

# Customer and Stakeholder Engagement for the 24-29 Regulatory Proposal – Phase 3

Research report prepared for  
Essential Energy

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# 1. Executive Summary

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This report summarises the findings from Phase 3 of Essential Energy's customer and stakeholder engagement program for the Regulatory Proposal 2024-2029.

The engagement program as a whole consists of four phases with a range of connected customers, business partners and stakeholders and utilises a variety of methods across the IAP2 engagement spectrum.

The engagement program for Phase 3 consisted of the following components:

- A virtual drop in website containing information about the findings from Phase 2 and the issues to be covered for Phase 3
- Seven face-to-face deliberative forums with residents and small to medium businesses across the Essential Energy network area
- Six in-depth interviews with Aboriginal and Torres Strait Islander customers (ATSI)
- Six in-depth interviews with culturally and linguistically diverse customers who speak a language other than English at home (CALD)
- Six in-depth interviews with large business/commercial and industrial customers (C&Is)
- One group session with renewable developers
- One group session with new technology providers
- One group session with Local Councils
- One group session with consumer and industry advocates
- Stakeholder and Pricing Collaboration Collective meetings

The groups and depths were conducted online using the Zoom videoconferencing platform.

In total 446 individual customers took part in the Phase 3 engagement (residential and small, medium and large business/C&I customers) along with 31 business partners (renewable developers, new technology providers, Councils) and stakeholders (consumer and industry advocates, Stakeholder Collaboration Collective and Pricing Collaboration Collective).

In most of the sessions, the content involved presenting options for the following topics, deliberating on those options and obtaining preferences for inclusion in the regulatory proposal:

- Transition to composite poles
- Undergrounding
- SAPS and microgrids
- Community resilience

- Real-time monitoring
- Dynamic assets
- Lowering Essential Energy's environmental impact
- Customer service

## **1.1 Engagement Findings**

### **1.1.1 The pace of change**

When questioned as to their preferred pace of change for building resilience to strengthen the network from extreme climate events there were wavering opinions as some forum participants expressed an urgency for improved resilience and were happy to support a “ripping the band aid off” approach, whilst others were concerned over the costs involved and the impact to customers’ bills.

This sentiment was mirrored by Local Councils.

### **1.1.2 The transition to composite poles**

Overall there was a great deal of support for Essential Energy transitioning to composite poles in high risk areas.

Of the options presented, most (67%) forum participants preferred Option D before and after deliberations, with one fifth (20%) ultimately preferring Option C, while ten percent chose Option B. Amongst consumer advocates, the majority preferred Option D as it provided greater value for money and larger safety benefits.

There was also strong support for composite poles amongst Local Councils, especially when it was confirmed that they could be recycled. However, the cost of moving to Option D was regarded as too much for some Council participants so there was a mix of preference for Options C and D.

The majority of the C&I customers and Renewable Developers were in favour of at least Option C, with some extending to Option D. Those who favoured Option C thought Option D may not be achievable and they did not like the bigger cost impact. However, they strongly agreed that the move towards composite poles in high-risk areas was important for safety and reliability reasons and there was also an argument that it was better to pay now as the prices for poles may increase in the future.

### **1.1.3 Undergrounding**

The subject of undergrounding overall, gained a great deal of interest and discussion amongst forum participants. Two thirds preferred Option C (converting 40 kilometres of poor condition overhead network to underground in very high-risk areas), while preference for Option A and B was fairly consistent at under 20% preference.

Due to the expense and the number of kilometres of undergrounding involved, Local Councils tended to select Option B or A as they felt most customers would see little impact to their community from the investment. C&I customers were mixed in their views depending on whether they were situated in high-risk areas. Some did not see the need for undergrounding and there was concern that finding faults was harder and possibly more costly in the long run.



Amongst Renewable Developers and Advocates, Option C seemed to be the logical choice on the basis of the level of safety it provided, the aesthetic appeal and improvements to resilience for the network.

#### *1.1.4 SAPS and microgrids*

This was again a popular initiative within the forums, with most participants electing Option C, as they would be investing in a more renewable-resourced future and agreed this should happen sooner rather than later (91%).

Most of the business partners and stakeholders were also in favour of microgrids and SAPS and saw them as having a positive impact on the network in terms of resilience and power quality, so selected Option C. New technology providers had a slight concern that if the work is progressed too quickly then there might not be adequate time to iron out any ‘teething issues’ and ensure the roll out runs smoothly. They didn’t want this to jeopardise the reputation of SAPS in the public eye.

C&I customers were slightly less enthusiastic. They could see no real benefit for themselves despite the decrease in their bill and there was also concern over the possible maintenance costs of the infrastructure for both SAPs and Microgrids.

#### *1.1.5 Community resilience*

Overall community resilience was a high priority for customers, with 90% of forum participants consistently preferring Option C for community resilience.

Option C was also preferred by Advocates and Local Councils, particularly on reflection of the response needed during the recent events.

#### *1.1.6 Real time monitoring*

The majority of forum participants preferred Option C (77%) with many arguing that it would be beneficial to do the work up-front, rather than put it off and pay more for it down the track.

Again, business partners and stakeholders were in line with customers and most selected Option C as their ideal. Some also stressed the importance of being able to adopt any further new technology advancements as they come onto the market.

#### *1.1.7 Dynamic assets*

Participants in the forums tended to indicate that Option C offered better value and they were in favour of creating an enhanced network that would improve the power quality and result in shorter outages for customers (87%).

Advocates, Local Councils, New Technology Providers and Renewable Developers were also keen to see Essential Energy invest to facilitate renewables and connections to the grid, so choose Option C.

#### *1.1.8 Lowering our environmental impact*

Across all the segments, connected customers, business partners and stakeholders, there was unanimous support for Option B, particularly as it is a cost saving as well as being better for the environment.

In that regard, the overwhelming majority of forum participants (93%) selected Option B, both initially and after all topics had been presented.

### *1.1.9 Customer service*

Reactions to the options were mixed, with some wanting to move to an online portal, whilst others were satisfied without a portal and could not see the benefit in investing money in improving the service.

This was reflected in the polling where at some forums there was a split decision on this topic. Overall half the forum participants preferred Option C, and approximately one fifth chose Option B.

Due to current frustrations with service levels amongst Councils, Option D was preferred, whilst Advocates questioned the popularity and use of an online portal by customers and therefore tended to select Option B. C&I customers were satisfied with Option C.

### *1.1.10 Importance Ranking*

More than two thirds (69%) of forum participants indicated that SAPs and microgrids were in their top three priorities, while over half prioritised community resilience (53%) and/or composite poles (52%). Environmental impact (40%) and real time monitoring (36%) were also important investments for many forum participants.

Amongst Local Councils customer service was their top priority, followed by investment in real time monitoring, dynamic assets, SAPs and microgrids and community resilience.

For all the renewable developers, composite poles were placed at the top of the priority list, followed by real time monitoring and dynamic assets. New Technology Providers believed that real time monitoring, microgrids and dynamic assets were most important for Essential Energy to focus on.

Advocates were less definitive in their choice of the top three, listing a number of areas. However, all agreed that transitioning to composite poles was a priority.

## *1.2 Implications*

There is support from customers, business partners and stakeholders for most of the higher pace investment proposals put forward by Essential Energy.

In particular customers believe that SAPS and microgrids, improving community resilience and transitioning to composite poles should be prioritised and implemented earlier than other initiatives.

Specifically, they support Essential Energy strengthening network resilience through:

- Investing in transitioning to composite poles as part of the pole replacement program and undertaking at least 5,000 additional proactive composite pole replacements in high-risk areas, going up to 25,000 replacements where it makes clear sense to do so;
- Investing in up to 400 SAPS and 10 microgrids over the five years; and
- Converting up to 40 kilometres of poor condition overhead network to underground in very high-risk areas.

There is also support for assisting in improving community resilience through investments in 1000 domestic generators, 40 large generators, 20 portable stand-alone power systems, 50 portable solar streetlights, 3 new staff roles to help develop community resilience plans, a portable community hub and depot.

Development of a smarter network is also strongly supported through:

- Investing in being able to see what is happening at a local level on the network (real-time monitoring) through a fully integrated data management system and obtaining data across the broader network
- Investing in 100 dynamic assets to mitigate existing power quality issues and to pre-empt others from occurring and installing batteries and solar panels at 50 key telecommunications and zone substation sites to provide a source of backup power

There is extremely strong support for Essential Energy lowering its environmental impact by investing in solar panels at the top 20 depots based on solar returns and moving about 850 light and heavy combustion engine vehicles to electric vehicles – with requests to go even further in this area.

Customers also want enhanced customer service with the introduction of a new system to record and manage interactions in one place, with many also wanting an online customer portal. However, there is little support for the portal to be extended to Councils, Retailers and more complex business structures.

Fine-tuned proposals based on the above findings will be tested in Phase 4 of the project.

## 2. Background and Objectives

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### 2.1 Background

Essential Energy builds, operates and maintains one of Australia's largest electricity distribution networks, providing electricity to regional, rural and remote NSW, and parts of southern Queensland. It covers 95 percent of NSW that is 737,000 square kilometres with 183,612 km of powerlines.

As a government owned entity the business is regulated by the Australian Energy Regulator (AER), and every five years it must present a Proposal to the AER which outlines its investment plans, the costs to deliver those plans and the proposed prices that customers will pay. The Proposal for 2024-2029 is due to be submitted to the Australian Energy Regulator (AER) for review and approval in January 2023.

Essential Energy is committed to placing customers and stakeholders at the centre of everything it does. Therefore, in order to develop its proposal, the business has adopted a comprehensive engagement program to identify customers' needs and priorities.

Essential Energy's approach to engagement for the previous proposal (2019-24) received considerable praise from the AER and customer representative groups, as well as winning the Energy Networks Australia and Energy Consumer Australia (ECA) 2018 award for consumer engagement. In a constantly evolving environment, there is a desire to build on this and do even better for the next one.

Woolcott Research and Engagement, with the assistance of ERM (previously KJA) were commissioned to develop and conduct the customer and stakeholder engagement program for the 2024-29 proposal.

### 2.2 Engagement Program Objective and Goals

The objective of the engagement program is to ensure the views and expectations of Essential Energy's diverse customer base are accurately and meaningfully reflected in the business's 2024-29 Regulatory Proposal, such that it is capable of acceptance and approval by the AER.

The goals of the engagement program as a whole are:

- To identify and understand all issues that are important to customers.
- To involve customers in decisions that affect them.
- To understand their individual perspectives on matters relating to Essential Energy's business.
- To distill technical concepts from the electricity industry in a way that can be more easily understood by the general public.

Specifically, for the Phase 3 forums, groups and depths, the objectives were:

- To understand what pace of change customers and stakeholders would like to take place between 2024-2029.
- To identify preferences for investment in relation to the topics of:

- transition to composite poles,
  - undergrounding,
  - SAPS and microgrids,
  - community resilience,
  - real-time monitoring,
  - dynamic assets,
  - lowering Essential Energy's environmental impact, and
  - customer service.
- To identify the priority areas that customers and stakeholders think it is most important to act on first.

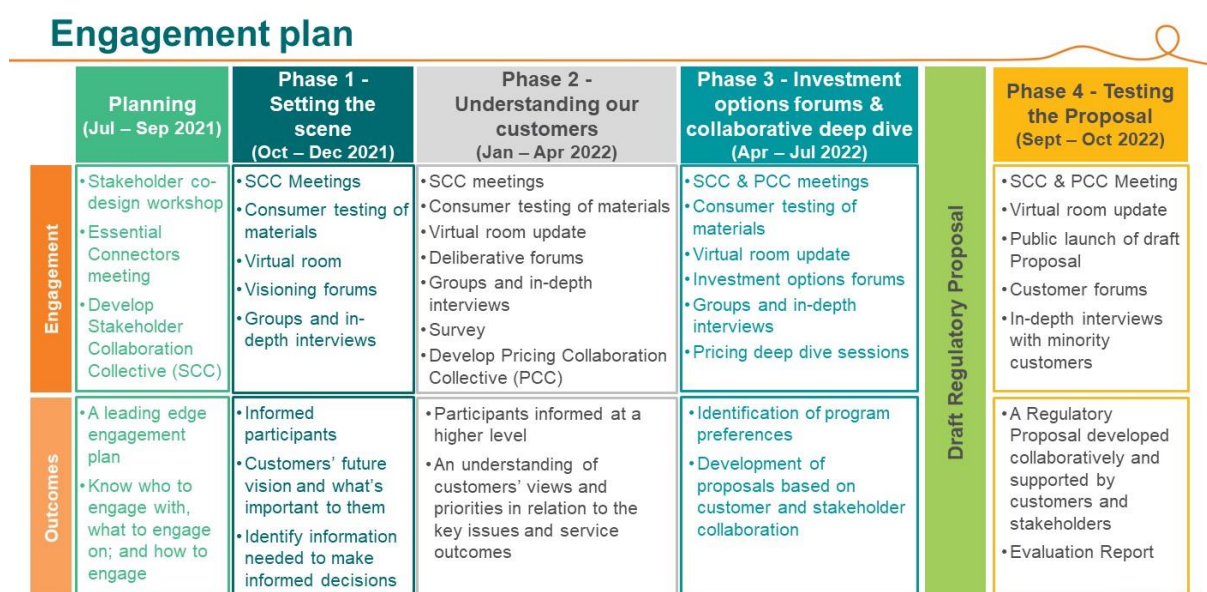
## 3. Engagement Program Design

### 3.1 Overview of the Engagement Program

The program involves four phases of engagement with a range of connected customers, business partners and stakeholders and utilises a variety of methods across the IAP2 engagement spectrum. The work adheres to The Research Society and International Association of Public Participation (IAP2) Core Values and Codes of Ethics.

A summary of the program is outlined in the diagram below.

Figure 1: Engagement Program Outline



### 3.2 Phase 3

The engagement program for Phase 3 consisted of the following components:

#### 3.2.1 Connected customers

- A virtual drop in website containing information about the findings from Phase 2 and the issues to be covered for Phase 3
- Seven face-to-face deliberative forums with residents and small to medium businesses across the Essential Energy network area
- Six in-depth interviews with Aboriginal and Torres Strait Islander customers (ATSI)
- Six in-depth interviews with culturally and linguistically diverse customers who speak a language other than English at home (CALD)
- Six in-depth interviews with large business/commercial and industrial customers (C&Is)

### 3.2.2 Business partners and stakeholders

- One group session with renewable developers
- One group session with new technology providers
- One group session with Local Councils
- One group session with consumer and industry advocates
- Stakeholder and Pricing Collaboration Collective meetings

The approach for each element is outlined below.

## 3.3 Connected Customers

### 3.3.1 Virtual drop in

The virtual drop in site was updated for Phase 3 with a summary of content and findings from Phase 2. All forum participants were strongly encouraged to visit the site prior to attending, to undertake some pre-reading to ensure they were informed on the relevant topics.

The content can be viewed using the Virtual Room link at:

<https://www.essentialenergy.com.au/ext/regulatory-proposal/>

### 3.3.2 Deliberative forums

Seven deliberative forums were conducted with residents and small to medium businesses – known as ‘small customers’ by Essential Energy. Unlike the previous two phases, the forums were conducted face-to-face in the following locations:

Table 1: Locations and number of participants at the deliberative forums

Location	Date	Participants
Taree	Tuesday 17 May	62
Inverell	Wednesday 18 May	49
Ballina	Thursday 19 May	71
Wagga Wagga	Tuesday 24 May	76
Bega	Wednesday 25 May	52
Broken Hill	Wednesday 1 June	42
Dubbo	Tuesday 7 June	76
TOTAL		428

The forums consisted of a mix of presentations from Essential Energy executives, table discussions and activities and polling sessions. There were 7-10 participants on each table. They ran from 6:00 - 9.30pm and dinner and dessert were included.

For each forum Woolcott Research & Engagement provided a lead facilitator, Ian Woolcott (who chaired the sessions and managed the flow and timing), six to nine table facilitators and one to two support staff members. Woolcott facilitators ensured that all issues were covered in the discussions and that everyone's views were heard and captured. They ensured that no one participant dominated the discussion on their table and that everyone had a chance to have their say and provide feedback. They also probed into issues that arose within the discussion to ensure that sufficient detail was gained.

Polling was also included whereby participants were able to answer questions shown on screen, with results given in real time. A copy of the agenda used by the facilitators is in Appendix A.

Essential Energy executives attended to present information, observe the discussions throughout the sessions and to answer any questions that arose. John Cleland (CEO), Chantelle Bramley (General Manager Strategy, Regulation and Corporate Affairs), Mike Bowan (General Counsel and Company Secretary), Luke Jenner (Executive Manager Engineering), Justin Hillier (Chief Financial Officer) and Amalie Smith (Chief Human Resources Officer) presented at the forums. Overall, there were 88 observers from Essential Energy and other stakeholder organisations across the seven forums, with 33 different Essential Energy staff members observing at least one, showing the high level of staff interest and engagement.

All the participants who took part in the Phase 2 forums were invited to attend Phase 3. Most attended however there were some who declined the invitation, due to COVID concerns or inability to attend on the date, and they were replaced with fresh participants. Participants were recruited to reflect the demographics of the Essential Energy network area and each table included a mix of demographics in terms of age, gender and solar/non-solar user status. The recruitment screener and information can be found at Appendix B. Participants were offered \$150 to take part, in appreciation for their time and to cover any expenses incurred.

The table below shows the demographics of those who attended the forums.

Table 2: Participant profile for deliberative forums

	Total (%)	North Coast (n=133) (%)	Northern (n=167) (%)	Southern (n=128) (%)
<b>AGE</b>				
18-44	36	39	34	34
45-64	43	50	37	42
65+	21	11	29	23
<b>GENDER</b>				
Male	47	41	48	54
Female	53	59	52	46



LANGUAGE OTHER THAN ENGLISH				
Yes	3	1	2	6
No	97	99	98	94
ABORIGINAL OR TORRES STRAIT ISLANDER				
Yes	5	4	8	2
No	95	96	92	98
SMB				
Yes	13	12	13	13
No	87	88	87	87
RURAL				
Yes	18	21	15	20
No	82	79	85	80
SOLAR				
Yes	45	48	46	39
No	55	52	54	61
FINANCIALLY VULNERABLE				
Yes	20	20	26	13
No	80	80	74	88

*What age bracket do you fall into? / Do you speak a language other than English at home or with family members? / Are you of Aboriginal or Torres Strait Islander origin? / Are you the owner or a decision maker for a small or medium business (less than 200 employees)?*

*Base: All respondents (n=428); North Coast (n=133), Northern (n=167), Southern (n=128)*

Data was weighted during analysis to be representative of the Essential Energy network area on region, age, gender and solar penetration.

### 3.3.3 Groups and depths

Similar to Phases 1 and 2, the forums were supplemented with groups and depths with harder to reach audiences, such those from an Aboriginal and Torres Strait Islander background or different language background and large C&I customers. Where possible the same participants took part as in Phases 1 and 2.

The forum materials and questions were adapted for an in-depth interview format. This can be found at Appendix C.

Table 3: Groups and depths with connected customers

	Participants
ATSI customers	6
CALD customers	6
C&I customers	6
<b>TOTAL</b>	<b>18</b>

### 3.4 Business Partners and Stakeholders

Group interviews were conducted with renewable developers, councils, solar installers and new technology providers and consumer and industry advocates. Appreciating the time and effort that this engagement requires of stakeholders, in-depths were purposely not conducted with retailers and aggregators and critical infrastructure respondents for this phase, as their views on the importance of the topics were established in Phase 2. Again, the same participants were invited as for Phases 1 and 2. Recruitment was conducted internally by Woolcott Research and Engagement.

Justine Langdon and Natalie Lindsay from Essential Energy attended the group sessions and presented information on the issues. An example of the discussion guide can be found at Appendix D.

Table 4: Groups and depths with business partners and stakeholders

	Participants
Renewable developers	5
Local Councils	4
New tech providers	6
SCC	12
Consumer and industry advocates	4
<b>TOTAL</b>	<b>31</b>

#### 3.4.1 Renewable Developers

Participants attended from the following organisations: ESCO PACIFIC HOLDINGS PTY LTD, ITP Renewables, Elliot Green Power (Nevetire), Metka EGN, Photon Energy and Terrain Solar Pty Ltd.

#### 3.4.2 Councils

Representatives took part from the following Councils: Hay Shire Council, Tamworth Regional Council, and Port Macquarie-Hastings Council.

### *3.4.3 New Technology Providers*

The following solar installers and new technology providers took part in the group session: Tesla, Reposit Power, AG-MURF AUSTRALIA PTY LTD, Stuart Watson & Associates Energy Consultants, Self Sufficiency Supplies and SolarWise.

### *3.4.4 Advocates*

Representatives took part from Community of the Ageing, Salvation Army, and Path Finders (Aboriginal and Torres Strait Islander Representative group).

### *3.4.5 Stakeholder Collaboration Collective*

This advisory group was formed during the planning phase to engage and collaborate with throughout the project. The group meets at least five times each phase to provide input and feedback on the draft engagement information, key questions and materials. They will also provide their own feedback on the topics throughout the engagement program. The sessions are conducted via Zoom.

The members of the group are:

- Energy Users Association of Australia, Andrew Richards
- Council of Small Business of Australia, Dominic Schipano
- St Vincent de Paul, Gavin Dufty
- Public Interest Advocacy Centre, Craig Memery or Thea Bray
- Cotton Australia, Jennifer Brown
- Australian Energy Council, Ben Barnes
- Total Environment Centre, Mark Byrne
- Renew, Dean Lombard
- Australian Energy Regulator, Clare McIntosh or Adam Young

The Collective were asked to provide their preferences for the options for each topic in this Phase via email, or by taking part in the advocates group.

## *3.5 Interpreting the Findings in this Report*

### *3.5.1 Percentages and averages*

Percentages are rounded to whole numbers and as a result, for some closed-ended questions (where a total of 100 per cent may be expected), total percentages may not add to exactly 100 per cent due to rounding. In addition, the open-ended (or free response) questions permit the respondent to provide as much detail as they like in explaining their response. As a result, a single response often contains more than one idea, theme or concept, and where this occurs the single response has been coded into multiple categories (or response codes) to separate these out and represent each part of their response. Because results are reported on a

respondent basis, it follows that the sum of the percentages for each open-ended question generally exceeds 100 per cent.

Mean scores have also been calculated for scale questions and have been rounded to one decimal place.

### *3.5.2 Test of statistical significance*

Tests for statistical significance have been conducted to indicate differences in results that are considered significant at the 95% confidence interval. This means that where there is a statistically significant result, we can be confident that this has not occurred by chance.

Where results have been found to be significantly higher, they are indicated in **green**, and where they have been found to be significantly lower, they have been indicated in **red**.

## 4. The Pace of Change

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### 4.1 Connected Customers

#### 4.1.1 Main forums

Without individual quantitative polling for the preferred pace of change in relation to building resilience to extreme weather events, it was difficult to determine from conversations whether fast or slow was the preferred option. However, this question was designed to get the audience thinking about the trade-offs in making investment decisions, rather than to establish a particular preference, so this was not unexpected.

There were wavering opinions as some participants expressed an urgency for improved resilience and were happy to support a “ripping the band aid off” approach.

*“I’m a rip the band aid off.” – Bega SMB participant*

*“Given what we’ve seen from the roads in the floods, if we pay a lot more now, we’d be protecting the future. If electricity is the same, then if there’s anything we can do to avoid the pain of living in what feels like a third world.” – Ballina participant*

While others were reluctant and preferred a more measured timeline of investment as they were cautious about investing money in quickly outmoded technology.

*“If we are talking about extreme weather events, faster and let’s do it now. But what concerns me is that everything is changing. If we go faster is there an end or should we go slower and plan over time and take a more measured approach.” – Broken Hill participant*

*“Slower because at the end of the day, throwing a lot of money that can’t be implemented in a short period anyway – allows you to take advantage of new products and technology.” – Wagga Wagga participant*

Mention was made that this modelling relies on the risk that disasters will continue to occur at the same rate when this is an unknown variable.

*“It’s a calculated risk – you’re hoping the current rate of disaster will stay what it is. If there are more natural disasters in the future, then we need to put them in faster.” – Ballina participant*

*“There is a lot of risk assessment that needs to happen. It is hard to say whether they should do it earlier in high-risk areas.” – SMB Wagga Wagga participant*

*“If we will get less disasters then it could go slowly. If they [EE] go faster there could be hiccups – because they’ve gone too fast.” – Broken Hill participant*

A deterrent for participants was the current economic climate and hike in the cost of living with a weighing up of exorbitant bills from other sources.

*“In the current climate it is hard as lots of costs are going up.” – Wagga Wagga participant*

*“It depends on the green power with turbines and how that is going to affect the network.” – Wagga Wagga participant*

Concern was also expressed for replacing assets before the end of their lifespan, and how this cost would impact customers. The speed and success of incorporating renewables into the current network was also a moot point, with the 2030 zero emissions target emphasised.

*“I would have thought that they would target oldest first then move to newer infrastructure. We don’t want to be mindlessly replacing infrastructure that doesn’t require it.” – Wagga Wagga participant*

*“We have to get to zero emissions by 2030 so we have to get on track. I think it’s a needs basis with flood and bushfire areas upgraded and focused on. Inverell is not as population heavy so it wouldn’t make sense to invest in those technologies, and we’re not that prepared yet.” – Inverell participant*

Regardless, communication was stated as integral to all transitions whether they are fast or slow, to educate customers on where their money is going and why.

*“But also, it has to be well communicated and transparent – tell us why you’re doing what you’re doing.” – Bega SMB participant*

*“If you are going to do something quickly and it costs more, there needs to be more communication around that – a big decision for 5mil. Good communication as to what is happening and why and what you are going to pay and what for.” – Taree participant*

Rather than relying on fast or slow as metrics for implementation, one participant stated that the regulatory period framework of five years could be the ideal determinant of the pace of change.

*“The regulatory period provides a framework – a background on 5-year planning, so you are constrained by this, and [it’s] implemented over 5 years. So, I’d be in favour of doing it in this constrained period.” – Wagga Wagga participant*

#### 4.1.2 CALD and ATSI priorities

Priorities for the pace of change for CALD and ATSI participants mirrored those of the forum findings. There were mixed reactions as to whether a slow or fast transition was the best way forward and no clear picture that any one community had a unified preference.

*“Investment earlier will improve things in the future.” – ATSI participant*

*“I like to be proactive even if the cost is more.” – CALD participant*

*“I like a slower transition.” – ATSI participant*

*“If it will help bring savings for the future economy then I’m all in.” – ATSI participant*

#### 4.1.3 C&I customers

This topic was not covered with C&I customers.

## 4.2 Business Partners and Stakeholders

### 4.2.1 Local Councils

Across the LGAs, there were a number of major concerns raised as to the increasing cost of living for residents and how that was impacting them financially. Whilst many agreed that getting improvement done fast was the ideal, they were not supportive of a fast pace of change if it meant large increases for customers.

*“There will be added pressure for us here in the far West if more costs rise for our residents” - Local Council.*

*“We are acting very conservatively at the moment, it is time to batten down the hatches and limit our exposure.” – Local Council*

*“Everyone is under pressure and it is only going to get worse.” - Local Council*

Renewables was seen to be an area which was growing and a priority for both Essential Energy and Councils, however there were concerns that this was a costly area and some questioned the impact of this on the future of electricity prices.

*“We are in the centre of the renewable zone, I have concerns over the cost of the renewables. It is going to cost us more and I am worried. We have the record for the number of people not paying their rates here. The outlook in recession times is bleak.” – Local Council*

However, some felt that change needed to start happening now, but perhaps in high priority areas where the investment was needed urgently.

*“I think the sooner they start the better, but with the targeted areas where more improvements need to be made.” – Local Council*

### 4.2.2 Renewable Developers

This topic was not covered with Renewable Developers.

### 4.2.3 New Technology Providers/Solar Installers

This topic was not covered with New Technology Providers.

### 4.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective

This topic was not covered with Advocates and Stakeholders.

## 5. Transition to Composite Poles













### 5.1 Connected Customers

#### 5.1.1 Main forums

Essential Energy presented key information about composite poles, outlining positive and negative aspects such as being light weight, fireproof, immune to rot and termites, having a longer life, less expensive to maintain and reusable, as well as negatives such as being more expensive to buy and there being limited manufacturers of composite poles in Australia.

Four options were outlined for Essential Energy to transition to composite poles as part of its standard replacement program and in high-risk areas (see Figure 2 below). At the table level, participants then expressed their thoughts and opinions about composite poles taking into consideration the advantages and disadvantages and the cost. They were then asked which option they preferred and reasons why, and participants completed their activity sheets indicating which option they preferred.

Figure 2: Transition to composite poles options

Transition to composite poles				
	Option A – No Change	Option B – Slow transition	Option C – Proactive	Option D – More proactive
Use of composite poles within replacement program	– Limited	– Broader	– Broader	– Broader
Proactive installations in high-risk areas	– None	– 2,500 over 5 years	– 5,000 over 5 years	– 25,000 over 5 years
	 \$0.18  \$0.80  annual bill increase	 \$0.73  \$3.19  annual bill increase	 \$1.27  \$5.54  annual bill increase	 \$2.32  \$10.11  annual bill increase
Composite poles installed in all high-risk areas by	– 2084	– 2074	– 2066	– 2040
Composite pole percentage of total poles by 2040	– 3%	– 15%	– 19%	– 27%
Outage length after extreme weather for most customers	– Very long	– Very long	– Very long	– Very long
Time to restore after extreme weather for most customers	– No change	– Very slight improvement	– Slight improvement	– Moderate improvement

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Overall, there appeared to be a great deal of support for Essential Energy transitioning to composite poles in high risk areas. Advantages such as the poles being more resistant to fire and having greater longevity, were particularly appealing and felt to be beneficial, particularly in fire prone areas. Participants also appreciated that they were Australian made and potentially better for the environment because they did not have to chop down trees. There were however many questions asked regarding how resistant they were to flooding and landslides, and there was discussion and questions around the composite material, such as why fibreglass was selected, and whether or not the composite material was degradable and therefore environmentally friendly.

*“I think they’re a great idea. They last a lot longer, cost more to produce, but the length of duration is a cost factor overall. Resistibility is a great positive.” – Dubbo participant*

*“I think it would like a good investment as they last longer, and they’re Australian made. They also employ more in those industries.” – Broken Hill participant*

*“Why fibreglass? What other products could be used, are they looking into any recycled products?” – Ballina participant*



*"I wonder about the environmental impact of making them – like are they using treated chemicals? Where do the materials for the composite poles come from? Timber poles are covered with copper chromium arsenic." – Dubbo participant*

There was also a sentiment expressed that they would hope that wooden poles would only be replaced by composite when they needed replacement.

*"For bushfires areas it is a good idea, but it's better to only replace as needed – don't cut down a pole if it's still ok." – Ballina participant*

In terms of the options, there were many comments about the seemingly long time it would take for any of the options to come into fruition, but particularly options A and B. It was frequently commented that there is a great deal of uncertainty regarding the future and in the next 60-70 years new technologies and new materials for the poles could be developed that are not known about yet.

Having said that, there was a strong sentiment expressed for Essential Energy to move towards composite poles relatively quickly, that is, sooner rather than later, even if it meant paying a little bit more.

*"It seems like such a long way in the future – anything could happen by then!" – Ballina participant*

*"There is a huge difference in the timeline. The sooner the better." – Wagga Wagga participant*

Upon viewing the estimated increased costs on an average annual bill, there were many who felt that they were very small amounts, although some were cautious, acknowledging that there were other costs to add up over the course of the forum.

*"The costs seem pretty small. That kind of amount wouldn't affect me as a business owner. I have solar so don't pay much in way of bills anyway" – Broken Hill SMB participant."*

*"The amount of money is hardly worth talking about, why are we splitting hairs – I don't understand?" – Dubbo participant*

Within the table discussions the majority appeared to be in favour of Option D. It was seen to be appealing because it provided the fastest transition (although 2040 was still considered a long period of time for this to occur), and provided the greatest number of poles – 25,000 over five years. The cost was also still seen to be relatively low and there would be lower ongoing maintenance costs for composite poles, compared to wooden poles.

Another upside of Option D, was the cost difference between Options C and D, with Option D seemingly offering greater value as it provides a greater number of poles (25,000) for the increase of \$2.32.

*"I am tossing up between C and D – it looks like you are doubling the price and getting 4-5 times the number of poles, so I'm leaning towards D." – Wagga Wagga participant*

*"Option D is a greener alternative and I like that. Even though composite poles are over double the price they save money in the long term." – Broken Hill SMB participant*

*"Personally, I like D – it may cost more over the life of your annual bill but it works out cheaper in the long run as it doesn't take as long for the system to be restored." – Inverell participant*

*“The cost is minimal for what is a necessary change. Composites are getting cheaper and cheaper to repair as well, and in the future they will become even cheaper.” – Wagga Wagga participant*

However, some decided to select Option C on the basis that it was so far in the future, that new technology and renewable materials might be available that would be even better than composite poles; that it was a more conservative and achievable option; and because of uncertainty or the need for greater assurance of the environmental impact of composite poles.

*“They might have improved technology and better use of recycled materials, that’s my only hesitancy – they might come up with something new in a few years.” – Bega participant*

*“C is more conservative, I think C is achievable – I don’t think D is achievable, outage lengths are the same across the board. So, I would go C.” – Wagga Wagga participant*

A minority selected Options A and B, mainly because they felt that the current situation was acceptable and they could see no significant benefit or need for composite poles.

*“I’m sticking with A, restoration is not much different and it all seems okay, I don’t see much difference in terms of the overall benefit.” – Inverell participant*

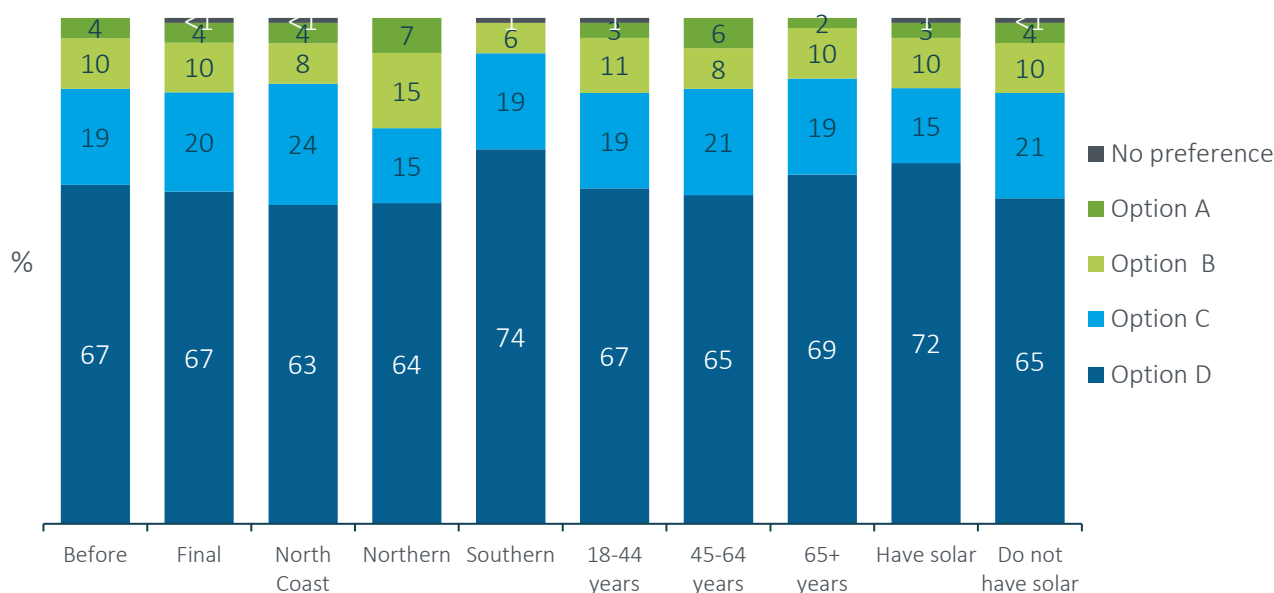
*“Option B – I don’t see D as a feasible thing as it is only moderate improvement but the cost is huge. Same with Option C ... my way of looking at it is that it’s not a great benefit to the system.” – Wagga Wagga SMB participant*

After the table discussions forum participants were asked to vote individually on which option they preferred for transitioning to composite poles. The result of this poll is displayed in the ‘Before’ column. After polling for each topic was collected, participants calculated how much the average Essential Energy bill would increase based on the options they selected. They were then shown the results of the polling from the whole room that night. Following this, as a group, participants were given the opportunity to ask Essential Energy questions about any of the topics and strategies that did not have a clear preference overall. Once the question and answer session ended, participants were then asked to vote on each of the topics again, considering what they had heard in the Q&A session and knowing the total bill impact. The result of this polling for the composite poles topic is shown in the ‘Final’ column, and then split out by region, age and solar ownership.

As shown in Figure 2, most (67%) respondents preferred Option D before and after the final forum discussions. One fifth (20%) ultimately preferred Option C, while ten percent chose Option B.

Preference for transitioning to composite poles was fairly consistent across regions, age and solar panel ownership.

Figure 3: Preferred composite poles option



What is your choice for composite poles? / What is your final choice for composite poles?

Base: All forum participants who answered this question; Before (n=428); Final (n=426), North Coast (n=132), Northern (n=166), Southern (n=128), 18-44 years (n=151), 45-64 years (n=183), 65+ years (n=92), Have solar panels (n=190), Do not have solar panels (n=236)

### 5.1.2 CALD and ATSI priorities

Most ATSI and CALD participants prioritised investing in Option D with some suggesting they would support a greater transition to composites and pay in excess of \$2.32 per year.

*“Definitely Option D, it’s only \$2.32 per year, if it was possible to do more it would be even better.” – ATSI participant*

*“If they’re not going to burn down and they’re easier to install, it’s [Option D] just a logical position.” – ATSI participant*

Environmental considerations were top of mind for some participants, while cost was the driving factor for others who chose Option D. Realising the benefits of investing in Option C within their lifetime was viewed as an important outcome.

*“If I’m paying extra to try and influence the environmentally friendly, safer network I want to have the opportunity to see it and use it. I’ll be dead by 2084.” – ATSI participant*

*“I’m more inclined to take Option D when presented with the statistics. With the numbers here you can see it’s double the price but you’re getting four times the installation, four times better investment for double the cost.” – CALD participant*

The few participants that preferred Options B and C supported a slower pace of change and were against the removal of existing poles for the sake of it.

*"I think a slower transition and replace them as they're needed to be replaced, if it's replaced when it reaches the end of its lifespan." – ATSI participant*

### 5.1.3 C&I customers

Amongst the C&I customers there was more support for proceeding with Option C, as for some Option D was seen to be an aggressive approach that may not be achievable and had a bigger cost impact.

They all agreed however, that Option C was the minimum, as the move towards composite poles in high-risk areas was extremely important and a matter of urgency given the changing climate. There was also an argument that it was better to pay now as the prices for poles may increase in the future.

*"Option C strikes a balance between cost and timeframe to proactively replace the timber poles." – C&I participant*

*"We need to get it done as soon as possible. The replacement should be done at today's prices otherwise costs will go up. It is better to pay for a pole now rather than in 15 years' time." C&I participant*

## 5.2 Business Partners and Stakeholders

### 5.2.1 Local Councils

There was strong support for composite poles, especially when it was confirmed that they could be recycled. However, the cost of moving to Option D was regarded as too much for some Council participants and most agreed to target high risk areas only. In that regard, some chose the more conservative options of A or B.

*"We are trying to reduce living costs for our residents. We should be looking at reduced costs or improving efficiencies for our residents. We are hearing electricity prices are going up, so we need to keep the costs down." – Local Council*

*"I wouldn't be rushing to mandate x amount per kilometre, just use them in high-risk areas." – Local Council*

*"I love the fact that composite poles are made in Australia, but I am keen to see them being recycled." – Local Council*

*"I think option B or A because of the finances. Cost estimates are going up. We are getting it wrong in Council – even recycled plastic is going through the roof." – Local Council*

Others were very positive toward composite poles replacing existing poles as they were proven to assist in strengthening the network's resilience and could see no negatives in moving toward Option C.

*"I would support them in high-risk areas as they have already proven." – Local Council*

*"The price over the 5 years between Options B and Option C is double but you get a lot more poles for the price." – Local Council*

### 5.2.2 Renewable Developers

The majority of the renewable developers were in favour of Option C, with some extending to Option D.

It was argued that the cost of a power outage is far greater than \$10 a year for a business so it would be worth their while to increase the network's resilience.

*"Business owners would be happy to pay to improve their resilience." – Renewable Developer*

*"It doesn't seem like a lot to pay considering all the other things that are increasing right now." - Renewable Developer*

*"Commercial businesses would be willing to pay a bit more on an annual basis to reduce the risk." - Renewable Developer*

Whilst the cost could be seen to be a bit of a stretch for people given the rising cost of living, it was felt that it is really important to put composite poles in for safety reasons.

### 5.2.3 New Technology Providers/Solar Installers

This topic was not covered with New Technology Providers.

### 5.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective

Option D was considered the ideal option, however it was recognised that there were possible constraints with regard to production and resourcing. It was also felt to be providing better value for money over Option C.

*"I am favouring option D as over the period you have over three times the delivery for the cost." – Advocate participant*

However, some decided that Option C was more appropriate as it was thought that the bill impact of these investments should be considered, particularly in the current economic environment.

*"But C is better given the economic environment." – Advocate participant*

But the consensus to emerge was that customers' safety was more important than the small amount of money that these options would add to their bills.

*"There are lots of areas in the state at high risk and we want to make the network as safe as possible without impacting the bill. This amount of money is not a lot in the overall picture for people's safety." – Advocate participant*

*"There have been terrible burdens on our community in terms of floods and fires so I would favour a more accelerated process of pole replacement and undergrounding to assist those communities." – Advocate Participant*

*"The least increase would be the best, but none of these are massive increases to help the community." – Advocate participant*

## 6. Undergrounding

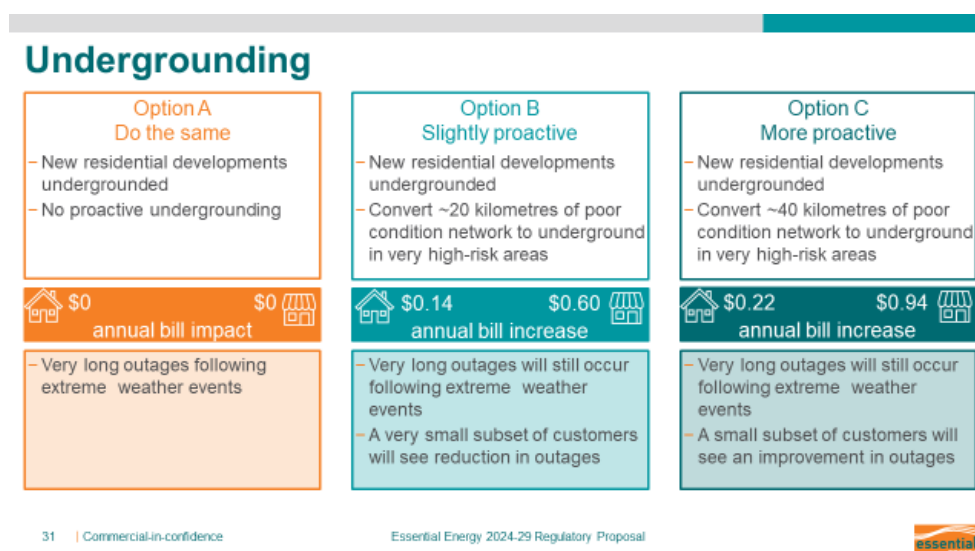
### 6.1 Connected Customers

#### 6.1.1 Main forums

Following on from composite poles, the idea of undergrounding was presented to participants in the forums. Essential Energy presented key information, again outlining the advantages and disadvantages of undergrounding the network in high-risk areas.

Three options were posed (see Figure 4 below), and again participants discussed these options, completed their activity sheets and put forth their reasons for their preferences.

Figure 4: Undergrounding options



Overall, the subject of undergrounding provoked a great deal of interest and discussion amongst forum participants. At the conceptual level undergrounding high risk areas of the network was very appealing because it reduced the risk of fires and maintenance costs and it would be aesthetically more pleasing. However, the high cost, questionable effectiveness in flood areas and overall perceived necessity or value were felt to be important factors that participants often weighed up in their decisions.

*"I love the idea from an aesthetic and safety point of view." – Taree participant*

*"I'm a bit concerned about how expensive it will be to dig it up in the future and who will pay for this, we need to think about the older people who can't afford it." – Wagga Wagga participant*

*"I like the idea of undergrounding in subdivisions but then he said there is movement and cracking so undergrounding isn't bullet proof either ... It looks better and would protect against the bats, but ripping up roads would be so expensive." – Inverell participant*

*"Cost is not a worrying factor. It's good for disaster areas – but if you do have an outage, how long does it take to find the issue and how long is it going to take to repair?" – Bega participant*

There was a great deal of discussion and frequent questions asked about how the high-risk areas would be defined. Some also felt that undergrounding would only be suitable in more populated urban areas rather than rural areas due to cost effectiveness. In this respect many asked questions about the appropriateness of undergrounding the network in flood prone areas, and when Essential Energy confirmed that it would not be suitable in these areas, some were less enthusiastic towards the idea.

*“Would they underground all of Taree? Undergrounding in a rural area would be ridiculous, how does that get determined?” – Taree participant*

*“It’s horses for courses – in some areas like Lismore why would you bother undergrounding but if you’re in the Blue Mountains in a high bushfire area it makes sense.” – Taree participant*

*“We had landslips which may affect an underground network. The only real advantage for undergrounding is bushfires but we have flooding which is more of a concern.” – Ballina participant*

There were also comments about the relationship between composite poles and undergrounding with many assuming that they would work in combination with each other – with some areas being deemed more suitable for composite poles and others undergrounding.

*“Maybe undergrounding for residential but out rural you need composite poles.” – Bega participant*

*“It sounds like flood and fire, composite poles are better.” – Wagga Wagga participant*

Technology was also thought to play an important role in the viability of undergrounding, with some participants suggesting that in the near future there may be new technology that would detect problems underground to help reduce maintenance costs.

*“The technology could be advanced – they can find a break in a wire above ground, but maybe in the future they will have better technology to find underground faults.” – Dubbo SMB participant*

The main reasons for preferring Option C, which many participants appeared to support, were focussed on the perceived very low cost of 22c annually and the fact that Essential Energy was only planning to underground in very high risk areas. It was felt to be important to reduce the risk and make it safer in these areas.

*“40kms, that’s all they’re doing for 22 cents over all those customers. But you have to start somewhere - the cost benefit for 40km is a no brainer for me.” – Bega participant*

*“I think Option C for this, I agree that critical assets are particularly important. Losing mobile phone towers is catastrophic, every time there is a storm the powerlines fail. We have underground to our house but in other areas there are always issues after every storm.” – Taree participant*

*“I am Option C as I think we need to make those big decisions. There are opportunities for undergrounding – the trend is happening overseas, we need to progress and there is a cost to progress. There are some benefits for some people. I am assuming that over time the costs will come down so others may benefit down the line.” – Wagga Wagga SMB participant*

*“Option C – converting 40km is important. People living in those areas need it. We have to evolve, its a lot safer because it eliminates risks – I’ve seen incidents with power lines. It’s also better aesthetically.” – Wagga Wagga participant*

Having said that, the low cost was also a reason why some decided that they should not do any additional undergrounding, preferring Option A. It was felt that the number of kilometres and the cost were so low that it would not cause a major impact on the network so therefore it was not worth the effort.

*“Option A – I don’t see this as important – they are putting it in new residential areas as it is. I don’t see the benefit, I feel that over 5 years it is not making a real difference.” – Taree participant*

*“I’m ok with it staying the same – it’s ok the way it is, why worry about putting them underground.” – Inverell participant*

*“I went B for undergrounding, because I prefer composite poles in the high-risk areas.” – Dubbo participant*

*“Option A for me. All in all, even 20-40km of any sort of work in areas where it’s better suited, it’s not going to make a dent in the network.” – Broken Hill participant*

In light of these varying opinions, and the pros and cons to consider, there appeared to be a number of participants simply selecting the middle option (Option B) because they were unsure and could see both sides of the argument. Others thought composite poles were a better option than undergrounding for helping to solve problems in high-risk areas, and the issue of locating faults underground was an issue that some simply could not reconcile.

*“I would be on B. While we are not rushing it, we are not pushing it but we are making some progress.” – Broken Hill participant*

*“It’s hard to know the balance between the advantages and disadvantages. I thought there would be some signal that can find the faults automatically. Maybe in the future there will be more technology that can do that.” – Dubbo participant.*

*“Option B – both B and C have risks and pros and cons. I would like to see what impact undergrounding has first before committing to more. Locating where a fault is and repairing it is harder for undergrounding.” – Taree participant*

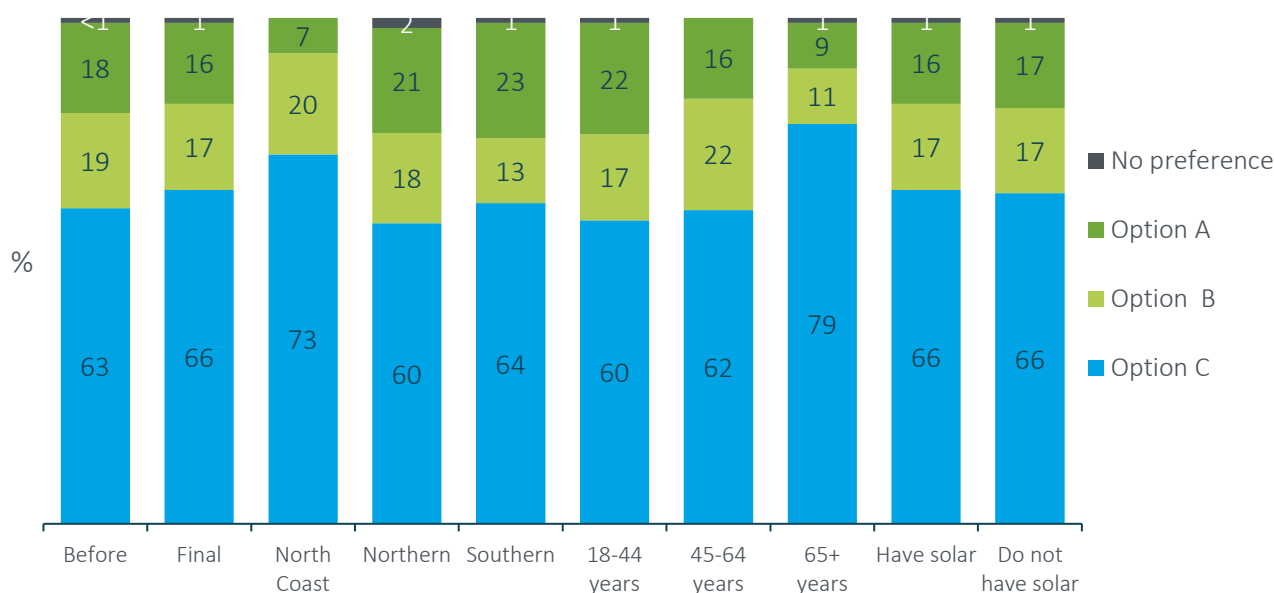
As with composite poles, forum participants voted on their preferred undergrounding option after table discussions and after calculating their total average bill impact.

Most (63% Before, 66% Final) participants preferred Option C, while preference for Option A and B was fairly consistent.

Option preferences did not vary across the locations and solar panel ownership. However, participants aged over 64 years showed a strong preference for Option C, with almost four in five (79%) preferring this option after final discussions.



Figure 5: Preferred undergrounding option



What is your choice for undergrounding? / What is your final choice for undergrounding?

Base: All forum participants who answered this question; Before (n=427); Final (n=428), North Coast (n=133), Northern (n=167), Southern (n=128), 18-44 years (n=153), 45-64 years (n=183), 65+ years (n=92), Have solar panels (n=191), Do not have solar panels (n=237)

### 6.1.2 CALD and ATSI priorities

Opinions were evenly split on undergrounding amongst ATSI and CALD participants with those who preferred Option A suggesting their responses were not related to cost but were tied to the difficulty connecting to renewables.

*"I think it's advantageous to have it above ground. It could be detrimental over a long period of time, it's not reactive and it's difficult to add onto so the cost of redigging means I'm going to lean towards A."* – CALD participant

*"How many of these people are getting solar panels? Undergrounding is more difficult to connect solar panels to."* – ATSI participant

Option B was preferred by participants who were concerned about bushfires and flooding, with composite poles supported in high-risk areas where there is an overhead vulnerability.

*"For existing infrastructure, if you can replace in bushfire prone areas, then yes – 22 cents a year is nothing. Install it wherever there is vulnerability for the overhead network."* – ATSI participant

*"I'm between A and B because with bushfires and flooding you're having to replace poles all the time in both events where undergrounding would be a lot better."* – ATSI participant

The remaining participants were supportive of Option C with an acknowledgement that undergrounding reduces deaths from head on car accidents, reduces the impact of falling trees and is a space saver.

*“There’s not much difference in the cost, high cost to install, and high cost to repair if something goes wrong, but on the other hand you can save a lot of space, there’s space underground, pedestrian paths can be put above the underground network.” – CALD participant*

*“I’d prefer to go with Option C, less deaths with cars hitting poles, and [the network] won’t go down once trees fall down.” – CALD participant*

### 6.1.3 C&I customers

For the C&I customers that were in a high-risk area, the notion of undergrounding was met with enthusiasm and so they choose Option C.

*“We are in a high-risk bushfire prone area so it is very important to underground the network where possible.” – C&I participant*

Others however, agreed that high risk areas were important to convert to underground, but perhaps not all were necessary given the expense. Certainly, high bushfire prone areas were key, however there was concern that finding faults was harder and possibly more costly in the long run than moving to composite poles. In that regard, a few C&I’s were satisfied with Option B.

*“Option B is reasonable because finding a fault is harder for underground cables so option C is a step too far.” – C&I participant*

## 6.2 Business Partners and Stakeholders

### 6.2.1 Local Councils

Local Council participants were very positive towards undergrounding per se, citing many benefits, including aesthetics, resilience, and a reduced need for vegetation trimming. They all agreed however, that it was extremely expensive and for the costs presented, there were not a lot of kilometres of undergrounding involved. In that regard, most selected Option A or B.

*“I would say A and B – undergrounding is great. It has many benefits with fires and aesthetics but again it comes down to cost.” – Local Council*

*“I am a big fan of undergrounding - we are a renowned Koala corridor and when the vegetation needs to be cut for the wires it has an impact on the trees.” – Local Council*

*“I can see the benefit but I am just looking at the kilometres. It only impacts a very small portion of the region and I am wondering what impact that would have to resilience.” – Local Council*

### 6.2.2 Renewable Developers

The renewable developers were very keen on Option C.

For some, it was seen as a no brainer to go underground at those prices. Undergrounding was considered far safer, visually more appealing and more resilient. In fact, some were interested in increasing the number of kilometres being put underground.

*“Can more money be invested in this area? Could they put more underground” – Renewable Developer*

One or two however, felt that it was more important to use the money to replace poor condition poles with composite poles across more of the region as they were seen to provide better value for money, particularly given the size of Essential Energy coverage.

*“Being able to replace more composite poles is better from a resilience point of view.” – Renewable Developer*

In that regard, for a few renewable developers they were happy with Option B.

*“Undergrounding is only helping a small set of customers and everyone has to foot the bill for it.” – Renewable Developers*

### 6.2.3 New Technology Providers/Solar Installers

This topic was not covered with New Technology Providers.

### 6.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective

Whilst undergrounding was well liked by advocates, there was a feeling that Option C offered a sensible course given that the cost of electricity was predicted to rise.

*“Option C is a sensible middle course given that energy prices are set to rise.” – Advocate participant*

There was agreement that Essential Energy needed to be strategic and look at where the best outcomes were going to be achieved for the money.

*“You need to get your best bang for buck, some areas will be flood and fire prone so we need to see where we can maximise the benefits.” – Advocate participant*

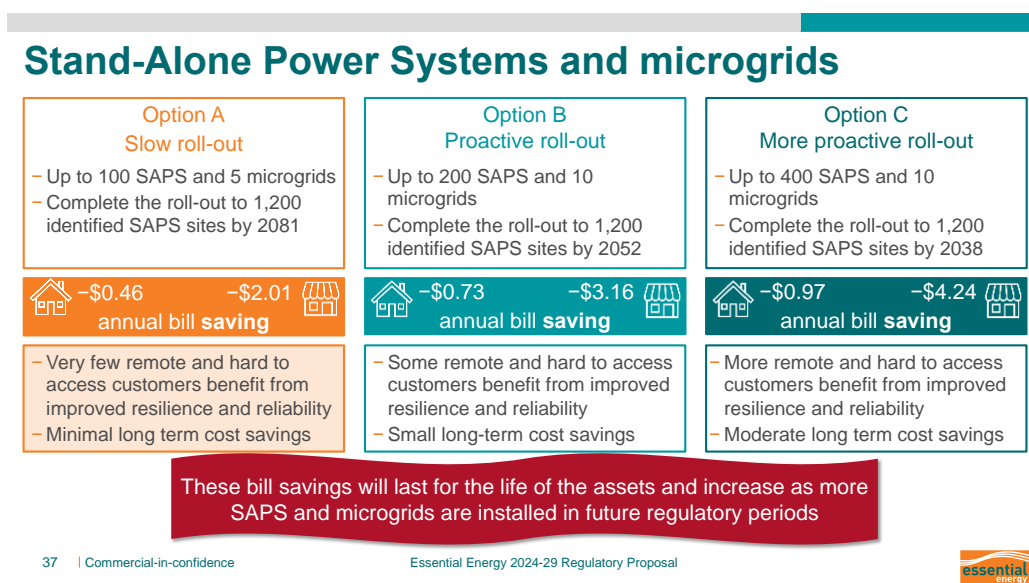
## 7. SAPS and Microgrids

### 7.1 Connected Customers

#### 7.1.1 Main forums

At the beginning of this section of the forum, participants watched a video filmed at an SAPS installation site, to assist in visualising the impact of implementation on remote customers. The following three options were then presented to participants:

Figure 6 Stand-Alone Power Systems



Voting indicated there was 90% support for Option C for SAPs and Microgrids with no significant differences between age, gender, and location. A strong theme to emerge was one of altruism, as participants spoke of this solution as benefitting communities as well as individual customers whose power supply suffers from being “at the end of the line”.

*“Love it! Off the grid living. Reducing the costs and reducing maintenance, increasing reliability. Providing for our more remote customers and taking care of them.” – Ballina SMB participant*

*“Option C – I think we should have an Option E. It is exciting to see we are building resilience in the community. This needs to be bigger.” – Inverell SMB participant*

*“It would be a way where we could help others down the line. SAPs are going to be great – local people can control them.” – Inverell SMB participant*

*“This one is all about community spirit – everyone has a right to have reliable electricity.” – Wagga Wagga participant*

Cost also entered conversations with some participants expressing their decision-making was purely motivated by money as the options for this topic were actually cost savings, but it tended to be less of a priority than assisting others to access a more resilient network.

*“The fact that it is cheaper to make communities more resilience is important. It takes the stress off the community and the network.” – SMB Inverell Participant*

*“I’m in favour of saving and therefore Option C. I want to turn the power off at my place and have a SAP.” – Taree participant*

*“Why would you sit there and twiddle your thumbs when you can help more people and save money?” – Wagga Wagga participant*

There was commentary around fringe dwelling and the fact that SAPs and Microgrids empower customers with the choice to live remotely but at the same time, customers continue to receive the technical support they may need in a crisis.

*“Off the grid living is the perfect opportunity for people to take control. This is a great investment tool. Essential Energy will do it for you, get you off the grid.” – Wagga Wagga SMB participant*

*“If something goes wrong – Essential Energy is still responsible which is a positive as it is still supported.” – Ballina participant*

*“People will be able to access power at a quicker rate when something happens, they will be able to fix it faster.” – Taree participant*

Forum participants in Dubbo and Broken Hill suggested that Essential Energy diversifies their target market and implements this technology in more communities currently experiencing power quality issues.

*“Why is it only a solution at the end of the grid, why are we not looking at putting a larger scale? It would make sense in a meshed grid for example in Dubbo.” – Dubbo participant*

*“Perhaps they could be introduced into our remote areas? It would solve some of the problems with power outages.” – Broken Hill participant*

Microgrids were also perceived in a positive light, with a few customers already operating this technology. The ability of microgrids to support the telecommunication network was valued in particular by Inverell participants with the only downside stated as Essential Energy’s capacity to fulfil the suggested quota in the Option C timeframe.

*“Microgrids are great too. It is better than building more infrastructure.” – SMB Inverell participant*

*“With microgrids it helps resolve the issue of telephone power line issues.” – Inverell participant*

*“The only downside to Option C was it was a stretch to get it implemented in time.” – Inverell participant*

Hesitation for Option C came from participants concerned about battery redundancy in the wake of advancing technology, with environmental considerations and the lack of biodegradability underpinning their views.

*"If they bring out new technology in the future then it might be old fashioned after a while which wouldn't be in the customers' interest." – Ballina participant*

*"It worries me about what happens once all the technology is old and no longer in use, where does the wastage go?" – Dubbo participant*

*"Why would we all just not choose Option C? But that would mean extra lithium mining, extra solar panel production which depletes resources." – Ballina participant*

*"Batteries are not yet up to the task. Better to wait for batteries, in 5-8 years they will get better." – Ballina participant*

Participants stated that education is lacking and that an increased level of communication could improve public awareness and positioning for this technology. There was confusion about how Essential Energy determines eligibility for an SAPS and acknowledgement that not many people have had experience with this solution. This may partially explain some participants' preference for Option B.

*"People don't understand renewable energy generation. The increase in diesel prices will make more people want to change to renewables – solar panels and batteries are becoming more and more appealing." – Wagga Wagga SMB participant*

*"In the general population there isn't much of an understanding, I would lean towards Option B." – Bega SMB participant*

*"Once there is more experience with it, and more education around it people will be more accepting of it." – Dubbo participant*

In conclusion, most participants were convinced that by electing Option C, they would be investing in a more renewable-resourced future and agreed this should happen sooner rather than later. Some participants questioned why something that delivered a bill saving was even part of the forum deliberation and expressed they would happily pay for the privilege.

*"This is a good move towards a more sustainable future." – Inverell participant*

*"Everyone wants it. Renewables have come a long way in last few years. It would allow you to run everything in the daytime to use all the electricity generated." – Wagga Wagga SMB participant*

*"Seems like a good alternative and I would hope that these can be rolled out relatively quickly as a good alternative choice of electricity and a saving to the consumer." – Dubbo participant*

*"I'd even choose Option C if I had to pay for it." – Inverell participant*

As with the previous topics, forum participants were given the opportunity to vote on their preferred option for SAPs and Microgrids.

Reflecting the table discussions, the overwhelming majority (91%) voted for Option C before and after final discussions, with less than one in ten indicating a preference for Option A or B.

Furthermore, preference for Option C was consistent across regions, age groups and solar ownership.

Figure 7 Preferred SAPS/Microgrids option

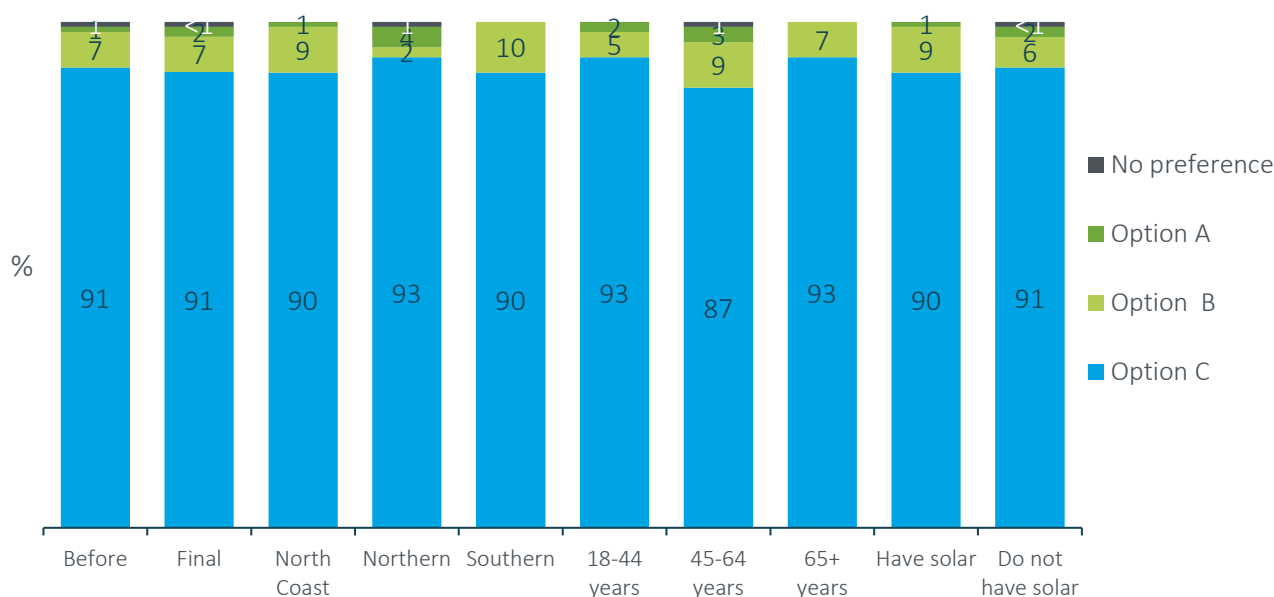


Figure 7 Preferred SAPS/Microgrids option

What is your choice for SAPS/Microgrids? / What is your final choice for SAPS/Microgrids?

Base: All forum participants who answered this question; Before (n=428); Final (n=427), North Coast (n=132), Northern (n=167), Southern (n=128), 18-44 years (n=153), 45-64 years (n=182), 65+ years (n=92), Have solar panels (n=190), Do not have solar panels (n=237)

### 7.1.2 CALD and ATSI priorities

There was a majority of support for Option C from CALD and ATSI responses to the SAP and Microgrid presentation with only one participant supporting Option B. Discussions touched on improved resilience due to technology advances in batteries, which could potentially create even greater savings in the long run.

*“With battery technology increasing every day, it’s getting cheaper and more reliable, so savings could be even higher.” – ATSI participant*

*“It sounds like a win-win all around, I don’t understand why anyone would choose A or B as it’s like having your cake and eating it. Definitely the resilience is a benefit, in a bell curve for the people who are out in these small outlying regions, the cost to return of servicing isn’t financially worth it.” – CALD participant*

Positive sentiments were expressed for helping out those customers who suffer from being remote and there was a perceived value for aboriginal missions when healthcare workers visit, and when houses are often blacked out after dark.

*“Microgrids would be helpful for aboriginal missions as often where the tar road ends is where the services end. So, if they have microgrids, then when the doctor or dentist visits, they will have power for the building.” - ATSI participant*

*“Some houses are blacked out after dark and they have to light fires or go to bed, so it would be good to get power to those people.” – ATSI participant*

### 7.1.3 C&I customers

Support for SAPs and Microgrids was less enthusiastic amongst the C&I participants. Most selected Option A or B on the basis that they could see no real benefit for themselves despite the decrease in their bill. There was also concern over maintenance costs of the infrastructure for both SAPs and Microgrids.

*“For us it wouldn’t help us anymore, we are in a built-up environment.” – C&I participant*

It was also seen by some that for the cost, the resultant number of SAPs and Microgrids across the network seemed relatively small.

## 7.2 Business Partners and Stakeholders

### 7.2.1 Local Councils

Most of the Council participants were in favour of microgrids and SAPs and saw them as having a positive impact on the network in terms of resilience and power quality. In fact, one or two had been looking at microgrids for their own town and were interested in talking to Essential Energy about it.

*“We have been looking for a microgrids for our town so it would be interesting to talk to EE in the future. It is not like we have unreliable electricity but we do have the odd outage happening at the worst times when it is either extremely hot or extremely cold.” – Local Council*

*“I love this. The numbers speak for themselves. As it is savings I think it is a good idea and could fund some of the other initiatives.” – Local Council*

As many were keen to make connection of renewables to the network a priority from a resilience perspective, the majority selected Option C.

*“This makes sense to go with option C.” – Local Council*

### 7.2.3 New Technology Providers/Solar Installers

New Technology Providers were strongly supportive of the implementation of SAPs and Microgrids, particularly as it will be a cost savings to customers. Their enthusiasm led to questions about which areas were going to be targeted and how the work was going to be progressed.

*“The negative bill impacts are very encouraging.” – New Technology Provider*

There was a slight concern that if the work is progressed quickly then there might not be adequate time to iron out any ‘teething issues’ and ensure the roll out runs smoothly. They asked about the reliability standard that would be required and requested that really strict standards be implemented to avoid any possible negative impacts. Even though there was strong support for Option C there was a concern that this option could end up costing customers if the roll out is not managed properly.

*“I’m nervous because if the roll out happens really quickly and there are teething problems then we could end up damaging the reputation of SAPs. But if you have done enough trials and are confident...” – New Technology Provider*



They also suggested that the manufacturing of SAPs in Australia be encouraged.

*“There should be collaboration with Australian manufacturers to help build the industry, and to help prevent bottle necks.” – New Technology Provider*

#### **7.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective**

The idea of Microgrids and SAPs was met with a great deal of enthusiasm by Advocates. They were seen to be the way of the future to improve resilience and to help smaller towns with power quality.

*“Having SAPs and Microgrids helps communities recover more quickly. This is the future for lots of smaller towns so I am all for these. The faster we can roll them out the better.” – Advocate participant*

In that regard, all the Advocates involved nominated Option C as their preferred choice. There were no obvious disadvantages with this option and it was seen to get the assets out to people the fastest and offered the biggest savings.

*“Are there any disadvantages with Option C? It seems like it is a no brainer.” – Advocate participant*

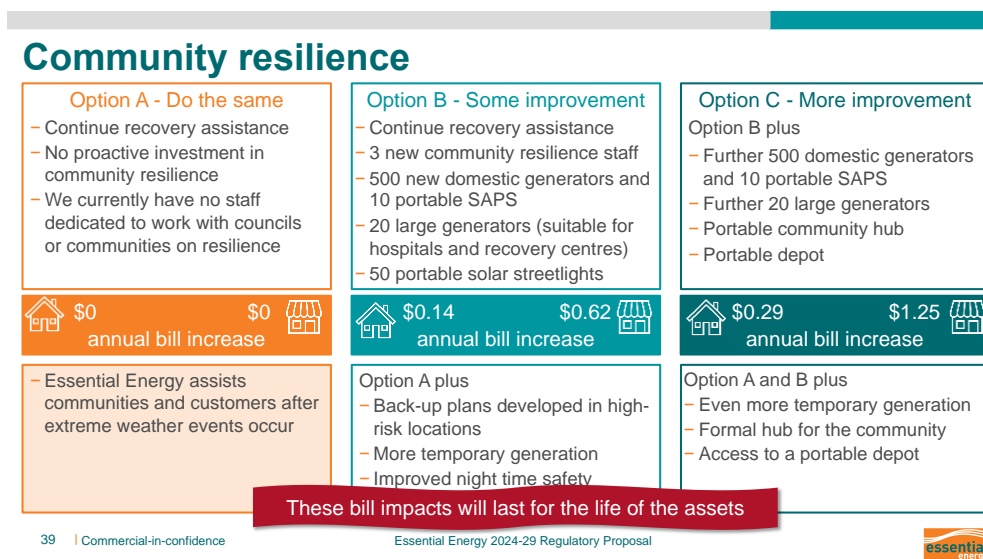
## 8. Community Resilience

### 8.1 Connected Customers

#### 8.1.1 Main forums

During table discussions about community resilience, participants were presented with three options as shown below:

Figure 8 Community Resilience



Conversations reflected recent disasters such as the floods in the Lismore area and the reality of living through extensive power outages. Discussions revealed a heightened awareness of the need for communities to be catered for when outages preside, communication is down, lighting is out, and customers are literally “in the dark”.

*“We are all had our fair share of disasters, the cost for an unscheduled power outage is – it’s a huge cost to businesses and individuals.” – Taree SMB participant*

*“I have been in a tiny community when we’ve been surrounded by fire when you can’t get in or out or communicate with family, so I’d go for Option C.” – Inverell participant*

*“I have lived through a couple of fires and support was hard to get.” – Taree participant*

*“I can do without a lot of these but not without the community hub. We know what this feels like, we’ve just been here, and we don’t want to be without power.” – Ballina participant*

The portable hub factored into Option C was a popular consideration with many participants but there were some who challenged the ability to quickly transport generators to the target communities, particularly if roads were blocked by fire or flood.

*"If the roads are closed, you can't bring them in – the roads were closed in the recent fires so you wouldn't have been able to get in a generator anyway." – Bega SMB participant*

*"As long as the generators are moveable and can get around the state without causing chaos, if it's over the whole state then it's really not very much extra to pay." – Bega participant*

As with SAPs and microgrids, there were those who elected Option C on behalf of others, not necessarily to improve their own resilience scenario.

*"Option C – altruistic approach – we're happy to pitch in to help everyone as communication is key. 7 days in the floods starts to add up." – Taree participant*

*"I get annoyed when the power is down for a few hours and I can't watch TV, but people in Tumut lost power for days, weeks, so imagine how bad that would be? If we make this choice and we can help people like that, why not?" – Wagga Wagga participant*

Preparedness in implementing a disaster plan was another strong theme to emerge, tied to nature's increasing unpredictability and the unknown impact of climate change on communities. Participants spoke of having safeguards in place and the need for speedy intervention when emergency strikes.

*"Fast – could be more bushfires tomorrow, more rain. We need to get ready quickly for severe weather events." – Wagga Wagga participant*

*"We probably should be going C because those events might become more frequent. Also, you can't always expect the Prime Minister to step in and save everyone! Better to have safeguards in place. Then communities won't be angry because there is no plan." – Broken Hill SMB participant*

*"If it was me in this situation in the future I would think why didn't we spend an extra 14c a year?... For future generations it sets it up for them for future emergencies. Even if the technology became outdated in the future it is better than nothing for the near future." – Bega participant*

There was strong support for the portable solar lighting (in Options B and C) which reportedly had a huge impact in the Lismore floods, with a plea for the allocated 50 in Option B to be considerably increased in Option C. There was also mention that it would be beneficial for staffing numbers to be increased from the proposed three, as personnel were viewed as the most impactful contributor to community resilience.

*"The portable solar lights would be great to light up roads. The drive through was deadly after the flooding when all the lights went out." – Ballina participant*

*"I would like to see an increase in solar lights in Option C. Didn't increase the staff either. But don't just throw people at the job, only if they need more staff. This is the most impactful, the sheer difference that it would make for the cost." – Wagga Wagga SMB participant*

It was clear that knowledge and information sharing were vital both within communities, and between Essential Energy and other organisations, and that customers require constant updates during a crisis as a matter of priority for safety and wellbeing.

*"What we want in the future is communication and reliable info sharing. [We] didn't know when they would get the tower back. The unknown is what people don't like. It's very hard to live with the unknown." – Ballina participant*

Overall community resilience was a high priority for participants, emphasised by the results of the quantitative polling. Many said they would happily pay more for the reassurance and guarantee of reliable community support in the wake of a climate disaster.

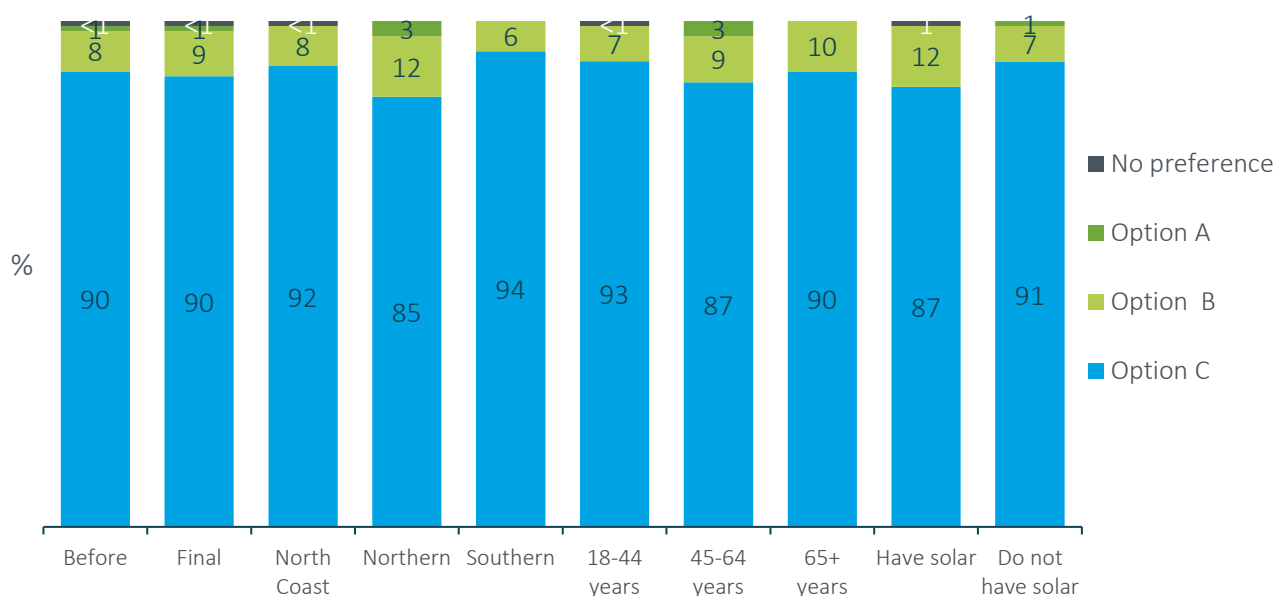
*“Some are happy to spend even more, if we could add \$1 imagine how many people we could help – it would be very important to do so.” – Wagga Wagga participant*

*“I’d pay more than 29 cents for a portable community hub, I’m very supportive of this. I’d pay \$10 per day to have everything working properly. We had no internet in the floods, so we drove to Lennox Head to the community hub.” – Ballina participant*

Forum participants consistently preferred Option C for community resilience (Before 90%, After 90%), which was reflected in the table discussions.

Again, preference for Option C did not vary across regions, age groups and solar ownership.

Figure 9: Preferred community resilience option



What is your choice for Community Resilience? / What is your final choice for Community Resilience?

Base: All forum participants who answered this question; Before (n=427); Final (n=428), North Coast (n=133), Northern (n=167), Southern (n=128), 18-44 years (n=153), 45-64 years (n=183), 65+ years (n=92), Have solar panels (n=191), Do not have solar panels (n=237)

### 8.1.2 CALD and ATSI priorities

There was overwhelming support for Option C with one exception in this discussion. As in the community forums, conversations reflected the recent floods and there was the sentiment that Option C provides an ‘insurance policy’, and protects against the unknown. The community hub was prized for being a vital tool for accessing shelter, telecommunication capacity and power.

*“I’ll be going for Option C, it’s about the resilience and the community hub, even though we haven’t needed it yet, it’s an insurance policy and the ability to have 40 large generators could provide some really good outcomes.” – CALD participant*

*“I’d say C definitely because people in Lismore would’ve liked to go somewhere just to charge their phones to contact people and with streetlights. I wouldn’t mind paying for that because you don’t know where the next one is going to hit and who it’s going to impact.” – ATSI participant*

*“People in my community would be happy to pay Option C for the benefits, same as myself.” – CALD participant*

There was a specific mention that at least one staff member working in the community resilience field should be a traditional language speaker, to aid aboriginal communities in their understanding.

*“Option C as it combines both A and B, but I would also like to think that with the community resilience staff, that they would have an Aboriginal person that speaks the language so people will understand how much it will cost.” – ATSI participant*

### 8.1.3 C&I customers

Again C&I’s tended to choose the middle option, Option B for Community Resilience. One or two could not see the value of moving to Option C as they could not see how Essential Energy could deploy so many generators and portable SAP’s to regions which are flood and fire affected and questioned if these solutions could really assist them and their business during these critical events.

*“How do they get them to the sites where they are needed? They are not serving anyone if they can’t get in until the crisis is over.” – C&I participant*

## 8.2 Business Partners and Stakeholders

### 8.2.1 Local Councils

Again, there was support for improving Community resilience, and many agreed that Essential Energy provides an important service that needs to be up and running as soon as possible during extreme weather events. There was also an expectation that Essential Energy would be looking at ways to improve response times, taking into account the learnings from past events.

Most nominated Option B or C, with cost being the only deterrent to moving to the higher option.

*“Essential Energy should have a very robust emergency service to get things up and running as soon as possible. The community expects that there would be some improvement to the response after the recent events.” – Local Council*

### 8.2.2 Renewable Developers

This topic was not covered with Renewable Developers.

### 8.2.3 New Technology Providers/Solar Installers

This topic was not covered with New Technology Providers.

### 8.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective

Improving community resilience was thought to be important for all Advocates. They cited incidences where the recent weather events had impacted communities and commented that any emergency help offered had been a 'God send'.

In that regard, Option C was preferred but if costs were to be an issue, there was a feeling that Option B would be the minimum.

*"If we can do as much as we can for these people it is important. I know it was widely appreciated. Option B at a minimum." – Advocate participant*

*"I would love to see Option C, but because of the cost pressures I think people may only want to go for Option B." - Advocate participant*

*"Essential Energy proposing emergency hubs and the other initiatives are going to be critical for communities. If we are trying to minimise trauma, and if we can afford it, we should be going for Option C." - Advocate participant*







## 9. Real-Time Monitoring

### 9.1 Connected Customers

#### 9.1.1 Main forums

The forum participants were presented with information on the issues behind real time monitoring, along with the details of the three options that they had devised. The options are shown below:

Figure 10 Real time Monitoring Options

Smarter network – real-time monitoring			
	Option A – Rely mainly on traditional solutions	Option B – Staged investment	Option C – High and early investment
Data management system	– Basic	– Enhanced	– Fully integrated
Data investment	– Target only known problem areas	– Target areas as soon as issues begin	– Across the broader network
Power quality management	– Manual adjustments and traditional investment	– Better managed at lower cost	– Better managed at even lower cost
Ability for customers to:	 \$2.32 \$10.11 annual bill increase 	 \$2.88 \$12.54 annual bill increase 	 \$3.76 \$16.35 annual bill increase 
– Connect new exporting technologies at low cost	– Limited	– Some	– More ability
– Maximise exports	– Limited	– Some	– More ability
– Access future markets	– Very limited	– Limited	– Available to all customers
Proactively identify outages	– Minimal	– Improved	– Very fast
Investment in future periods	– High and on -going	– Moderate	– Minimal
Power quality	– Will decline	– Will stay the same	– Will improve

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Discussions tended to centre on Option C as the preferred option as participants indicated that it would be beneficial to do the work up-front, rather than put it off and pay more for it down the track.

*“It’s better to get in with a pre-emptive strike even though it’s more expensive over the long run but in the short term I feel like it’s the better option.” – Inverell Participant*

*“Fix the problem before it happens. Be proactive.” – Ballina Participant*

*“If we do it now it will be much more cost effective than doing it after another 5 years.” – Broken Hill Participant*

Others made reference to the benefits of Option C for them and the community in general.

*“Proactively monitoring is great, a good benefit for everyone. If we can pay a bit extra it would be well worth the investment.” – Dubbo Participant*

*“If we have real time monitoring then Essential Energy can act faster if something happens. Hopefully that will reduce the amount of problems caused by issues.” – Dubbo Participant*

*“Power quality damages your equipment so it’s important to improve it.” – Bega Participant*

Some, though fewer in number, also indicated a preference for Option C because it was of greater benefit to solar customers. Whether or not they were solar customers themselves, many had looked into solar, and so seemed to have an interest in it.

*“I chose C primarily because I think it benefits those with solar. I’m looking in to it but haven’t done anything yet, and would want to make sure I can export if I generate more than I use.” – Wagga Wagga Participant*

Although compared to some of the other service area options that had been presented to them, Option C was on the more costly side, this didn’t tend to generate a great deal of discussion. Some participants pointed out that it was one of the dearer options but they also tended to feel that it offered value in comparison to Option A. Similarly, some of the SMB participants felt that the increased power quality would be attractive to many businesses.

*“If you chose A, you would be paying \$2.32 to go backwards effectively whereas C you would be only paying an extra \$1.50 for a lot more.” – Inverell Participant*

*“What is the cost of an outage for a business? It can have a massive impact for some businesses. So if you put the \$16 increase in that context, it’s not much at all.” – Wagga Wagga SMB Participant*

However, a few participants did appear to be becoming cost conscious by this stage in the forum, and were expressing some concern in relation to the potential end cost to them.

*“I just think you’ve got to be careful that you’re not over costing the customer too much. I think Option B is a good compromise.” – Broken Hill Participant*

*“You do have to think that the cost of each of these is adding up now.” – Dubbo Participant*

While not a major issue to emerge overall, a few of the participants expressed concerns over the potential loss of jobs that could result from what they were viewing as a higher degree of automation involved with Option C in particular.

*“Straight away I think of the loss of jobs – going to Option C, it heavily relies on technology.” – Taree participant*

This concern was often countered by other participants who tended to indicate that the investment under any of the options (but particularly Option C) would involve the employment of numerous staff to develop and integrate new systems for Essential Energy.

*“It will probably improve employment because you’ll have to employ a lot of technical people.” – Bega Participant*

Some participants appeared to be in favour of Option B because they saw it as a more gradual staged approach. They thought it was better than Option A (which they saw little benefit in), but not as extreme as Option C (which most participants were supporting).



*“To me Option B seems sensible. It will achieve more than A, and also isn’t rushed so you may get the benefit of improved technology along the way.” – Inverell SMB Participant*

*“I am worried about technology changing so B for me. Do it a bit slower so there’s more flexibility.” – Ballina Participant*

Clearly though, there was limited support for Option A. Many saw this option as taking a step backwards, rather than improving the network. As such, they were not particularly keen to pay the extra amount associated with this option if there was no real return in it for them.

*“Option A is not really an option. It’s a ‘no brainer’ as paying for something to decline is not on.” – Wagga Wagga SMB Participant*

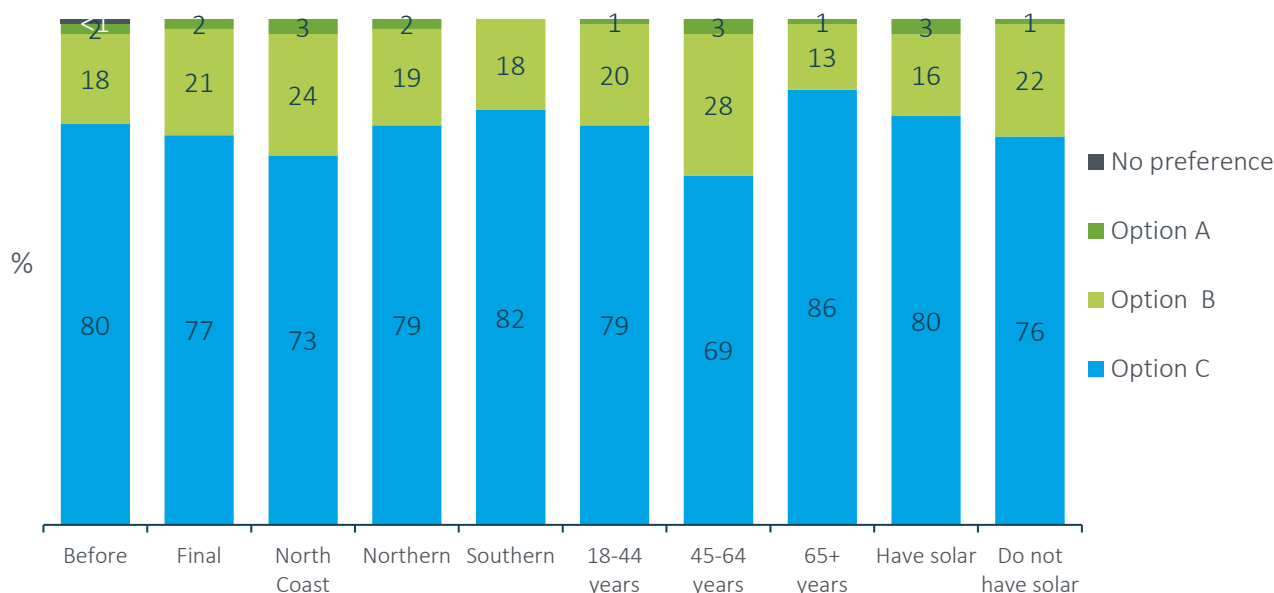
*“With Option A – you don’t want the power quality to decline.” – Broken Hill Participant*

*“It would be irresponsible to go for Option A when for a small amount extra you actually get an improvement.” – Bega Participant*

Similar to the qualitative findings, voting data indicates that the majority (80% Before, 77% Final) of participants, both initially and after all options had been presented were supportive of Option C in relation to real time monitoring. However, approximately one fifth (18% Before, 21% After) chose Option B.

Preferences were similar across region and solar ownership, however compared to other age groups 45 to 64 year olds were be less supportive (72% Before, 69% Final) of Option C.

Figure 101: Preferred real time monitoring option



What is your choice for real time monitoring? / What is your final choice for real time monitoring?

Base: All forum participants who answered this question; Before (n=425); Final (n=428), North Coast (n=133), Northern (n=167), Southern (n=128), 18-44 years (n=153), 45-64 years (n=183), 65+ years (n=92), Have solar panels (n=191), Do not have solar panels (n=237)

### 9.1.2 CALD and ATSI priorities

Once again Option C was preferred by CALD and ATSI in-depth participants with acknowledgement that paying more at the outset would provide advantages in the long run. There was a genuine acceptance that adding \$3.76 to the bill for this option was better than Option A for which customers would still be charged \$2.32 to do nothing.

*“While it is a little bit more expensive in the long run it could work out to be a lot cheaper as you’re not having to wait hours for them to fix the problems.” – ATSI participant*

*“People who have reliable power don’t need any additional resilience, you only want to channel energy into the places that are flaky. It’s hard to get my head around what you get for \$3.76. If it’s going to cost \$2.32 to do nothing then you might as well go with the \$3.76.” – ATSI participant*

*“Over the long term it would probably be cheaper to go fully integrated as they’d know what was happening across the board and they could get ahead of any outages.” – ATSI participant*

### 9.1.3 C&I customers

Most C&I customers selected Option B or C. Whilst most agreed this was a necessary capability for Essential Energy, they were more in favour of a staged approach due to the speed of technological advancement.

*“There has to be a staged process as technology changes, situations change or populations move.” – C&I participant*

Having said that one C&I held strong support for investment in this area as he was in a fire prone area and did experience power quality issues that impacted his business.

*“We do have power quality issues – disturbances happen a lot and they have big impacts on us.” – C&I participant*

## 9.2 Business Partners and Stakeholders

### 9.2.1 Local Councils

Real time monitoring was considered by Councils as a step forward and something that would help with power quality and their own ability to connect solar to the network. Having visibility of the network to enable Essential Energy to shift load where needed was seen by most to be worth the investment.

In that regard, the preferred option was Option C, but once again there were concerns around the total bill impact on customers with the uptake of all these initiatives.

*“Option C is huge for a local business. For me, this is the sort of stuff we are interested in, so I would hope that there is some cost sharing with other governments. The VPP is something that is needed and wanted for our council. We have lots of roof space but we can use it.” – Local Council*

*“If we can have the community and businesses on our side to see where we can be load shifting it would make us more efficient with our usage.” – Local Council*

*“I would lean towards B but my ideal would be Option C. Option B is a compromise given the cost.” – Local Council*

### 9.2.2 Renewable Developers

All the renewable developers could see the value in moving forward with Option C as it was seen to benefit both Essential Energy and themselves. It was imagined that it would offer them greater flexibility to connect to the network and guard against power quality issues with the increase in renewables.

*“For me I would go with Option C, as we have to do something with renewables increasing and there will be power quality issues.” – Renewable Developers*

However, some felt that the cost of real time monitoring needed to be assisted by the Government as opposed to being funded by customers.

*“It gives us more flexibility but I would like to see no additional cost to the customer – the Government should pay.” – Renewable Developer*

Option A was considered not to be an option as it was going to result in a cost despite no further investment in this area.

*“This has to be done as Option A still costs. So, in that case I would go to at least Option B.” – Renewable Developer*

*“For me I would go with Option C, as we have to do something with renewables increasing and there will be power quality issues.” – Renewable Developer*

### 9.2.3 New Technology Providers/Solar Installers

The New Technology Providers could see the long-term benefits of investing in real-time monitoring. They preferred Option C as the cost difference was minimal, but it seemed to provide a lot more benefits than Option B.

*“I think Option C makes a lot of sense and provides long term benefit. The cost of \$3.76 per residential bill per year is almost exactly 1c a day, which is nothing, so we have to go with Option C. It is a no brainer.” – New Technology Provider*

It was mentioned that the data that is already gathered by aggregators would be highly valuable in terms of increasing visibility of the network and that distributors such as Essential Energy could help to facilitate the transfer of such data.

*“A lot of the aggregators have mass compliant metering on all of their systems. I would imagine that would be of great value to get visibility at the connection point across the LV network for all of these systems.” – New Technology Provider*

*“There needs to be a standard way to co-operate with the aggregators to get data from them. If the DNSP could write them a standard that would be awesome.” – New Technology Provider*

It was also pointed out that it is common to have numerous types of meters on the one system. There can be an aggregator’s meter, a smart meter from the retailer and a meter from the battery installation as well. This was thought to be make it even more important that there is a standard developed in terms of accessing data to improve network visibility.

#### 9.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective

There was agreement that Essential Energy needed to plan for the future, particularly with the growth in renewable generation. Given that, the majority choose Option C.

*“For me there is a cost, but we know the network is going to change with greater amounts of renewable energy. The network has to cope with that as there will be greater disruption to the community. We need to ensure we are reducing our reliance on fossil fuels.” – Advocate Participant*




## 10. Dynamic Assets

### 10.1 Connected Customers

#### 10.1.1 Main forums

The forum participants were presented with information about dynamic assets by Essential Energy – the second section of the smarter network initiatives. The options presented were as follows:

Figure 12 Dynamic Assets

Smarter network – dynamic assets			
	Option A – Do the same	Option B – Mitigate existing problems and pre-empt some	Option C – Mitigate existing problems and pre-empt more
Power quality management	– Traditional methods	– Minimal investment in 50 dynamic assets	– Moderate investment in 100 dynamic assets
Investment in zone substation resilience	– None	– Batteries and solar panels at 25 sites	– Batteries and solar panels at 50 sites
	 \$0 \$0 annual bill increase	 \$0.15 \$0.64 annual bill increase	 \$0.22 \$0.96 annual bill increase
Ability for customers to maximise their exports	– Limited	– Limited	– More ability
Response to power quality issues	– Slow (manual)	– Faster (automated) in some areas	– Faster (automated) across a broader area
Power quality	– Will decline	– Will stay the same	– Will improve
Reliability outcomes from zone substation resilience investment	– No change	– Shorter outages for some customers	– Shorter outages for more customers

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Unlike the discussion that took place in relation to real time monitoring (which involved an increase of \$2.32 for the average household for the basic option), the monetary amounts involved with dynamic assets were seen to be almost insignificant, and the discussions tended to start off with this cost aspect, rather than the actual benefits that the options would provide.

*“At 22c – it is not a huge difference to the total bill per annum.” – Taree Participant*

*“The difference between them is a few cents. It hardly warrants any discussion.” – Inverell SMB Participant*

*“The price difference is so small.” – Ballina Participant*

*“It’s only an extra 7c to go to Option C.” – Wagga Wagga Participant*

Though still related to cost, some participants were more concerned about the value that they would get from the investment being made, with participants in most breakout groups tending to indicate that Option C offered better value in this respect.

*“If you’re looking at B and C – C is more cost effective as it provides double of what is offered in Option B, but at less than double the cost.” – Inverell participant*

*“Option C is not that much of a bigger increase but you’re getting a bigger outcome.” – Inverell Participant*

*“There’s more bang for your buck with option C.” – Bega Participant*

Discussions did still cover the reasons (other than cost) for feeling that Option C would be the most beneficial option to adopt. These reasoning tended to relate to the creation of an enhanced network that would improve the power quality and result in shorter outages for customers.

*“Shorter outages for a larger number of people is a real positive. Power quality will improve more under Option C as well.” – Ballina Participant*

*“This option is much more progressive. We need to move forward and get ready for more extreme events.” – Wagga Wagga Participant*

*“It allows them to mitigate risks, and plan more. It just makes sense.” – Dubbo Participant*

*“Option C is going to improve things. Building capacity in the system. Power quality is going to improve for businesses. That would be good. Less impacts to business then.” – Broken Hill SMB Participant*

While not one of the main reasons mentioned in the discussions, some participants did indicate that they supported Option C because it seemed more conducive to the movement towards households having their own solar systems.

*“It’s going to be more and more important as more and more people get solar.” – Dubbo Participant*

*“In a country where solar is so important we need to put money in to help.” – Broken Hill Participant*

*“Option B would allow things to keep ticking along.” – Bega Participant*

While most expressed a clear preference for Option C, some (though relatively few in number) indicated support for Option B. Those who supported this option tended to indicate that it was an adequate solution to the issue.

*“It will avoid a power quality decline over time.” – Bega Participant*

*“Doing the minimum may be enough.” – Dubbo Participant*

*“I would go with option B. It’s hard to understand the two being different anyway. The power would improve under B.” – Broken Hill Participant*

There was no obvious support expressed for Option A. Participants felt that this option was insufficient and would lead to a decline in power quality. The only potential advantage seen with this option was that it did not involve any additional cost – though the costs associated with Options B and C were not seen to be significant.

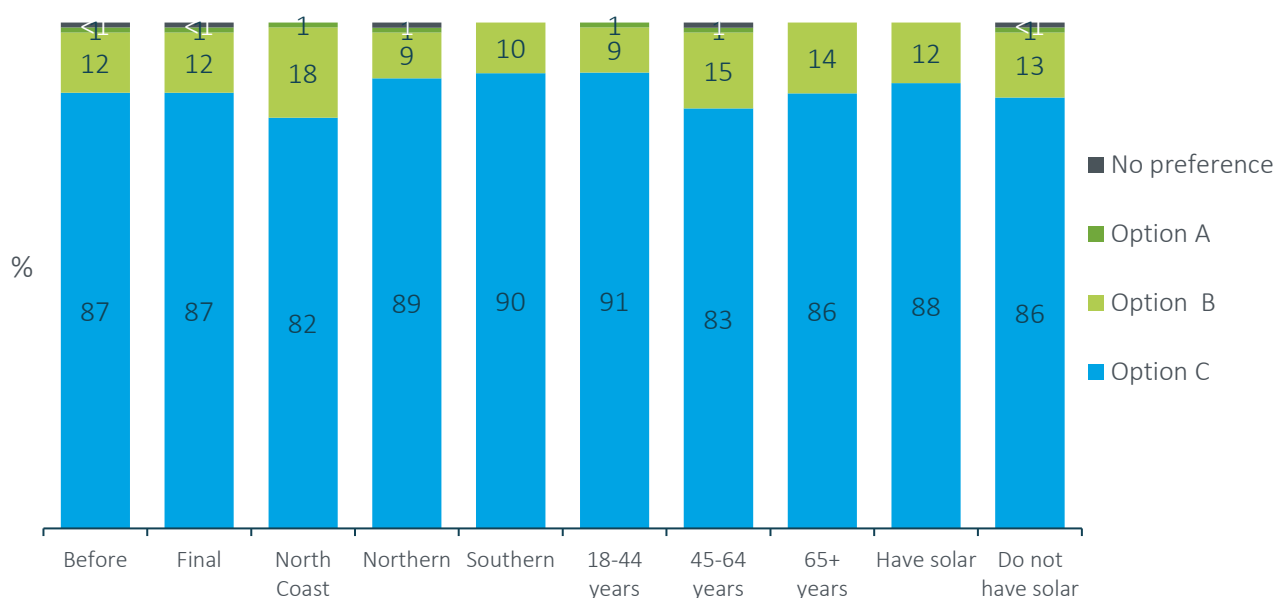
*“Power quality declining is not what we want. The only advantage in A is that there is no cost increase.”*  
– Ballina Participant

*“There’s no benefits to option A other than cost. I think it’s irresponsible not to do anything for the next 5 years.”* – Wagga Wagga Participant

Participants also demonstrated a strong preference for Option C in the polling results, with almost nine in ten (87%) choosing that option both before and after the final discussion.

Similar to most other topics, choice of preferred option did not significantly vary across region, age group or solar panel ownership.

Figure 11: Preferred dynamic assets option



What is your choice for dynamic assets? / What is your final choice for dynamic assets

Base: All forum participants who answered this question; Before (n=428); Final (n=428), North Coast (n=133), Northern (n=167), Southern (n=128), 18-44 years (n=153), 45-64 years (n=183), 65+ years (n=92), Have solar panels (n=191), Do not have solar panels (n=237)

### 10.1.2 CALD and ATSI priorities

There was overwhelming support for Option C from all ATSI and CALD participants with comments expressing that Option B required an investment for no change in power quality which they weren’t happy to pay. There was interest in increasing the number of batteries to the network as it was viewed as improving the customer experience.

*“This one actually looks like you’re doing something, whereas the real-time monitoring looked like you were doing nothing.”* – ATSI participant

*“My community would be happy to pay 22 cents extra for an improvement in power quality.”* – CALD participant

*“It’s doing more to improve the customer’s experience - investing in 100 dynamic assets, batteries and solar panels at 50 sites.” – ATSI participant*

Option C also benefitted those customers who strongly promoted renewable energy and those who were interested in maximising their solar export potential.

*“I believe that we need the alternative power from a battery and the more people that can have it the better.” – ATSI participant*

*“Customers can maximise their solar exports with Option C which is important.” – CALD participant*

### 10.1.3 C&I customers

In line with many of the comments regarding real time monitoring, the widely held view was that power quality and reliability were important and so Option C for some was preferred.

For others however, Option B seemed to represent a more conservative investment and one that would test the benefit of dynamic assets without going the whole way. There was also a question over the future energy landscape, advancements in the available technology, and the sustainability of batteries and solar panels.

*“There has to be a better way to do things than doing 25 supersized sites. Also, they are only short term, they don’t last forever. They need to look at the longevity of those things”. – C&I participant*

## 10.2 Business Partners and Stakeholders

### 10.2.1 Local Councils

Most selected option C without question, despite the cost implications. It is seen to be an area they wanted to see Essential Energy participate in to help facilitate renewables and new connections to the grid.

*“Definitely a C on this one. The costs are relatively low for the benefit” – Local Council*

*“It is disappointing to have solar on our roof and not being able to get it to other sites that need it.” – Local Council*

### 10.2.2 Renewable Developers

All renewable developers choose Option C. It was seen to be a necessity, given the increase in the use of renewables and for the future of the network. It was also seen to be an important aid to enabling exporting and to maintain power quality.

*“Option C - we need this with the increase in renewables” – Renewable Developer*

*“Option C for me. We need the ability for renewables to connect to the network. It is important and the ability to export is a must” – Renewable Developer*

*I am for option C - it makes sense. – Renewable Developer*



### 10.2.3 New Technology Providers/Solar Installers

Option C was thought to be a ‘no brainer’ for dynamic assets and in fact New Technology Providers would like to see an option that pushes further than C. Developments were thought to be moving very quickly in this space.

*“I would like to see a C++!” – New Technology Provider*

*“In looking at the forecast of EVs I think vehicle to grid charging should be considered and how we engage in that to help stabilise the grid. EVs can add a lot of benefit to these solutions as well.” – New Technology Provider*

### 10.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective

Whilst the difference between Options B and C were minimal, the focus on cost in the current environment meant that some Advocates questioned moving quickly to Option C.

Having said that, the majority preferred Option C as it was seen to offer better value for money and provided greater opportunity for customers in the future.

*“You would really want to go for C. There is potential to get good bang for your investment in this area.” – Advocate participant*

*“I am favour in a higher level of investment in this area. I would like rental communities to have the ability to access renewables.” – Advocate participant*

*“If you think of our rural and ATSI communities, we need to upgrade the network for them so I would go for Option C. – Advocate participant*

## 11. Lowering Essential Energy's Environmental Impact

### 11.1 Connected Customers

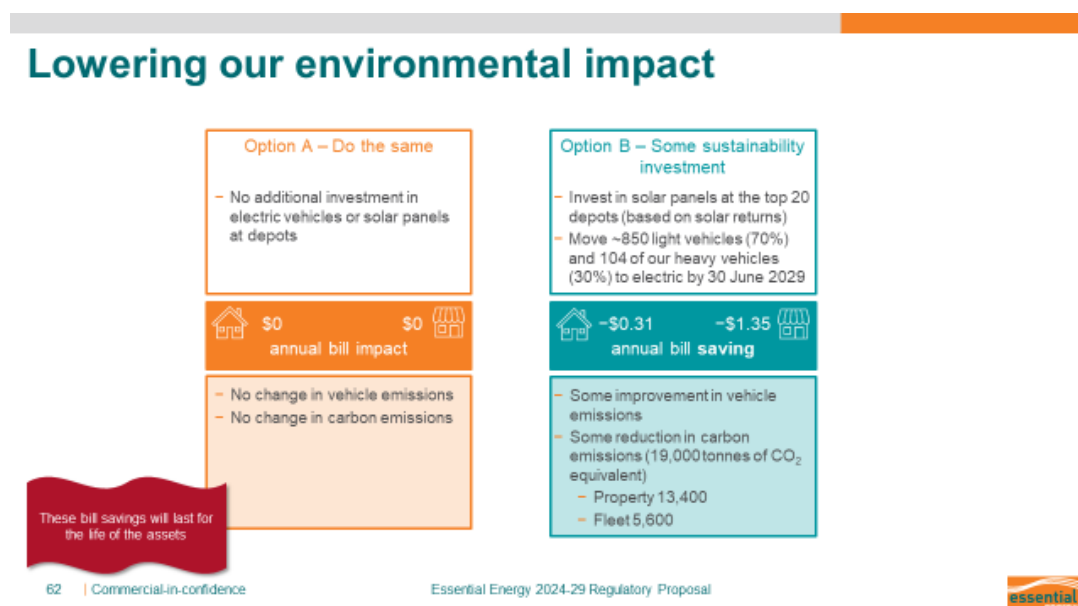
#### 11.1.1 Main forums

Within the forums, participants were told about the proposal by Essential Energy to lower their environmental impact via two main ways:

- investing in solar panels and batteries to power their depots
- transitioning their fleet to electric vehicles

Two options for lowering their environmental impact were presented to forum participants for comment:

Figure 12 Lowering our environmental impact



Of the two, Option B which involved some sustainability investment was the most preferred, with the majority feeling this was an obvious option, particularly as it is a cost saving.

*"It is a no brainer." – Ballina SMB Participant*

*"It shouldn't be an option – they should be doing this anyway." – Wagga Wagga Participant*

*"There comes a point in time where everyone will have to reduce their footprint." – Broken Hill Participant*

For most, the feeling was that if it was going to benefit the planet and result in cost savings there was really no reason why they should not be investing in this area.

There was slightly more support for the addition of solar panels than the use of batteries as some were still sceptical of the environmental impact of batteries when they were past their use by date.

*“How long do the batteries last, I think we should go into it in a measured way because there’s no plan for the recycling of batteries.” – Dubbo Participant*

*“There’s needs to be a feasibility study on whether these E vehicles will be useful in the areas they’re implemented.” – Broken Hill*

There was also a question over whether Essential Energy could replace all their fleet with electric vehicles given their limit range and their unsuitability for heavy vehicles.

*“Electric trucks are a fair time away yet. Huge distances might not work.” – Dubbo participant*

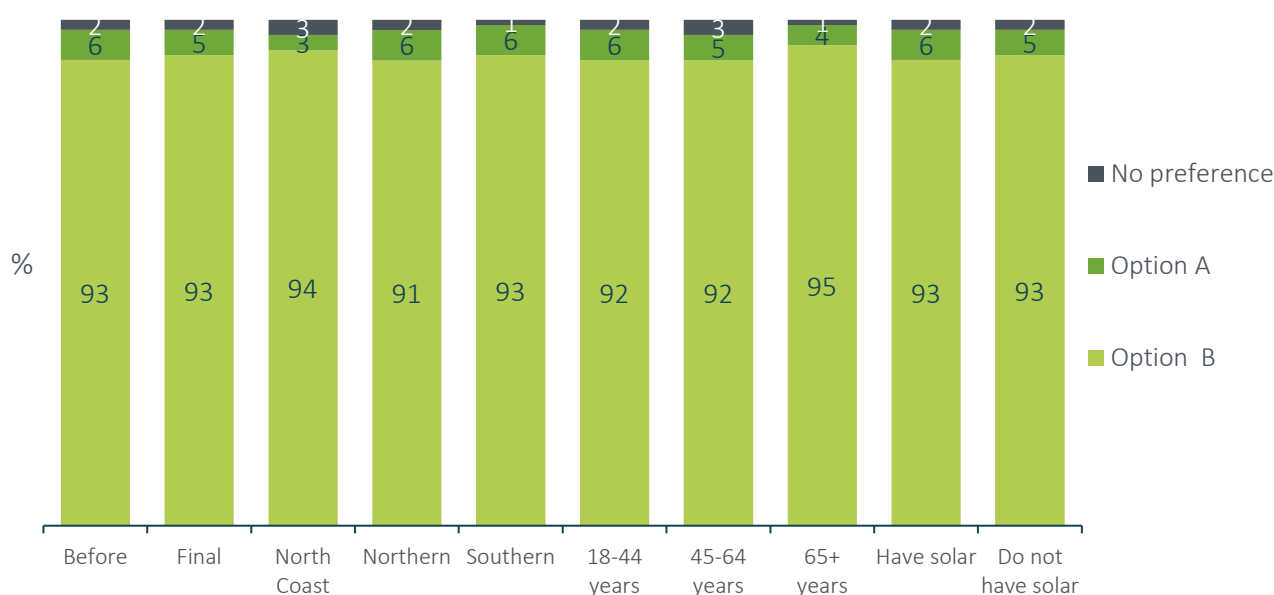
The majority were keen for this option to be implemented sooner rather than later. Most agreed that there should be some sense of urgency in investing now to help save the planet. However as mentioned, there was a question over the speed with which electrical vehicles should be introduced due to a perception that they still were lacking in efficiency and practicality to some degree.

*“There may be benefit in doing it a bit slower only for the electric vehicle part. They should wait for these to become more efficient. Solar can be as soon as possible.” - Dubbo SMB Participant*

When asked to vote on the options within the forum, the overwhelming majority (93%) selected Option B, both initially and after all options had been presented.

There were no differences between age and gender or by location.

Figure 13: Preferred lowering environmental impact option



What is your choice for lowering environmental impact? / What is your final choice for lowering environmental impact?

Base: All forum participants who answered this question; Before (n=427); Final (n=427), North Coast (n=132), Northern (n=167), Southern (n=128), 18-44 years (n=152), 45-64 years (n=183), 65+ years (n=92), Have solar panels (n=190), Do not have solar panels (n=237)

### 11.1.2 CALD and ATSI priorities

Option B received total support from participants as it was considered a “no brainer” but more particularly from the standpoint of setting an example to other large industries and corporations.

*“Option B is a no brainer, I think there’s an ongoing benefit of this as the service cost for a vehicle with a combustion engine is really high compared to an electric vehicle where the cost is minimal.” – ATSI participant*

*“Option B – if people can see the electricity companies are going solar and using electric cars they will think, ‘If they can do it, so can we.’ It works out better for the environment and for the future.” – ATSI participant*

In addition to the positive environmental spin-off created by option B, it was praised for its appeal in delivering a cost saving to customers.

*“Option B saves money and it’s better for the environment.” – ATSI participant*

*“It sounds like somebody thinks like me because I was saying recently they should put solar panels on top of cars.” – ATSI participant*

### 11.1.3 C&I customers

Whilst most were in favour of Option B and Essential Energy investing in solar panels and EV’s, there was some questions about whether this was going to contribute to power quality issues and whether or not EV’s would be viable for the part of the Essential Energy fleet that needed to travel long distances.

*“They should be doing it only if it makes financial and practical sense. It should not just be about the environment. Will their vehicles be able to travel the distances required?” – C&I participant*

*“My view is putting solar on the biggest depots is ok provided that wires are up to scratch. In many cases the solar is overloading the grid in the wrong way. So is this just adding to the issues?” – C&I participant*

## 11.2 Business Partners and Stakeholders

### 11.2.1 Local Councils

As with the other segments, Option B was seen to be the only option to go forward with. Few could see any reason to do otherwise.

*“There is no reason to do anything else.” – Local Council.*

### 11.2.3 New Technology Providers/Solar Installers

This topic was not covered with New Technology Providers.

#### ***11.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective***

Advocates agreed that there was no reason for not proceeding with Option B. It was considered a corporate responsibility for Essential Energy to do everything in their power to lower bills and to lower their environmental impact.

*“Lowering bill costs and lowering environmental impact is key.” – Advocate participant*

*“Essential Energy has a corporate responsibility to walk the talk.” – Advocate participant*

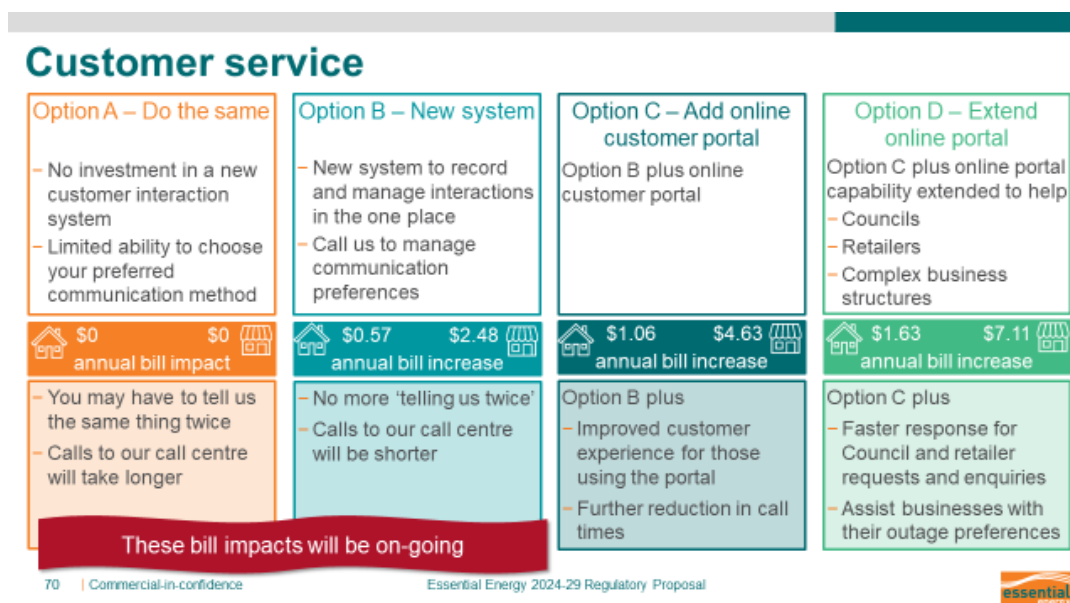
## 12. Customer Service

### 12.1 Connected Customers

#### 12.1.1 Main forums

Essential Energy presented some options regarding their move toward improving customer service as shown below:

Figure 14: Customer Service options



Reactions to the options were mixed, with some wanting to move to an online portal, whilst others were satisfied with the current level of service and could not see the benefit in investing money to improve the service.

Those in favour of an online offering were surprised to learn that Essential Energy didn't have this level of capability already as all large companies were seen to provide this to customers these days. For these customers, most selected Option C over Option D, on the basis that they were not a big business and therefore would not benefit from moving to a high functioning portal.

There was also an argument that big businesses, local government and retailers should be paying for the upgrade as opposed to Essential Energy residential customers.

*"I am a fan of new portals and systems, it definitely improves businesses" – Taree participant*

*"It's surprising they don't have this! Everything is online now" – Broken Hill participant*

*"Why should it be that we are paying for the CRM system – why are we paying for it?" – Inverell participant*

*“Why are customers paying for portals for big customers?” – Ballina (SMB) participant*

*“I think Option C, I understand Option D for the retailers’ perspective but I don’t know if it’s that necessary. I’d say Option C.” – Taree participant*

*“If I was a small business owner I’d go D, but I’m not so they can pay for that.” – Dubbo participant*

*“For the average consumer, I don’t think Option D is required.” – Inverell participant*

*“I’m leaning towards C – but I wonder with real time monitoring and dynamic assets there will be less of a need to call them.” – Ballina participant*

Some customers who were satisfied with the current system, were happy with being able to simply phone Essential Energy when needed and reported the service to be prompt, friendly and efficient and in that regard opted for Option A. One or two also suggested that they rarely contacted Essential Energy and could not see the value in investing money in this area.

*“Customer service has been pretty good when I’ve called.” – Bega (SMB) participant*

*“I never speak to them. If I have, it has been good. I speak to someone in Australia! They are helpful.” – Wagga Wagga participant*

*“When I call to complain about something I want to talk to someone and get answers!” – Inverell participant*

*“Haven’t called them for years. I can’t remember the last time I called them.” – Wagga Wagga (SMB) participant*

*“I want Option A – I don’t need to deal with Essential Energy. It is not worth it. At the moment, we ring if we have a problem and they sort it. If they bring it in are we going to be told to log into the portal? I need to talk to a person.” – Inverell participant*

Others choose option A as they believed that Essential Energy should be funding improvements in customer service themselves as it was regarded as simply a cost of doing business.

*“Option A – they should be building their own CRM – we shouldn’t be funding it!” – Inverell (SMB) participant*

*“But it is paying for their internal system. We are paying them to improve their own system. That doesn’t seem right. We don’t even benefit really.” – Taree participant*

*“I understand that having a unified system is important – but ideally, I don’t think that the customer should foot the bill” – Ballina participant*

*“Feel very strongly about this one, feel like we are being gutted, we are being asked to agree to pay more to pay for better service. They should be doing this anyway” – Bega participant*

A smaller number of participants choose Option B as they could see the logic in having one system that could track a customer enquiry across the business. These customers imagined that this would improve service levels enough without running to the expense of investing in a customer portal. A portal was also not seen to suit everyone, particularly the elderly and those in remote locations with poor internet.

*“Option B covers a new system without the big expense.” – Taree participant*

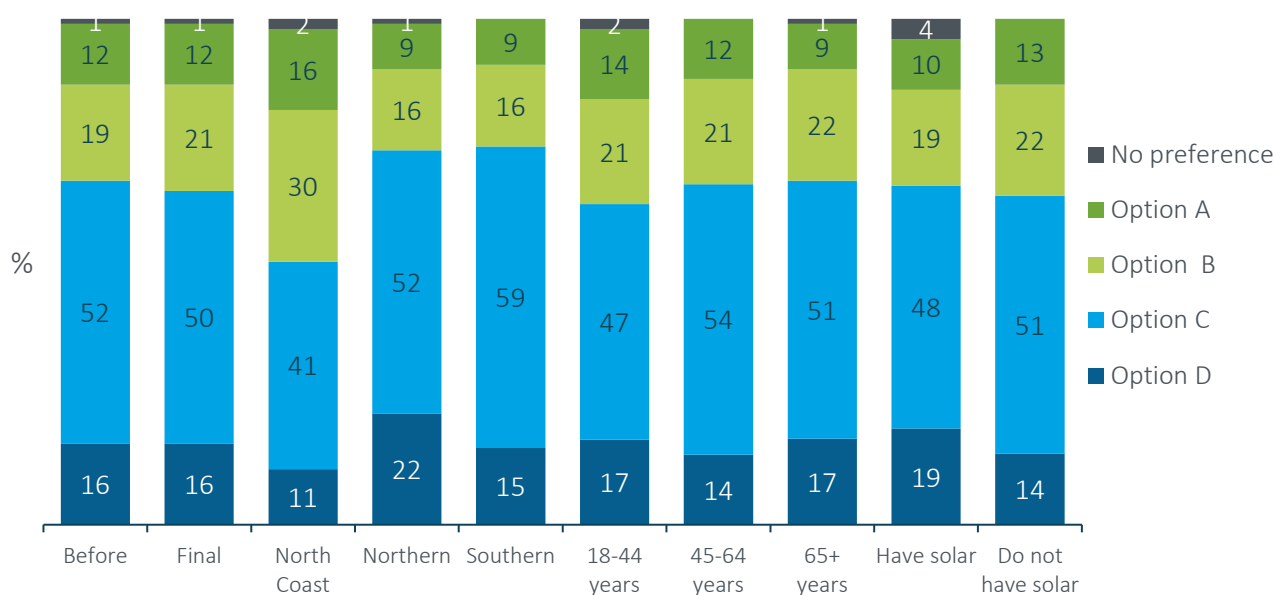
*“There is an assumption that internet coverage is everywhere and that everyone can enter portals and use them but some are not tech savvy. Lots like to talk to someone rather than go online.” – Bega participant*

*“Looking at those options as a customer, B delivers most bang for the buck.” – Wagga Wagga participant*

Polling was somewhat mixed in relation to customer service, with no option having a clear majority. Approximately half (52% Before, 50% Final) the forum participants preferred Option C, and approximately one fifth (19% Before, 21% Final) chose Option B. However, most participants indicated that they did not want the customer service to stay the same, with only one in ten (12% Before, 12% Final) choosing Option A.

Preference for options did not vary by age or solar panel ownership, however those in the North Coast region were more likely (30%) to preference Option B.

Figure 15: Preferred customer service option



*What is your choice for Customer Service? / What is your final choice for Customer Service?*

*Base: All forum participants who answered this question; Before (n=428); Final (n=428), North Coast (n=133), Northern (n=167), Southern (n=128), 18-44 years (n=153), 45-64 years (n=183), 65+ years (n=92), Have solar panels (n=191), Do not have solar panels (n=237)*

### 12.1.2 CALD and ATSI priorities

Opinions on this were evenly split with CALD and ATSI participants favouring all four scenarios for varying reasons. Option D was popular with those who had business interests and who valued an online portal for accessing information quickly and efficiently, but it was acknowledged that not everyone has the capability to use technology in this manner.



*"If you ask me, I would go for Option D because in my business I used to use online portals all the time, we did everything online." – CALD participant*

*"A lot of the people in my community would not be able to use that online portal, they would want to go for Option B." – CALD participant*

*"With Option D businesses should pay for it themselves. We're talking about a fairly substantial difference between Option C and D." – ATSI participant*

Those who valued Option C commented that consolidating different customer service reporting systems could dramatically benefit the customer.

*"Nothing bugs me more than two systems not talking to each other, it seems to happen a lot in government. I'd be going Option C because as a customer I'm getting all the benefits here but for \$1.63 I'd be paying for their benefits." – CALD participant*

*"I suppose everything is passed on eventually, everyone's customer service costs are passed on to you, in some form it's just itemising it." – ATSI participant*

*"I do like the ability to go online and see what has happened because you might be doing something else, rather than having to call someone. Option C gives you more flexibility and it's quicker." – ATSI participant*

While Options A and B were preferred by participants who either didn't see value in the online portal or who had never experienced the need to call the customer service department of Essential Energy, there were also comments that businesses should be paying for their own customer service upgrades and not passing the cost onto their customers.

*"I've never had to call them so it's not something I would pay extra for." – ATSI participant*

*"Option B as I don't have as much interest in the online portal. Need to remember passwords and not many people can do that. My phone is my computer." – ATSI participant*

*"My style of thinking is that the company should pay from their assets." – CALD participant*

### 12.1.3 C&I customers

Most C&I participants felt that Option B or C was good enough and questioned the need to extend the investment to provide an online portal for them. A number were happy (and preferred) being able to ring the depot with staff who knew the area, or the call centre when needed, and argued that the money would be perhaps better spent on a dedicated C&I relationship manager.

*"Customers want to talk to a person who knows their area. To my way of thinking Option C covers most of what is needed." – C&I participant*

*"It is going to take someone at Essential Energy to find all that info and upload it to an online portal so will still be quicker to call someone." – C&I participant*

*"A customer relationship manager would be better for us like we used to have." – C&I participant*

*"Talking to someone is most important and being able to talk to them quickly." – C&I participant*

## 12.2 Business Partners and Stakeholders

### 12.2.1 Local Councils

Councils cited some frustration with the service from Essential Energy, especially regarding who to contact and the new connections process. Although one Council participant recognised the recent improvements with the introduction of the Better Connect program, there was a feeling that improvements were still needed.

In that regard, most opted for Option D.

*“Any improvements to customer service is good. Better Connect improvements have been good. Option D would be good. I am all for better systems. Let’s go for a vast improvement.” – Local Council*

*“From a Council perspective I would go Option D. Council is frustrated with trying to speak to the right person within Essential Energy.” – Local Council*

In addition to being able to contact Essential Energy, Councils could see an advantage in being able to negotiate the timing of outages through a portal.

*“It is worth paying to be able to work with Essential Energy to improve the timing of outages.” – Local Council*

### 12.2.3 New Technology Providers/Solar Installers

This topic was not covered with New Technology Providers.

### 12.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective

Within the Stakeholder Collaboration Collective, the concept of a customer portal was met with variable enthusiasm. On the one hand it was agreed that it could improve the customer experience, however on the other hand, it was seen to require a significant change in customer understanding of the energy market and therefore would only have limited appeal to certain customers.

In addition, it was argued that most customers did not directly deal with Essential Energy so in reality this portal may not be necessary.

Amongst the Advocate group, Option B was the preferred option. Whilst online portals were considered useful to many as they provided a one stop shop, there was some concern that not all customers were computer literate and there was concern that other avenues of contact would be lost.

*“An online portal is not easy to manage for the elderly and the Aboriginal Community.” – Advocate participant*

*“There are sections of the community that still want to deal face to face and you don’t want them left behind.” – Advocate participant*

## 13. Importance ranking

### 13.1 Connected Customers

#### 13.1.1 Main forums

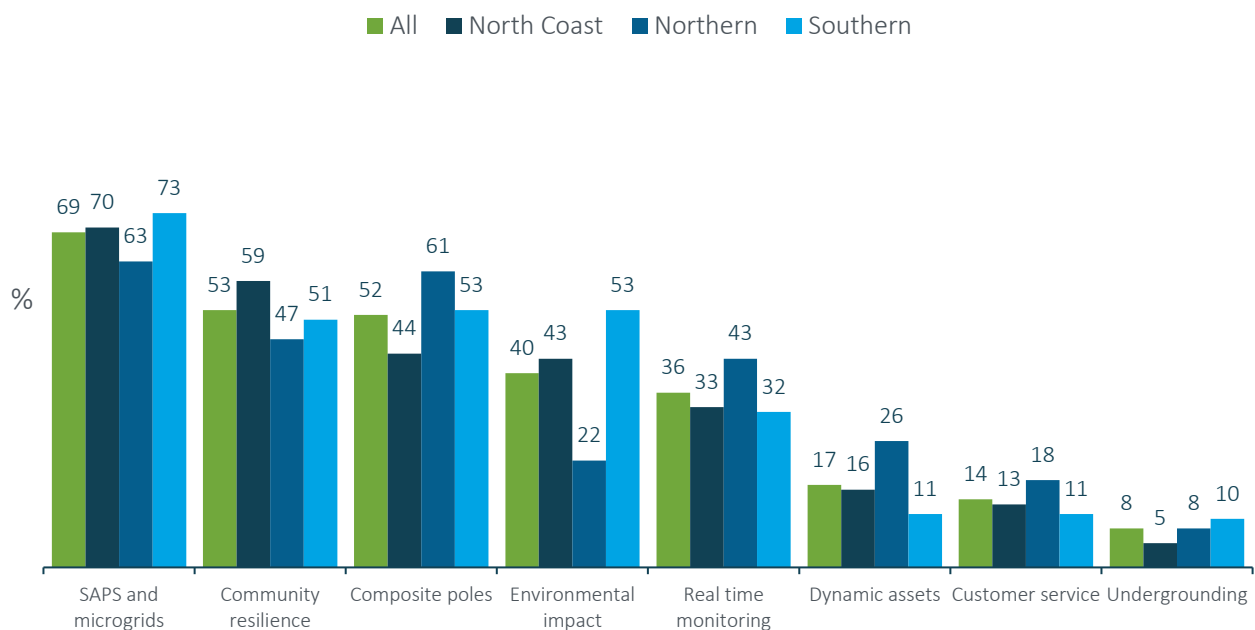
Lastly, participants were answered to select three topics spoken about that they felt were most important for Essential Energy to invest in for the 2024-2029 period.

More than two thirds (69%) of forum participants indicated that SAPs and microgrids were in their top three priorities, while over half prioritised community resilience (53%) and/or composite poles (52%). Environmental impact (40%) and real time monitoring (36%) were also important investments for many forum participants. Seventeen percent indicated that investing in dynamic assets was one of their top priorities, and fourteen percent nominated customer service. Lastly, less than one in ten (8%) indicated that undergrounding was in their top three priorities.

There were some differences between regions in regards to importance. In general those in the North Coast region were more likely to prioritise community resilience in light of the recent flooding in the area (59%). Northern participants were more likely to prioritise composite poles (61%). They were less likely to prioritise lowering Essential Energy's environmental impact (22%) and more likely to support investment into dynamic assets than other regions (26%). Conversely, those in the Southern region of Essential Energy's network were highly supportive of the company investing in lowering their environment impact, with more than half (53%) selecting it in their top three priorities along with composite poles.

As expected, those who owned solar panels tended to be more supportive of investment into real time monitoring (47%) and dynamic assets (25%).

Figure 16: Three most important investments



*Out of the topics we have discussed tonight, please choose the top three most important investments that you think Essential Energy should make in the 2024-2029 period.*

*Base: All forum participants who answered this question Final (n=395); North Coast (n=119), Northern (n=152), Southern (n=124)*

### 13.1.2 CALD and ATSI priorities

The top three priorities valued by CALD and ATSI participants from all scenarios received outstanding support in comparison to other options. They were as follows:

- Lowering the environmental impact

*“Because it’s about looking after the environment, allowing native species to regenerate.” – ATSI participant*

*“I like that they’re going to greener vehicles.” – ATSI participant*

- SAPs and Microgrids

*“These are a good thing for remote areas where they don’t have reliable power.” – ATSI participant*

- Undergrounding

*“Because of bushfires and floods and things like that.” – ATSI participant*

### 13.1.3 C&I customers

This was not covered with C&I customers.

## 13.2 Business Partners and Stakeholders

### 13.2.1 Local Councils

Council participants were unanimous in their selection of Customer Service in their top three.

The other priorities then varied between:

- Real time monitoring
- Dynamic assets
- SAPS and Microgrids
- Community resilience

### 13.2.2 Renewable Developers

For all the renewable developers, composite poles were placed at the top of the priority list. This was regarded as an immediate problem given the age of the network, the fact that there were poles that need replacing and the increasing frequency of extreme weather events.

Next on the list was invariably, real time monitoring and the use of dynamic assets.

*“We also need real time monitoring in order to capture what is going on.” – Renewable Developer*

Undergrounding was the lowest priority for some as it were not felt to represent good value for money.

### **13.2.3 New Technology Providers/Solar Installers**

Microgrids and dynamic assets were thought to be the most important for Essential Energy to focus on by New Technology Providers. However, real time monitoring was thought to be required in order to do this. It was thought that all of these topics will have a big impact in terms of resilience and stabilising the turbulence of the industry at the moment.

*“You have to target all of them together if that is feasible.” - New Technology Provider*

### **13.2.4 Consumer and Industry Advocates and the Stakeholder Collaboration Collective**

Amongst Advocates, there was varying opinions as to what the three most important areas were, although most agreed that transitioning to composite poles was a key priority. The other priorities for investment mentioned included:

- Customer service
- Lowering environmental impact
- Community resilience
- Real time monitoring – we need to get ready for the future
- SAPS and Microgrids

## 14. Implications

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There is support from customers, business partners and stakeholders for most of the higher-level or faster pace investments put forward by Essential Energy.

In particular they believe that SAPS and Microgrids, improving community resilience and transitioning to composite poles should be prioritised and implemented earlier than other initiatives.

Specifically, they support Essential Energy strengthening network resilience through:

- Investing in transitioning to composite poles as part of the pole replacement program and undertaking at least 5,000 additional proactive composite pole replacements in high-risk areas, going up to 25,000 replacements where it makes clear sense to do so;
- Investing in up to 400 SAPS and 10 Microgrids over the five years; and
- Converting up to 40 kilometres of poor condition overhead network to underground in very high-risk areas.

There is also support for assisting in improving community resilience through investments in 1000 domestic generators, 40 large generators, 20 portable stand-alone power systems, 50 portable solar streetlights, 3 new staff roles to help develop community resilience plans, a portable community hub and depot.

Development of a smarter network is also strongly supported through:

- Investing in being able to see what is happening at a local level on the network (real-time monitoring) through a fully integrated data management system and obtaining data across the broader network
- Investing in 100 dynamic assets to mitigate existing power quality issues and to pre-empt others from occurring and installing batteries and solar panels at 50 key telecommunications and zone substation sites to provide a source of backup power

There is extremely strong support for Essential Energy lowering its environmental impact by investing in solar panels at the top 20 depots based on solar returns and moving about 850 light and heavy combustion engine vehicles to electric vehicles – with requests to go even further in this area.

Customers also want enhanced customer service with the introduction of a new system to record and manage interactions in one place with many also wanting an online customer portal. However, there is little support for the portal to be extended to Councils, Retailers and more complex business structures.

Fine-tuned proposals based on the above findings will be tested in Phase 4 of the project.

## 15. End of Session Feedback

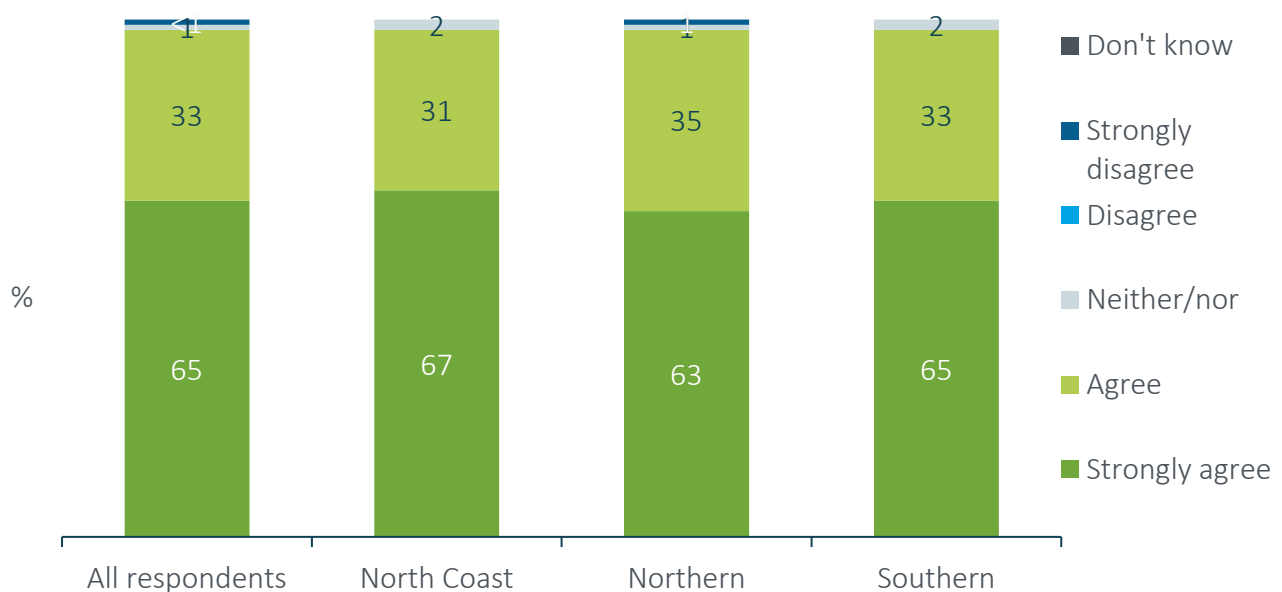
After the forums, attendees were asked for their feedback by rating their level of agreement with several statements.

Almost all customer forum participants agreed that they had enjoyed the session, with approximately two fifths agreeing strongly (65%).

*"It was collaborative, friendly, enjoyable and informative." – Taree participant*

*"Fun talking at a round table with like-minded people." – Broken Hill participant*

Figure 17: Enjoyment in taking part in the session



Based on your experience today, please indicate whether you strongly agree or disagree with each of the following statements: **'I enjoyed taking part'**

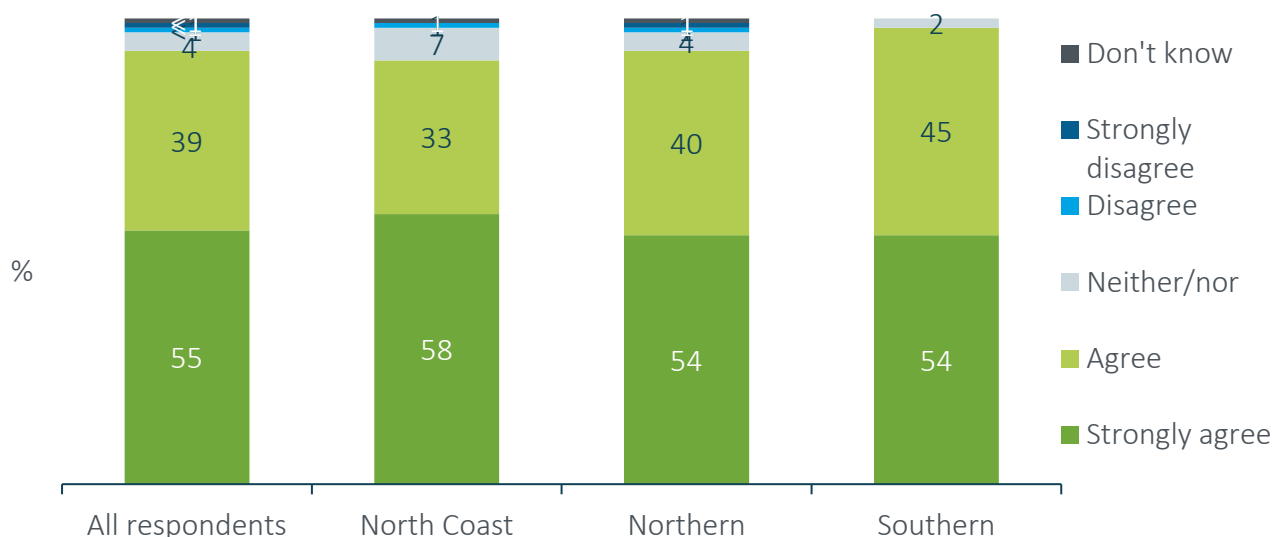
Base: All customer forum participants who answered this question (n=426); North Coast (n=132); Northern (n=167); Southern (n=127)

The majority of forum participants also agreed that the session was informative, and they learned a lot (55% strongly agree, 39% agree).

*“The informative staff from Essential were patient and responsive to questions making our enquiries easily answered.” – Taree participant*

*“I learnt about lots of things I didn't know.” – Inverell participant*

Figure 18: Informative session



Based on your experience today, please indicate whether you strongly agree or disagree with each of the following statements: **‘It was informative and I feel I have learned a lot.’**

Base: All customer forum participants who answered this question (n=426); North Coast (n=132); Northern (n=167); Southern (n=127)

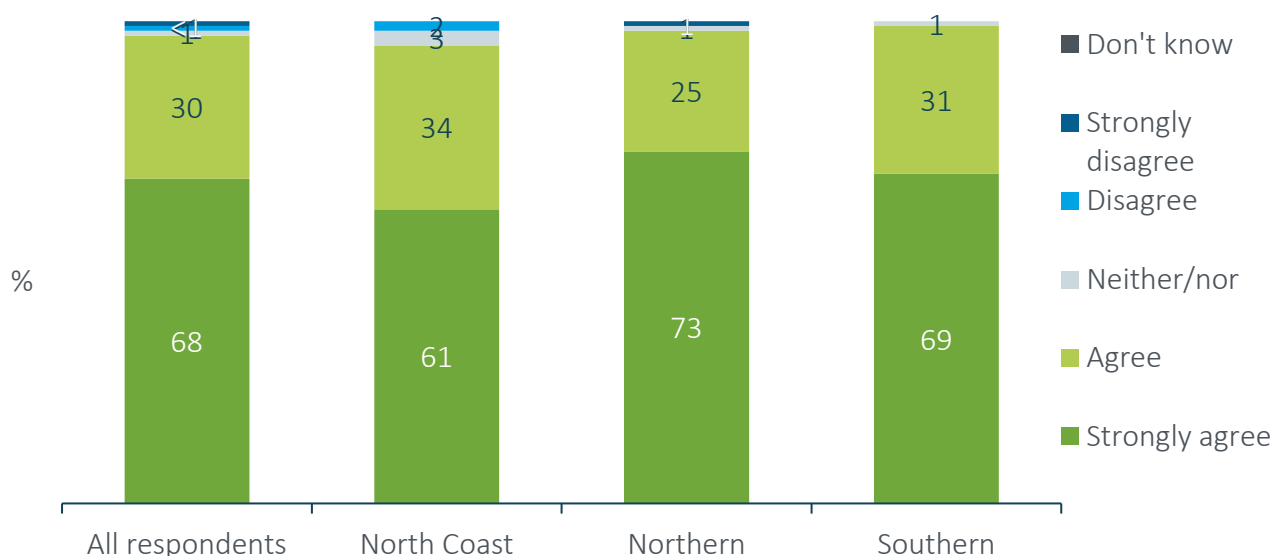
Similarly, ninety eight percent of participants agreed that the session was well structured and organised, with over half (55%) agreeing strongly.

*“Enlightening information and sharing of opinions and ideas. Very well structured and organised.” – Wagga Wagga participant*

*“Great facilitation, wonderful time keeping.” – Inverell participant*



Figure 19: Organised and well-structured session



Based on your experience at the Zoom session, please indicate how strongly you agree or disagree with each of the following statements: **'The session was well organised and structured.'**

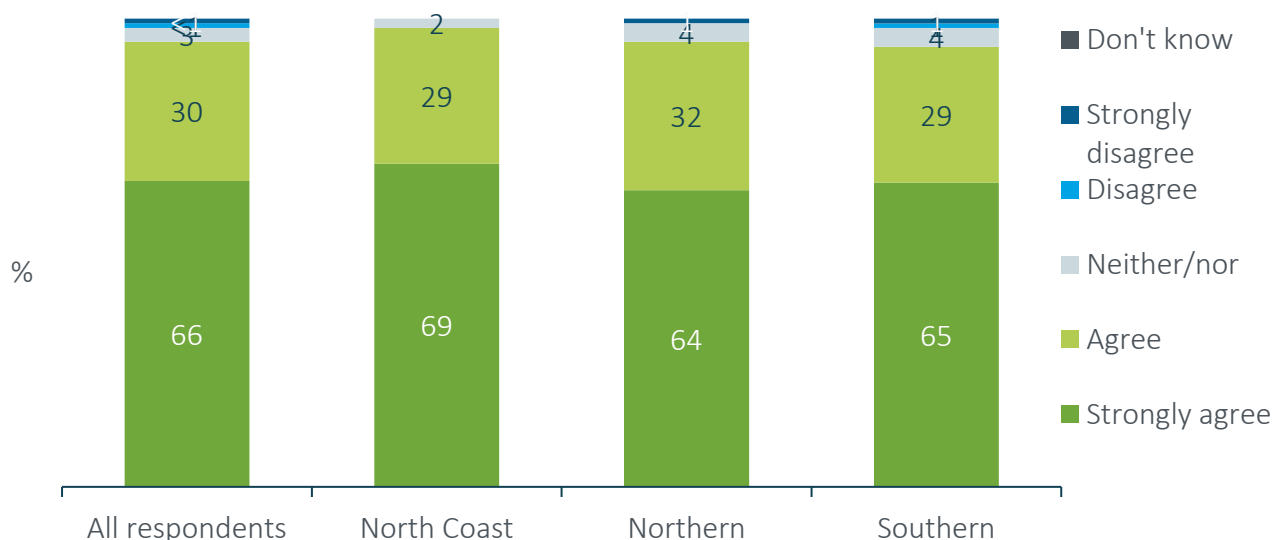
Base: All customer forum participants who answered this question (n=426); North Coast (n=132); Northern (n=167); Southern (n=127)

Almost all also agreed that the session allowed them to share their views and contribute to discussions (66% strongly agree, 30% agree).

*"Everyone got a say and was involved. I found this inclusive and enjoyable."* – Bega participant

*"Being able to discuss in a group environment and to see or hear other people's views."* – Wagga Wagga participant

Figure 20: Able to provide views and contribute



Based on your experience today, please indicate whether you strongly agree or disagree with each of the following statements: **'I was able to provide my views and contribute during the session'**

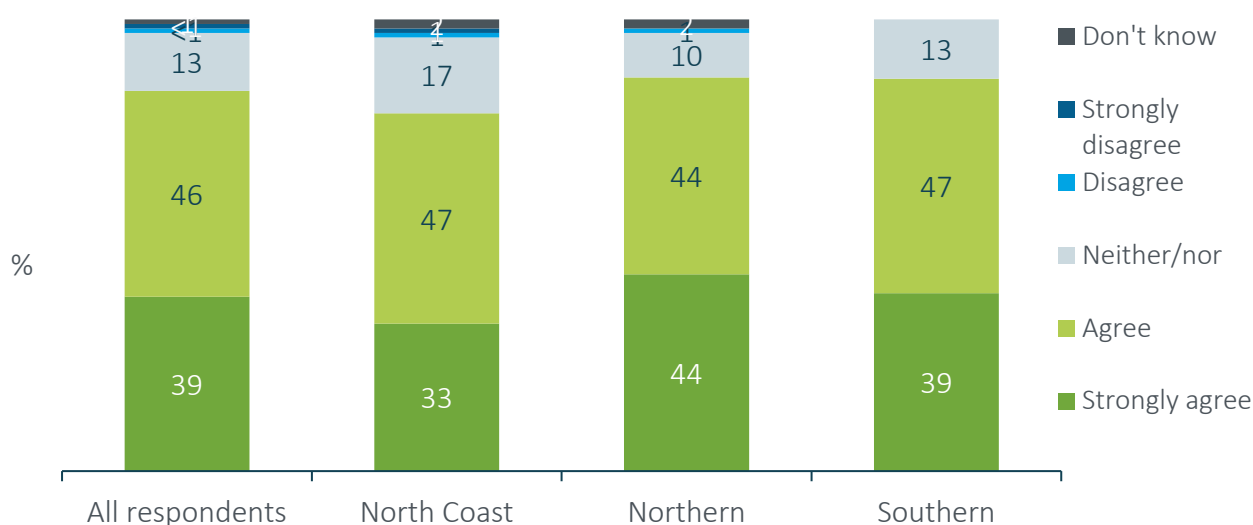
Base: All customer forum participants who answered this question (n=426); North Coast (n=132); Northern (n=167); Southern (n=127)

Most (85%) agreed that Essential Energy would act on the feedback provided in the session, however thirteen percent neither agreed nor disagreed.

*"I enjoyed learning of the future improvements and protection of the communities from Essential Energy." – Broken Hill participant*

*"General information, feel heard, more understanding in business practices." – Dubbo participant*

Figure 21: Essential Energy will act on feedback



Based on your experience today, please indicate whether you strongly agree or disagree with each of the following statements: **'I think Essential Energy will act on the feedback given'**

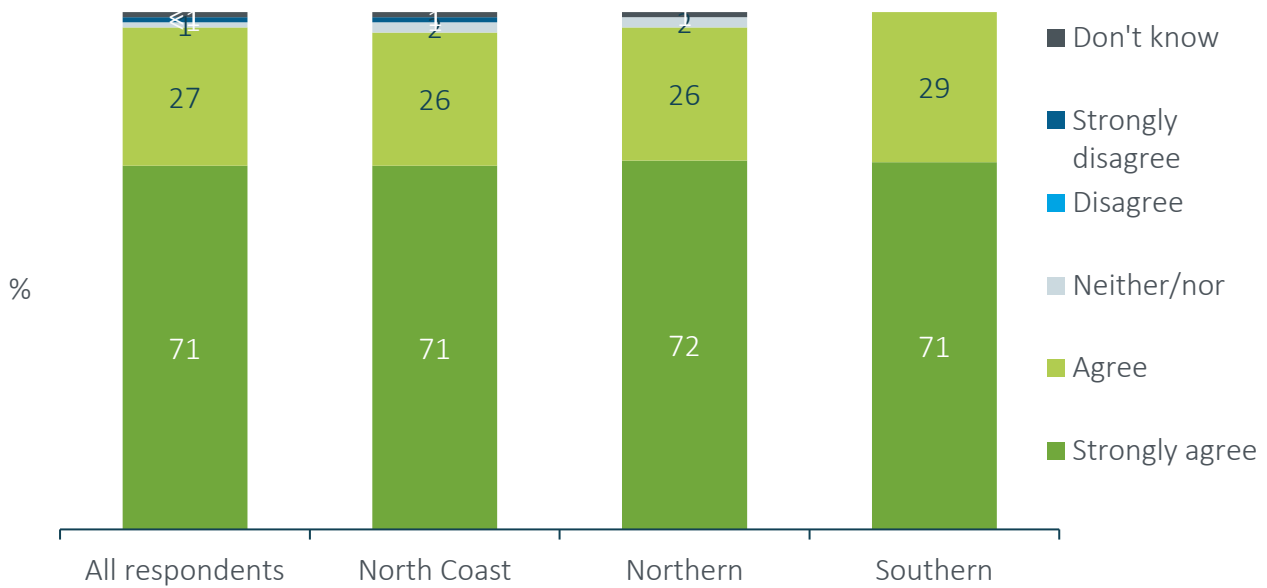
Base: All customer forum participants who answered this question (n=426); North Coast (n=132); Northern (n=167); Southern (n=127)

Lastly, almost all (98%) agreed that events like the customer forums were a good way of consulting the public about issues, with over seventy percent (71%) agreeing strongly.

*"Lots of listening to the community and their genuine concerns. Good organisation for large scale discussion." – Bega participant*

*"It was an opportunity for the community to come together to make informed decisions." – Wagga Wagga participant*

Figure 22: Customer workshops are a good way to consult the public



Based on your experience today, please indicate whether you strongly agree or disagree with each of the following statements: **'I think events like this are a good way of consulting the public about issues.'**

Base: All customer forum participants who answered this question (n=426); North Coast (n=132); Northern (n=167); Southern (n=127)

There was also spontaneous positive feedback provided by some of the group participants:

*"One piece of feedback I would like to give is well done guys, it is great to see you engaging with all these different industry groups and customers in this process. Great to be able to voice our opinions and give that feedback from industry. This overall effort has been fantastic and it has been great to be a part of."* – New Technology Provider

*"To have such a progressive framework and outline was pretty mind blowing. It is fantastic. Great to have the opportunity to have such input."* – New Technology Provider

# Appendices

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## Appendix A: Deliberative Forum Agendas

### Essential Energy Regulatory Proposal 24-29 Phase 3 Facilitators' Agenda

Project:	Essential Energy – Regulatory Proposal 24-29				
Event:	Phase 3 Forums				
Details:					
Dates and location:	Tuesday 17 May – Taree Wednesday 18 May – Inverell Thursday 19 May – Ballina Tuesday 24 May – Wagga Wagga Wednesday 25 May – Bega Wednesday 1 June – Broken Hill Tuesday 7 June - Dubbo	Time:	6.00pm-9.30pm	Duration:	3.5 hours
Forum objectives:	<ul style="list-style-type: none"><li>• To present what we’ve learned from Phase 2</li><li>• To obtain customers’ preferences for each topic in the context of rising electricity prices and the total bill impact</li><li>• To collaboratively fine-tune the preferred options or identify if there are any other program options that would meet customers’ needs better</li></ul>				

Time	Session details	Responsibility	Materials
Before 6.00pm	<b>Pre-forum</b> <ul style="list-style-type: none"> <li>Registration</li> <li>Provide participants with filming/photography permission forms and signing sheet (ask them to write in keypad number)</li> </ul>	WR	Filming/photography form Signing sheet
6.00-6.05pm (5 mins)	<b>Welcome and guidelines for the session</b> <ul style="list-style-type: none"> <li>Structure of the session</li> <li>Guidelines</li> <li>Location of toilets and evacuation in emergency</li> <li>Introduce speaker</li> </ul>	WR Lead Facilitator	PPT slides
6.05-6.10pm (5 mins)	<b>Introduction by Essential Energy executive</b> <ul style="list-style-type: none"> <li>Acknowledgement of Country</li> <li>Where we are up to in the engagement program - we've done two phases of forums and a survey with residents and small/medium businesses</li> <li>What we've heard so far... customer priorities, resilience, pricing etc.</li> </ul>	EE Exec	PPT slides

6.10-6.17pm (7 mins)	<b>Presentation 2: Context for energy costs</b> <ul style="list-style-type: none"> <li>How customers pay for EE's costs</li> <li>Our network costs now</li> <li>Expect increasing bills in the future - NSW Roadmap and increasing cost of living in general</li> <li>Managing costs</li> <li>Planning for the future</li> </ul>	EE	PPT slides
6.17-6.20pm (3 mins)	<b>Presentation 3: Introduction to the activity</b> <ul style="list-style-type: none"> <li>Topics we will cover</li> <li>For each topic we will present several options - we want to know which one they would prefer for each.</li> <li>If you choose the most expensive options for each topic then this would result in a total bill impact of..</li> <li>You will have a chance to go back and change selections towards the end of the evening when they review the total bill impact.</li> </ul>	EE	PPT slides
6.20-6.25pm (5 mins)	<b>Introduction to polling</b> <ul style="list-style-type: none"> <li>Introduction to the polling from the lead facilitator and instructions</li> <li>Practice polling question – participants input their answers and see results</li> </ul>	WR Lead Fac	PPT slide and keypads
<b>RESILIENCE</b>			
6.25-6.30pm (5 mins)	<b>Presentation 4: Resilience intro</b> <ul style="list-style-type: none"> <li>The pace of change - proactive v reactive approaches</li> </ul>	EE	PPT slides
6.30 - 6.40pm (10 mins)	<b>Table discussion: The pace of change</b>  <i><b>Introductions on tables: Ask participants to introduce themselves – where they live and what they would be doing if they weren't here tonight (you can ask another ice breaker question if you want)?</b></i>  <i><b>Before talking about poles I just want to spend a bit of time talking about the pace of change. All the options for resilience tonight involve <b>varying paces of change</b>. I want to be clear that we are not asking which option you prefer overall but rather which option you prefer for each topic <b>for the 2024-2029 period</b>.</b></i>	WR Facilitators	

	<ul style="list-style-type: none"> <li>In general would you prefer that EE spends more sooner and gets it all done quicker or spreads it out over time? Discuss the pros and cons of faster or slower pace of change – what would you prefer? What are the key considerations in your decision? <i>(Try to get a feeling for what is most important)</i></li> <li>Are you comfortable that investing in strengthening the network will not prevent events from occurring and that when they do occur the resulting costs could still be passed on and paid for by all customers (similar to how they are now)?</li> <li>What timescale do you think is appropriate for the move to a stronger network in <b>high risk areas</b>? If EE moves quickly this could mean that they are replacing assets (such as poles/wires) well ahead of time (e.g. 50 year assets could be replaced in 5-10 years). How comfortable are you with this?</li> </ul>		Show handout 1
6.40-6.50pm  (10 mins)	<b>Presentation: Topics 1 and 2 – Transition to composite poles and undergrounding</b>	EE	PPT slides
6.50 – 7.05pm  (15 mins)	<p><b>Table discussion: Topics 1 and 2 – Transition to composite poles and undergrounding</b></p> <p><b>Give out handout of options for composite poles</b></p> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Which is the group's preferred option (put a sticky dot on the table's chosen option on the board)</li> <li>Would a different option be even better? Why?</li> <li><b>Give out activity sheet.</b> Ask participants to fill in their activity sheet (they can either choose the same option as the table or different) <b>COLUMN 1 ONLY</b></li> </ul> <p><b>ASK THEM TO PUT THEIR KEYPAD NUMBER ON THE ACTIVITY SHEET</b></p> <p><b>Give out handout of options for undergrounding</b></p> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher</li> </ul>	WR Facilitators	<p>Handout composite poles</p> <p>Table board and sticky dot</p> <p>Activity sheet – column 1</p> <p>Handout undergrounding</p>

	<p>risk reduction compared to slower=lower cost=less risk reduction)</p> <ul style="list-style-type: none"> <li>Which is the group's preferred option and why (put a sticky dot on the table's chosen option on the board)?</li> <li>Would a different option be even better?</li> <li>Ask participants to fill in their activity sheet (they can either choose the same option at the group or different) <b>COLUMN 1 ONLY</b></li> </ul>		<p>Table board and sticky dot</p> <p>Activity sheet – column 1</p>
7.05-7.30pm (25 mins)	<b>DINNER</b>		
7.30-7.38pm (8 mins)	<b>Presentation: Topic 3 -SAPS and Microgrids and Topic 4 - Community resilience</b>	EE	PPT slides
7.38 – 7.50pm (12 mins)	<p><b>Table discussion: Topic 3 -SAPS and Microgrids and Topic 4 - Community resilience</b></p> <p><b>SAPS/Microgrids:</b> <b>Give out handout of options for SAPS/Microgrids</b></p> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Which is the group's preferred option (put a sticky dot on the table's chosen option on the board)</li> <li>Would a different option be even better?</li> <li>Ask participants to fill in their activity sheet (they can either choose the same option at the group or different) <b>COLUMN 1 ONLY</b></li> </ul> <p><b>Community resilience:</b> <b>Give out handout of options for community resilience</b></p> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Which is the group's preferred option (put a sticky dot on the table's chosen option on the board)</li> <li>Would a different option be even better?</li> </ul>	WR Facilitators	<p>Handout SAPS/ Microgrids</p> <p>Table board and sticky dot</p> <p>Activity sheet – column 1</p> <p>Handout comm resilience</p> <p>Table board and sticky dot</p> <p>Activity sheet – column 1</p>



	<ul style="list-style-type: none"> <li>Ask participants to fill in their activity sheet (they can either choose the same option at the group or different) <b>COLUMN 1 ONLY</b></li> </ul>		
7.50-7.55pm (5 mins)	<b>Polling: Resilience options</b> <ul style="list-style-type: none"> <li>Participants put their preferred options in from column 1 on the activity sheet</li> </ul>	WR Lead Fac	Keypads
<b>POWER QUALITY</b>			
7.55-8.08pm (13 mins)	<b>Presentation 5: Topic 5 and 6 - A smarter network</b>	EE	
8.08 - 8.18pm (10 mins)	<b>Table discussion: Topic 5 and 6 – A smarter network</b>  <b>Real time monitoring:</b> <b>Give out handout of options for real time monitoring</b> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Which is the group's preferred option (put a sticky dot on the table's chosen option on the board)</li> <li>Would a different option be even better?</li> <li>Ask participants to fill in their activity sheet (they can either choose the same option at the group or different) <b>COLUMN 1 ONLY</b></li> </ul> <b>Dynamic assets:</b> <b>Give out handout of options for dynamic assets</b> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Which is the group's preferred option (put a sticky dot on the table's chosen option on the board)</li> <li>Would a different option be even better?</li> <li>Ask participants to fill in their activity sheet (they can either choose the same option at the group or different) <b>COLUMN 1 ONLY</b></li> </ul>	WR Facilitators	Handout real time monitoring  Table board and sticky dot  Activity sheet – column 1  Handout Dynamic Assets  Table board and sticky dot  Activity sheet – column 1
8.18-8.20pm	<b>Polling: Power quality options</b>	WR Lead Fac	Keypads

(2 mins)	<ul style="list-style-type: none"> <li>Participants put their preferred options in from column 1 on the activity sheet</li> </ul>		
8.20-8.30pm  (10 mins)	<b>DESSERT</b>		
<b>LOWERING EE'S ENVIRONMENTAL IMPACT AND BETTER CUSTOMER SERVICE</b>			
8.30-8.40pm  (10 mins)	<b>Presentation 6: Topic 7 - Lowering our Environmental Impact and Topic 8 - Customer Service</b>	EE	
8.40-8.50pm  (10 mins)	<p><b>Table discussion: Lowering our Environmental Impact and Customer Service</b></p> <p><b>Topic 7 - Lowering our Environmental Impact:</b> <b>Give out handout of options for environmental impact</b></p> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Which is the group's preferred option (put a sticky dot on the table's chosen option on the board)</li> <li>Would a different option be even better?</li> <li>Ask participants to fill in their activity sheet (they can either choose the same option at the group or different) <b>COLUMN 1 ONLY</b></li> </ul> <p><b>Topic 8 - Customer Service:</b> <b>Give out handout of options for customer service</b></p> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Which is the group's preferred option (put a sticky dot on the table's chosen option on the board)</li> <li>Would a different option be even better?</li> <li>Ask participants to fill in their activity sheet (they can either choose the same option at the group or different) <b>COLUMN 1 ONLY</b></li> </ul>	WR Facilitators	<p>Handout environ impact</p> <p>Table board and sticky dot</p> <p>Activity sheet – column 1</p> <p>Handout better customer service</p> <p>Table board and sticky dot</p> <p>Activity sheet – column 1</p>

8.50-8.53pm  (3 mins)	<b>Polling: Lowering our Environmental Impact and Better Customer Service</b> <ul style="list-style-type: none"> <li>Participants put their preferred options in from column 1 on the activity sheet</li> </ul>	WR Lead Fac	Keypads
<b>BRINGING IT ALL TOGETHER</b>			
8.53-8.56pm  (3 mins)	<b>Table activity: Calculating the full bill impact</b> <ul style="list-style-type: none"> <li>Participants to add up their individual choices on their activity sheets and see their personal bill impact.</li> </ul> <p><b>WR analyst fill in the last numbers on the heatmap</b></p>	WR Facilitators	Activity sheet – column 1  Calculators
8.56-9.00pm  (4 mins)	<b>Show Heat Map slide</b> <ul style="list-style-type: none"> <li>Heat map slide shown of all the preferences with indication of which option is preferred for each topic (in green) or where there is no clear preference (in red)</li> <li>Tell participants that we are now going to go back to the tables and they can discuss each topic without a clear outcome further</li> <li>They can also reassess their choices in light of the total bill impact they just calculated</li> </ul>	WR Lead Fac	PPT slide
9.00-9.08pm  (8 mins)	<b>Q&amp;A</b> <ul style="list-style-type: none"> <li>Participants get a chance to ask questions about the split preference options</li> </ul>	EE Panel	Leave summary slide on screen
9.08-9.10pm  (2 mins)	<b>Table activity: Final choices</b> <ul style="list-style-type: none"> <li>Make final choices on activity sheet in column 2 in light of total bill impact calculation from earlier and the Q&amp;A answers.</li> </ul>	WR Facilitators	Activity sheet – Column 2
9.10-9.18pm  (8 mins)	<b>Polling: Final choices</b> <ul style="list-style-type: none"> <li>Participants to input their final choices from the activity sheet column 2 for each topic</li> <li>Final results shown side by side with earlier results and comparisons made (before and after final deliberation)</li> </ul>	WR Lead Fac	Keypads  Activity sheet – Column 2
9.18-9.23pm  (5 mins)	<b>Table activity: Reasons for top 3 choices</b>	WR Table Facilitators	

	<ul style="list-style-type: none"> <li>Of all the topics we have looked at tonight, which three do you think are the most important for EE to take forward and why?</li> <li>Explain to participants that we are going to ask them to vote on this in the next session so they need to have their top 3 chosen.</li> </ul> <p><b>WR analyst to fill in the numbers on the final heatmap with bill impact (take the higher amount if there are still split preferences)</b></p>		
9.23-9.25pm (2 mins)	<p><b>Polling: Choose the top three</b></p> <ul style="list-style-type: none"> <li>Polling on importance – choose the 3 most important from all the topics discussed.</li> </ul>		
9.25-9.27pm (2 mins)	<p><b>Show Final Heat Map slide</b></p> <ul style="list-style-type: none"> <li>Show final heat map and bill impact.</li> </ul>	WR Lead Fac	
9.27-9.30pm (3 mins)	<p><b>Summing up and thanks</b></p> <ul style="list-style-type: none"> <li>Closing remarks – what EE will take from today and confirmation of next steps.</li> <li><i>Woolcott Research Lead Facilitator – thanks and reminder to fill in end of session questionnaire on tables.</i></li> <li>Give out end of session survey and incentive.</li> <li><b>At the end make sure you collect:</b> <ul style="list-style-type: none"> <li>End of session surveys</li> <li>Activity sheets (check keypad numbers are written in)</li> <li>Sign in sheet (check everyone has signed it)</li> <li>Filming permission forms</li> </ul> </li> </ul>	<p>EE</p> <p>WR Lead</p> <p>WR Table facs</p>	<p>End of session questionnaire and signing sheet</p> <p>Incentive</p>
<u>CLOSE</u>			

## Appendix B: Recruitment Screener

Thank you for your interest in being involved in a community forum. The purpose of the forums is for Essential Energy to understand your views about what the priorities should be for the electricity network in the future.

Below is a short questionnaire with a few demographic questions to ensure we have a representative group of residents and businesses.

We will contact you let you know if you are successful and if so, we will confirm details with you.

1. Are you an employee of Essential Energy?

- |     |   |                     |
|-----|---|---------------------|
| Yes | 1 | THANK AND TERMINATE |
| No  | 2 | CONTINUE            |

2. Do you, or any immediate members of your family, work for an electricity distributor, retailer, generator or Australian Energy Regulator (AER)?

- |     |   |                     |
|-----|---|---------------------|
| Yes | 1 | THANK AND TERMINATE |
| No  | 2 | CONTINUE            |

**TERMINATE MESSAGE FOR Q1 and Q2.** Unfortunately, we are unable to include anyone with a close connection to Essential Energy and/or electricity regulation. Thanks again for your interest.

3. What is your postcode: \_\_\_\_\_ (Terminate if not in EE network area)

**TERMINATE MESSAGE FOR Q3.** Unfortunately, you do not live within the area we are looking for. Thanks again for your interest.

4. Which forum would you like to attend? SR

- |                                |   |
|--------------------------------|---|
| Tuesday 17 May – Taree         | 1 |
| Wednesday 18 May – Inverell    | 2 |
| Thursday 19 May – Ballina      | 3 |
| Tuesday 24 May – Wagga Wagga   | 4 |
| Wednesday 25 May – Bega        | 5 |
| Wednesday 1 June – Broken Hill | 6 |
| Tuesday 7 June – Dubbo         | 7 |

5. Do you identify as being...? CHECK QUOTAS

- |                   |   |
|-------------------|---|
| Male              | 1 |
| Female            | 2 |
| Gender neutral    | 3 |
| Prefer not to say | 4 |

6. What is your date of birth? \_\_\_\_\_ CHECK QUOTAS

# TERMINATE IF UNDER 18

If you don't want to give this information:

Which of the following age groups you fall into? CHECK QUOTAS

Under 18	1	TERMINATE
18-24	2	
25-34	3	
35-44	4	
45-54	5	
55-64	6	
65+	7	

## 7. Do you speak a language other than English at home or with family? CHECK QUOTAS

No, English only	1	SKIP NEXT Q
Yes	2	

## 8. What is the main language other than English spoken at home or with family? DNRO

Arabic	1	Lebanese	14
Australian Indigenous Languages	2	Macedonian	15
Cantonese	3	Mandarin	16
Croatian	4	Polish	17
Dutch	5	Punjabi	18
French	6	Serbian	19
German	7	Spanish	20
Greek	8	Tagalog (Filipino)	21
Hindi	9	Turkish	22
Indonesian	10	Vietnamese	23
Italian	11	Other (please specify)	24
Japanese	12	Prefer not to say	25
Korean	13		

## 9. Are you of Aboriginal or Torres Strait Islander origin? CHECK QUOTAS

No	1	
Yes	2	
Prefer not to say	3	DO NOT OFFER

## 10. Are you the owner or a decision maker for a small or medium business (less than 200 employees)?

Yes	1 (recruit as small business)
No	2 SKIP NEXT QUESTION
Don't know	3 SKIP NEXT QUESTION

## 11. What industry does the business operate within?

---

## 12. What is your approximate annual household income? CHECK QUOTAS

Less than \$41,600 per year (less than \$800 per week)	1
\$41,600 - \$78,000 per year (\$800 - \$1,500 per week)	2
\$78,000 - \$104,000 per year (\$1,500 - \$2,000 per week)	3
\$104,000 - \$156,000 per year (\$2,000 - \$3,000 per week)	4
More than \$156,000 per year (more than \$3,000 per week)	5
Do not wish to answer	6

13. Does the property you are living in have any of the following? SR per row

	Yes	No
Solar panels for electricity	1	2
Battery storage	1	2
Electric vehicle(s)	1	2

14. Which of the following best describes your household makeup? SR

Single household	1
Couple living together with no children	2
Shared household	3
Family household with children still at home	4
Other (please specify)	5
Do not wish to answer	

15. Do you live in a: SR

Stand-alone house or dwelling with acreage or farm	1 RURAL
Stand-alone house or dwelling without acreage or farm	2
A townhouse or semi	3
An apartment or unit complex	4
Other (please specify)	5

16. In the last 12 months, have you had any difficulty paying your electricity bills such as:

	Yes
Had to borrow money to pay a bill	1
Had to ask for an extension or paid late	2
Been on a special payment plan	3
Been disconnected due to inability to pay	4
Had to cut back on buying food or other groceries to avoid disconnection	5
Delayed other payments to avoid disconnection	6
None of the above	7
Do not wish to answer	8

IF YES TO ANY CODE AS A VULNERABLE CUSTOMER

17. Do you, or a member of your household, rely on life support equipment such as a positive airway pressure machine (PAP/CPAP), powered wheel chair, home dialysis? SR

Yes	1
No	2
Don't know	3

IF YES CODE AS LIFE SUPPORT CUSTOMER

18. Are you a member of any special interest groups or associations related to energy, farming or irrigation?

Yes (please specify)	1
No	2

Thank you for providing that information. Lastly, could you please provide your contact details:

TITLE: \_\_\_\_\_  
FIRST NAME: \_\_\_\_\_  
SURNAME: \_\_\_\_\_  
Preferred ph. number to be  
contacted on: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
SUBURB/POSTCODE: \_\_\_\_\_  
EMAIL ADDRESS: \_\_\_\_\_

Thank you for your time and willingness to participate. We will be in touch to confirm whether you have been selected to participate and with further instructions.

Should you require further information in the meantime please contact Melissa Homann or Liz Sparham of Woolcott Research on 02 9261 5221.

Thank you



## Appendix C: ATSI and CALD Topic Guide

### *Essential Energy Regulatory Proposal 24-29 Phase 3 – ATSI and CALD Depth Topic Guide*

(60mins on ZOOM)

There is a specific ATSI and CALD PPT pack for these in-depths. Note that you will need to read out the speaking notes for each slide – so you will probably want to print them out first.

Also ensure you have an activity sheet with you that you can fill in for the participant (and a calculator)

Name of participant:

Date:

*Note that timings are to be used as a guide only*

#### INTRODUCTION (2 MINS)

Thank you for agreeing to take part in this next phase of research for Essential Energy's future planning.

- We work for an independent research company WR
- The purpose of the project is to involve customers in developing Essential Energy's future plans and pricing.
- Essential Energy are regulated by the Australian Energy Regulator and have to put in a proposal every 5 years that shows what their plans are and how much it will cost. They need customer input into those plans.
- (FOR CALD ONLY) We are talking to people who speak a language other than English to find out if there are certain things that Essential Energy needs to consider specifically for those groups. So I'd like you to answer the questions from your own perspective, but also the perspective of people who speak a language other than English.
- (FOR ATSI ONLY) We are talking specifically to people from an Aboriginal and Torres Strait Islander background to find out if there are certain things that Essential Energy needs to consider specifically. So I'd like you to answer the questions from your own perspective, but also the perspective of Aboriginal and Torres Strait Islander people generally if possible.
- Our role is to report back to them on your feedback however your responses are confidential and anonymous. We report on an overall basis only and do not mention specific names, etc.
- Check ok to record the discussion (if relevant)

## INTRODUCTION (5 MINS)

SHOW SLIDES 3-4: 'Purpose' and 'What we heard in last phase'

## OPTIONS (45 MINS)

Go through slides for each section and ask the questions in the slides.

Fill in column 1 of their activity sheet for them.

## CALCULATING THE TOTAL BILL IMPACT (2 MINS)

- Add up the bill impacts and let the participant know the amount.
- Ask if they are happy with that amount or if they would like to make any changes
- Write in the final amounts in column 2

## TOP 3 (3 MINS)

- Of all the topics we have discussed today, which three do you think are the most important for EE to take forward and why?

## CLOSE

Any final comments?

Phase 4, in Sept, will be on pulling it all together and getting your feedback on the specific proposals EE plan to include. Would it be ok if we contact you to get your feedback in that phase?

Thank and close

## Appendix D: Example Agenda for Group Sessions

### Essential Energy Regulatory Proposal 24-29 Phase 3 Facilitators' Agenda – LOCAL COUNCILS

Project:	Essential Energy – Regulatory Proposal 24-29				
Event:	Phase 3 Forums				
Details:					
Dates and location:	<ul style="list-style-type: none"><li>Monday 27th June</li></ul>	Time:	2.00pm-4.00pm	Duration:	2 hours
Forum objectives:	<ul style="list-style-type: none"><li>To present what we’ve learned from Phase 2</li><li>To obtain customers’ preferences for each topic within the total bill impact</li><li>To collaboratively fine-tune the preferred options or identify if there are any other program options that would better meet customers’ needs</li></ul>				

Time	Session details	Responsibility
2.00-2.05pm (5 mins)	<b>Welcome and guidelines for the session</b> <ul style="list-style-type: none"> <li>Structure of the session</li> <li>Explain recording</li> <li>Introductions</li> </ul>	WR Facilitator
2.05-2.10pm (5 mins)	<b>Introduction by Essential Energy executive</b> <ul style="list-style-type: none"> <li>Acknowledgement of Country</li> <li>Where we are up to in the engagement program - we've done two phases of forums and a survey with residents and small/medium businesses</li> <li>What we've heard so far... customer priorities, resilience, pricing etc.</li> </ul>	EE Exec
2.10-2.15pm (5 mins)	<b>Presentation 2: Context for energy costs</b> <ul style="list-style-type: none"> <li>How customers pay for EE's costs</li> <li>Our network costs now</li> <li>Expect increasing bills in the future - NSW Roadmap and increasing cost of living in general</li> </ul>	EE

	<ul style="list-style-type: none"> <li>Managing costs</li> <li>Planning for the future</li> </ul>	
2.15-2.20pm  (5 mins)	<b>Presentation 4: Resilience intro</b> <ul style="list-style-type: none"> <li>Proactive v reactive approaches</li> <li>Topic 1: Transition to composite poles</li> </ul>	EE
2.20 - 2.30pm  (10 mins)	<b>Discussion: Proactive v reactive approaches</b>  <i>All the options for resilience that will be presented involve <b>varying paces of change</b>. We want to be clear that we will not be asking which options you prefer overall but rather which options you prefer for each topic <b>for the 2024-2029 period</b>.</i> <ul style="list-style-type: none"> <li>In general would you prefer that EE spends more sooner and gets it all done quicker or spreads it out over time? Discuss the pros and cons of faster or slower pace of change – what would you prefer? What are the key considerations in your decision? <i>(Try to get a feeling for what is most important)</i></li> <li>Are you comfortable that investing in strengthening the network will not prevent events from occurring and that when they do occur the resulting costs could still be passed on and paid for by all customers (similar to how they are now)?</li> <li>What timescale do you think is appropriate for the move to a stronger network in <b>high risk areas</b>? If EE moves quickly this could mean that they are replacing assets (such as poles/wires) well ahead of time (e.g. 50 year assets could be replaced in 5-10 years). How comfortable are you with this?</li> </ul>	WR Facilitator
2.30-2.40pm  (10 mins)	<b>Presentation: Topics 1 and 2 – Transition to composite poles and undergrounding</b>	EE
2.40 – 2.50pm  (10 mins)	<b>Discussion: Topics 1 and 2 – Transition to composite poles and undergrounding</b>  <b>Composite Poles:</b> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Would a different option be even better? Why?</li> </ul>	WR Facilitator

	<b>Undergrounding:</b> <ul style="list-style-type: none"> <li>• What are your initial thoughts on each of the options – pros and cons of each?</li> <li>• What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>• Would a different option be even better?</li> </ul>	
2.50-2.55pm (5 mins)	<b>Presentation: Topic 3 -SAPS and Microgrids and Topic 4 - Community resilience</b>	EE
2.55 – 3.05pm (10 mins)	<b>Discussion: Topic 3 -SAPS and Microgrids and Topic 4 - Community resilience</b>  <b>SAPS/Microgrids:</b> <ul style="list-style-type: none"> <li>• What are your initial thoughts on each of the options – pros and cons of each?</li> <li>• What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>• Would a different option be even better?</li> </ul> <b>Community resilience:</b> <ul style="list-style-type: none"> <li>• What are your initial thoughts on each of the options – pros and cons of each?</li> <li>• What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>• Would a different option be even better?</li> </ul>	WR Facilitator
3.05-3.15pm (10 mins)	<b>Presentation 5: Topic 5 and 6 - A smarter network</b>	EE
3.15 - 3.25pm (10 mins)	<b>Discussion: Topic 5 and 6 – A smarter network</b>  <b>Real time monitoring:</b> <ul style="list-style-type: none"> <li>• What are your initial thoughts on each of the options – pros and cons of each?</li> <li>• What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>• Would a different option be even better?</li> </ul> <b>Dynamic assets:</b> <ul style="list-style-type: none"> <li>• What are your initial thoughts on each of the options – pros and cons of each?</li> </ul>	WR Facilitator

	<ul style="list-style-type: none"> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Would a different option be even better?</li> </ul>	
3.25-3.35pm (10 mins)	<b>Presentation 6: Topic 7 - Lowering our Environmental Impact and Topic 8 - Customer Service</b>	EE
3.35-3.45pm (10 mins)	<b>Discussion: Lowering our Environmental Impact and Customer Service</b>  <b>Lowering our Environmental Impact:</b> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Would a different option be even better?</li> </ul> <b>Customer Service:</b> <ul style="list-style-type: none"> <li>What are your initial thoughts on each of the options – pros and cons of each?</li> <li>What pace of change would you like to see happening and why? (faster=higher cost=higher risk reduction compared to slower=lower cost=less risk reduction)</li> <li>Would a different option be even better?</li> </ul>	WR Facilitator
3.45-3.55pm (10 mins)	<b>Top 3 choices</b> <ul style="list-style-type: none"> <li>Of all the topics we have looked at today, which are the most important for EE to take forward and why?</li> </ul>	WR Facilitator
3.55-4.00pm (5 mins)	<b>Summing up and thanks</b> <ul style="list-style-type: none"> <li>Closing remarks – what EE will take from today and confirmation of next steps.</li> </ul>	EE
CLOSE		



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Engagement for Essential  
Energy's 24-29 Regulatory  
Proposal – Phase 3

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