisfied with the current standards.



Excluding Reliability, customers were most willing to invest in Network Resilience and least in Large Scale Renewable Energy with on average, 74.9% willing to invest in improving service levels and 25.1% not willing to invest above the minimum. In comparison, 39.7% were willing to invest in improving Reliability.

Customer attitudes shaping initiative preferences

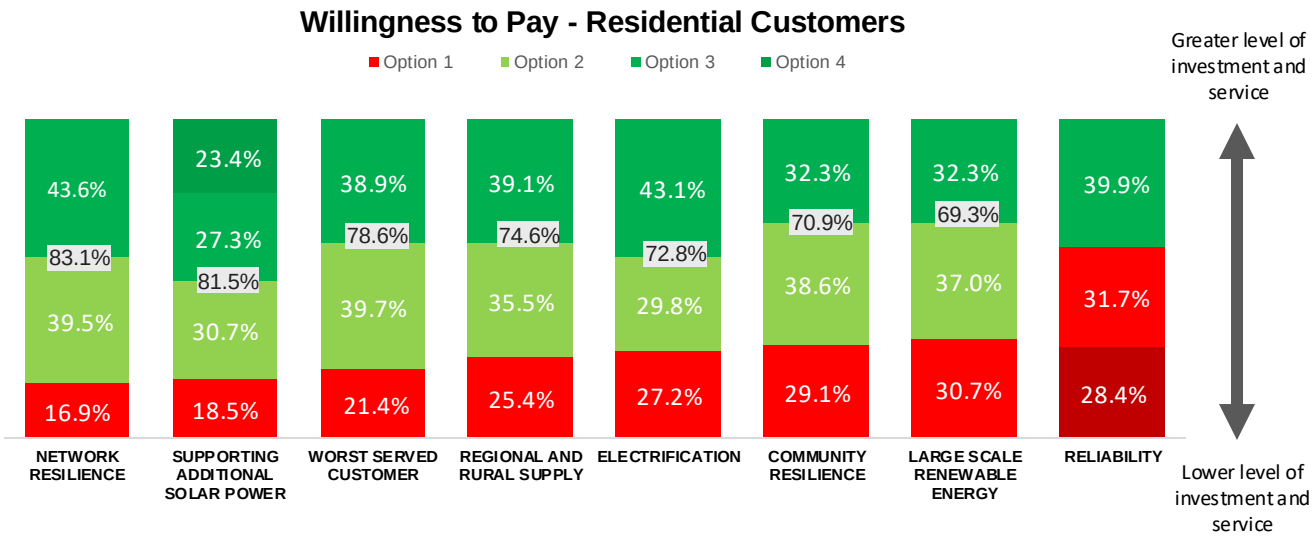
- Customers had a sense of moral obligation to help their fellow Australian, often prioritising initiatives such as Network Resilience and Worst Served Customers to ensure equal access to energy for all customers.
- At times, customers focused on the overall themes of initiatives rather than assessing specific improvement levels, such as Electrification where personal views on EVs at times dominated discussions over the projected impact of EVs on outage frequency.
- Initiatives such as Community Resilience, Electrification, and Supporting Additional Solar Power often required further evidence or explanation from stakeholders before customers felt fully informed of the topics at hand.
- Initiatives related to renewable energy were perceived by some customers as idealistic or only relevant for the following regulatory reset rather than the current reset, whereas those more environmentally minded saw value of immediate implementation to future proof services.

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

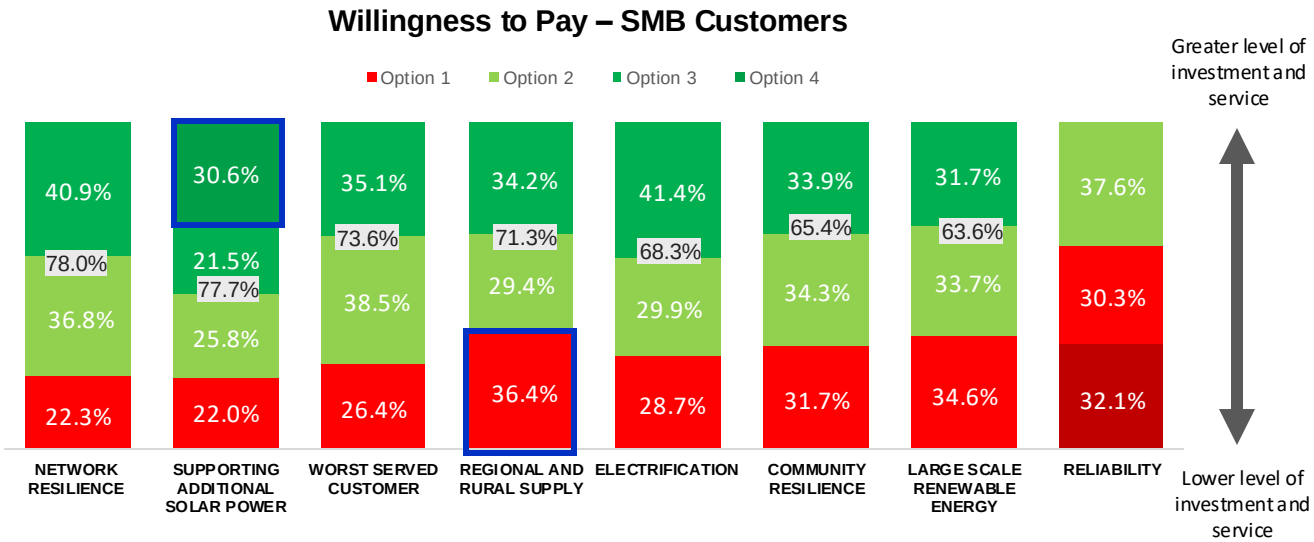
A larger proportion of SMB customers however preferenced a minimal service level improvement, given the higher bill impacts associated with options levels

Both customer cohorts were cognisant and took into account the outcomes of service level improvements and bill impacts on the other cohort, reflective of the strong sense of community within Powercor.

Between 69.3% - 83.1% of residential customers indicated they were willing to invest in discretionary improvements across seven of the eight initiatives



Between 63.6% - 78.0% of SMB customers indicated they were willing to invest in discretionary improvements across seven of the eight initiatives



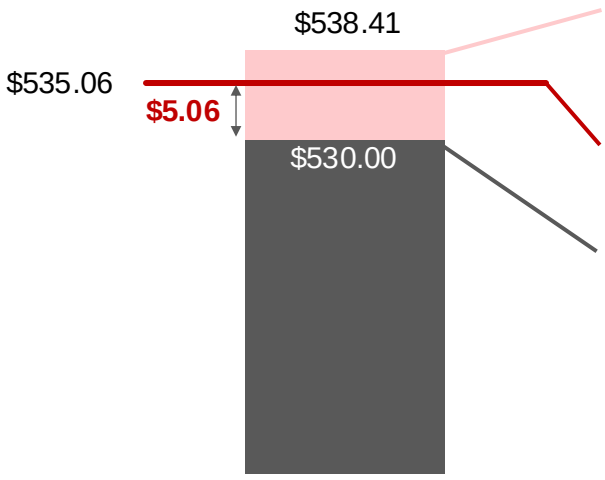
SMB customers were significantly more likely to invest in Supporting Additional Solar Power and less likely to invest in Regional and Rural Supply compared to residential customers

Note: Significance testing was conducted between residential and SMB Powercor across option levels. Significant differences are highlighted on the SMB chart with a blue outline which means the SMB option was significantly higher 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 $5.06 and $35.47 respectively, beyond compliance costs across initiatives

Average Annual Residential Distribution Bill (2026 - 2031)

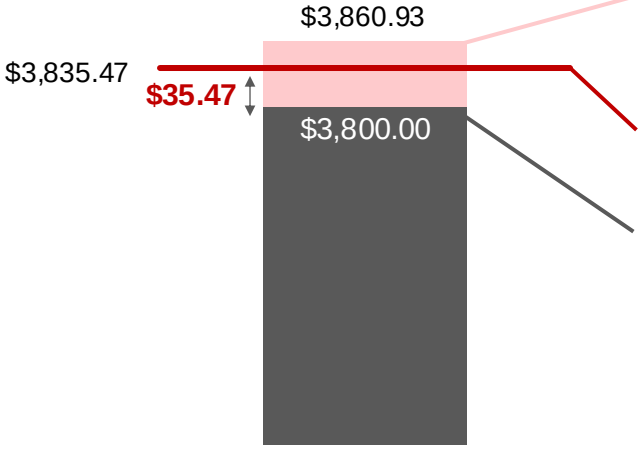


The maximum discretionary total for all proposed initiatives is $538.41, with a total bill impact of $8.41

Customers were willing to spend an additional $5.06, with a total bill impact of $535.06

The indicative compliance cost is $530.00

Average Annual SMB Distribution Bill (2026 - 2031)



The maximum discretionary total for all proposed initiatives is $60.93, with a total bill impact of $3,860.93

Customers were willing to spend an additional $35.47, with a total bill impact of $3,835.47

The indicative compliance cost is $3,800.00

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 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

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

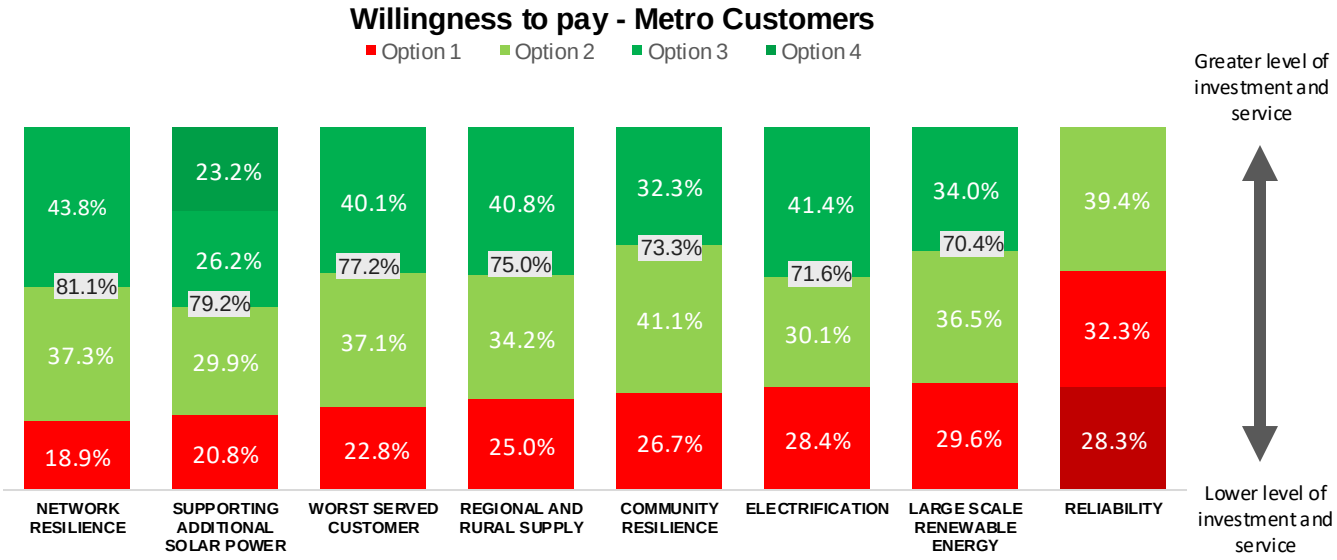
Powercor AUSTRALIA

Forethought® Outcomes

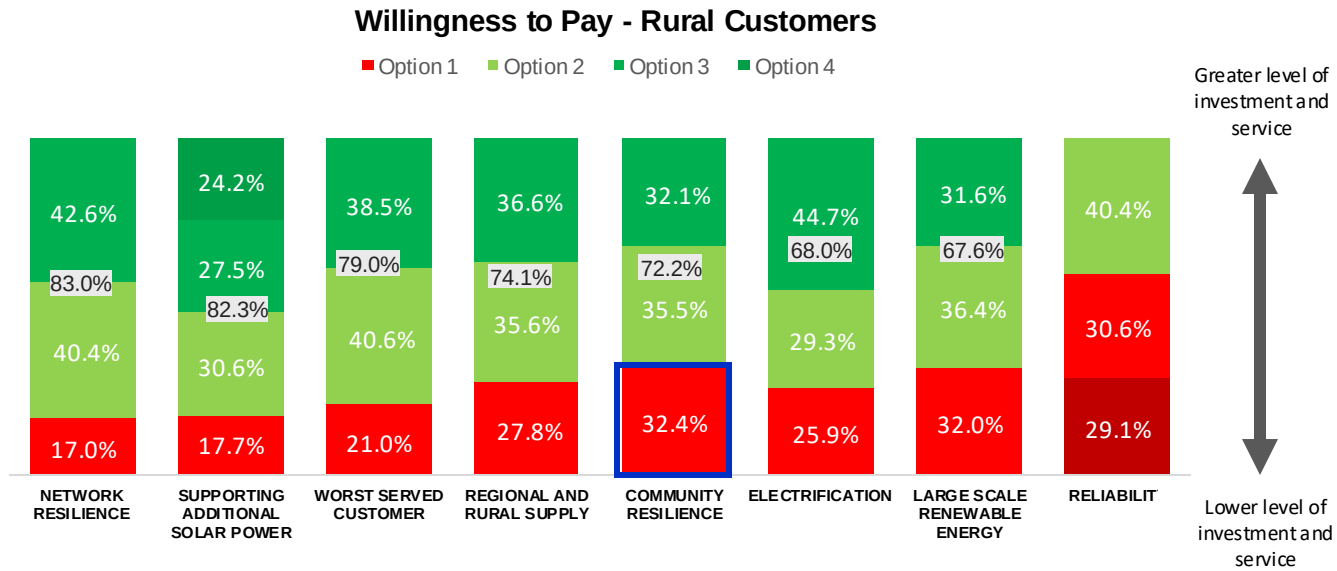
Willingness to invest in initiatives was high for both metro and rural customers

Both groups were most willing to invest in Network resilience, Supporting Additional Solar Power and Worst Served Customer initiatives. Rural customers were significantly less willing to invest in Community Resilience compared to Metro customers.

Between 70.4% - 81.1% of metro customers indicated they were willing to invest in discretionary improvements across seven of the eight initiatives



Between 67.6% - 83.0% of rural customers indicated they were willing to invest in discretionary improvements across seven of the eight initiatives



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

Image above: Participant from the mass engagement forum.

Image above: Participant from the mass engagement forum.

4.1
Initiative Deep Dive

Network Resilience

Supporting Additional Solar Power

Worst Served Customers

Regional and Rural Supply

Electrification

Community Resilience

Large Scale Renewable Energy

Reliability

Network Resilience

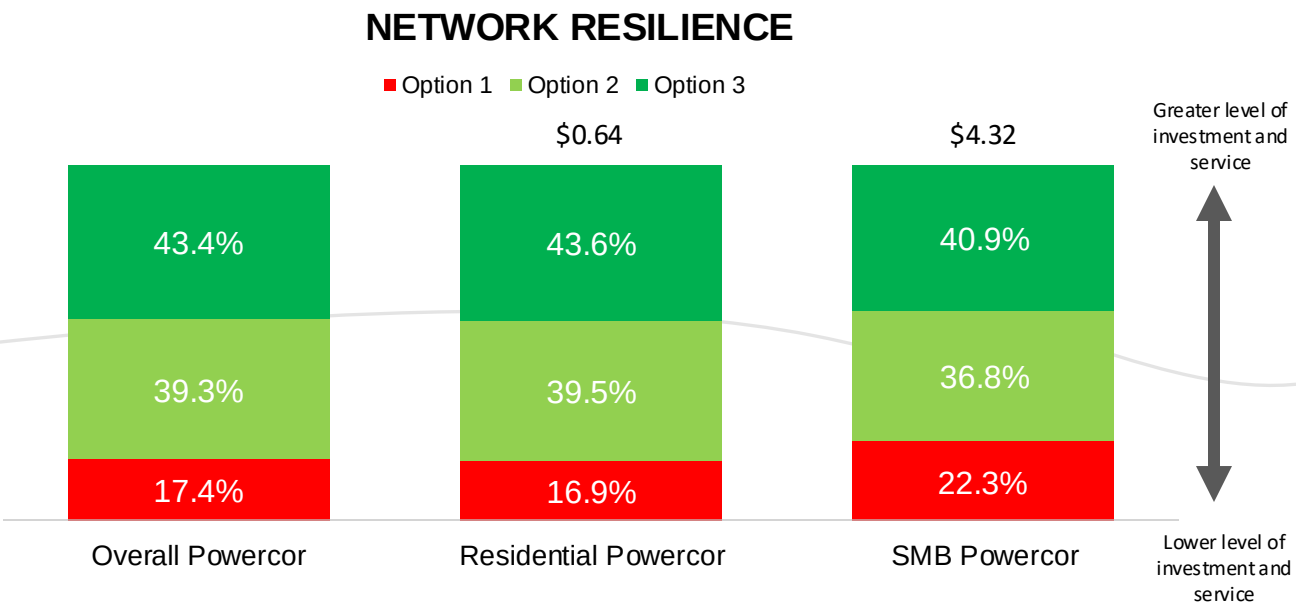
Customers were presented with the initiative description, service level improvements and associated residential and SMB bill impacts for Network Resilience.

Initiative Description

Targeted network hardening to reduce the likelihood of high-risk townships being off supply for extended periods using micro-grids, tie-lines and deployable generation units.

Service Levels	residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 **No investment.** As extreme weather becomes more frequent, services may worsen over time.	$0.00	$0.00
Option 2 **Moderate investment.** Current network resilience is maintained, despite extreme weather becoming more frequent.	$0.64	$4.63
Option 3 **High investment.** Current network resilience is improved over time to decrease outage duration or avoid outages for high-risk communities, despite extreme weather becoming more frequent.	$0.88	$6.39

82.6% of customers were willing to invest in maintaining or improving Network Resilience



83.1% of residential customers and 77.7% of SMB customers were willing to pay to improve Network Resilience.

What we heard from customers

- Network Resilience emerged as a critical initiative amongst customers with customers emphasising the necessity of resilience in safeguarding critical infrastructure during extreme weather events.
- This initiative was deemed essential to mitigate future and reduce impact of extreme weather events on communities. Investment was driven by the need to avoid negative consequences from not hardening network systems.
- A proactive approach to network hardening was valued by customers considering the escalating frequency and severity of extreme weather events due to climate change.
- The personal experiences of customers affected by power outages underscored the importance of a resilient network, with some customers expressing concern for vulnerable populations or the elderly in particular.
- Customers felt that enhancing Network Resilience would also positively impact other initiatives, such as Reliability.

"Strong, resilient network for reliable electricity to support business. Extreme weather becoming more frequent requires higher investment."
SMB Customer

"People being able to survive rather than thrive. Could equate to life and death. Prevention is better than cure. People are already dealing with significant problems caused by weather events - lessen burden with electricity. Climate change is increasing, and extreme weather events will only increase."
Residential Customer

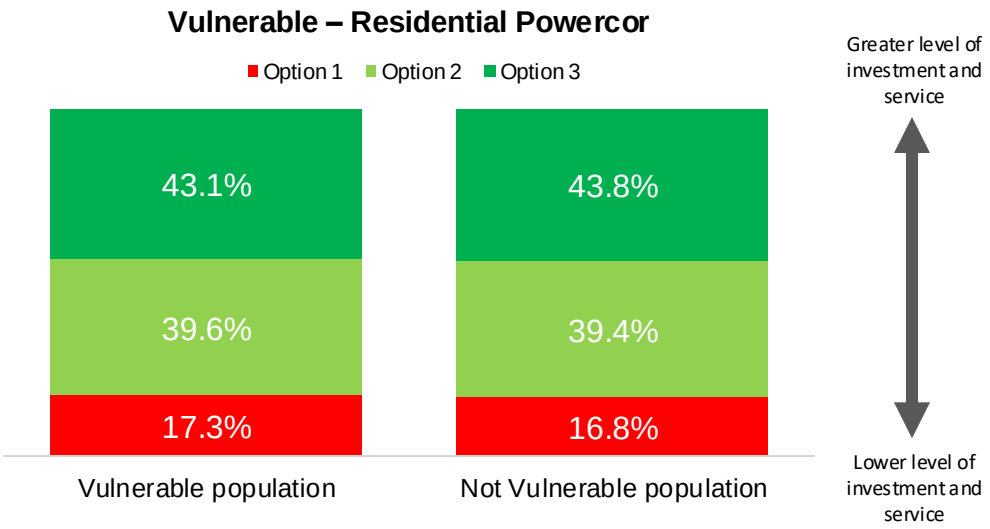
Overall bill impact was not captured as magnitude of impact differed for both residential and SMB customers. Note: Significance testing was conducted between SMB Powercor and other cuts at the 5% level of significance. No significant differences were found.

Customer cohorts shared the same level of willingness to pay across service level options

There were no significant differences in preferences between vulnerable and non-vulnerable customers, highlighting its importance across all customer segments.

Customers generally expressed concern for vulnerable groups, particularly elderly individuals who may be among the most disadvantaged during prolonged power outages. Further emphasising that for majority of customers, enhancing network resilience was crucial for the benefits it brings to the entire community.

"When catastrophic events happen, it's very important that there is infrastructure to support locals. As extreme weather events become more common, it's important to future proof infrastructure."
SMB Customer



Additionally, there were no significant differences in preferences between other customer cohorts such as location and weather impacted customers, suggesting that all groups of customers shared similar preferences for investing in Network Resilience.

4.2
Initiative Deep Dive

Network Resilience

Supporting Additional Solar Power

Worst Served Customers

Regional and Rural Supply

Electrification

Community Resilience

Large Scale Renewable Energy

Reliability

Supporting Additional Solar Power

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

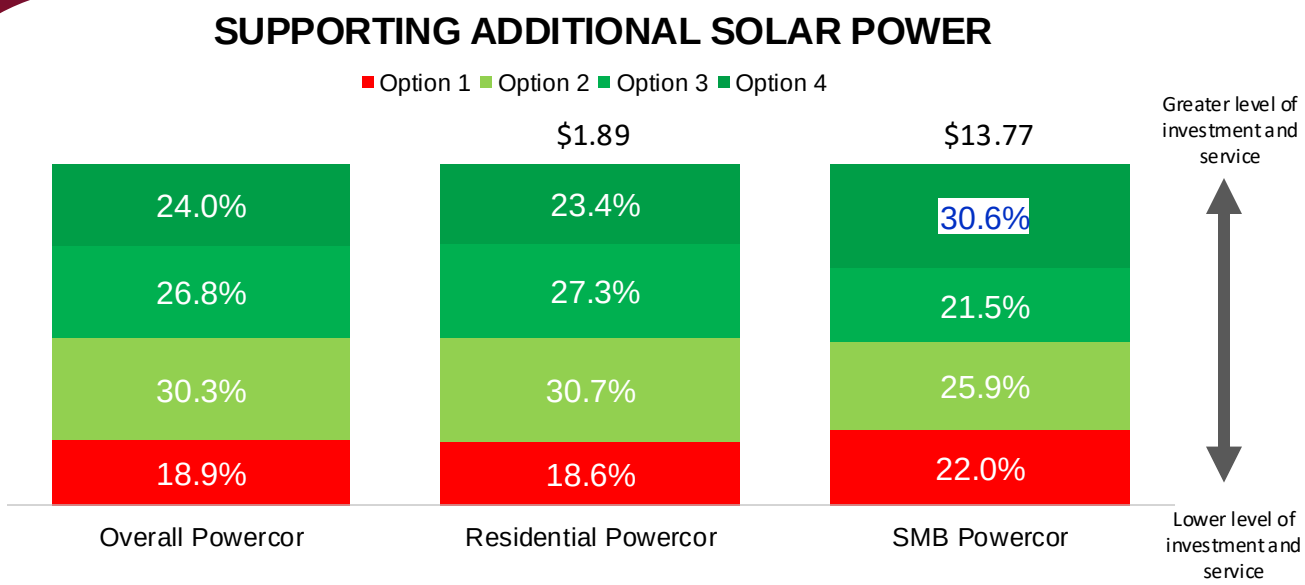
Initiative Description

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, 90% of customers can freely export solar and 10% of customers cannot export at all.	$0.00	$0.00
Option 2 All customers can always export solar, and 90% of customers can freely export at least 99% of the time.	$1.74	$12.58
Option 3 All customers can always export solar, and 93% of customers can freely export at least 99% of the time.	$2.28	$16.55
Option 4 All customers can always export solar, and 95% of customers can freely export at least 99% of the time.	$3.14	$22.71

Supporting Additional Solar Power

81.1% of customers were willing to invest to increase solar export capability



79.2% of residential customers and 82.3% of SMB customers were willing to invest in this initiative. SMB customers were significantly more likely to invest in Option 4 compared to residential customers.

What we heard from customers

- Customers preferencing higher service level improvements in Option 3 and 4 viewed it as an important step towards adopting renewable energy by efficiently exporting solar power onto the grid.
- Environmentally focused individuals in particular perceived the initiative as a means to promoting further solar adoption through increased export capability, therefore an increased potential for renewable energy usage and generation.
- Customers preferencing Option 2 favoured a more gradual and lower cost approach to expanding capacity, understanding the need for infrastructure upgrades. This improvement level still ensured all customers had some degree of export capability compared to Option 1.
- In qualitative discussions, most customers believed that the greatest benefit from solar was in self-consumption rather than exports. Many felt that exporting solar had become less financially beneficial and desired saving money on electricity through self-consumption of solar. Customers also discussed low feed in tariffs and return on investment.
- This initiative was at times contentious among customers. Generally, there was a positive sentiment towards the benefits of renewable energy. However, many expressed a belief that investment in this initiative was not equitable or fair when compared with most other initiatives, benefitting only customers with solar panels and driving a preference in Option 1.

"I plan to get solar panels in the future so if there is more options for me to get more back and be a better investment for myself, then the additional upgrades will be a benefit to myself and household."
Residential Customer

"Solar generation is increasing faster than network capacity. This power needs to be harnessed and shared. If we're working towards electrification and green energy, then we need to invest."
Residential Customer

"This initiative would benefit from a gradual approach [Option 2] to test case before continuing to higher level investments."
Residential Customer

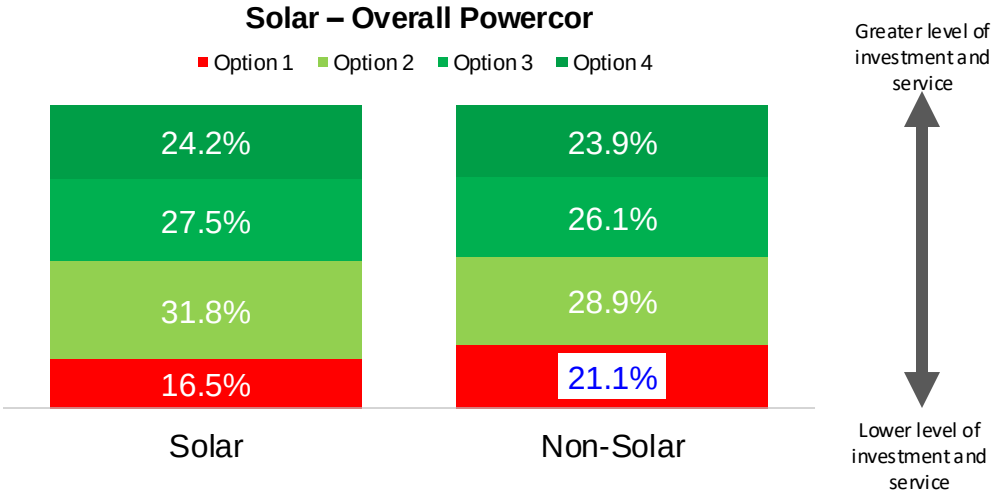
Overall bill impact was not captured as magnitude of impact differed for both residential and SMB customers. Note: Significance testing was conducted between residential and SMB Powercor at the 5% level of significance. Blue indicates that the SMB cut was significantly higher than the residential Powercor result.

Customer's willingness to pay for this initiative differed based on age and solar ownership

Customers with solar panels were significantly more likely to invest in the initiative than those without.

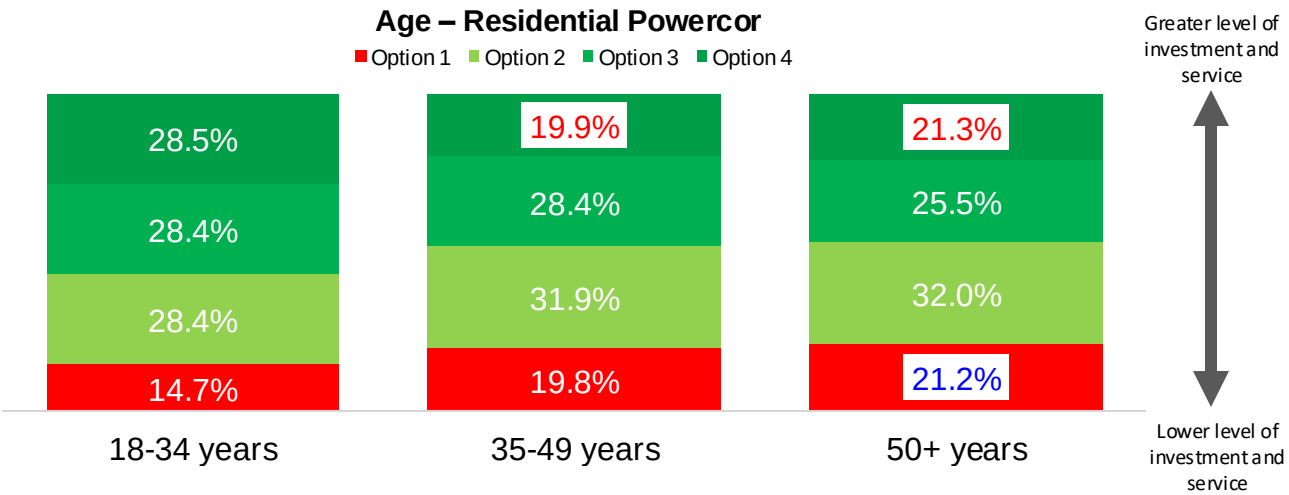
Solar panels owners saw a clear benefit in increasing export capability and potentially had great awareness and understood the environmental benefits of the initiatives. Whereas, customers without solar may have perceived the implementation of the initiative to merely incur additional costs without personal benefit.

"I don't have solar and I'm moving to an apartment where this won't impact me."
Residential Customer



Residential customers aged 50 and over were significantly more likely to not invest in the initiative compared to customers aged 18-49.

Younger customers tended to value investing in initiatives that focused on future-proofing the energy industry to mitigate negative environmental impacts and boost renewable energy usage.



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
Initiative Deep Dive

Network Resilience

Supporting Additional Solar Power

Worst Served Customers

Regional and Rural Supply

Electrification

Community Resilience

Large Scale Renewable Energy

Reliability

Worst Served Customers

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

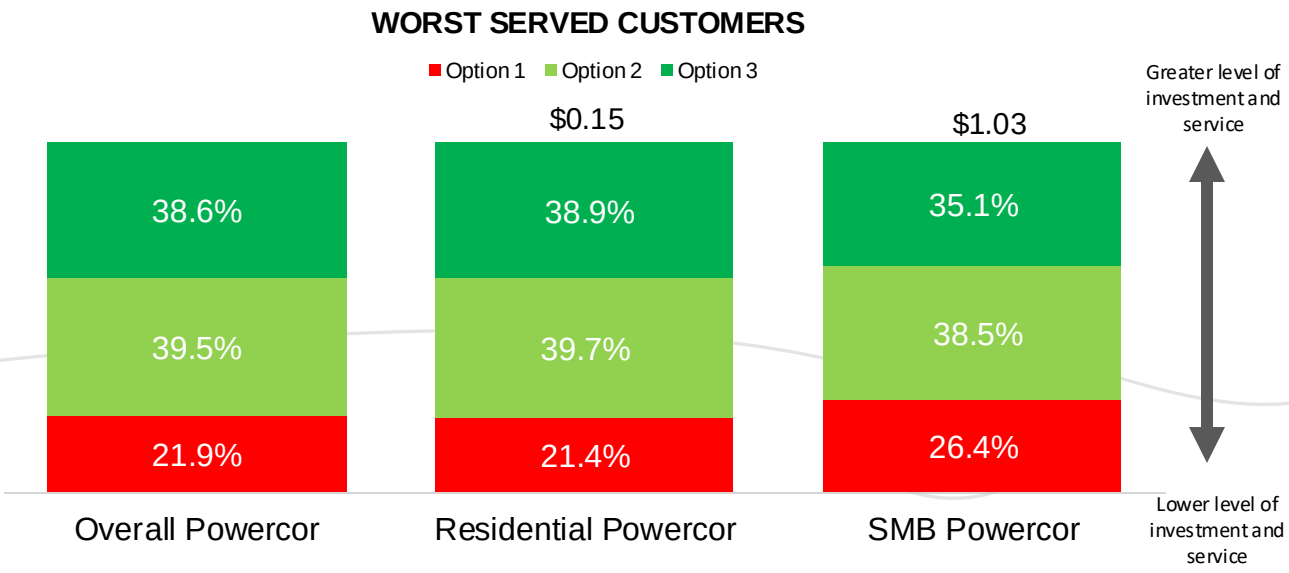
Initiative Description

Reduce the annual minutes off supply for worst served customers through targeted network investments.

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 No change to reliability performance experienced by worst served customers.	$0.00	$0.00
Option 2 Worst served customers experience 250 fewer minutes off supply per annum (improved for 30% of customers).	$0.15	$1.06
Option 3 Worst served customers experience 250 fewer minutes off supply per year (improved for 50% of customers).	$0.24	$1.76

Worst Served Customers

78.1% of customers were willing to invest in improving the reliability performance for worst served customers



77.2% of residential customers and 79.0% of SMB customers were willing to pay in improving performance for Worst Served Customers.

What we heard from customers

- Support in this initiative was driven by a strong desire to provide equal access to reliable energy to all customers including those worst served. Improving the experience of worst-served customers was of high importance to Powercor customers, reflecting their belief in universal access to dependable power and their focus on supporting their surrounding community.
- Willingness to invest in this initiative stemmed from protecting particular customers with a medical reliance on electricity or and those in highly remote areas, where energy performance was deemed crucial for safety and communication.
- The personal experiences of those affected by power outages underscored their willingness to invest, as these individuals understood the impact such outages could have on day-to-day experiences. Whereas customers without these experiences were more likely to favour a medium investment in Option 2.
- Customers felt that enhancing performance for Worst Served Customers would also positively impact other initiatives, such as Network Resilience and Reliability.

> "I have a lot of extended family who reside in rural Victoria. When power goes out, medical and isolation increases, communication may decrease, less time off supply per year would relieve this stress in extended family."
> **Residential Customer**

> "As a rural businessperson, it does impact my business. Personal experience: 14 years ago, we had 6 power outages during one summer which impacted personally and through business through not being able to work from home and no air conditioner."
> **SMB Customer**

Overall bill impact was not captured as magnitude of impact differed for both residential and SMB customers. Significance testing was conducted between SMB Powercor and other cuts at the 5% level of significance. No significant differences were found.

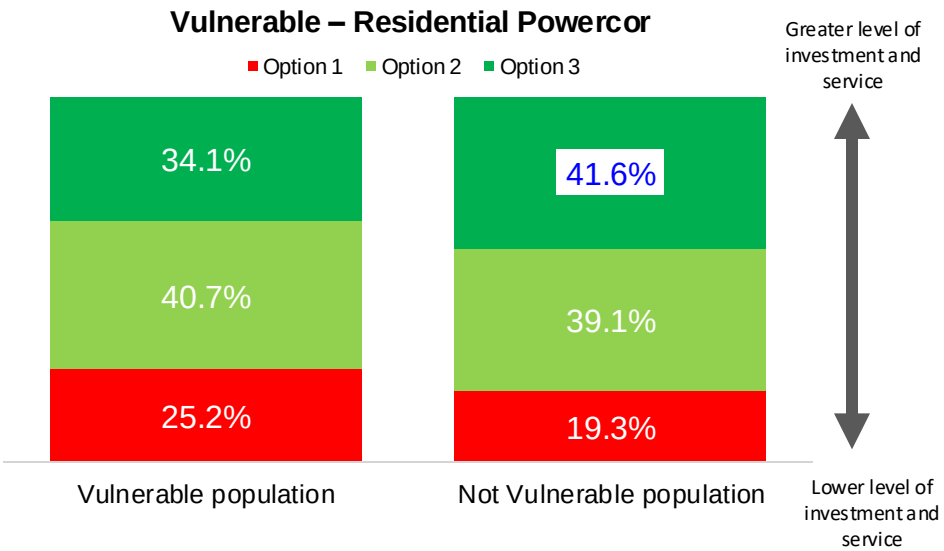
Customers shared the same level of willingness to pay across service level options

Vulnerable customers were significantly less likely to invest in the highest improvement level for worst served customers.

Vulnerable customers tended to be more cost sensitive towards investing in initiatives.

In particular, financially vulnerable customers were likely to not preference investing in initiatives that did not directly benefit them.

"Likely to have minimal affect on the majority [of customers]. 250 minutes or fewer per year is not much per day."
Residential Customer



Among other customer cohorts such as weather impacted customers and customers located in metro or rural areas, there were no significant differences in preferences therefore sharing similar sentiments towards Worst Served Customers.

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.

4.4
Initiative Deep Dive

Network Resilience

Supporting Additional Solar Power

Worst Served Customers

Regional and Rural Supply

Electrification

Community Resilience

Large Scale Renewable Energy

Reliability

Regional and Rural Supply

Customers were presented with the initiative description, service level improvements and associated residential and SMB bill impacts for Regional and Rural Supply.

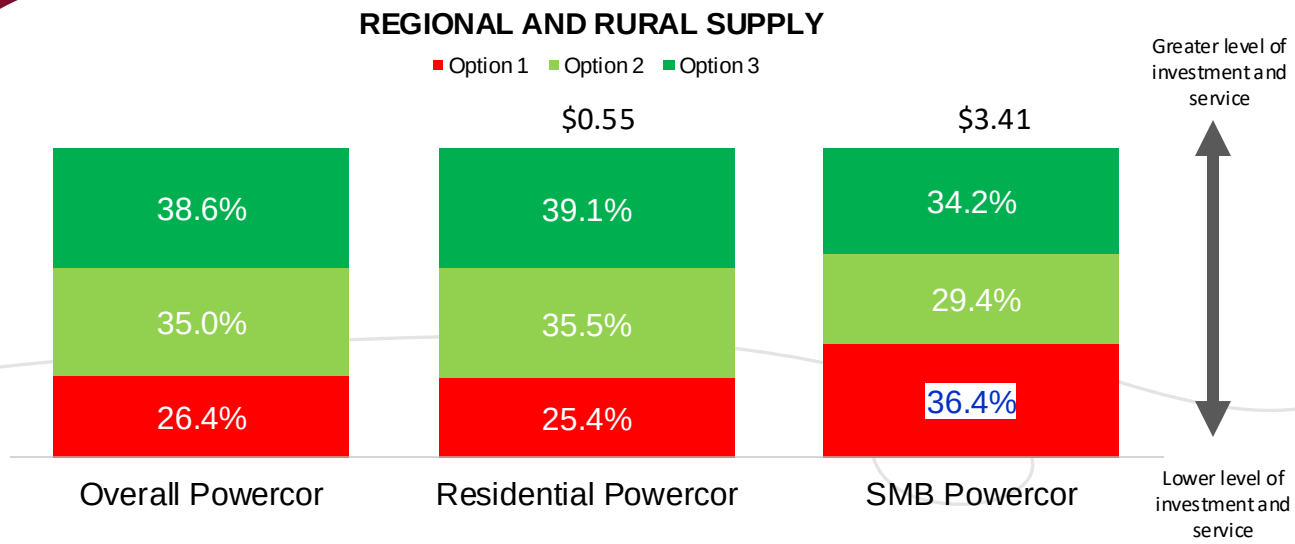
Initiative Description

A package of initiatives to support regional and rural supply upgrades to homes and businesses and enable further growth opportunities in regional communities.

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 Maintain existing investment and therefore the current gap between regional/rural and urban services will increase.	$0.00	$0.00
Option 2 **Medium level** of investment to increase electrification of regional industries (e.g., dairy and/or manufacturing, food processing or tourism).	$0.61	$4.40
Option 3 **High level** of investment to increase electrification of regional industries (e.g., dairy and/or manufacturing, food processing or tourism).	$0.85	$6.17

Regional and Rural Supply

73.6% of customers were willing to invest in enhancing service for regional and rural areas and industries



74.6% of residential customers and 71.3% of SMB customers were willing to pay for Regional and Rural Supply. SMB customers were significantly more likely to preference Option 1 compared to residential customers.

What we heard from customers

- Support in this initiative was driven by willingness to support regional industries in meeting export demands, and necessary investments in regional infrastructure. Customers felt investment in this initiative could bridge the gap between regional and metropolitan energy needs and provide access to equitable service across all regions.
- Customers believed investment would improve the efficiency of operations for businesses, specifically in tourism-dependent regions, increasing profitability and sustainability of processes.
- Customers had mixed views on how implementing this initiative would affect business pricing. Some believed increasing electrification in regional industries would lower operational costs for those industries leading to lower prices for consumers with more competitive pricing, while others feared it could result in higher prices from industries.
- Some customers were wary of overcommitting to implementation with uncertainty in the long-term benefits to avoid redundant implementations.
- Others felt that government or industry customers alone should fund further investment in this initiative.
- Customers expressed a need for clearer communication regarding the specifics of Powercor investment efforts for this initiative to gain broader support and backing form the community.

> "The ability to grow regional communities and decentralise manufacturing is something that needs consideration." **Residential customer**

> "Increasing supply to regional community provides opportunity for increased output of services/goods. Could result in additional jobs, tourism, profitability and expenditure within the state." **Residential customer**

Overall bill impact was not captured as magnitude of impact differed for both residential and SMB customers. Note: Significance testing was conducted between residential and SMB Powercor at the 5% level of significance. Blue indicates that the SMB cut was significantly higher than the residential Powercor result.

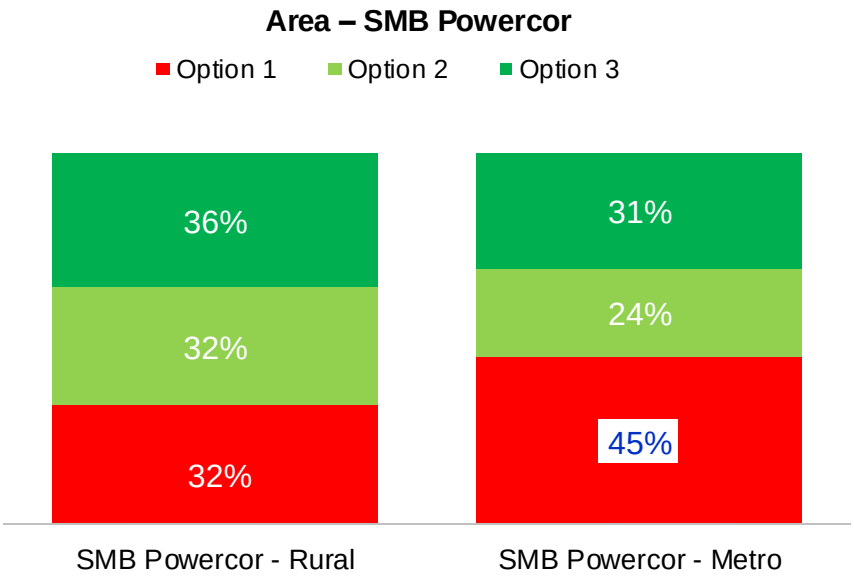
Customer's willingness to pay for this initiative differed based on their location

Rural SMB customers were significantly more likely to invest in Regional and Rural Supply compared to Metro SMB customers.

Rural SMB customers valued the direct benefits of implementing service level improvements. These customers recognised how enhancements would positively impact their operations.

In contrast, Metro SMB customers were less inclined to invest, likely due to their existing infrastructure and services being more robust, with a lack of direct benefits.

"Effects me directly and often regional/rural people are disadvantaged. Farming is essential for our communities so we must support and improve quality of services. Tourism has a high monetary value to our economy."
SMB customer



Among other customer cohorts such as vulnerable customers, and residential customers located in metro or rural areas there were no significant differences in preferences therefore sharing similar sentiments towards investing in Regional and Rural Supply.

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.

4.5
Initiative Deep Dive

Network Resilience

Supporting Additional Solar Power

Worst Served Customers

Regional and Rural Supply

Electrification

Community Resilience

Large Scale Renewable Energy

Reliability

Electrification

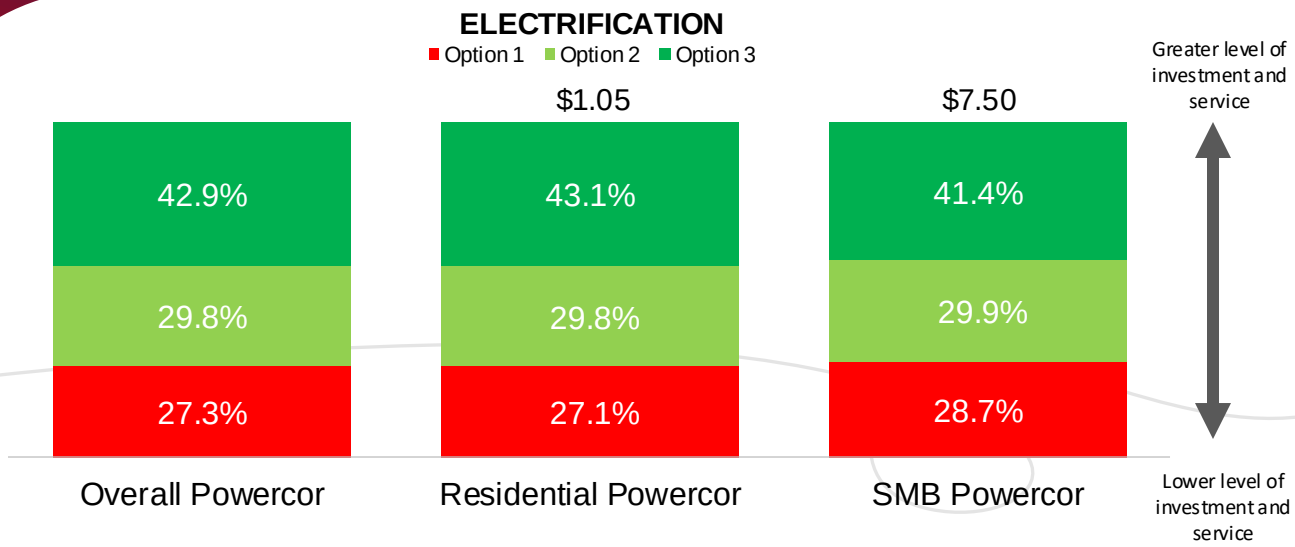
Customers were presented with the initiative description, service level improvements and associated residential and SMB bill impacts for Electrification.

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.	$0.49	$3.52
Option 2 Areas with high levels of electric vehicle activity have more frequent outages. This option will increase investments to **proactively** prevent problems, in addition to all outages being addressed **reactively**.	$0.97	$7.05
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.	$1.46	$10.57

72.7% of customers were willing to proactively address networks problems from expected increases in EV uptake



72.8% of residential customers and 68.3% of SMB customers were willing to invest above the minimum in Electrification of transport.

What we heard from customers

- The Electrification initiative was contentious among customers. In general, customers had strong negative attitudes towards EV ownership. They believed EV's benefitted a limited, often affluent, segment of the population and felt they were being asked to subsidise EV owners, which led to concerns about perceived inequity of the initiative.
- Majority of customers did not own EV's, however some were considering future ownership.
- This skewed their willingness to support the initiative, often looking past the specific benefits of service level improvements providing further network capability. Skepticism about the high forecasted uptake of EVs in Victoria also affected support for higher investment options.
- Customers believed the government should play a larger role in promoting EV adoption through further incentives and infrastructure support.
- Customers favoring Option 3 supported proactively future-proofing the energy network to avoid power disruptions from increased EV charging demand and saw the initiative playing a role in reducing emissions and encouraging EV uptake over nonelectric vehicles.
- Some preferred a moderate investment in Option 2 to avoid proactive implementation of the initiative before EV demand was fully materialised, with suggested reassessment as EV adoption grows in future regulatory periods.

"Environmental concerns moving forward with EV replacing petrol/diesel. To allow for EV growth we need to allow to future proof our electricity supply. Need to ensure a green future for future generations."
SMB customer

"Some investment is required to avoid power outages, especially in high density areas."
Residential customer

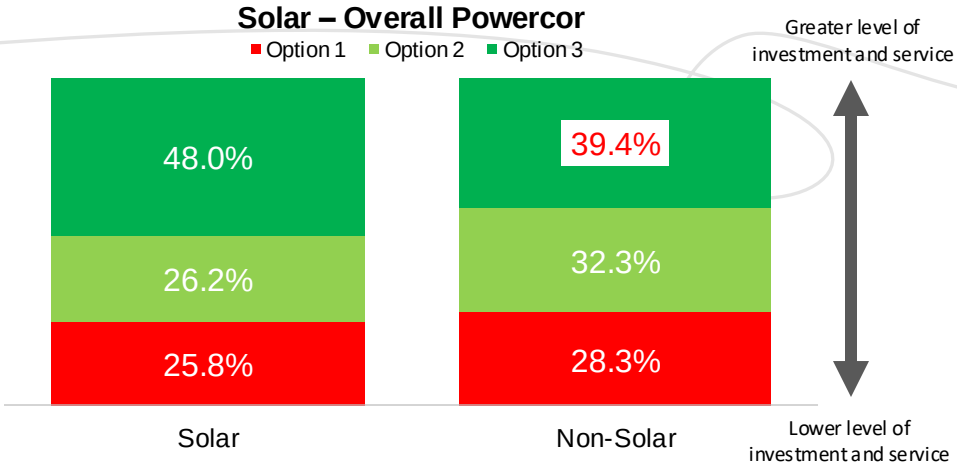
"I feel like EV's are a luxury item only affordable to the wealthy … and I feel no obligation to subsidise their expenditure."
Residential customer

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

Customer's willingness to pay for this initiative differed based on home and solar ownership

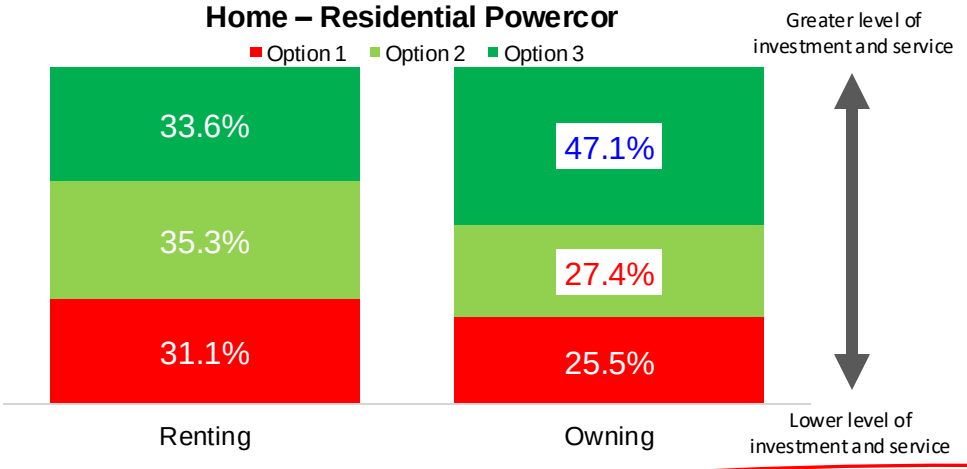
Customers who owned solar panels were significantly more likely to invest in Option 3 compared to non-owners

Individuals who owned solar panels were willing to invest in renewable solar technology, therefore likely being more pre-disposed to supporting environmental initiatives and more likely to recognise the value in future proofing the network for increased EV charging demand compared to non solar owners.



Customers who were renting were significantly less likely to invest in Option 3 compared to customers who owned their home

Individuals who were renting their home typically had less control over their residential charging infrastructure and less locational stability, therefore were less likely to invest in proactive implementations to future proof the network.



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.

4.6
Initiative Deep Dive

Network Resilience

Supporting Additional Solar Power

Worst Served Customers

Regional and Rural Supply

Electrification

Community Resilience

Large Scale Renewable Energy

Reliability

Community Resilience

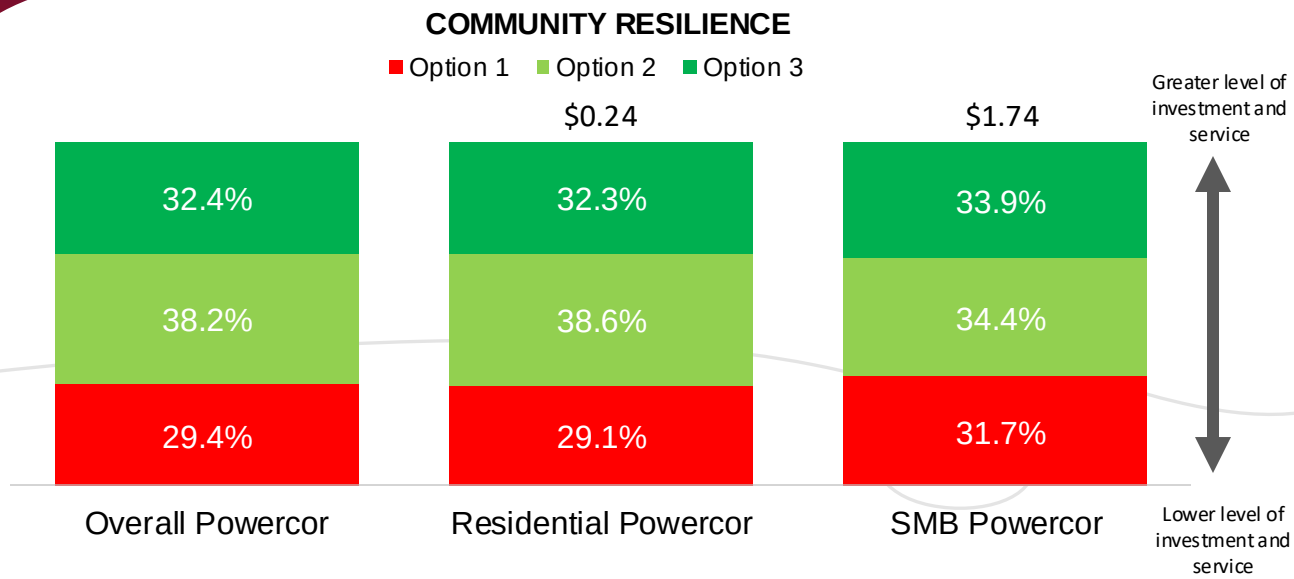
Customers were presented with the initiative description, service level improvements and associated residential and SMB bill impacts for Community Resilience.

Initiative Description

Provision of community support to prepare and on the ground support following an extreme weather event.

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 Maintain current reactive approach to major event management.	$0.00	$0.00
Option 2 **Moderate increase** to the number of community liaison officers, enhancing community support for a small number of high risk communities after major weather events through additional **mobile emergency response vehicles** and **community resilience plans.**	$0.26	$1.90
Option 3 **Larger increase** in community liaison officers supporting higher risk communities following major weather events with **mobile emergency response vehicles** and **community resilience plans.**	$0.44	$3.20

70.6% of customers were willing to invest in increasing community resilience services



70.9% of residential customers and 65.4% of SMB customers were willing to invest in Community Resilience.

What we heard from customers

- Customers acknowledged this as an important initiative to ease pressure and provide beneficial support to communities during extreme weather events, however, most prioritised other initiatives higher.
- Some customers perceived Mobile Emergency Response Vehicles (MERVs) and Community Liaison Officers to be beneficial for information dissemination, device charge, and general support, advocating for proactive community engagement and event planning to enhance overall resilience.
- Conversely, some customers were sceptical of the benefits, noting a lack of belief in the extent of the positive impact it could have.
- Additionally, many customers believed that energy distributors were not obligated to play a major role in community support compared to other organisations such as the SES which consumers perceived to be more appropriately resourced. They generally felt Powercor should direct their efforts towards their core responsibilities such as improving network resilience and reliability, and felt that government mandates would ensure minimum requirements were met.

> "People remain calmer when there is someone else to answer questions and when there is more easily accessible information and resources. People thrive on reassurance and explanations and seem to better understand what has happened."
> **Residential customer**

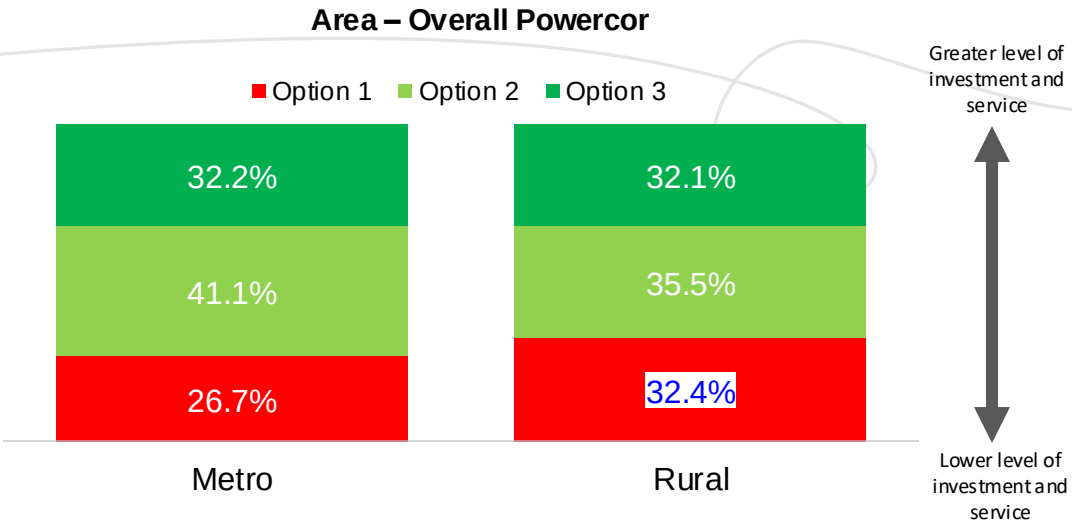
> "This is a great and important initiative but am surprised that this is within the scope of Powercor. Seems to me like this should be managed by government or community agency."
> **Residential customer**

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

Customer's willingness to pay for this initiative differed based on their location and exposure to extreme weather

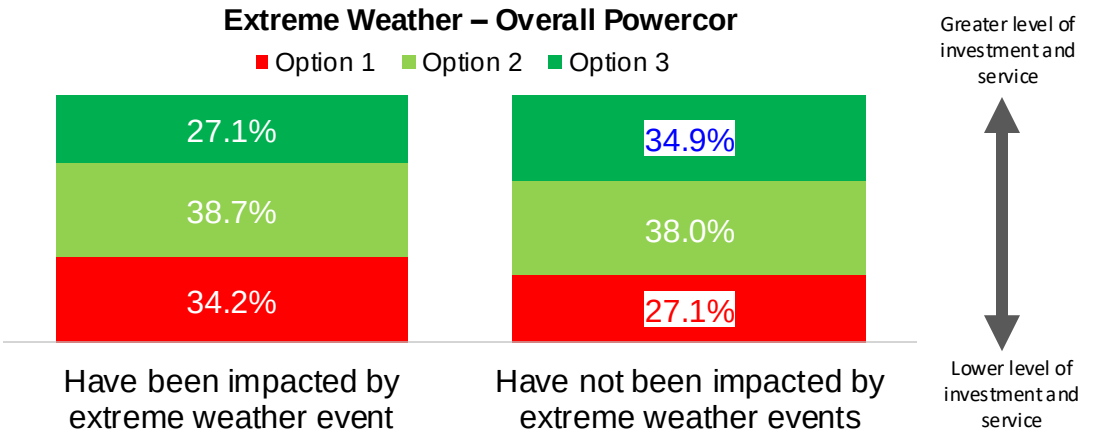
Customers living in regional/rural areas were significantly more likely to not invest in community resilience

From qualitative engagements, it emerged that some rural customers felt their community and existing organisations already possessed strong capabilities to manage and recover from extreme weather events, leading them to perceive energy distributors as having a limited role in providing further support.



Customers who had been impacted by an extreme weather event were significantly less likely to invest in community resilience

Customers impacted by extreme weather had a clearer understanding of their support needs and priorities during, perceiving that other organisations were better placed to support them. These customers also noted that not all extreme weather events required MERVs or Community Liaison Officers.



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.

4.7
Initiative Deep Dive

Network Resilience

Supporting Additional Solar Power

Worst Served Customers

Regional and Rural Supply

Electrification

Community Resilience

Large Scale Renewable Energy

Reliability

Large Scale Renewable Energy

Customers were presented with the initiative description, service level improvements and associated residential and SMB bill impacts for Large Scale Renewable Energy.

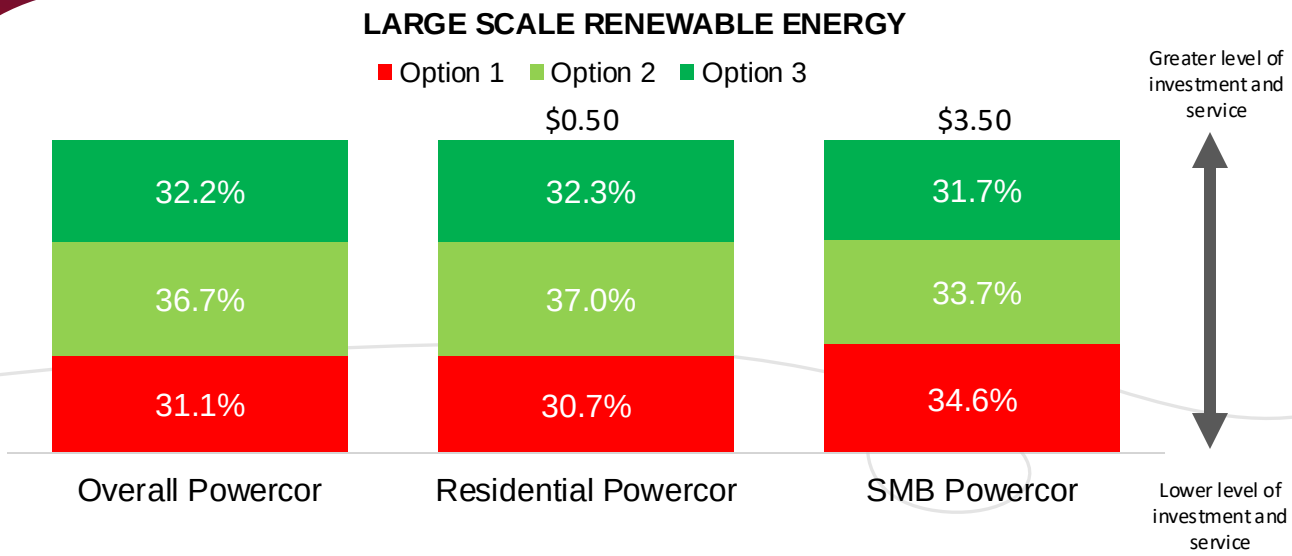
Initiative Description

Network support to connect additional large-scale renewable generation capacity, lowering emissions for Victorian customers and powering homes with renewable energy.

Service Levels	Residential bill impact (average $ annual)	Business bill impact (average $ annual)
Option 1 Maintain existing capacity to support connection and export of generation to the network.	$0.00	$0.00
Option 2 Invest to enable additional generation connection equivalent to powering 195,000 residential homes.	$0.29	$2.11
Option 3 Invest to enable additional generation connection equivalent to powering 380,000 residential homes.	$1.22	$8.81

Large Scale Renewable Energy

68.9% of customers were willing to invest in increasing community resilience services



69.3% of residential customers and 63.6% of SMB customers were willing to invest in Large Scale Renewable Energy of transport. There were no significant differences in option preferences between customer cohorts such as location and vulnerable customers, suggesting that willingness to pay sentiments were equal across Powercor customers.

What we heard from customers

- Customers recognised broad benefits of investing in large-scale renewables to progress the energy transition and aid in reaching renewable targets. They highlighted potential economic benefits including job creation and stimulating the economy.
- Customers that preferenced a high investment in Option 3 believed renewable energy was the future and foresaw long-term societal and environmental benefits of making further investments.
- Customers that preferenced a medium investment in Option 2 viewed the service level improvement as favourable for the upcoming regulatory period to minimise potential losses, with the aim to expand investment in the next regulatory period based on effectiveness, to provide further flexibility for future advancements in renewable energy.
- Some customers advocated for energy generators to bear more of the infrastructure costs to reduce the financial burden for customers directly.
- There was an emphasis on ensuring Powercor consulted with the community prior to any investment in large-scale renewable energy projects to address concerns, stay transparent and obtain community buy-in. Customers wanted clearer, integrated plans to ensure coordinated investments in renewable energy, avoiding perceptions of ad hoc decision-making.

"Increase capacity of the grid without overinvesting when technologies could develop or change before the investment in infrastructure has been for seen a ROI."
Residential customer

"Needed for the future if coal and petrol stop being mined. Better for the environment, less carbon emissions and a positive future for next generations. New homes will be built over the next 30 years and new immigration so there is a need for more power and renewable will be soon the only option when coal and gas stop being used. It upgrade systems to enable more use of renewable energy."
Residential customer

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

4.8
Initiative Deep Dive

Network Resilience

Supporting Additional Solar Power

Worst Served Customers

Regional and Rural Supply

Electrification

Community Resilience

Large Scale Renewable Energy

Reliability

Reliability

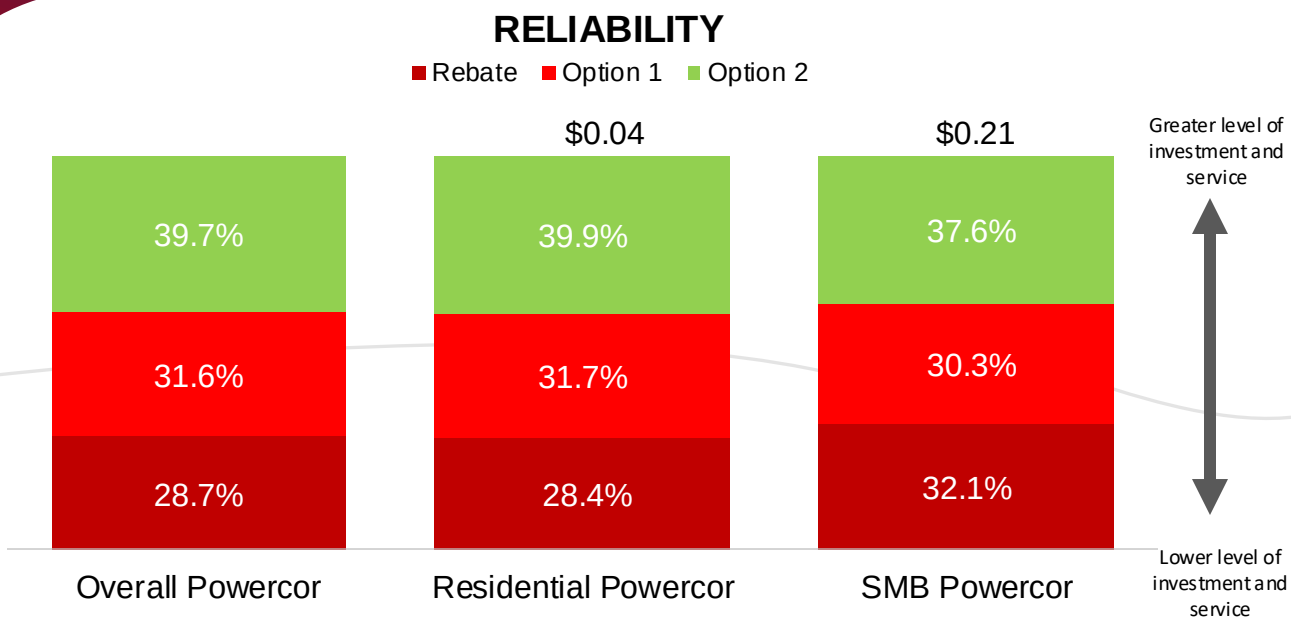
Customers were presented with the initiative description, service level improvements and associated residential and SMB bill impacts for Reliability.

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 1 115 minutes of an unplanned outage per annum for the 'average' customer (less than customers currently receive).	-$0.12	-$0.88
Option 2 102.2 minutes of an unplanned outage per annum for the 'average' customer (this maintains what customers currently receive).	$0.00	$0.00
Option 3 90 minutes of an unplanned outage per annum for the 'average' customer (this is a significant improvement on what customers currently receive).	$0.18	$1.32

Only 39.7% of customers were willing to invest in improving reliability as most were satisfied with their current performance



Customers across SMB and residential shared the same willingness to pay for service levels across Options 1-3. There were no significant differences in option preferences between customer cohorts such as weather affected or vulnerable customers suggesting that willingness to pay sentiments were equal across Powercor customers.

Support for initiative maintenance

- Network reliability was universally regarded by customers as a fundamental expectation, described as a "hygiene factor," essential for all customers and customers perceived outcomes of service level improvements to be beneficial for the overall community rather than specific individuals or cohorts.
- Customers experiencing minimal outages perceived their current reliability as acceptable therefore preferenced service level maintenance in Option 2 over improvement performance. They felt there was very little discernible difference in unplanned outage times between Option 2 and 3 to warrant further investment.
- Customers felt adequately prepared for short power outages through utilising batteries or generator, reducing their urgency or need to invest further in improving in reliability performance.
- Customers who were reliant on continuous power for business or personal life were not willing to reduce their reliability performance and therefore did not preference the negative/discounted investment Option 1.
- Many participants associated reliability with network resilience, highlighting that enhancing resilience would improve overall network reliability as an effect.

"We are fortunate enough to have a very high average reliability already. There are other issues to address prior to this. 102.2 mins across one year seems very low for the average customer. Happy to not pay additional costs and retain this average."
Residential customer

"Being offline for under 2 hours on average per year isn't a huge inconvenience."
Residential customer

Note: Significance testing was conducted between SMB Powercor and other cuts 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

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 Powercor. 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. The Customer Values Analysis included five proposed improvement areas, while this Trade-Off Evaluation study included eight initiative areas.

Topics across studies	Included in Customer Values Analysis	Included in Trade-Off Evaluations study
Regional and rural supply	X	✓
Large scale renewable energy generation	X	✓
Network Resilience	✓	✓
Community Resilience	✓	✓
Worst served customers	✓	✓
Supporting Additional Solar Power	✓	✓
Reliability	X	✓
Electrification	X	✓
Sustainability (reducing carbon emissions in the distribution of your electricity)	✓	X
Ensuring any **locally generated energy** can be used to support, and grow, local community participation	X	X

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

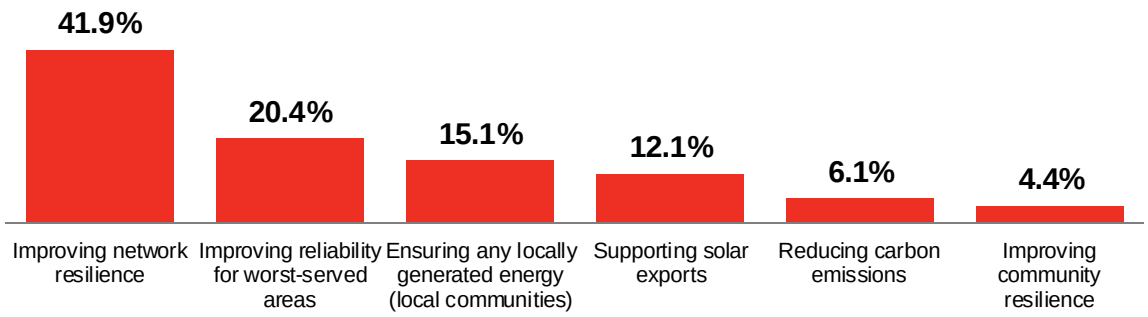
This program builds on existing knowledge and insights cont.

High level comparison of findings across studies

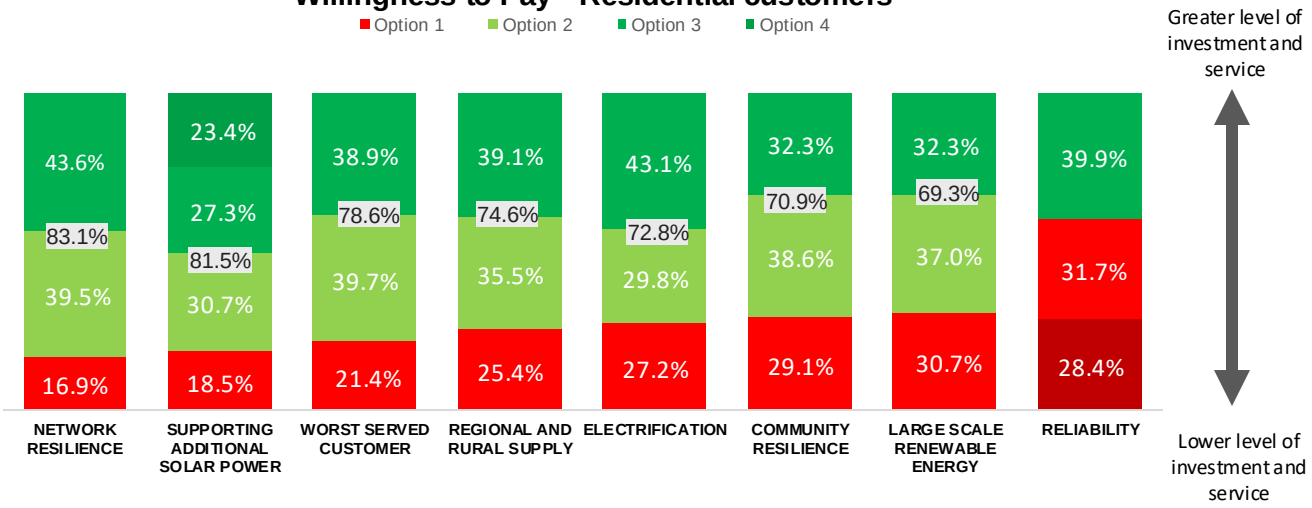
There were consistent preferences across studies from customers regarding the way they would prioritise investment to improve proposed initiatives. Across both studies, **residential customers** prioritised improvements to network resilience the highest.

Supporting the network's capacity for *exporting solar* and *improving reliability for worst-served areas* were both prioritised highly in both studies. Similarly, improving community resilience was prioritised among the lowest across both studies.

Customer Values Analysis (Jan 2024) – Residential customers



Willingness to Pay - Residential customers

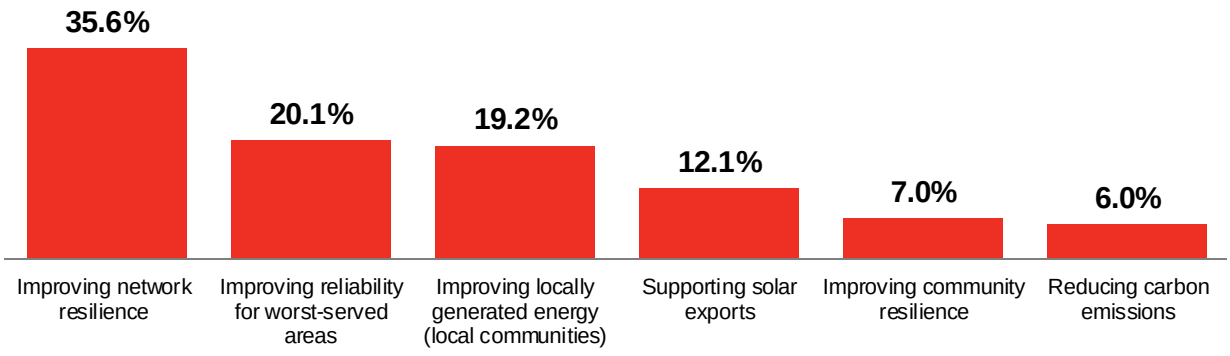


This program builds on existing knowledge and insights cont.

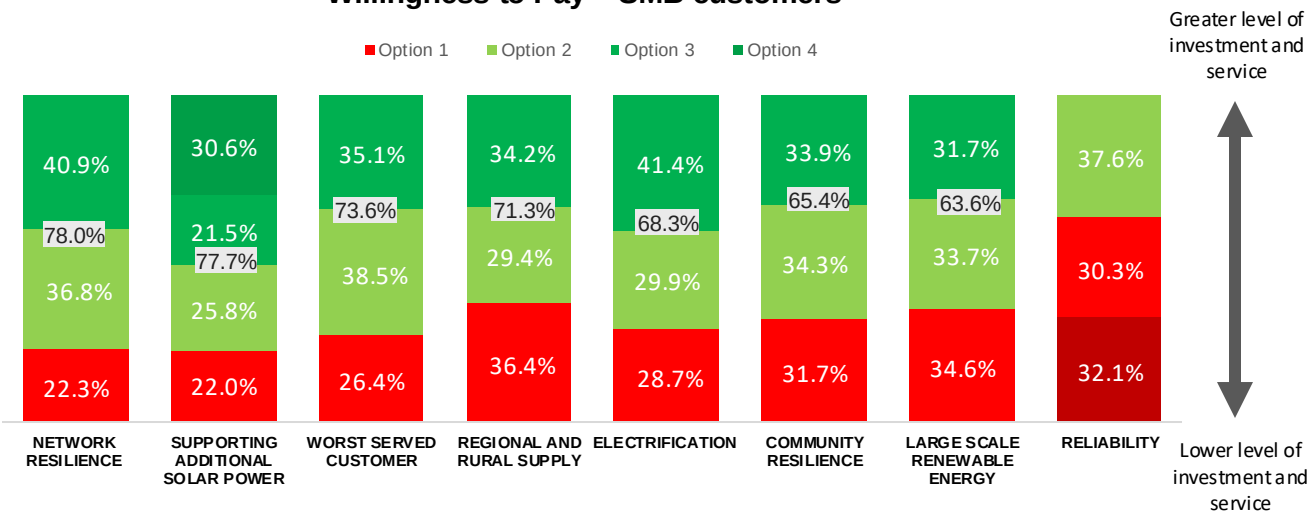
Similar to residential customers, SMB customers ranked network resilience consistently high across both studies. The biggest difference between studies was how customers prioritised supporting exporting solar. This was prioritised higher in the Trade-Off Evaluations study.

Secondary TURF analysis conducted as part of the Customer Values Analysis study showed that *improving reliability for worst-served areas* was often grouped with *improving network resilience* in the top responses for Powercor SMB customers. Suggesting customers may perceive similar outcomes across these initiatives. This grouping remained consistent across both studies.

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 61. Following this, they were asked to prioritise those areas for improvement (results shown on pages 62 and 63).

The Customer Values Analysis indicated that residential customers were willing to pay an additional 5.1% and SMB customers an additional 9.5% 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: Participant from the mass engagement forum.

Image above: Belyan Matthews – Senior Regulatory Analyst.

6.
Appendix
Engagement Context

Total Summary of Initiatives

Initiative and description	Option levels	Residential Bill Impact	SMB Bill Impact
Regional and rural supply A package of initiatives to support regional and rural supply upgrades to homes and businesses and enable further growth opportunities in regional communities.	1. Maintain existing investment and therefore the current gap between regional/rural and urban services will increase	$ 0.00	$ 0.00
	2. Medium level of investment to increase electrification of regional industries (e.g., dairy and/or manufacturing, food processing or tourism)	$ 0.61	$ 4.40
	3. High level of investment to increase electrification of regional industries (e.g., dairy and/or manufacturing, food processing or tourism)	$ 0.85	$ 6.17
Large scale renewable energy generation Network support to connect additional large-scale renewable generation capacity, lowering emissions for Victorian customers and powering homes with renewable energy.	1. Maintain existing capacity to support connection and export of generation to the network	$ 0.00	$ 0.00
	2. Invest to enable additional generation connection equivalent to powering 195,000 residential homes	$ 0.29	$ 2.11
	3. Invest to enable addition generation connection equivalent to powering 380,000 residential homes	$ 1.22	$ 8.81
Network Resilience Targeted network hardening to reduce the likelihood of high-risk townships being off supply for extended periods using micro-grids, tie-lines and deployable generation units.	**1. No investment.** As extreme weather becomes more frequent, services may worsen over time.	$ 0.00	$ 0.00
	2. Moderate investment. Current network resilience is maintained, despite extreme weather becoming more frequent.	$ 0.64	$ 4.63
	3. High investment. Current network resilience improves over time resulting in shorter outage durations or avoidance of outages in high-risk communities, despite extreme weather becoming more frequent.	$ 0.88	$ 6.39
Community Resilience Provision of community support to prepare and on the ground support following an extreme weather event	1. Maintain current **reactive** approach to major event management	$ 0.00	$ 0.00
	2. Moderate increase to the number of community liaison officers, enhancing community support for a small number of high risk communities after major events through **additional mobile emergency response vehicles** and community **resilience plans**	$ 0.26	$ 1.90
	3. Larger increase in community liaison officers supporting higher risk communities after following major events with **mobile emergency response vehicles** and community **resilience plans**	$ 0.44	$ 3.20
Worst served customers Reduce the annual minutes off supply for worst served customers through targeted network investments	1. No change to reliability performance experienced by worst served customers	$ 0.00	$ 0.00
	2. Worst served customers experience 250 fewer minutes off supply per annum (improved for 30% of customers)	$ 0.15	$ 1.06
	3. Worst served customers experience 250 fewer minutes off supply per year (improved for 50% of customers)	$ 0.24	$ 1.76
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, 90% of customers can freely export solar and 10% of customers cannot export at all	$ 0.00	$ 0.00
	2. All customers can always export solar, and 90% of customers can freely export at least 99% of the time	$ 1.74	$ 12.58
	3. All customers can always export solar, and 93% of customers can freely export at least 99% of the time	$ 2.28	$ 16.55
	4. All customers can always export solar, and 95% of customers can freely export at least 99% of the time	$ 3.14	$ 22.71
Reliability Improving the annual minutes of supply experienced by the average customer.	1. 115 minutes of an unplanned outage per annum for the 'average' customer (less than customers currently receive)	-$ 0.12	-$ 0.88
	2. 102.2 minutes of an unplanned outage per annum for the 'average' customer (this maintains what customers currently receive)	$ 0.00	$ 0.00
	3. 90 minutes of an unplanned outage per annum for the 'average' customer (this is a significant improvement on what customers currently receive)	$ 0.18	$ 1.32
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.	$ 0.49	$ 3.52
	2. Areas with high levels of electric vehicle activity have more frequent outages. This option will increase investments to proactively prevent problems, in addition to all outages being addressed reactively.	$ 0.97	$ 7.05
	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.	$ 1.46	$ 10.57

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

Overview of Survey Flow

Survey breakdown

Length of survey: 15-minutes

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

Pre-Education Stage and Comprehension Check	• 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 participants' background including: who they live with, level of education, income, etc.

Engagement Context References

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[3] Cedamia, last updated April 14 2023, *CED regions in Australia*, accessed 19 December 2023, www.cedamia.org/ced-regions-in australia/#:~:text=19%20February%202019%2C%20Maribyrnong%20City,to%20declare%20a%20Climate%20Emergency

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[9] Gordon. J, 24 April 2024, *Why Victoria's ban on networks offering gas appliance rebates is a win for energy consumers, Institute for Energy Economics and Financial Analysis,* accessed 31 May 2024, https://ieefa.org/resources/why-victorias-ban-networks-offering-gas-appliance-rebates-win-energy-consumers

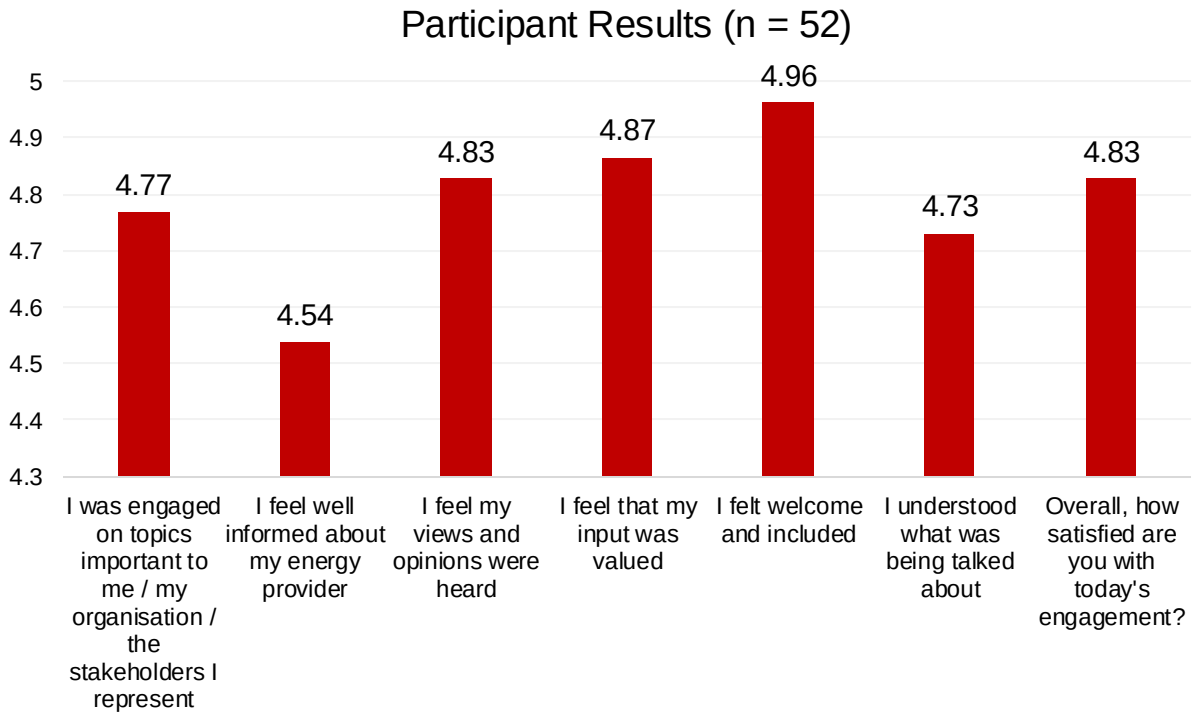
[10] Tippet. H, 12 April 2024, *Victorian households have the highest gas usage in the country — will they turn it around?, ABC News,* accessed 31 May 2024, www.abc.net.au/news/2024-04-12/victoria-gas-household-electricity-swap-power-bills/103695756

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	4.8 / 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

"I found the forum very informative and quite enlightening; very enjoyable. Different views [were] expressed and relevant information [was] received."

"I feel my opinion was valued and heard. I feel as though the scenarios and initiatives that were discussed matched my overall opinions."

"The Powercor reps were incredibly well-informed and answered all questions succinctly. Angelica was our table leader, and she did a wonderful job of leading the discussion."

"Was great to have a rep from the organisation on each table really listening to us."