

# People's Panel Report

Summary Report 2022



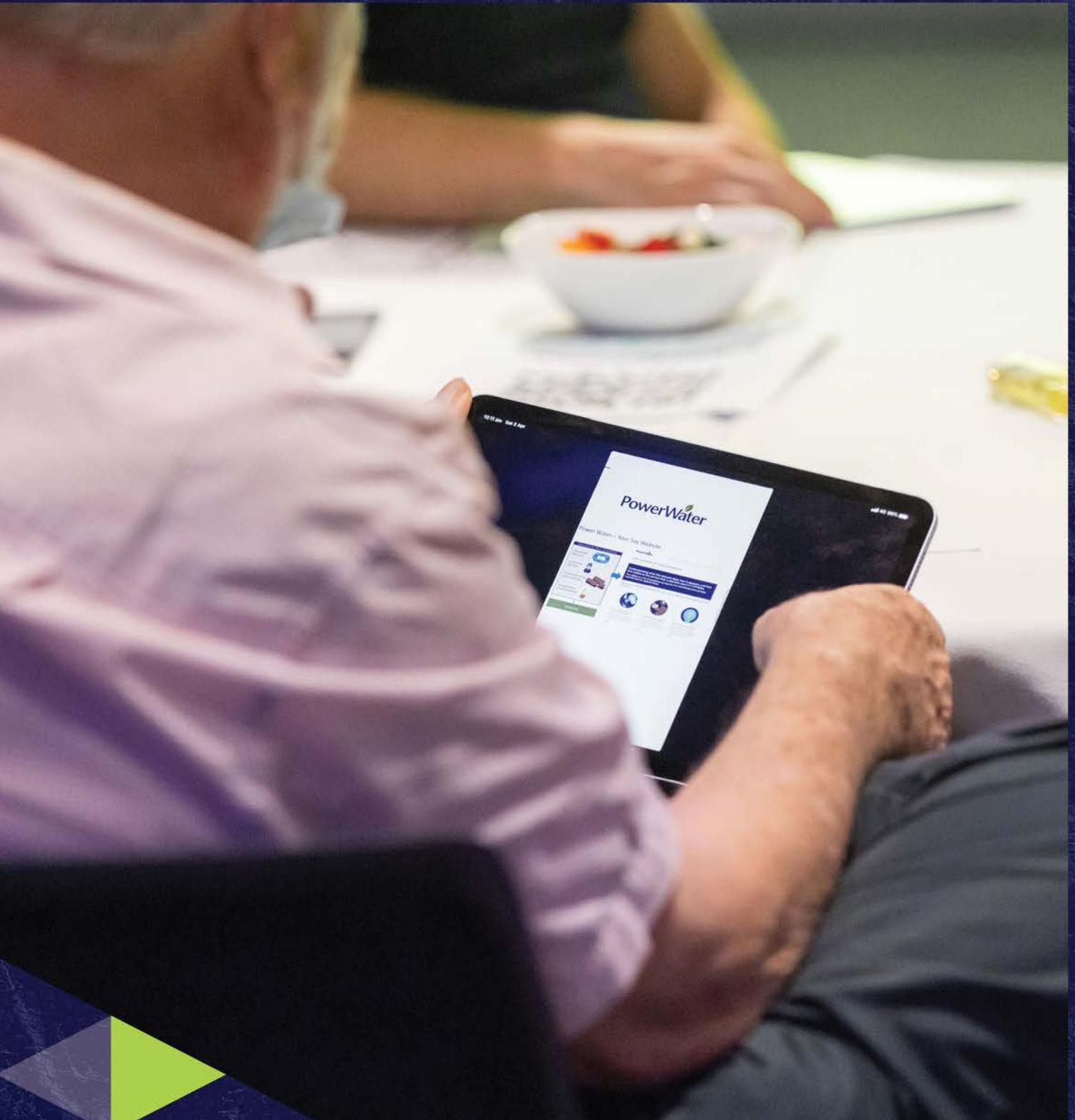


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# Summary

*Power and Water's People's Panels are a group of everyday Territorians who have been assisting us in making decisions that will affect all Territorians on our spending plans for the next five years and beyond.*



# Background

At Power and Water, we have developed an extensive engagement program to support our future plans for the electricity network. This has started with an understanding of what matters to our customers and understanding their values, vision and priorities.

Power and Water is the essential service provider in the Northern Territory, providing electricity, gas, water and sewerage services to households and businesses.

Our purpose is to make a difference to the lives of Territorians. For the 185,000 people connected to our regulated electricity networks in Darwin, Katherine, Alice Springs and Tennant Creek, we do this by ensuring electricity is transported safely, reliably and affordably through our comprehensive network of poles and wires.

Every five years, we submit our plans for the electricity networks, and related services we provide customers, to the Australian Energy Regulator.

Our plans for expenditure and pricing for the 2024-2029 period need to be submitted in January 2023. The period leading up to the submission of our plans is an opportune time to engage with customers on our strategic direction to the end of the decade.

A centrepiece of our engagement is establishing a representative panel of residential customers in both Darwin and Alice Springs – what we have termed our People's Panels.

This document summarises the outcomes of the two People's Panels in March and April 2022. A summary of the outcomes of our first round of People's Panels held in November 2021 can be found on our website.

People's Panels provide an opportunity for deliberative engagement from a broad cross section of our community. Participants in the People's Panels were recruited as a broad representation of residential customers in those areas.

Customers are given resources and freedom to provide feedback on their values, vision and priorities. We aim to take these priorities and demonstrate a clear line of sight between customer preferences and our plans to the regulator.

The People's Panels were run over two days. Participants validated the values and priorities from the feedback in November, provided a view on Power and Water's 2030 Vision and considered how Power and Water should respond to a range of challenges, including the direction, speed, and guardrails for options in response.

These outcomes were achieved through a process of co-design. Participants were given the opportunity to test the solutions presented, raise new ideas and opportunities, and develop a consensus position. Minority and dissenting views were captured. The process of co-design sought to meet the principles of inclusive, participative, respectful and outcome focused.

An important part of the March and April People's Panels was to share our responses to outcomes, learnings and recommendations from the People's Panels held in November 2021. Panellists were provided with the first round People's Panel report. Over the two days, we talked through what we heard in November, attempted to respond to the many questions that were raised, explained how we were responding to customer "pain points" and co-designed solutions for the strategic issues they raised.

The Panel was facilitated and reported on by an external facilitator, who worked with Power and Water to ensure the process was engaging, forward-thinking and inclusive.

# Key messages

Key messages from the March and April People's Panels included:



## Affordability

Panel members recognise that some of their recommendations would increase overall costs and prices but want Power and Water to work out how to mitigate this impact on vulnerable members of the community.



## Replacement

Power and Water should not keep replacement as low as possible and instead should look to smooth expenditure and price impacts over time and integrate new technology where it makes sense to do so.



## Customer service and engagement

Power and Water should do more to support face-to-face engagement and handling of complaints, and expenditure plans should reflect this.



## Innovation and cost efficiency

Power and Water should be more cost efficient and facilitate and support the transition to renewables. It should adopt new technologies proven to work elsewhere and pilot new technologies.



## Community batteries

Power and Water should not leave investment in community batteries for the market to solve and should build capability and understanding of the technology through feasibility assessments and pilots.



## Pricing

Status quo pricing arrangements should not be retained and Power and Water should develop prices that make it easier for retailers (and the Government's Pricing Order) to pass on improved price signals to customers (Darwin only view).



## Next steps

Power and Water will reconvene the People's Panels in August 2022 to further develop the outcomes from the March and April Panels and provide an update on expenditure and revenue forecasts and related pricing impacts.

# 1 Purpose

*We will work with you to develop solutions and recommendations to ensure we reflect your views, values, and concerns in the options, solutions and approaches we develop and are able to demonstrate how your feedback has influenced our decisions.*

Power and Water's commitment to the People's Panels



This report summarises outcomes from the People's Panels sessions held in March and April 2022. These sessions form part of Power and Water's community engagement on its 2024-2029 Regulatory Proposal. Future sessions are planned for August 2022.

Each Panel was held over two full days with the Alice Springs People's Panel held at the Alice Springs Convention Centre on 26 and 27 March and the Darwin People's Panel held at the Darwin Convention Centre on 2 and 3 April.

There were 21 participants in Darwin and 17 in Alice Springs. All participants had attended the November People's Panels. A detailed breakdown of the demographics of participants is included in the Appendix.

The People's Panel is intended to be representative of our residential customer base. All participants were randomly recruited by Taverner Research to broadly reflect the Northern Territory population. The Panels include representation from youth, Aboriginal and Torres Strait Islander peoples, Culturally and Linguistically Diverse (CALD) residents, different voices, pensioners and solar customers.

The first session (day one) built upon the foundations of the November Panels and focused on further developing the tools needed to critically assess and challenge expenditure plans and options.

Sessions involved a combination of information presentation, question and answer sessions, participant choice on the issues to be responded to in-depth, and a process of co-design to test the solutions presented, raise new ideas and opportunities, and develop a consensus position.

Across the two Panels, Power and Water staff from various areas of the business, executives and subject matter experts were in attendance in person and online to facilitate discussion and provide their understanding of the changing electricity market. In response to feedback from the November Panels, a customer service representative presented the options for customer service improvements and answered questions about Power and Water's response to customer queries and complaints. External subject matter experts on future network opportunities and challenges were also available to provide views and answer questions.

The first session centred on Power and Water customers and:

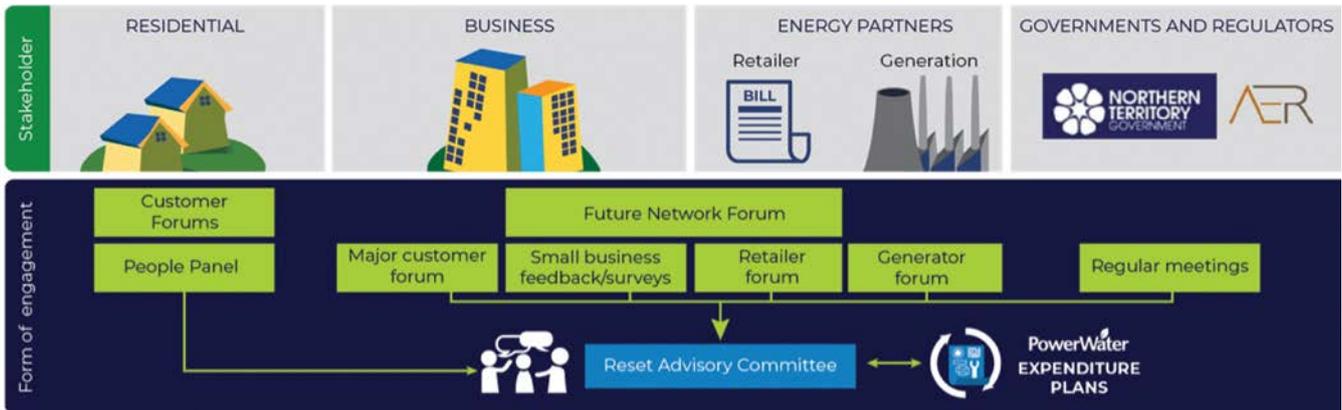
- validating the values important to customers and their trade-offs
- testing customer views on Power and Water's 2030 Vision
- communicating our plans, factors, expenditure drivers and the levers available to reduce costs
- repeating back what we heard from customers at the November Panels and how we have progressed.

The second session (afternoon of day one and day two) focused on the big challenges facing the network and how Power and Water should:

- address customer service concerns.
- plan for the replacement of older assets in the network
- address the opportunities and challenges of increased renewables and new technologies entering the network.
- design options for tariffs to reduce future costs.

The People's Panels represent one component of our engagement process with stakeholders. In preparation for our Regulatory Proposal to the Australian Energy Regulator, Power and Water will

engage with several key groups through meetings and forums to inform our plans. This process is illustrated below, including the stakeholder groups and form of engagement.



Our Reset Advisory Committee is also an important part of our engagement process. The goal of the Committee is to discuss feedback received in detail with representatives from each of the stakeholder groups – including representatives from our Darwin and Alice Springs People's Panel. The Reset Advisory Committee also analyses and advises on the relationship between customer preferences for options and expenditure plans and associated revenue and pricing outcomes. A Draft Expenditure Plan based on these discussions will be submitted on 31 January 2023.

A roadmap of our engagement process demonstrates the various stakeholder activities completed by Power and Water. This process is illustrated below.

The first steps in this roadmap were:

- Customer Focus Groups held between August 2021 and October 2021.
- Retailers, Future Network Forums and the People's Panel in November 2021.

This report covers the ideas and feedback received from the November People's Panels, the responses

and options we provided in March and April 2022, and the conclusions reached.

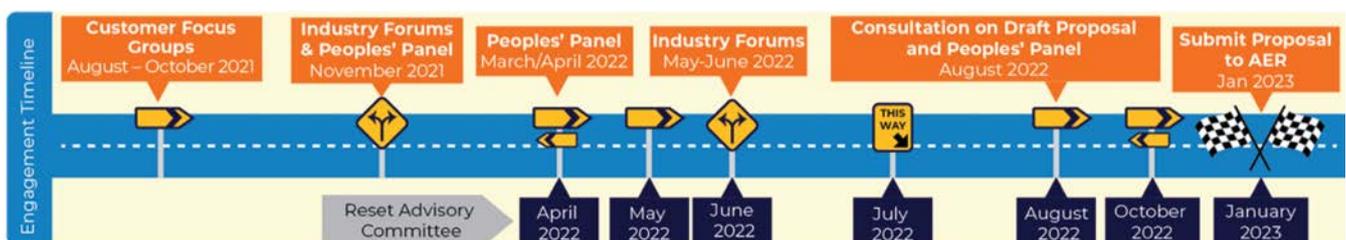
Power and Water will hold other engagement forums for customers not represented in the Panels.

This includes:

- a Retailer Forum.
- a Large Users Forum.
- a Generators Forum; and
- the Future Network Forums.

In early August 2022, Power and Water is aiming to release a draft initial regulatory proposal for consultation. The draft initial regulatory proposal will be out for public consultation for a six-week period.

In mid and late August 2022, Power and Water will hold the third and final People's Panel to take the draft initial draft regulatory proposal to ensure we have listened and heard what our stakeholders have said and take away any final feedback for the draft initial regulatory proposal that will be submitted on 31 January 2023.



## 2

# Method

*It is important Power and Water is guided by the views and values of the community, alongside that of subject matter experts, if it is to develop a robust Regulatory Proposal that best serves the people of the Northern Territory.*



# People's Panels

**The People's Panels allow for customers to consider current and future electricity issues. They are an essential part of our collaboration with the community to shape expenditure plans and revenue and pricing outcomes that we will include in our Regulatory Proposal.**

Participants from the People's Panels were randomly selected residential customers to simulate a 'mini-public' representative of a larger customer cohort.

In November 2021, participants were provided information on critical thinking, group consensus decision making, interrogations and generation of new information and competing views. With these skills, participants were asked at the March and April 2022 Panels to explore a range of challenges and options in response and reach consensus on how our proposed plans should be developed and refined.



The People's Panels have been designed on the principles that:

- Participants are broadly representative of the wider customer base
- Participants are tasked with answering one big question: 'How can Power and Water plan for a future that best serves customer needs?'
- Participants have access to in-depth information and diverse perspectives
- Participants are given time to discuss issues, ideas and weigh up options.

## Representation

**The People's Panels give a broad representation of Territorians and provide Power and Water and Panel members the opportunity to explore in-depth Power and Water's performance, current and future challenges and options in response.**

People's Panels are often used in community engagement processes where choices must be made and there is no clear 'right' technical answer, but rather decisions are about values and priorities.

Most community members have little understanding of Power and Water's potential courses of action and the long-term consequences. The Australian Energy Regulator's assessment of Power and Water's expenditure and pricing plans, informed by our engagement with customers, will have a significant impact on how Territorians consume and use electricity into the future. The outcomes of the considered and well-developed process, which reflects the views of a broad representation of the community in the Northern Territory, should be included in our expenditure and pricing plans and the regulator's deliberations on those plans.

## Prior engagement

**Customer engagement on our Regulatory Proposal began in August 2021 with four focus groups across Darwin and Alice Springs. This was followed by People's Panels conducted in November 2021.**

The focus groups tested how quickly and easily we could establish a baseline of customer knowledge and understanding, priorities and preferences for engagement activity. The November Panels focused on the customer lifecycle and our activities within this lifecycle.

This is important in the Northern Territory where the level of experienced customer advocacy in energy is limited. A large part of our early sessions

was therefore on explaining different parts of the electricity supply chain and addressing preconceived ideas around Power and Water's role in providing services to customers.

Our early focus groups helped us refine our approach to explaining our services to customers.

At the conclusion of the March and April Panels, several participants expressed that they felt more informed, engaged, and better understood the role of Power and Water in the network because of the information provided over the course of the engagement process.

## Recruitment

Recruitment and screening of participants was conducted to ensure representation across several demographics including location (Alice Springs or Darwin or within a 20 kilometre radius of each location), age, gender and income. Participants were asked if they identify as Aboriginal or Torres Strait islander, commonly speak a language other than English at home, have solar panels and/or a solar battery, and currently receive some form of government pension or disability benefit.

There were 21 participants in Darwin and 17 in Alice Springs. All participants had attended the November People's Panels.

Males represent most participants in the Darwin People's Panel (12 out of 21), compared to Alice Springs where most participants are female (14 out of 17).

Several younger participants from the November Panel chose not to participate in the March and April process, with only three participants in the 18-39 age bracket in Darwin and four in Alice Springs.

The Darwin Panel comprises more solar owners than the Alice Springs Panel, and in Alice Springs there are more participants in the lower-income bracket.

The spread of participants is considered to support consideration of a broad range of issues at both sessions. A detailed breakdown of the demographics of the participants is included in Appendix A.

Participants were notified of a COVID-19 case identified in the days following the Alice Springs Panel. As a result, there were changes to the structure of the day and format of the presentation at the Darwin Panel. This included additional precautions such as increased use of face masks by all Power and Water staff, removing the requirement for table rotations and practical guidance on maintaining social distancing of 1.5 metres.

In line with industry practice, participants were given a gift card in recognition of their time.

# 3

# Structure

*Electricity is complex and networks can be looked at as a collection of assets. It's not the customers' job to decide if how those assets are being used is efficient. That's what the regulator does.... the role of customers in engagement is actually to talk about their lived experience of the network, what's working for them, what isn't working for them...So the purpose of the engagement is not for consumers to become proxy regulators, it's actually for them to talk about the things that matter to them.*

Lynne Gallagher, Energy Consumers Australia



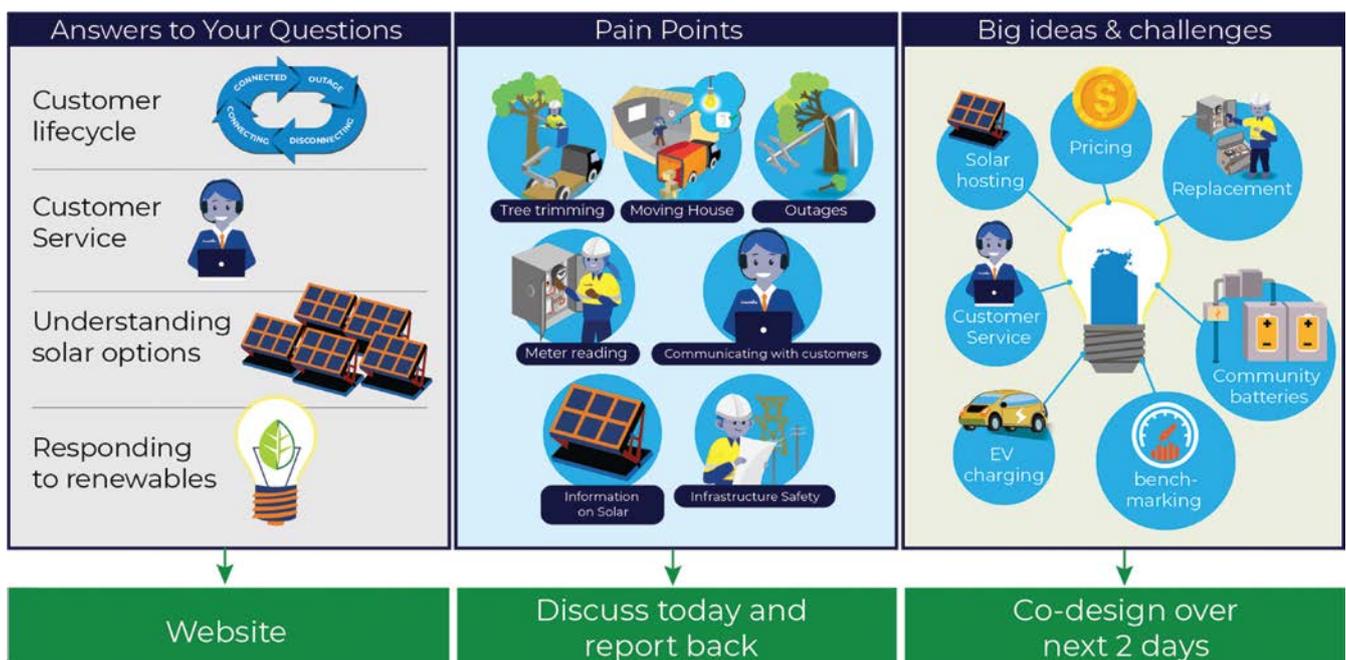
# How we sought to address the Panels' feedback

We captured the insights and feedback from the November People's Panels and grouped these into three response themes:

- Answers to your questions – The November People's Panels raised many good questions about how the energy market works, Power and Water's role, and issues regarding performance and service delivery. In response, Power and Water produced the 'Your Say' website with a range of reference material and more than 50 videos from industry experts which provide additional information and directly responds to many of the participant queries.
- Pain points – The November People's Panels focused on the customer experience and how Power and Water should respond to the challenges customers face on their customer experience journey. A series of customer 'pain points' were identified. For each pain point, we developed a response or a proposal for improvement. We presented many of these to the participants at the March and April Panels.

- Big ideas and challenges – Several significant challenges and opportunities were identified at the November People's Panels. These represent the big ideas and issues that will materially influence how Power and Water and customers collectively answer the question, 'How can Power and Water plan for a future that best serves customer needs?'. Big ideas were the subject of in-depth discussion and a process of co-design at the March and April People's Panels, with the objective of achieving a consensus position on how Power and Water should respond.

These response themes also provided the framing for how information was presented, the topics to be covered over the two days, the structure of the sessions and the method of engagement.



# Day One – Setting the scene

**Day one focused on demonstrating how we have responded to and addressed feedback from the November People’s Panels. The first of the big ideas and challenges for co-design were also presented.**

Participants were provided with a recap of the outcomes from November, including the ‘Customer Lifecycle’ and ‘Power and Water’s Activities’. This was followed by an overview of the engagement process.

Participants were presented with our approach to responding to feedback from the November Panels. A process of individual and group voting was applied throughout the sessions to guide discussion and capture priorities and views.

A key outcome from the November Panels was the identification of a suite of customer values. Understanding customer values is essential when considering the inevitable trade-offs considered in decision making.

Participants were provided with cards representing the top ten values identified from November and asked to consider the tensions and trade-offs existing between these values. This consideration of value and value trade-offs was a recurring theme through the process of decision-making over the following sessions.

Feedback from the November Panels included a desire for increased transparency of Power and Water’s 2030 Vision and its intended direction in adopting or facilitating existing and new technologies. Using the customer values, participants discussed and shaped Power and Water’s 2030 Vision statement, achieving a consensus view at each Panel.

Participants also voted on which of the customer experience pain points identified from November they would like to discuss in detail. A series of subject matter experts then discussed how Power and Water is proposing to respond to these issues, with participants voting on whether they believed enough has been done to address the pain point. Throughout the voting process, participants were encouraged to voice dissenting views and suggestions on how Power and Water can better resolve the issue.

In the afternoon, Power and Water presented the first big ideas and challenges for co-design – ‘Customer service’ in Alice Springs, and ‘Customer service’ and ‘Replacement of ageing assets’ (refer below) in Darwin.



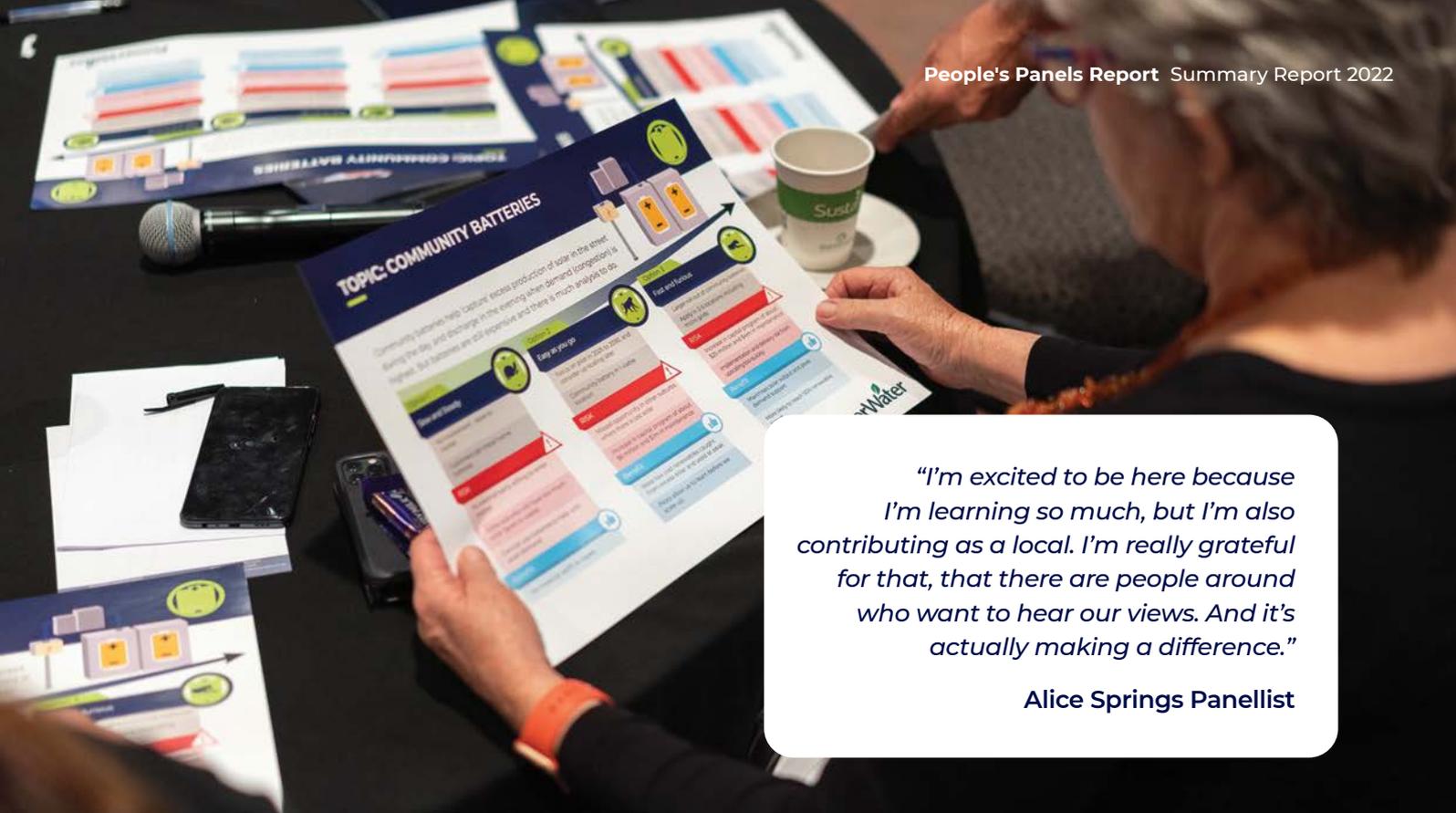
## **Customer service – face to face communication**

Ensuring customers are getting the support they need for account queries noting the November People’s Panels (particularly in Alice Springs) were disappointed shopfronts had closed.



## **Customer service – customer complaints**

Providing customers with options for complaint management, including escalation to a single point of contact.



*"I'm excited to be here because I'm learning so much, but I'm also contributing as a local. I'm really grateful for that, that there are people around who want to hear our views. And it's actually making a difference."*

**Alice Springs Panellist**

## Day Two – Giving us direction

**Day two is defined by the big issues and challenges for Power and Water's network.**

The session commenced with a role-play to allow participants to consider the changing energy landscape.

Banners showing the 'Energy Landscape in 2010' characterised by few renewables and a one-way energy system and a '2030 Vision' representing a high penetration of renewables and the challenges of two-way flows of energy were the focus of the role play. Participants were encouraged to express how they felt about these scenarios and what the banners were seeking to represent to the audience.

Participants were then asked to consider elements of the 2030 Vision in detail through sessions focusing on:

- The replacement of ageing assets: The volume of replacement work Power and Water must undertake over time as assets age and the benefits and costs associated with progressing replacement at different speeds. (This session was held on Day one in Darwin).
- Unlocking solar: Understanding the challenges of solar creating congestion for the network and generating energy at periods of low demand.

- Community batteries: Understanding the relationship between solar and community batteries, including opportunities to use community batteries to manage excess solar in the middle of the day and discharge when the sun goes down.
- Electric Vehicle (EV) charging: Expanding on the discussions at the November Panels regarding Power and Water's role in the roll out of EV charging and understanding the integration of EVs and solar.
- Pricing options: Exploring the opportunity of using tariffs to shift demand to periods of high generation of energy and low demand to reduce network stress. (This session was only held in Darwin).

These issues were explored through a process of co-design, providing participants with the opportunity to test the solutions presented, raise new ideas and opportunities, and work towards the development of a consensus position. Minority and dissenting views were also captured.

# Materials used and activities

Feedback from the November Panels informed design of the March and April Panels. This included:

- increased participation of subject matter experts
- subtitles on videos
- more readable slides with larger font
- tailoring information and discussion where appropriate to Darwin and Alice Springs
- less movements between tables for participants
- improved sound quality and better use of microphones.

We heard loud and clear that accessibility of information is important. We sought to increase accessibility and engagement through a range of tools to ensure the sessions were informative, thought-provoking and produced meaningful outputs.

These tools were used to encourage individual investigation and idea development, table discussions and Panel consensus, and movement around the room on a broad range of topics. The DOPE (Dove, Owl, Peacock, Eagle) personality types used in November were again used to remind participants of how different people prefer to communicate and handle conflict.



Participants were each provided with an iPad to access information on the issues being discussed. The live polling tool Mentimeter was also actively used throughout the two days to capture both individual and table responses, allowing results to be shared in real-time and for discussion to be tailored to feedback.



Free standing banners were used to check-in on concepts and information placemats outlining the benefits, risks and solutions for the topics discussed were provided to each table for easy reference and to support readability.



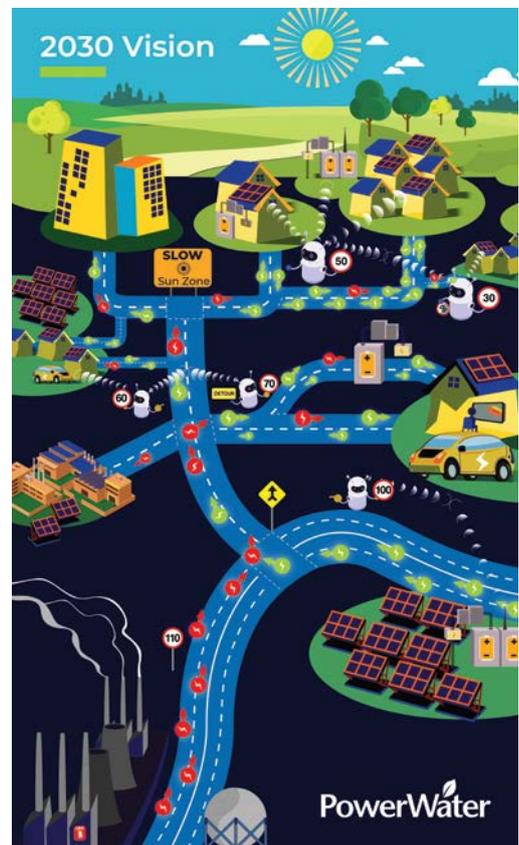
Participants were directed to the 'Your Say' website which includes a range of reference material and more than 50 videos from industry subject matter experts, internal and external to Power and Water. A number of these videos were played across the two days to provide deeper insights and independent perspectives on issues discussed.

Sessions involved scenario and role play based exercises, including on the future energy landscape and options for the replacement of ageing assets to encourage participation and the exchange of ideas on the concepts presented.

Each table comprised three to four participants and a Power and Water facilitator who guided the conversations and ensured all participants had the opportunity to contribute and recorded participant input. In Alice Springs, there was also movement of participants between tables once each day to encourage a diversity of views.

To accommodate the different engagement styles of participants and ensure a broad range of input was captured, the Mentimeter live polling tool was used which allowed participants to express their individual views. Mentimeter was also used to record feedback from table discussions and to support the development of a consensus position on issues, where practical, including the identification of dissenting views.

Following feedback from the November Panels, more regular breaks were provided, intermittent clarification checks on activities occurred, and interaction with subject matter experts was included to ensure participants progressed at a similar pace and their questions were considered. One of the panellists expressed appreciation at “being able to talk to genuine experts on the field” and it was “information I can trust”. Further feedback on the process was also sought at the conclusion of each day.



# 4

## Day One – Setting the scene

*Day one focused on demonstrating how Power and Water responded to and addressed feedback from the November People's Panels, including identified "pain points" and how the suite of core values developed by participants and their trade-offs would be used to guide decisions over the two days. Power and Water also presented the first big ideas and challenges for co-design.*



# Feedback from November People's Panels

The objectives of day one were introduced in Alice Springs by David Tovey, the Acting Executive General Manager for Customer, Strategy and Regulation. In Darwin, Rosemarie Dentesano, the Acting Executive General Manager for People, Culture and Safety, introduced the Panel session.

The facilitator commenced discussion by reflecting on the feedback provided from the November People's Panels and captured what participants wanted to get out of the sessions and understand better.

Participants were also asked how well they remembered the November Panel outcomes and the level of preparation they completed prior to the March and April Panels. It is clear there was some preparation done and participants were motivated to work on developing options to the issues identified in November.

The Reset Advisory Committee and its function was introduced to participants to emphasise the importance of the customer consultation process and the outputs of their feedback into Power and Water's Regulatory Proposal.



## What's one thing you want to get out of this weekend?

- What is Power and Water doing for the future?
- How is Power and Water future proofing the network against climate change to leave a legacy for future generations?
- Learn about the power industry.
- Understand solar rebates when applying for solar and the connection between installers, Power and Water and customers.
- What is the relationship between Jacana, Power and Water and customers?



## What would you like to understand better?

- Electric Vehicle infrastructure and charging station ownership.
- How will our input transfer into an operational plan?
- The replacement cycle and future proof solutions.
- The health plan when power goes out.
- Outcomes of feedback to the pathway forward.
- The replacement cycle and future proof solutions.



## What do you remember from last session?

- Solar and solar farms.
- Power and Water is not Jacana Energy.

# Customer values

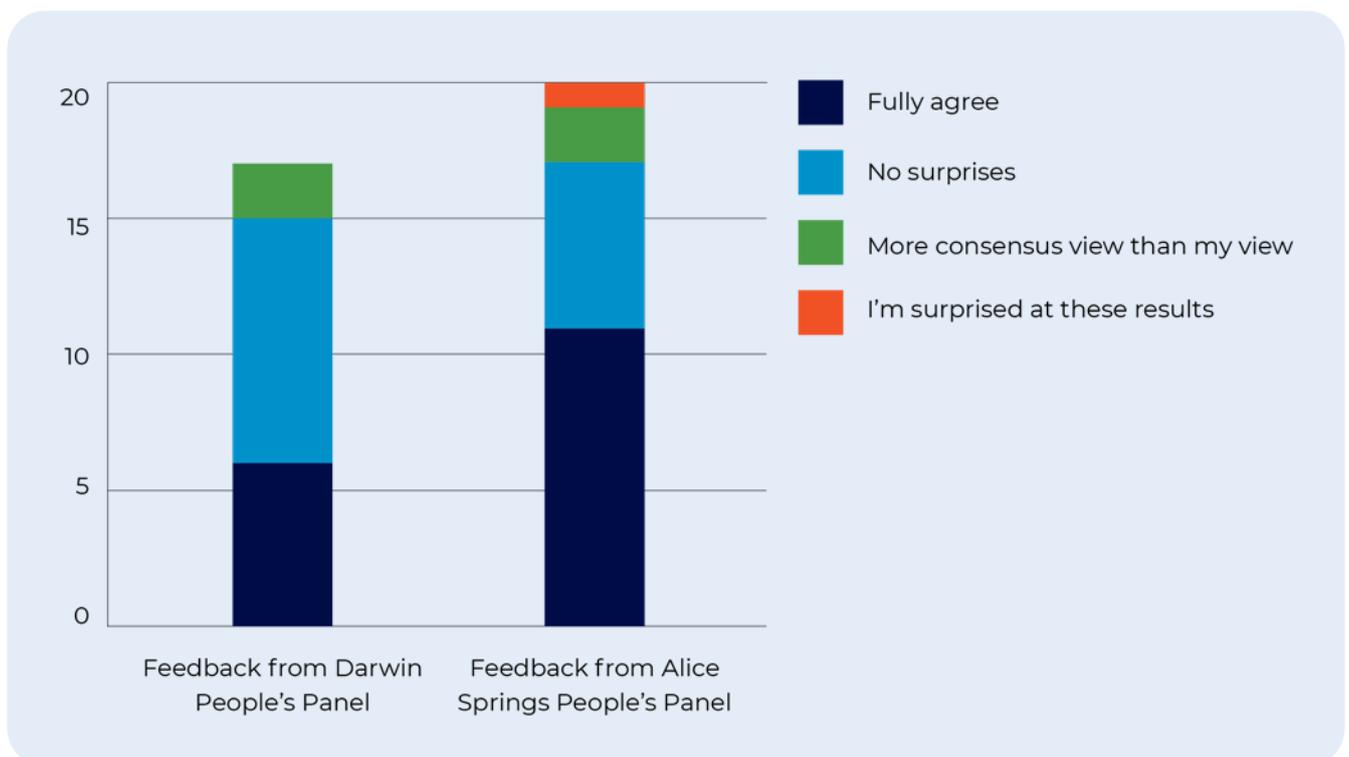
The Panels reflected on the activities and discussions from the November Panels on customers, the lifecycle and the identification of customer values. Understanding customer values is helpful when considering the trade-offs inherent in decision making.

A key outcome from the November Panels was the identification of a suite of customer values.

Participants were provided with the top ten values identified at the November People's Panels and asked to provide their reaction to this list.



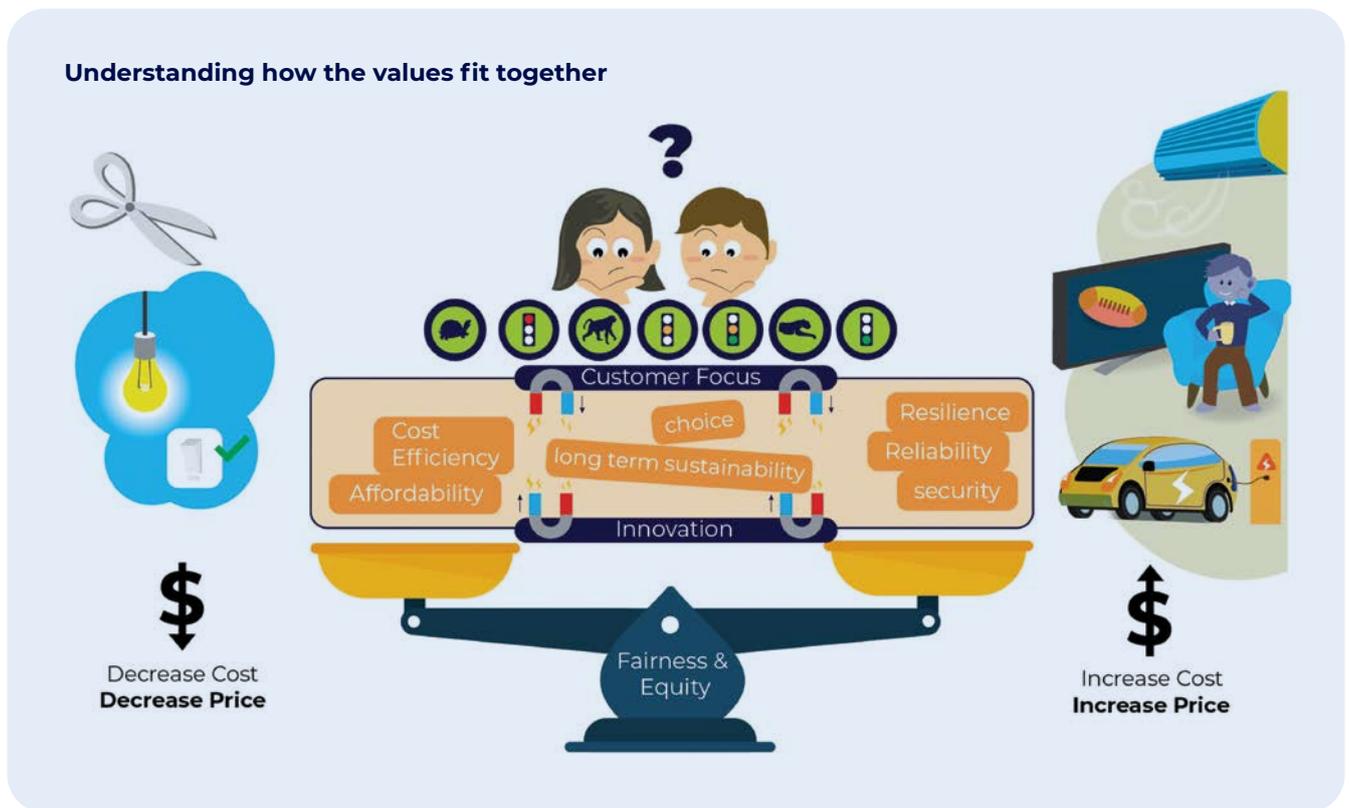
Most participants either stated they 'Fully agree' or there were 'No surprises' with this list, with a small number of participants believing it represents more of a consensus view than their own view or is not the list they expected.



A table activity involving hypothetical scenarios was used to allow participants to engage on the trade-offs that may need to occur between values when pursuing different options and making decisions. One example was balancing the values of reliability and affordability. Participants were shown the graphic below to assist them with understanding how values are balanced between using electricity and cutting costs.

The table activity identified that the values of equity, fairness and affordability remain key concerns, including how these should be balanced through the process of solution design. Other values of importance to participants were choice, sustainability and reliability.

Consideration of these values and their value trade-offs were an important element of the process of decision-making over the following sessions.



# The People's Panel 2030 vision for Power and Water

The People's Panel 2030 Vision for Power and Water is intended to reflect the voice of the customer when answering the key question of, 'How can Power and Water plan for a future that best serves customer needs?'

The following draft 2030 Vision statement was presented and tested with the People's Panel through a process of collaborative design.

[Draft] Power and Water's 2030 Vision is to:

- Be more active and responsive
- Enable, facilitate and support the shift to renewables
- Be more innovative and cost efficient
- Support more customer choice.

Participants were asked to provide additional elements or considerations to improve on the proposed Vision statement and its ability to capture the themes and needs of Power and Water's customers into the future. Feedback for each element of the Vision statement includes:

These suggestions have been merged to produce a People's Panel version of the 2030 Vision, encompassing the consensus view of each Panel:

[People's Panel version] People's Panel 2030 vision for Power and Water is to:

- Be effective, proactive and responsive through its communications and across platforms
- Enable, facilitate and actively support the shift to renewables
- Be innovative and cost efficient
- Support fair and equitable customer choice
- Educate Territorians to make wiser power choices now and into the future.

We will refer the People's Panel version of the 2030 Vision to the Reset Advisory Committee to inform its understanding and consideration of customer preferences for investment options and programs.



## Be more active and responsive

- Provide a mechanism or platform to be more active and responsive, e.g. via an IT process.
- Communicate effectively, proactively and responsively.



## Enable, facilitate and support the shift to renewables

- Actively support the shift to renewables and distinguish between supporting and promoting renewable energy connection.
- Lead the shift to renewables, rather than enable.



## Support more customer choice

- Clarity sought on the breadth of this statement – this could cover choice of retailer, technology, solar provider.
- Power and Water should educate the broader public on current and future choices .



## Our future plans

Posters of the regulatory process were used to demonstrate how engagement will inform the next five-year expenditure and pricing plans.

The role of the Australian Energy Regulator is to set the total revenue we can collect. Power and Water's Regulatory Proposal for the 2024 – 2029 period sets out the planned network expenditure to be recovered from customers through network tariffs.

There are two types of costs – operating and capital expenditure. The components of Power and Water's costs are:

### Operating costs

- Maintenance of assets
- Vegetation management

### Capital costs

- Building and replacement of assets
- Connecting to the grid

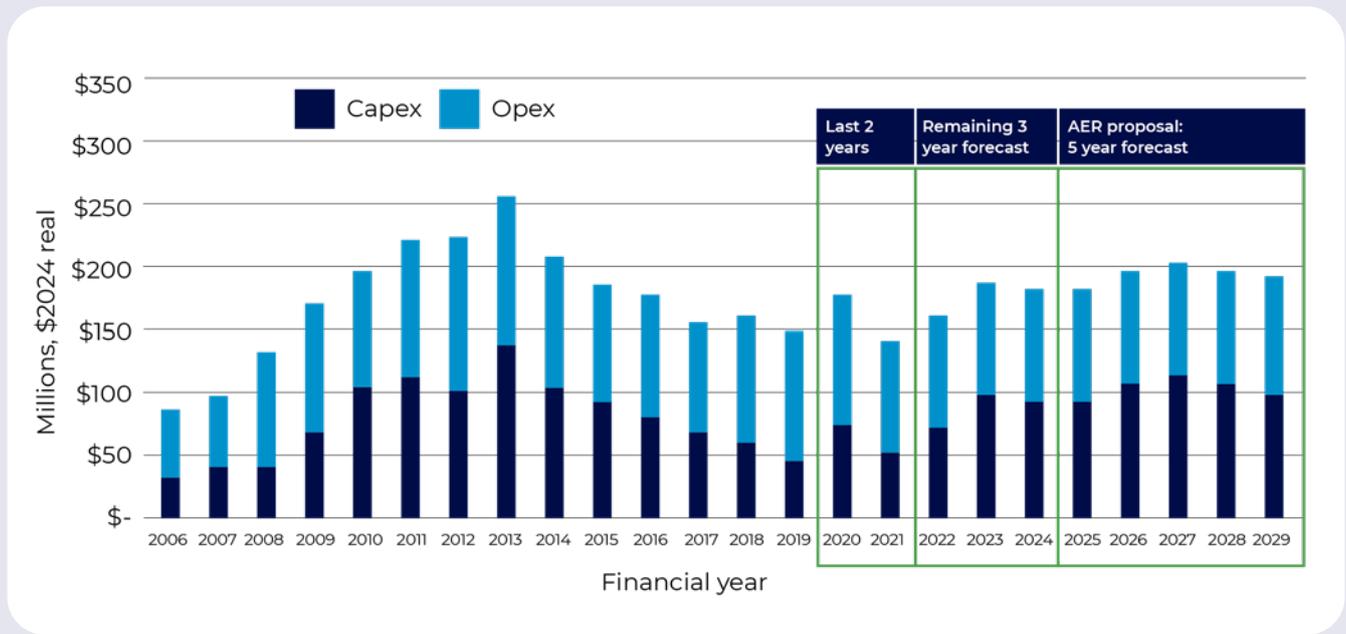
### Mix of Capital and Operating costs

- Network planning
- Customer service
- Corporate and network support
- Emergency response

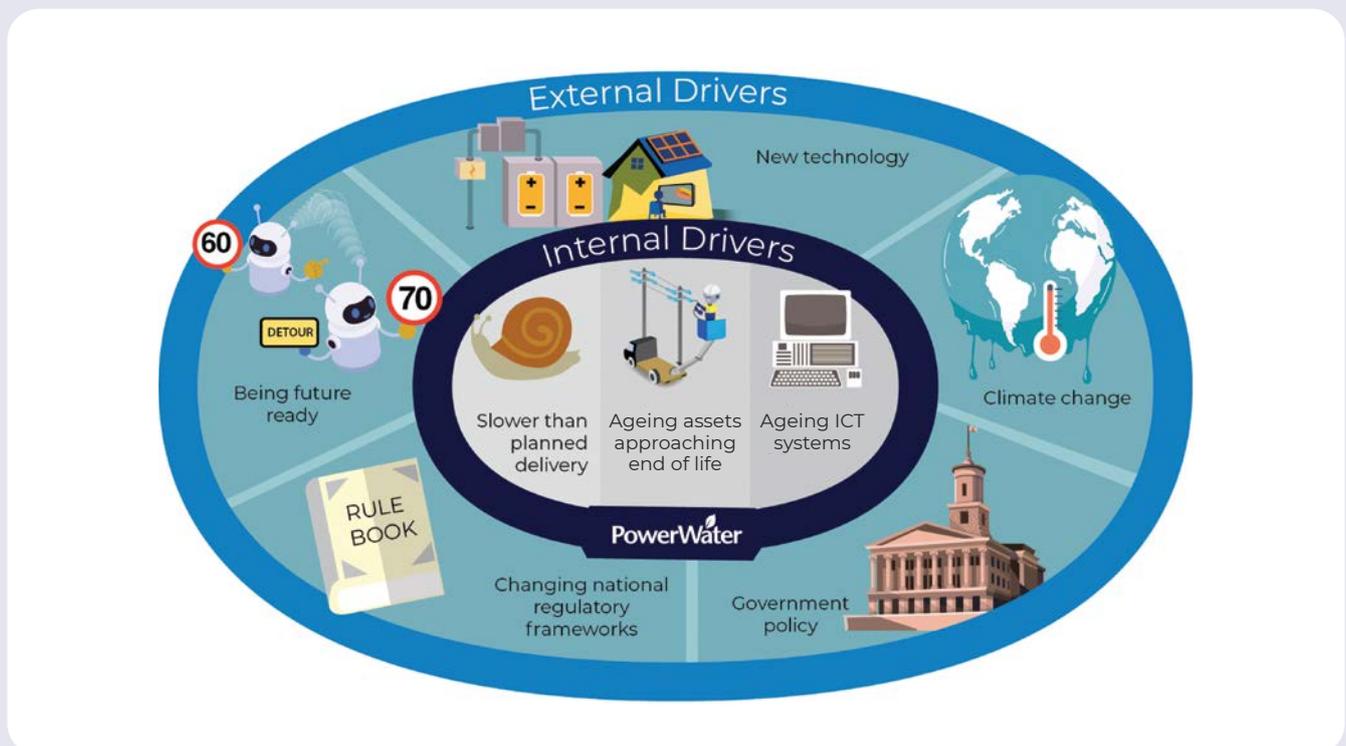
Operating costs are recovered through electricity bills by setting prices which assumes the cost of operating expenditure (Opex) is recovered each year based on expected costs. Comparatively, the total cost of capital expenditure (Capex) cannot be recovered yearly as it will result in high prices for higher value assets and the life of these assets can

last up to 80 years. This means the values of these assets are recovered over the period of use.

Early analysis of expenditure forecasts to 2030 demonstrates Power and Water's network expenditure is expected to increase, which will require revenue to increase comparatively.



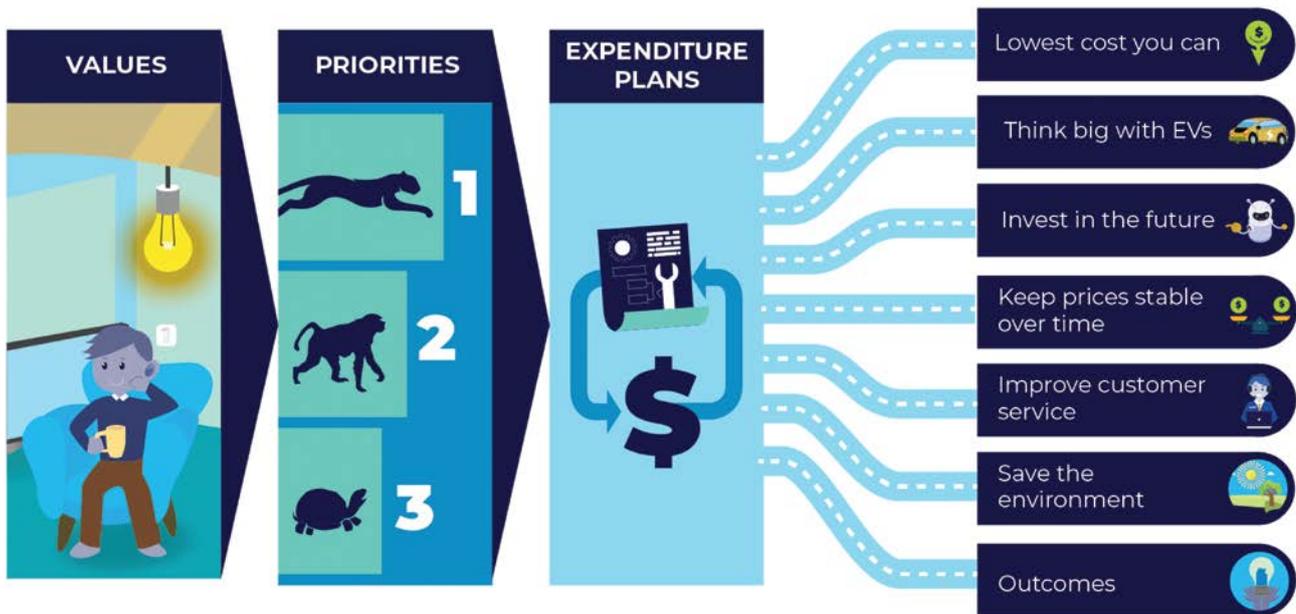
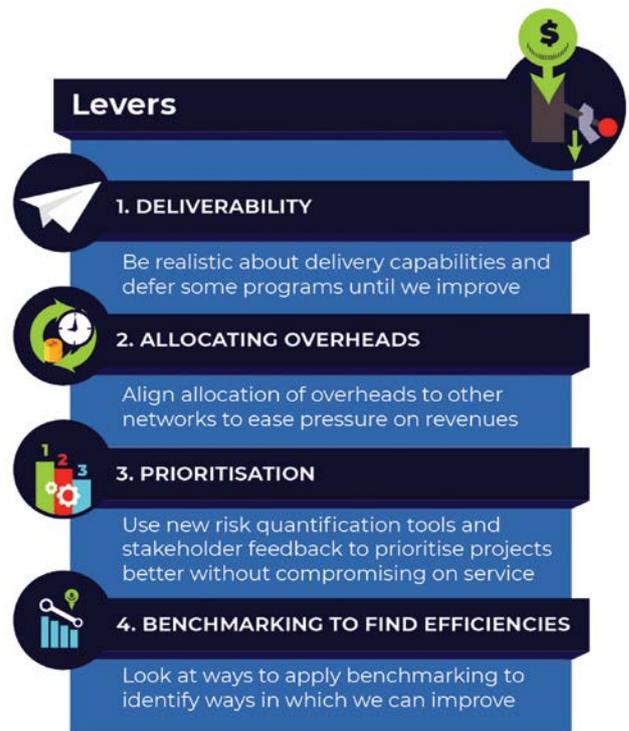
Some of the macro and internal drivers influencing the higher expenditure include:



Participants were provided with the levers Power and Water may consider to reduce costs and therefore lower revenue requirements from customers.

These levers link to how the feedback from these Panels is expected to influence the future expenditure plans for Power and Water, including:

- The customer values underpinning Power and Water’s future growth
- The levels of priority for pursuing future network options considered by participants.



# What we heard and how we progressed

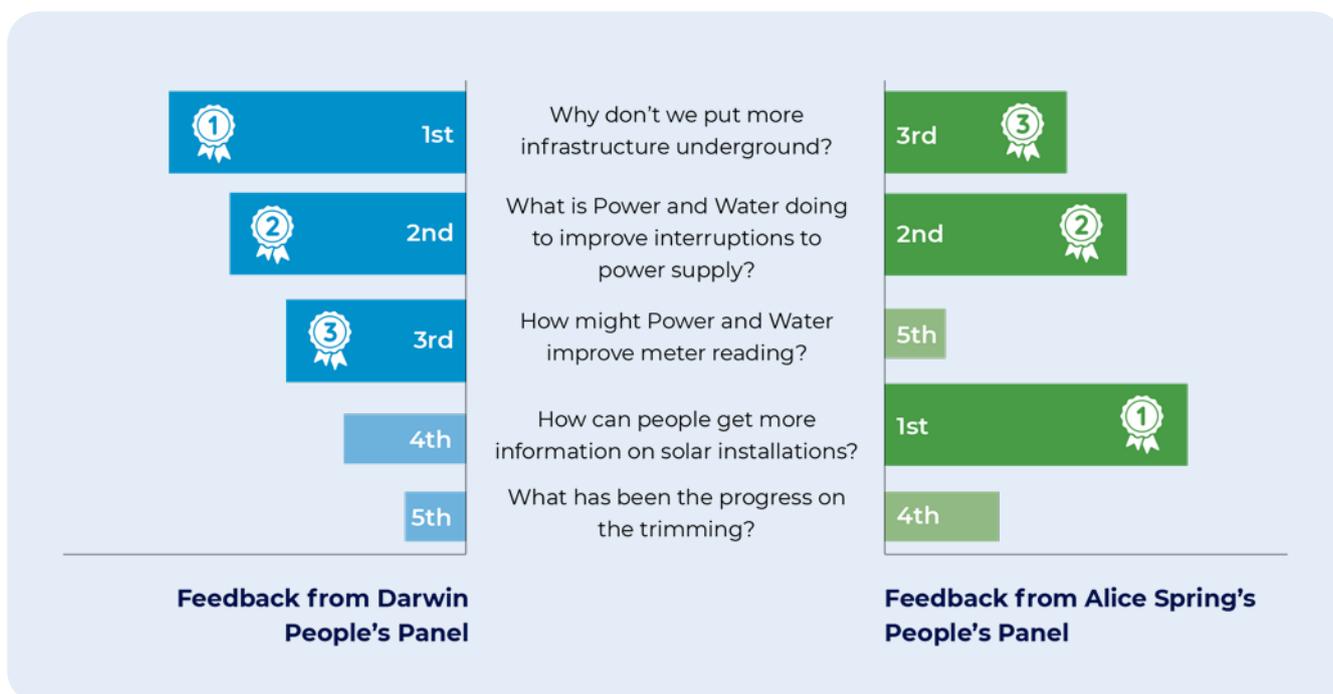
The November People's Panels focused on how we should respond to the challenges customers face on their customer experience journey. For each of the customer 'pain points' identified, Power and Water developed a response or proposed improvement.

Participants voted on which of the customer experience pain points identified from November they would like to discuss in detail.

In Alice Springs, the pain points addressed were Solar and Installation and Undergrounding. In Darwin, the pain points were Connections and Disconnections and Undergrounding.



This is the results of the voting from the Darwin and Alice Springs Panel:



## Solar and installation

In the Alice Springs session, we reported back on two questions raised in the November Panel:

- Where can people go for information on solar and installations?
- How might Power and Water support better dissemination of quality information about solar products and options?

Participants were advised that our website provides comprehensive information and links to assist customers in understanding solar. This includes directing customers to where to find further information, such as from the Clean Energy Council and Renew. We explained that while Power and Water supports solar connections to the network, there are reasons why it makes sense for customers to conduct their own research due to varying circumstances in instalment needs and location options.

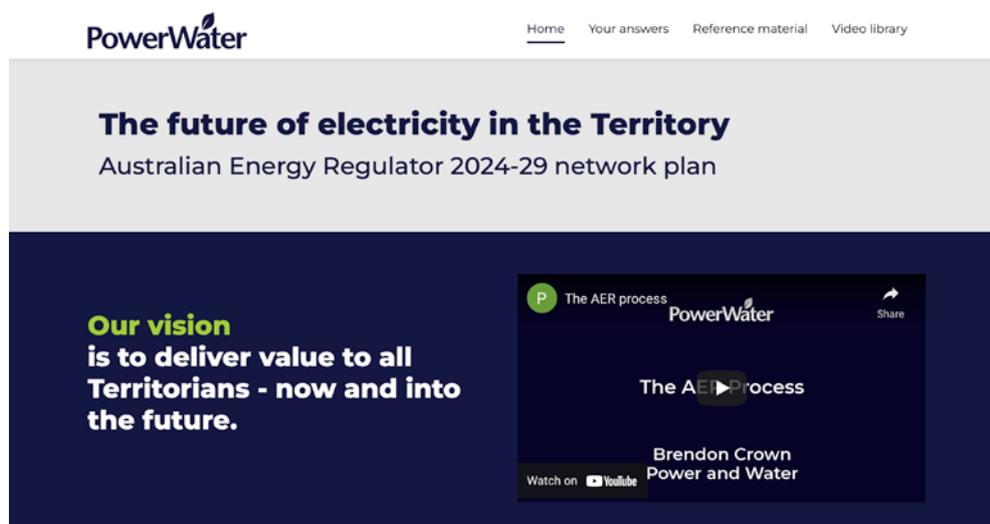
There were two videos played during the session from the Clean Energy Council and Renew answering the question: Where can people go for information on solar and installations?

Darren Gladman discussed the Clean Energy Council's role in providing customers information about solar and informed participants that the Clean Energy Council has a program which accredits installers to provide prospective solar customers with a list of accredited installers to choose from.

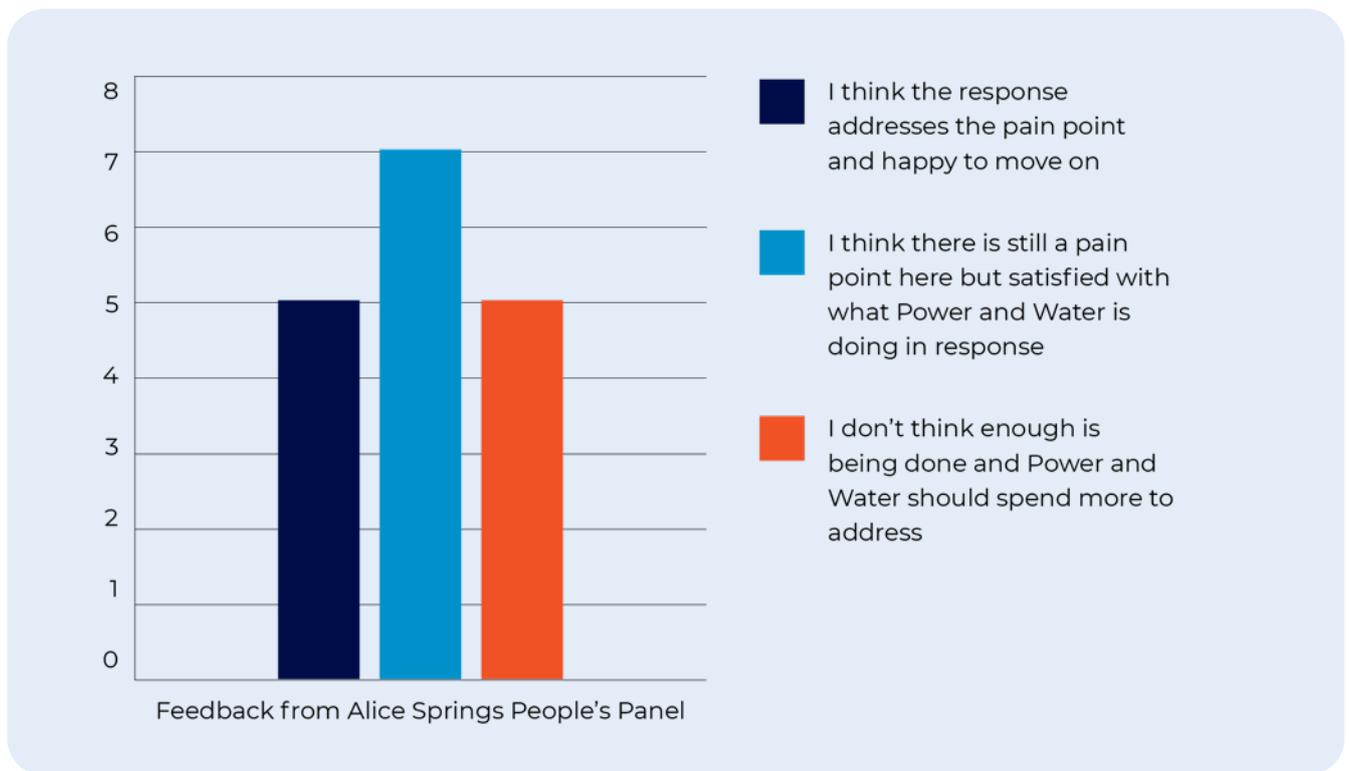
Dean Lombard from Renew suggested referring to Solar Choice and Solar Quotes who review installers and products, as well as potential community energy organisations who work with the installers directly. Renew also provides advice about system size and partners customers with installers based on their system needs. Dean also discussed the Clean Energy Council approved solar retailer scheme which requires installers to pay a fee and adhere to standards of conduct, thereby accrediting solar installers.

More information about these companies and the information they provide are included in the Power and Water [‘Your Say’ website](#).

### Your Say website



The Panel was asked to consider our response to the pain point and whether they believed enough has been done to address their concerns. The results of these votes are:



To understand how we could further improve the response in future, table discussions were conducted and feedback was reported back to the broader group. Suggestions include:

- Oversee their own accreditation program of solar installers.
- Provide more extensive information about the implications of solar installation.
- Partner with a community education program and provide community solar sponsorship, including linking skilled and unskilled people through work schemes.
- Install solar for low-income households.
- Run advertisements on TV or through social media directing customers to the right places for advice.

## Connections and disconnections

Discussion focused on the connection and disconnection process, including challenges faced by Power and Water such as the compliance and technical requirements and the need to coordinate different parties involved in the process.

Stuart Essie, Senior Manager of Asset Management, spoke about the impacts of the Casuarina outage and Cyclone Marcus on the reliability of assets and effective response management. These weather events transitioned Power and Water to adopting a more proactive approach when responding to outages.

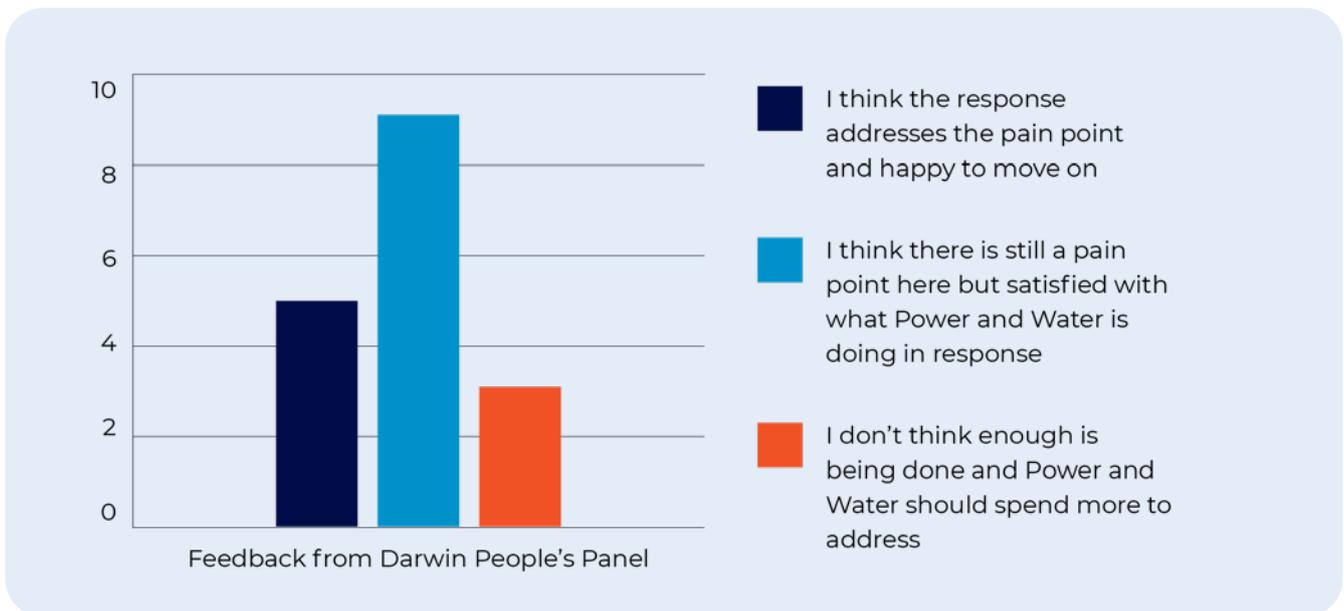
Other improvements undertaken by Power and Water to streamline the connection and disconnection process include:

- improving information dissemination by contacting vulnerable customers in the event of an outage using mobile notifications.

- providing accessible and comprehensive information on the website about connection and disconnection.
- investigating how to simplify connections through development of an online process to make it as simple and easy to connect as possible.

The Panel was provided with insights via video from retailers, Rimfire Energy and Jacana Energy, about customer choice. Michael Allen from Rimfire explained current barriers to changing retailers including the requirement to have a communications-enabled, remotely readable inverter meter. Trude Blizzard from Jacana Energy discussed the distinction between the roles of Jacana Energy and Power and Water in the electricity market. These videos are available on the 'Your Say' website.

The Panel was asked to consider our response to the pain point and whether they believed enough has been done to address their concerns. The results of these votes are:



To understand how we could further improve the response, table discussions were conducted and feedback was reported back to the broader group. Suggestions include:

Notifying customers of the cause of an outage after connection has been restored.

Improving communication regarding planned and unplanned outages, with consideration for customers not using social media.



## Undergrounding and responding to cyclones

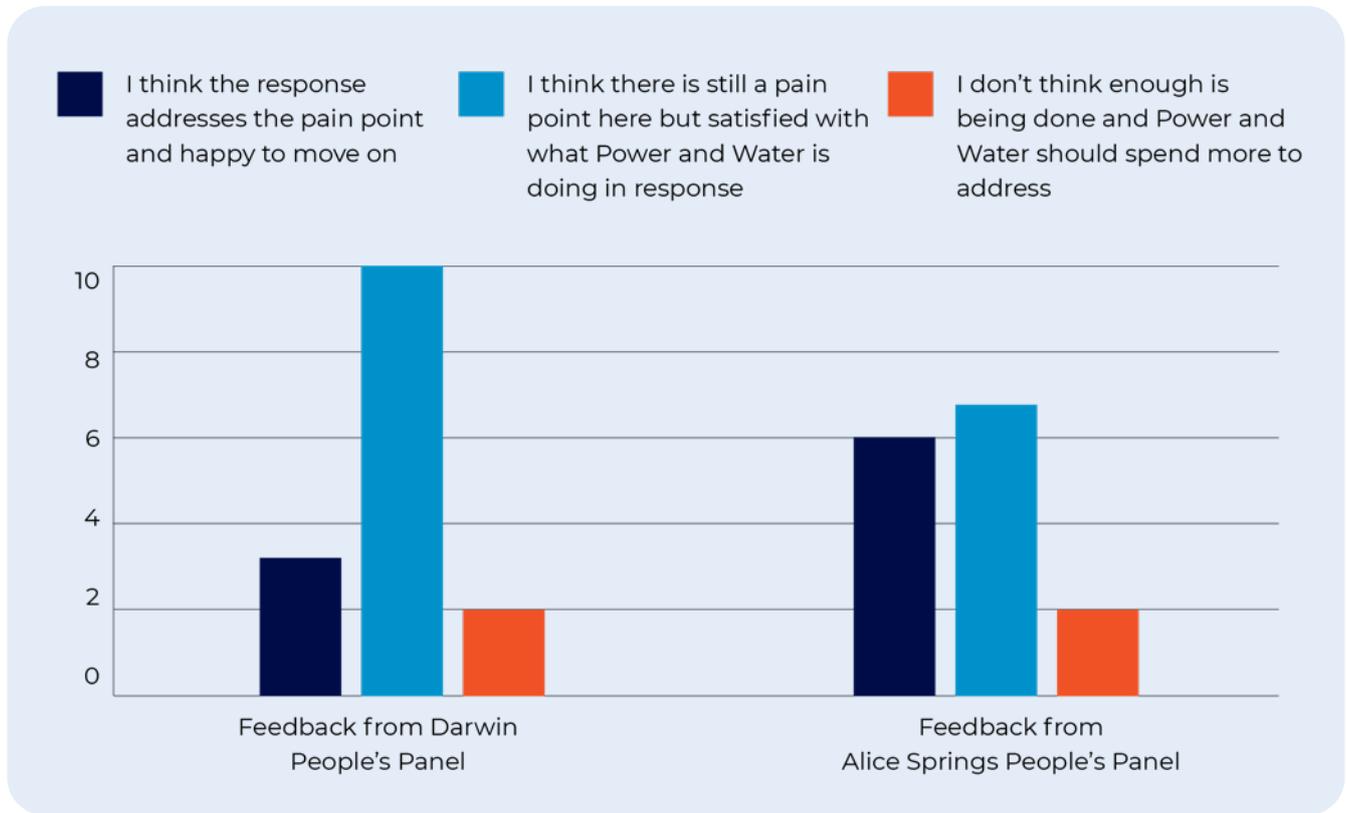
Challenges discussed in this session included the higher cost of moving power lines underground and the lower life expectancy of underground lines compared to overhead lines. There was also discussion about how locating electricity power lines underground could protect against the impacts of climate change and extreme weather.

A participant asked if Power and Water can mandate developers to locate power lines underground or overhead in new areas. We explained there are guidelines and requirements for developing new areas, and while underground is preferred in rural areas where there are long distances between customers, cost is still a key consideration.

As part of the discussions, we noted the following:

- Most electricity assets in new urban suburbs are commonly constructed underground.
- The Northern Territory Government has already committed to funding the undergrounding of some high priority assets.
- Power and Water considers undergrounding a viable option when it can be demonstrated the cost of undergrounding can deliver the benefits for all customers.
- The cost of undergrounding all infrastructure is significant.

The Panel was asked to consider our response to the pain point and whether they believed enough has been done to address their concerns. The results of these votes are:



To understand how we could further improve the response in future, table discussions were conducted and feedback was reported back to the broader group. Suggestions include:

- Exploring solar power to offset undergrounding costs.
- Considering undergrounding at the end of the life of an asset.
- Providing a clearer communication plan for progressing undergrounding.

# Big ideas and challenges

Several significant challenges and opportunities were identified at the November People's Panels. These represent the big ideas and issues that will materially influence how Power and Water and customers collectively answer the question 'How can Power and Water plan for a future that best serves customer needs?'

These issues were the subject of in-depth discussion and a process of co-design, including consideration of different speeds of response, with the objective of achieving a consensus position on how Power and Water should respond.

Options were discussed in the context of the customer values and their trade-offs and a consensus position by the Panel on how Power and Water should respond to the issue was developed.

The outcomes and the positions reached by the Panel (including dissenting views) will be referred to the Reset Advisory Committee for consideration. Our response on these issues will continue to be developed, with consideration of the Panel's views, and will be further discussed at the August People's Panels.



# Options to improve customer service

The November People's Panel had expressed disappointment that shopfronts had closed.

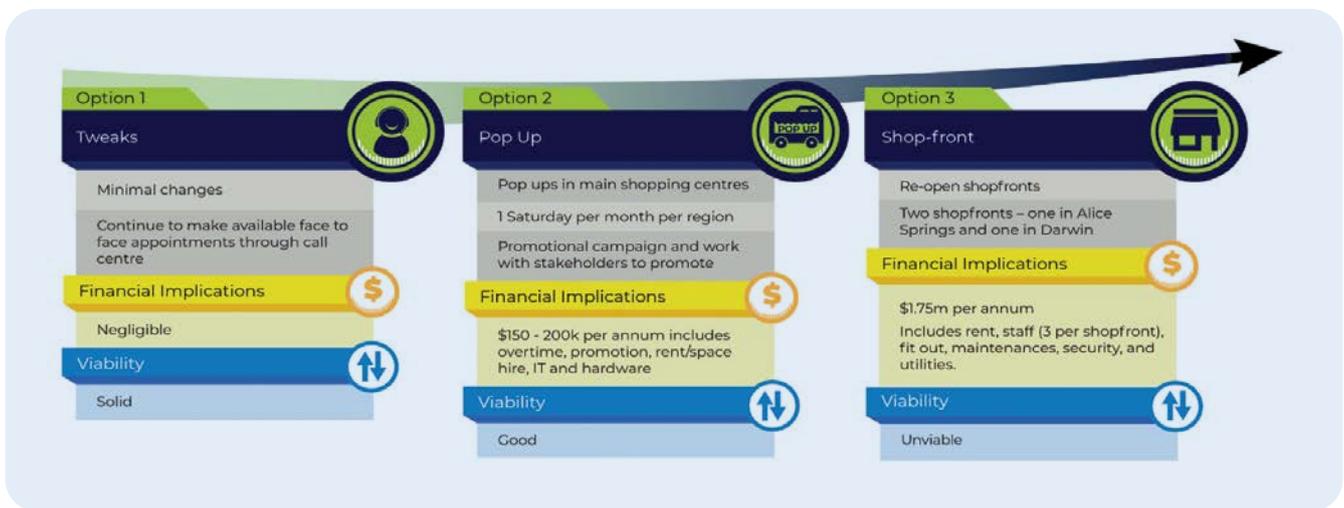
## Face-to-face communications

During this session, customer service representatives from Power and Water addressed concerns regarding the availability of face-to-face interactions with customers following the decision to close shop fronts due to low foot traffic and the

focus of many customer enquiries being on retail, rather than network, issues.

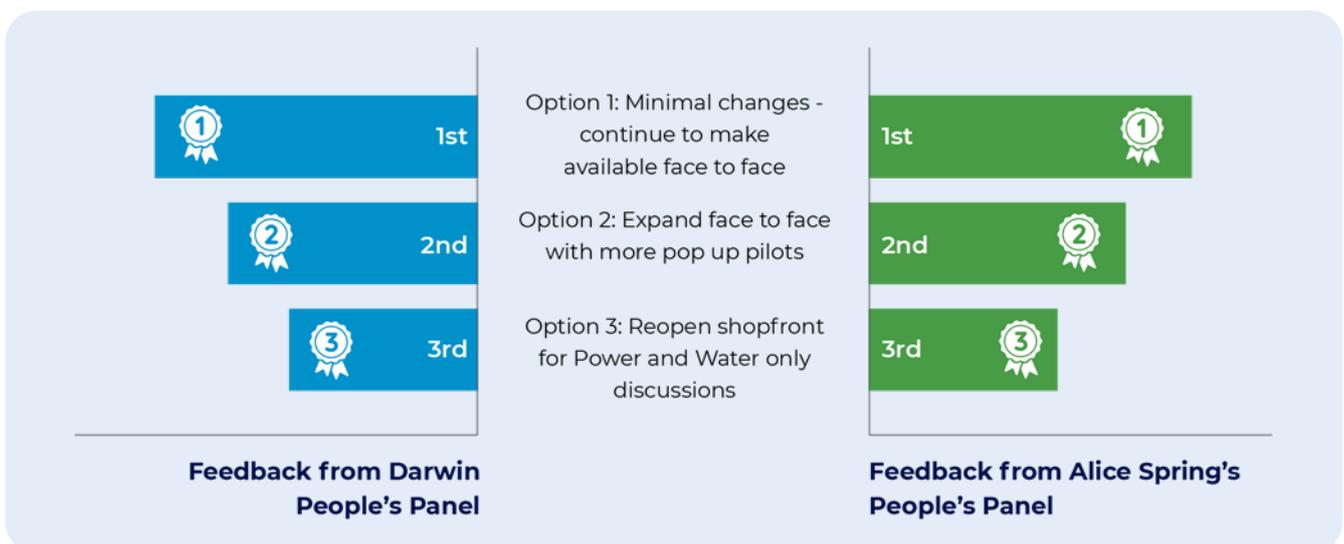
It was clarified that customers can request face-to-face contact in Alice Springs, Katherine and Darwin, in addition to contacting Power and Water via the website, Power and Water phone app and our Customer Service Line.

Options were presented and participants voted on which option to pursue.



Participants strongly support an increase in face-to-face communication options with consideration given to joint initiatives with other participants. For example, participants are supportive of pop-ups in shopping centres across the

regions and running promotional campaigns to advertise where to access support. While there is some interest in re-opening shopfronts, most participants do not support this option in either Alice Springs or Darwin.



Value trade-offs identified by panellists when selecting these options include choice, accessibility, equity and fairness versus cost efficiency.

After discussions during the Panel, the consensus statement from both Panels is:

In relation to face to face communications:

- Change is needed, but should be minimal and cost-effective
- Face to face options should increase with consideration given to joint initiatives with other participants
- Active promotion of customer options should be included in forecast costs.
- Responses may contrast for different generations with different preferences for face-to-face contact with Power and Water.

The Darwin Panel agree with this statement and emphasise a need to focus on information and education, rather than just a specific communication channel.

To understand how we could further improve the response, table discussions were conducted and the following feedback was reported back to the broader group:

- The website needs to be clear that face-to-face contact at home is available.
- Consideration must be made to those without access to the internet.
- Deployment of an education bus or a desk in existing office space in the central areas of Alice Springs, Darwin and Katherine to provide a face-to-face channel on weekdays should be considered.

### Customer complaints

During this session, we focused on how customer complaints are currently addressed and how the process can be improved. The current escalation of customer complaints is to a customer resolutions officer, then through to a manager who reviews the response made by the resolutions officer. If the desired response to the customer complaint or query is not given by either party, the next step available to customers is to refer to the Northern Territory Ombudsman.

We currently track the number and nature of complaints, including those escalated to the Ombudsman. In the last nine months, there have been 13 complaints escalated to the Ombudsman.

Options were presented and participants voted on which option to pursue:



The Darwin Panel has greater preference for installing a dedicated internal officer who is responsible for resolving complaints. In Alice Springs, there is a similar number of people who

support devoting resources to resolving the issue before customer goes to the Ombudsman and installing a dedicated ambassador.



Value trade-offs identified by panellists when selecting these options include fairness, equity and affordability versus cost efficiency.

After discussions during the Panel, the consensus statement from both Panels is:

In relation to better responsiveness to customer complaints:

- Power and Water does need to do something more
- This should include systems that provide more feedback to the complainant
- Options that integrate with face-to-face engagement should be recognised
- Existing refinements in telephony could be explored with this option.

To understand how we could further improve the response, table discussions were conducted and the following feedback was reported back to the broader group:

- Review the process through a Quality Assurance lens.
- Implement an accountability measure which ensures Power and Water reports back to the public through the website on its effectiveness in managing customer complaints.
- Install a local social media ambassador who educates proactively on the complaint process.

# Replacement of Ageing Assets

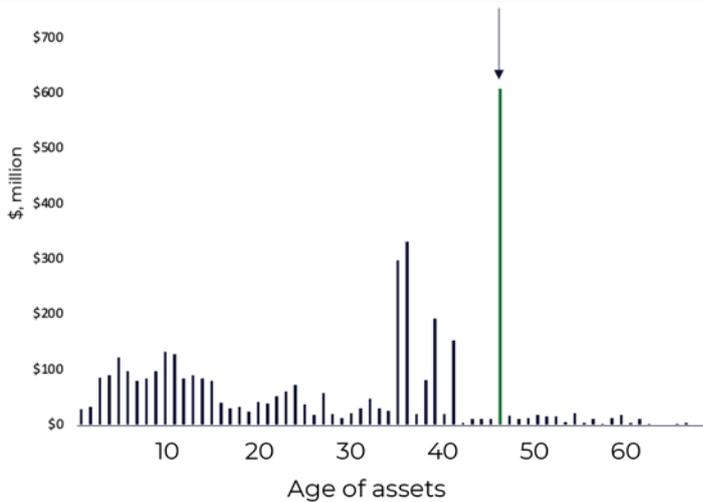
This session was held on Day One in Darwin and Day Two in Alice Springs and addresses the challenge of an ageing network. It was discussed that replacement has been low in the past decade, but analysis suggests networks will need to spend considerably more in the next 20 years. Many Power and Water assets, with an average age of 50 – 60 years, are expected to reach their end of life at a similar time.

Power and Water currently has a relatively young asset base, with only 3.26% of assets more than 50 years old.

However, the assets rebuilt immediately following Cyclone Tracy will be more than 60 years old in 2040 and the proportion of assets more than 50 years old will be more than a third of the asset base.

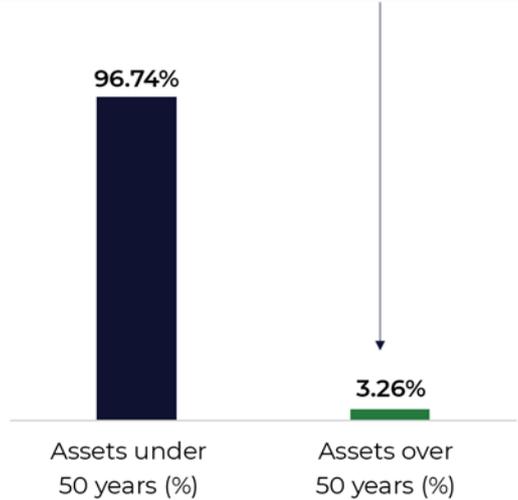
## Value of assets by age

About 20 per cent of the network was built after Cyclone Tracy. They are younger than 50 years.



## % of assets under and over 50

About 3 percent of assets are older than 50 years.



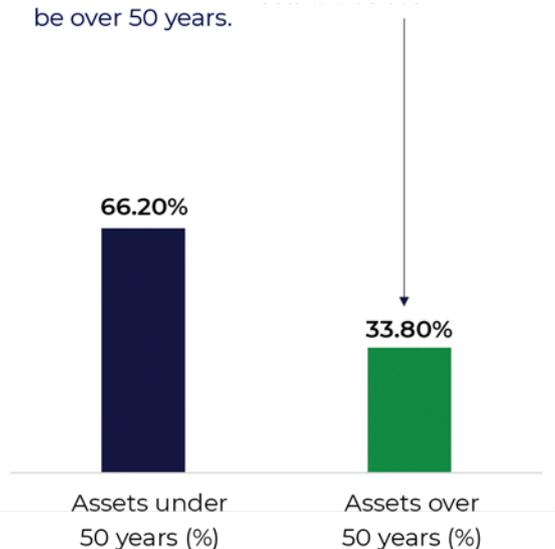
## Value of assets by age

By 2040, the remaining Cyclone Tracy assets will be over 60, and other assets will be over 50.



## % of assets under and over 50

About a third of assets will be over 50 years.



The Panel was shown how prices are predicted to rise by 30 - 35% across the 2030 - 2040 period to meet the replacement needs of the network, even if Power and Water gradually increases the replacement of assets. It was noted that the oldest network in Australia, South Australia Power Network (SAPN), currently has 12% of its assets

more than 60 years old and the introduction of new technologies could be employed to support the retirement of older assets.

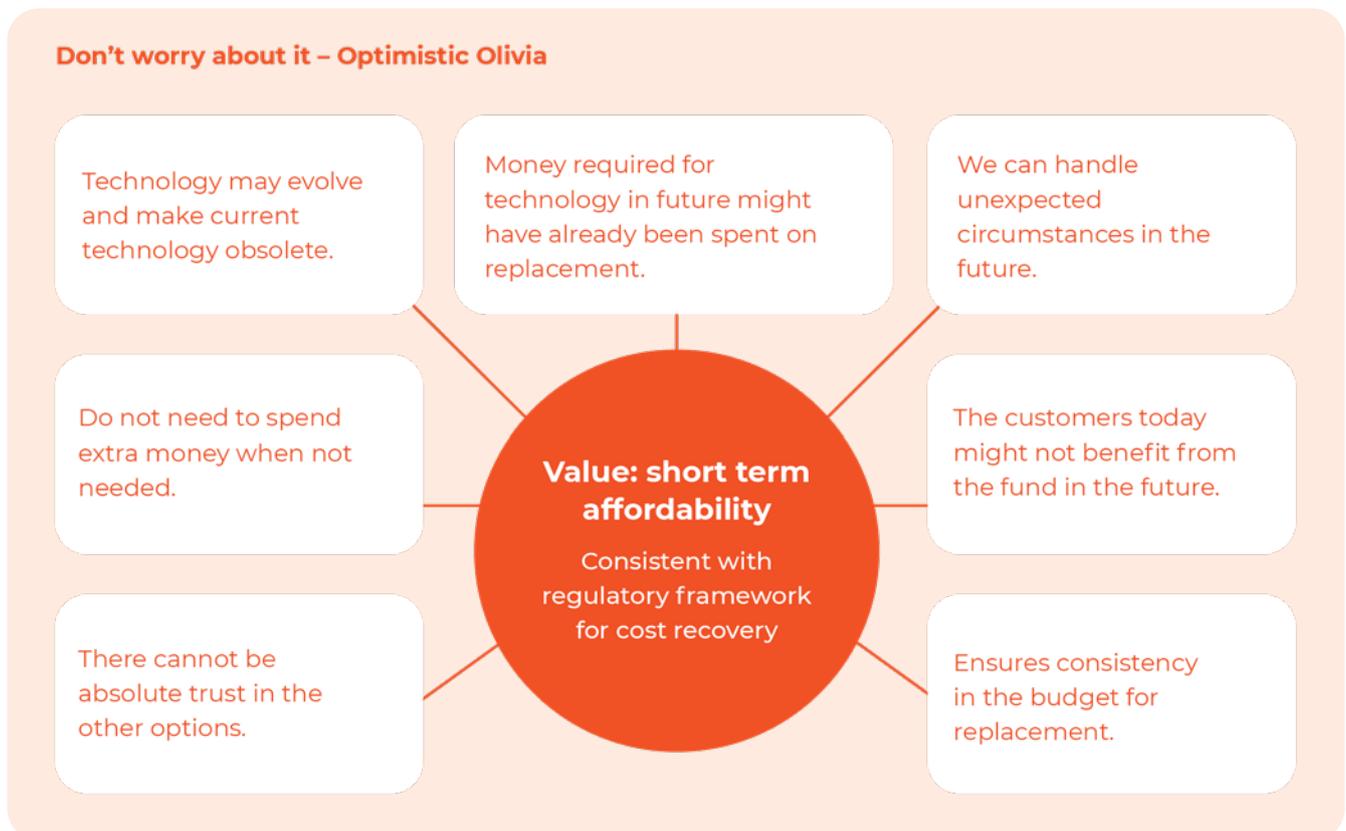
The Panel was provided with three potential asset replacement options:



The Panel broke into three teams, with each assigned a 'persona' reflecting one of the three replacement options:

Each team developed arguments in support of their persona to report back to the broader group.

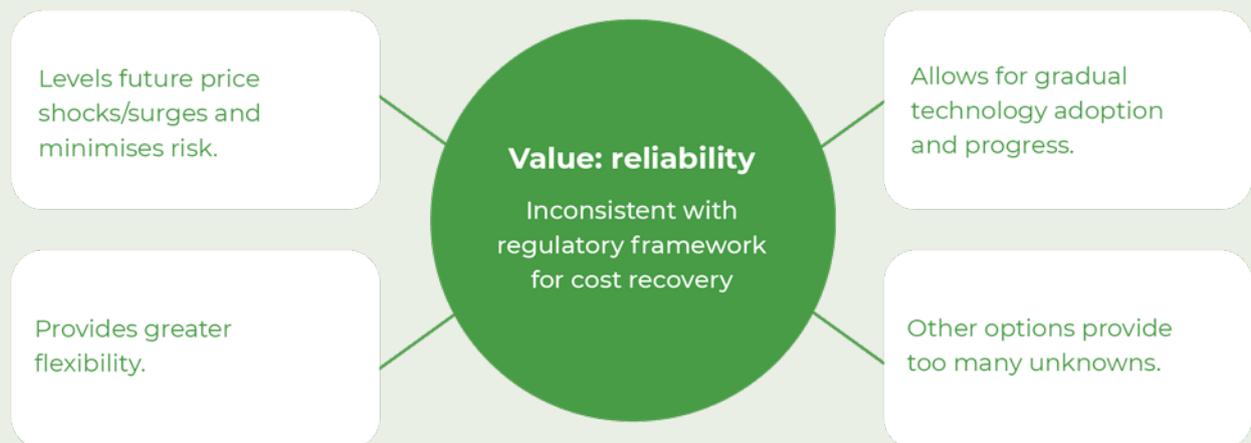
- Don't worry about it – Optimistic Olivia
- Replace early – Prudent Paulo
- Save for a rainy day – Saving Sam



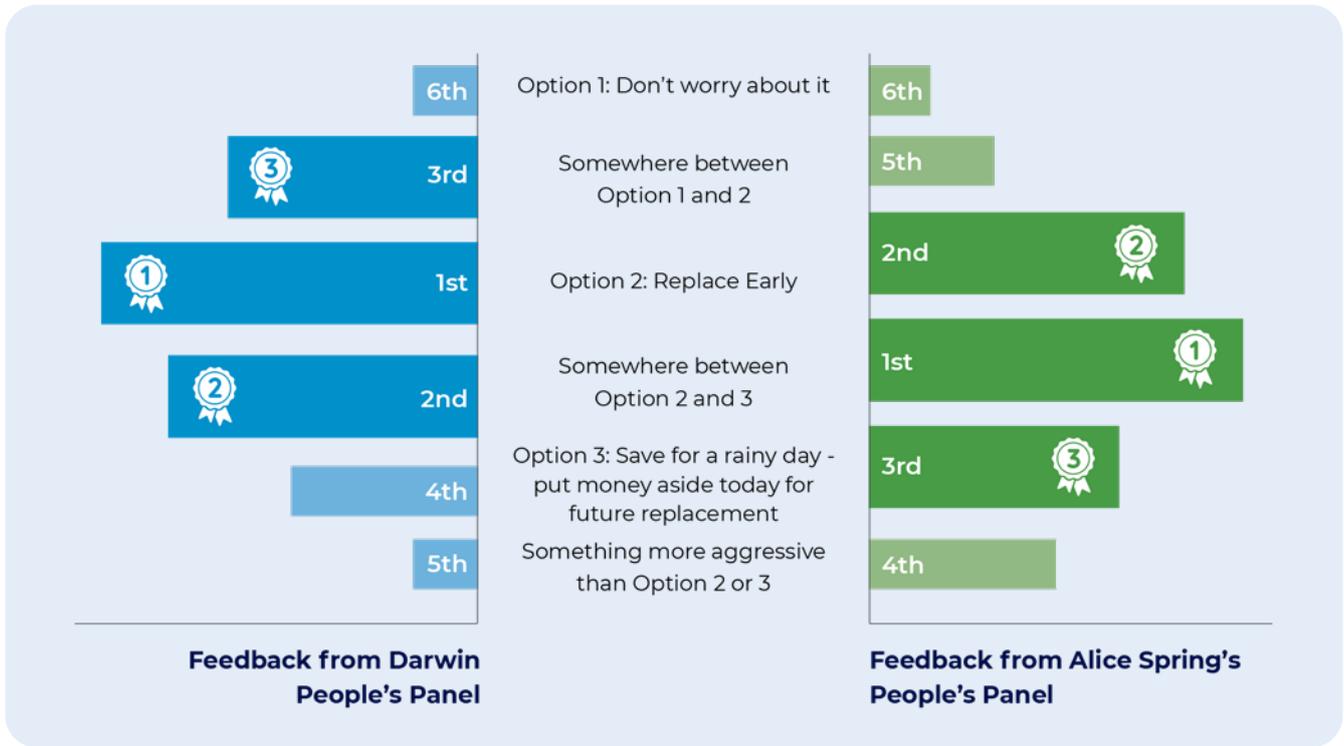
### Replace early – Prudent Paulo



### Save for a rainy day – Saving Sam



Following this exercise, options were presented and participants were asked to vote on which option to pursue.



There is a general consensus across the Panels that Option two, or a combination between either Option one and two or Option two and three, should be considered.

Value trade-offs identified by panellists when selecting these options include reliability, safety, resilience and security versus affordability

After discussions during the Panel, the consensus statement from both Panels is:

The Panel generally do not believe Power and Water should keep replacement as low as possible

**AND**

We should pursue options that smooth capex and prices over the long term but use advances of technology wherever possible.

However, there is a mixed opinion on whether Option two or three should be applied, or a combination.

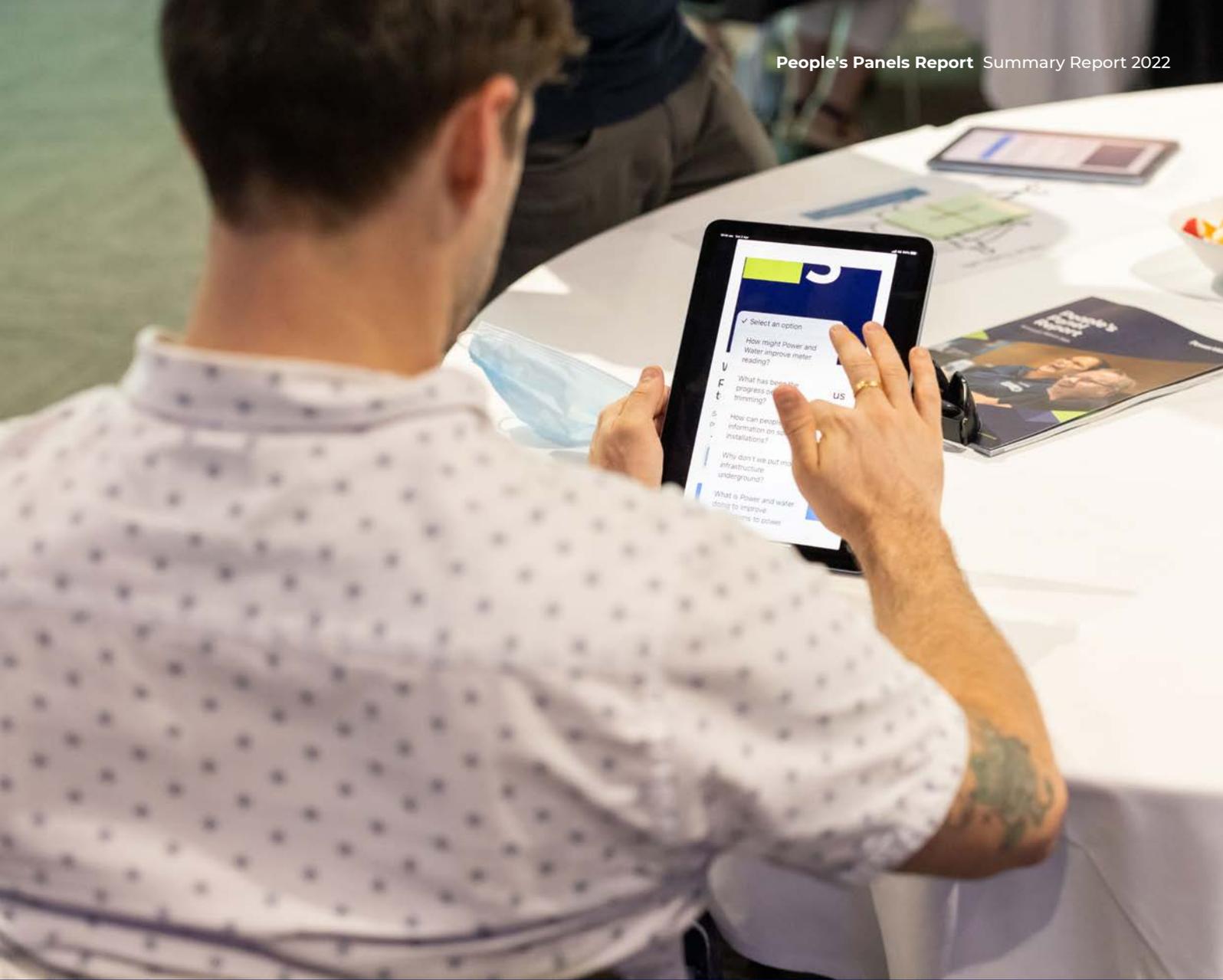
Caveats on this statement include protecting low-income households (concession holders) and for Power and Water to deliver on its promises through transparent criteria.

5

## Day Two – Giving us direction

*Day two was defined by the big issues and challenges for the future network, including investigating ways to manage the impact of solar, community batteries, EV charging and tariffs on residential customers, through a continued process of co-design.*





## The changing energy world

The Darwin Panel was given the option of being provided with the consensus and dissenting statements developed at the Alice Springs Panel as a reference point for deliberations, and to tailor this to develop a Darwin-specific position. The use of the Alice Springs outcomes as an initial reference point for the process of co-design was preferred and led to more topics – such as the use of tariffs to influence demand – being discussed.

The session commenced with a role-play to allow participants to consider the changing energy landscape.

Banners around the room illustrated scenarios showing the 'Energy Landscape in 2010' characterised by few renewables and a one-way energy system and a '2030 Vision' representing a high penetration of renewables and the challenges of two-way flows of energy.

Participants were encouraged to express how they felt about these scenarios and what the banners were seeking to represent to the audience.



### Energy landscape in 2010

#### Describe what you feel

- Simpler
- Fossil fuel based
- Limited diversification
- Dark, barren and artificial
- Structured and neat
- Dark, gloomy and lots of pollution
- Dull, boring and depressing
- Not every active
- Industrial
- Doom and gloom

#### What do you think the energy landscape in 2010 is about?

- Network size and speed
- Lower levels of new energy being used
- Shows a lot of pollution from low use of renewables
- Old forms of technology and technology use
- Largely a supply only scenario
- Illustrates the distribution network, with the size of the roads indicating volume.



### Energy landscape in 2030

#### Describe what you feel

- Busy and more complex
- Bright and engaging
- Cleaner and greener
- Lack of passive solar design
- Happier, more active and brighter days
- Complex distribution network
- Automation
- Active
- Bright, light and modern
- Bright, optimistic and futuristic

#### What do you think the energy landscape in 2030 is about?

- Multiple generation sources, including renewables
- More localised energy – increased solar, battery storage, EVs and charging stations
- Increased control and regulation of distribution
- Integrated networks allowing flexibility in supply and demand points
- Storage of energy to smooth demand

Craig Chambers from Engevity and Lyndon Frearson from Ekistica provided an independent view on how the Northern Territory network is anticipated to evolve.

Lyndon discussed the shift in relationship between players in the power system – retailers, generators, consumers – as money, power flow and

roles change. Craig discussed the challenge the Northern Territory faces in being a smaller grid, as well as the need to maintain supply and reliability while meeting the changing needs of consumers.

Both subject matter experts recognised the importance of the shift to renewables while still analysing the benefits to Territorians.

At the end of this session, Lyndon and Craig answered questions from participants about the future grid. The questions posed to Lyndon and Craig and the responses provided were:

***“Why don’t we consider other options of renewable energy and why is there a large focus on solar?”***

- Solar is an issue now which must be responded to within the next 5-10 years. Additionally, while there may be more viable technologies in future, they are not happening now.
- There is an abundance of sun and solar resources in Australia, particularly in the Northern Territory. This makes it the least cost renewable.
- Other technologies do not have the scale of solar and do not offer the same levels of cost reductions.

***“Can we look at other places in the world for what works well?”***

- Countries are responding to the challenges differently depending on the historical performance and the specifications of the grid. The difference in Australia is the size of the grid and the uptake of solar.
- Australia is at a different stage of EV rollout to places like the UK. However, we can look to other countries for how they respond to increased demand from EV charging and solar output.

***“What are the differences/issues the Northern Territory has in managing transition from centralised to decentralised generation compared to other states?”***

- The Northern Territory doesn’t have the scale of diversity of weather patterns, loads or increase in industry demand as in the East Coast.
- The Northern Territory cannot lean on other systems/networks to manage changing energy demands throughout the day and year.

***“How are other networks responding to the energy transition?”***

- SAPN is looking at ways to communicate with solar inverters to constrain when demand is low but solar systems are operating at peak strength.

***“Why bother with roads – why not encourage people to go off-grid?”***

- The challenge is linked to diversity of energy sources. The grid provides diversity so when the battery runs out of capacity and the sun doesn’t shine, the grid will support energy demand.

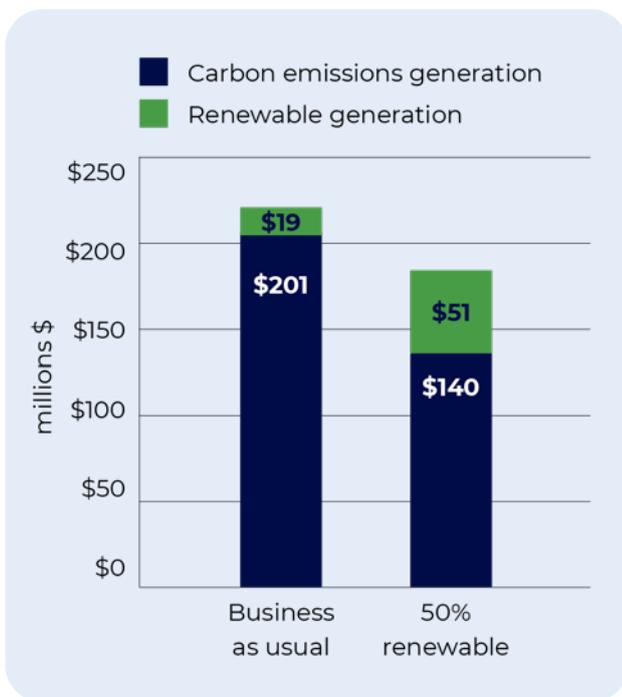
Participants were then asked to consider elements of the 2030 Vision in detail through a series of sessions focusing on providing the Panel with the benefits and challenges from adoption of existing and new technologies, and the solutions that Power and Water could explore to meet

the predicted growing demand for renewable energy sources. While each of these technologies has specific challenges and considerations, the relationships and interdependencies between each were also discussed.

# Future network: unlocking solar

This session discussed both the benefits of solar for households and communities as well as the challenges of solar creating congestion for the network and generating energy at periods of low demand.

The Northern Territory has a significant advantage from having high levels of solar capacity which can be employed to fulfil renewable energy needs of residents and the Northern Territory renewable targets. The Panel also discussed the Darwin-Katherine System Plan which highlights that it is significantly cheaper to aim for 50 per cent renewables compared to using today's high emissions technologies.



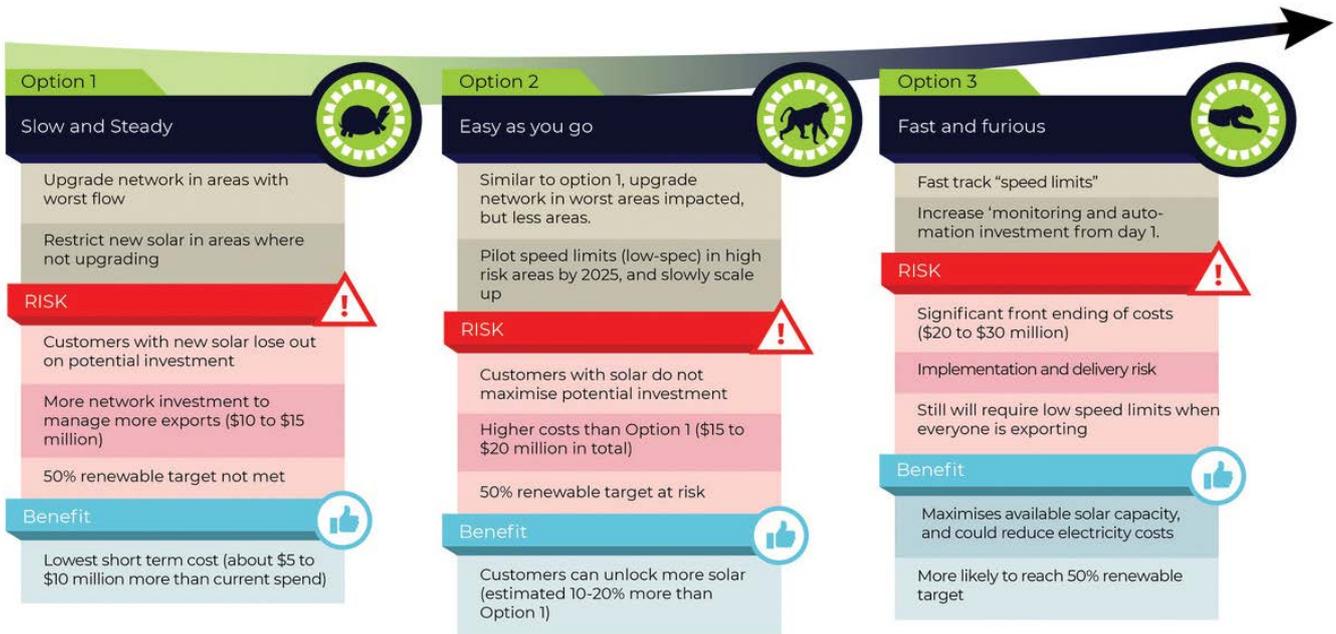
Participants were reminded of the concept of the two-way flows of energy on the network, which had been discussed earlier in the day, and the congestion and voltage issues which can result from increasing levels of solar penetration.

A video of Andrew Deme, CEO of GridQube was shown who explained that the current process of limiting solar is through the size of the connection or amount of solar in the local network. He explained that transformers are sized to a maximum capacity and once solar use increases, there is so much generation that an 'eight-lane freeway' would be required to transport solar from rooftop to another suburb, which is too costly and inefficient. Other options are needed to ensure more solar can exist on the system without investing in more network.

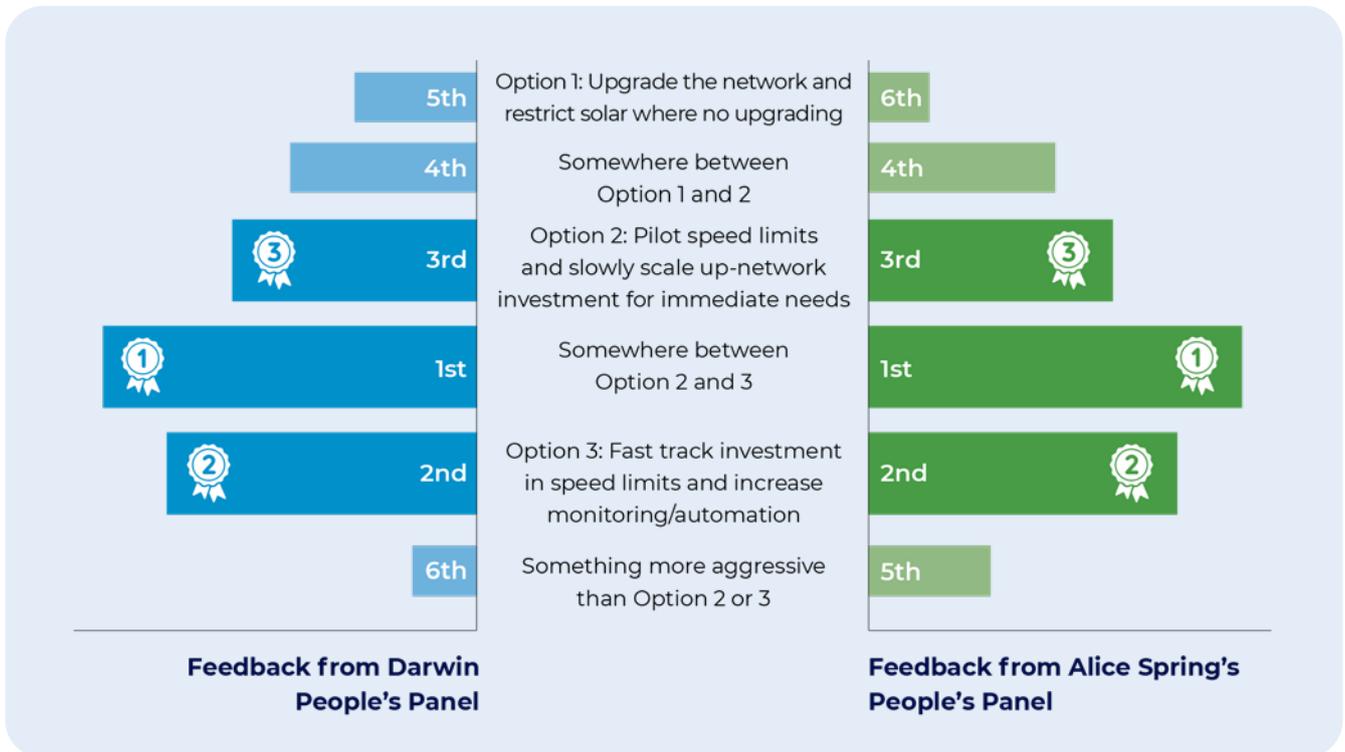
Participants discussed in groups how these challenges will impact the Northern Territory grid and customers and posed a range of questions to the subject matter experts who were present:

- Why should people without solar pay more money to allow people with solar to export?
- When will the whole country have smart meters and how will this help manage the network?
- Will energy be cheaper for consumers or relatively similar due to increased investment in technology and systems to service energy networks?
- Will urban areas subsidise rural areas?
- Will all households be self-sufficient or off-grid once we improve battery technology and affordability?
- Could there be incentives for jobs which require lots of travelling to have solar on top of their vehicles?
- Is there consideration for the impacts of climate change on these assets?

Following discussion, options were presented and participants were asked to vote on which option to pursue:



The result of this process is similar across the Panels, with most participants preferring Option two or three, or something which serves as a combination were presented and participants were asked to vote on which option to pursue:



Value trade-offs identified by panellists when selecting these options include sustainability versus cost efficiency and affordability; affordability and reliability versus equity and fairness; and innovation versus cost efficiency.

After discussions during the Panel, the consensus statement from both Panels is:

The Panel generally believes we should invest more to facilitate and support solar:

- Where technologies are proven, they should be adopted to help achieve renewable targets
- We also need to move forward by piloting new technologies
- Community outcomes should be considered to reduce or optimise and to minimise disadvantage, so no one should be left behind
  - > learning/understanding about;
  - > regarding the price impact of; and
  - > embracing the technology.

However, there is mixed opinion on whether Option two or three should be applied or in combination – it is clear the front runner is going north of Option two but not necessarily Option three.

There are some caveats addressed at both Panels about the affordability and equity risks of pursuing Option two or three, or a combination of these options. This is supported by the common view that:

**More needs to be done for remote and disadvantaged communities, which could be facilitated through government support.**

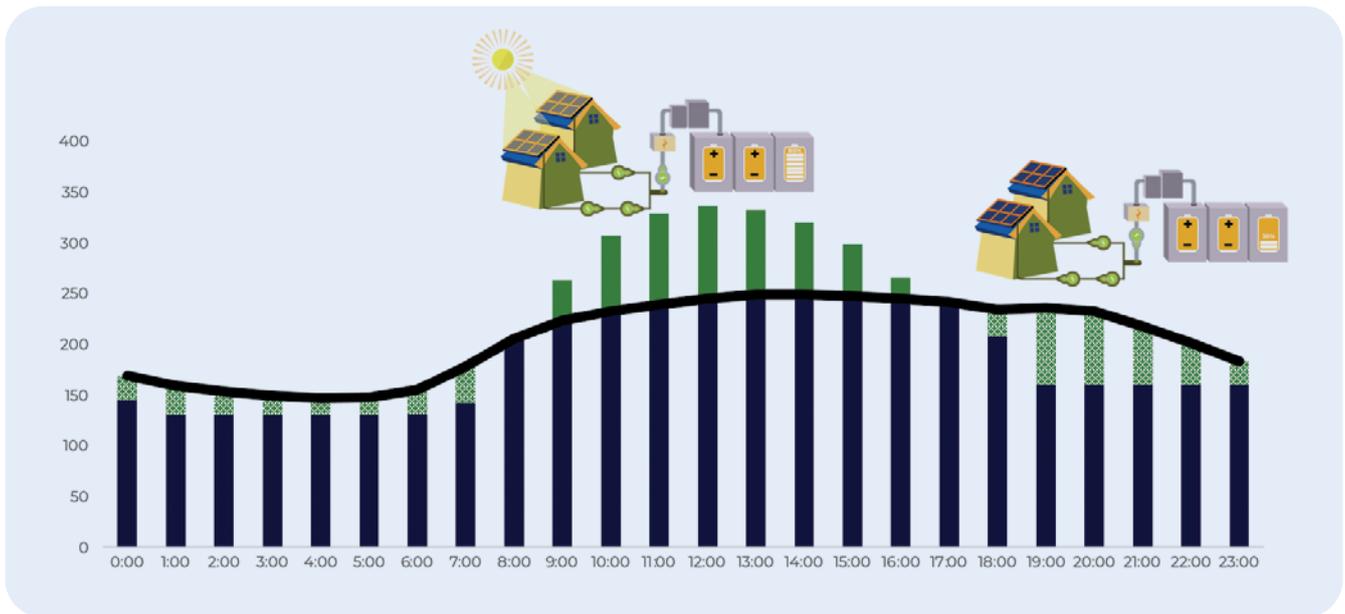
**There needs to be overall benefits across the community through optimising investment and innovation.**

Additionally, many participants believe technological changes must be considered when executing options to avoid an obsolescence of Power and Water's investment in solar.

# Future network: Community batteries

This session focused on understanding the relationship between solar and community batteries, including opportunities to use community batteries to manage excess solar in the middle of the day and discharge when the sun goes down.

Participants were shown the graph below which demonstrates how the excess solar generated in the middle of the day can charge a battery and discharge in the times of peak demand.



Community batteries are made of multiple panels/batteries which can store solar generated from multiple households. This could help support the transition of Northern Territory's grid into a solar-rich network. It was noted that a community

battery that would support approximately 200 homes costs around \$6 million and \$1 million to maintain.

Options were presented and participants were asked to vote on which option to pursue:

Option 1	Option 2	Option 3
<b>Slow and Steady</b> (Turtle icon)	<b>Easy as you go</b> (Horse icon)	<b>Fast and furious</b> (Horse icon)
No involvement – leave to market	Focus on pilot in 2025 to 2030, and consider up-scaling later	Larger roll-out of community batteries
Customers can install home batteries	Community battery in 1 viable location	Apply in 3-5 locations including micro grids
<b>RISK</b> (Warning icon)	<b>RISK</b> (Warning icon)	<b>RISK</b> (Warning icon)
No external party willing to enter market	Missed opportunity in other suburbs where there is lost solar	Increase in capital program of about \$25 million and \$4m in maintenance
Some suburbs will have too much solar (goes to waste)	Increase in capital program of about \$6 million and \$1m in maintenance	Implementation and delivery risk from upscaling too quickly
Cannot use batteries to help with peak demand	<b>Benefit</b> (Thumbs up icon)	<b>Benefit</b> (Thumbs up icon)
<b>Benefit</b> (Thumbs up icon)	More low cost renewables caught from excess solar and used at peak	Maximises solar output and peak demand support
No material uplift to capex	Pilots allow us to learn before we scale up.	More likely to reach 50% renewable target

Like the solar options voting, many participants want Power and Water to pursue Option two or three, or something which serves as a combination. It is clear both Panels believe Power and Water should be taking a part in facilitating the roll-out of batteries.



Value trade-offs identified by panellists when selecting these options include sustainability, reliability, resilience and security versus affordability; security and resilience versus choice; and innovations and reliability versus cost efficiency.

After discussions during the Panel, the consensus statement from both Panels is:

The Panel do not want Power and Water to leave the issue of community batteries for market participants to consider as that could mean community battery technology is not considered early enough.

- A pilot community battery in the most viable location should be progressed to assess the technology (e.g., new housing developments)
- Participants differ on how fast or slowly we included batteries in our forward forecasting
- This will be heavily dependent on the success, market feasibility, technical and physical aspects of the pilot.

Participants suggest we could go further by:

Co ordinating with the Northern Territory Government to make installation of community batteries mandatory in new residential developments, which could be a selling point for homes, noting the cost burden would fall on homebuyers who would also realise the benefit.

Setting up public investment bonds into the technology to receive returns from the batteries over time.

Starting investment in locations with an abundance of solar such as new developments.

Considering the price impact through efficiency and reduced fuel costs versus capital costs of the battery.

Investing in the development of mobile charging units so customers can charge themselves.

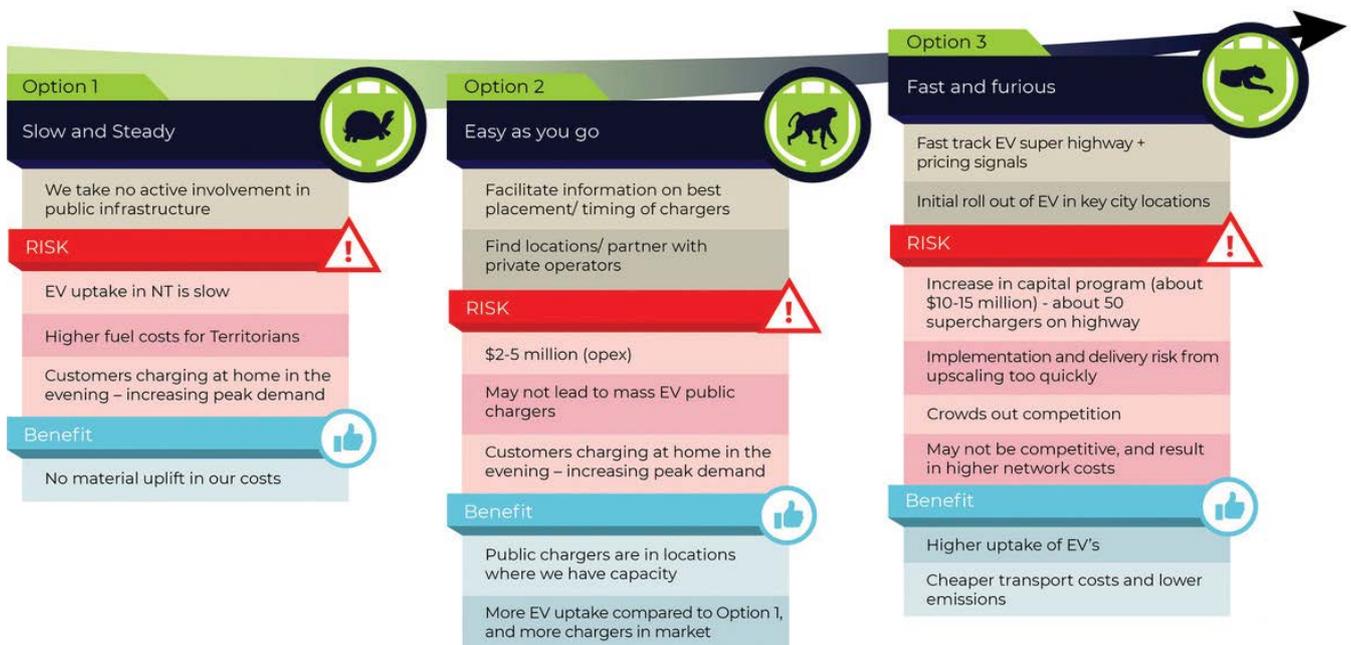
# Future network: Electric Vehicle (EV) charging

This session expanded on the discussions in November regarding the approach Power and Water should take on EVs and the need to install more public chargers as demand for EVs increase.

Power and Water explained there are publicly available EV recharge points across the Northern Territory, but they are mostly overnight charging and the 'highway' for chargers is not as advanced as states such as Queensland which has one of the world's longest EV superhighways.

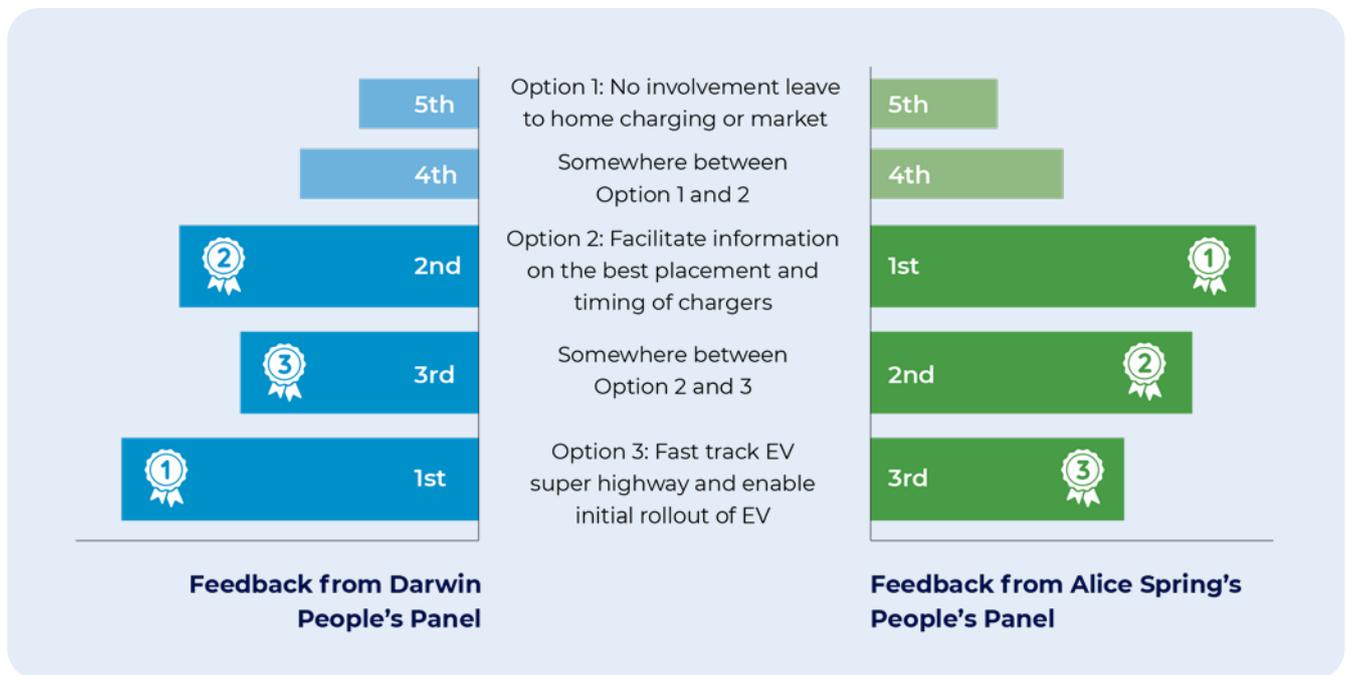
Some participants believe Power and Water should have some influence or control over the installation of EV charging infrastructure, while others want to ensure the potential market for the installation of EV charging infrastructure is retained. Many participants share the view there should be incentives for public charging during off-peak times to reduce solar waste.

Options were presented and participants were asked to vote on which option to pursue:



The voting on options between Alice Springs and Darwin differed on this issue. In Alice Springs, there is a stronger preference for either Option two or a combination of Option two and one of the other options. In Darwin, there is a stronger preference for Option two or three, or a combination.

It is clear however neither Panel want to leave this issue to the market alone to address.



After discussions during the Panel, the consensus statement from both Panels is:

There is a strong preference for facilitation and partnering with an emphasis on using technology to maximise where the best locations may be for charging and using technology to integrate the timing of vehicle charging in a way that doesn't affect the network.

- Less preference for Power and Water to take a lead role to fast tracking investment in super charging on highways
- Less preference for its own investment in EVs and EV chargers
- However, proactive facilitation of information and partnering should be pursued. e.g. sponsoring a day where we had councils, shopping centres and members of the community and create a gathering to connect councils with EV charging manufacturers and then become a conduit for investment.
- Capacity building with other innovations and technologies should be considered

The consensus position is comparable at both Panel discussions:

- The Alice Springs Panel is interested in Power and Water providing information to customers and the market on the best locations to put different types of charging technology.
- The Darwin Panel has mixed views regarding government funding versus Power and Water investment, with some interest in Power and Water pursuing EVs for their own fleet. It is clear the Darwin Panel want Power and Water to take a more progressive stance on investment in EV charging infrastructure beyond facilitation and innovation in charging.

Participants suggest Power and Water could go further by:

**Leveraging existing technology.**

**Considering the benefits for residents and tourists.**

**Being a facilitator and partnering to attract investment with government funding.**

**Recovering funding through those who use EVs.**

# Future network: pricing (Darwin only)

**This session explored the opportunity of using tariffs to shift demand to periods of high generation of energy and low demand to reduce network stress.**

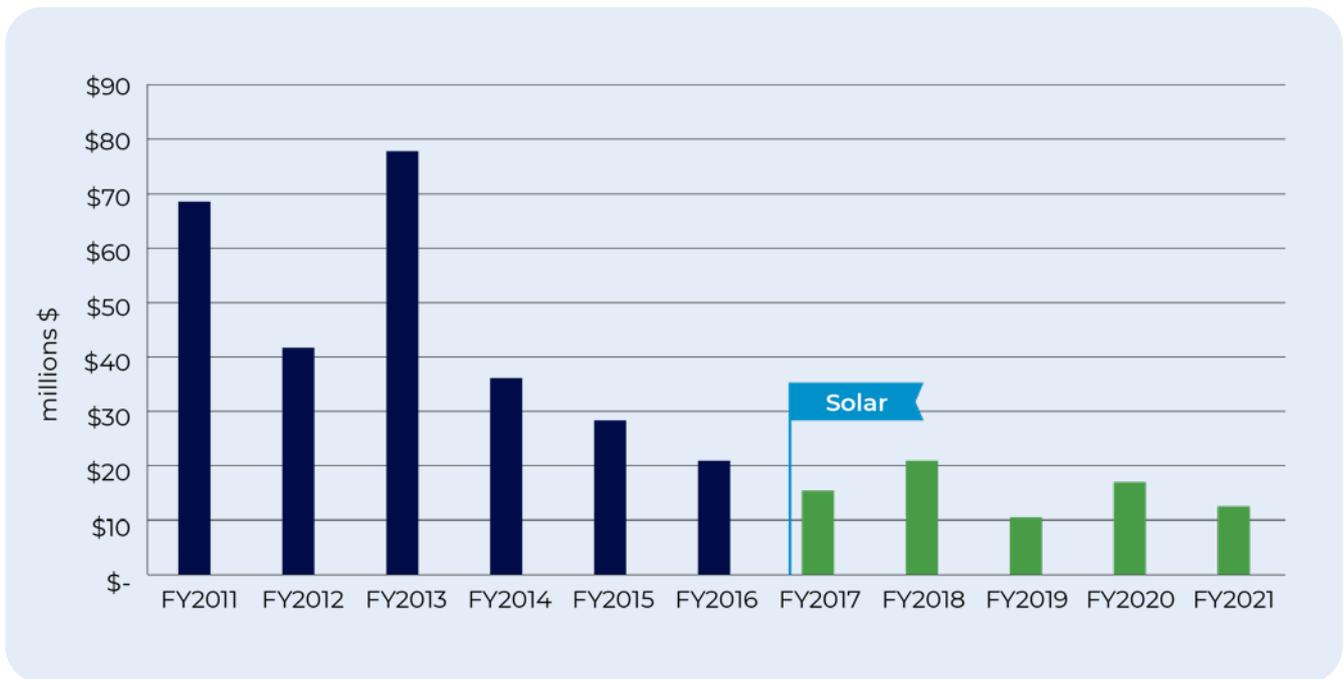
After the Darwin Panel made the decision to leverage Alice Springs consensus statements for the big issues, this allowed sufficient time for a session discussing the use of tariffs to shift electricity demand.

A table exercise using the 'personas' from the session on ageing asset replacement (Optimistic Olivia, Prudent Paulo and Saving Sam) was undertaken to engage participants on how pricing can be used in consumption decisions to manage demand. Groups identified a range of strategies to

reflect different consumptions patterns, including when to discount and when to price on a per unit basis. One of the statements which came from this session is:

***“We shouldn’t provide a discount for buying more if it puts stress on the system.”***

The session then shifted to how our expenditure on new assets has changed over time. The graph below demonstrates how the air conditioning boom in 2011 drove up expenditure to match the network stress in the middle of the day, and then experienced a significant decline after 2017 which was largely due to solar.

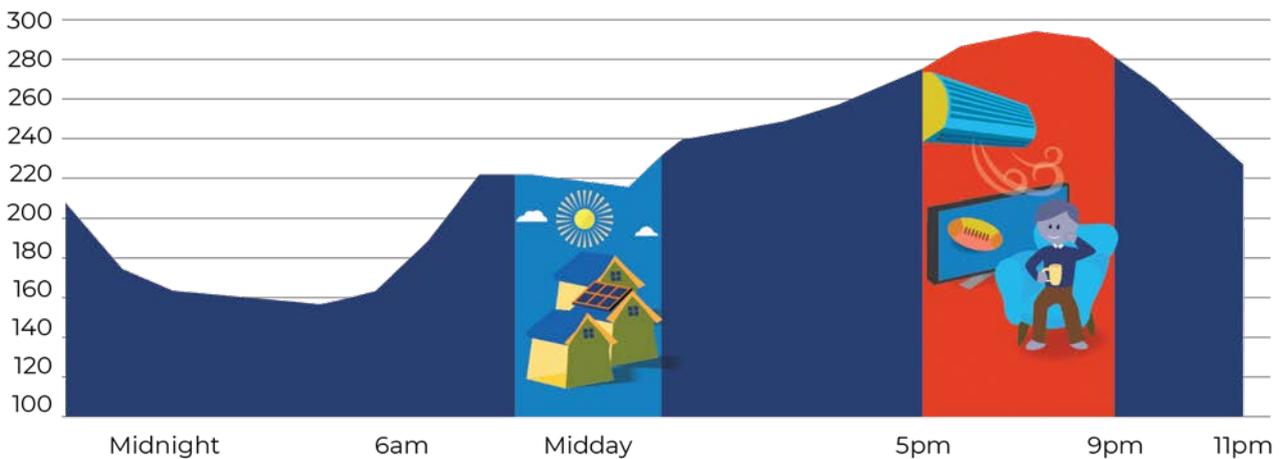


While other states in Australia experience high demand at the end of the day, the Northern Territory has historically experienced its highest levels of demand in the middle of the day. While solar has now helped curtail the peak in the middle of the day (reducing the need to augment the network for several years), the peak has now shifted to summer and wet season evenings when air conditioners are being used but solar cannot offset the increase in demand. This results in a need to invest in new assets when peak demand growth is high.

Like air conditioning, the increased penetration of EVs on the network is expected to further contribute to peak demand. It is expected that if one out of two cars are EVs by 2040, energy consumption will increase by 20 per cent.

This is primarily due to charging of EVs after work which would see peak demand in the evening and minimum change in the use of 'spare' energy during the day. It is anticipated that 25 - 30% more assets (poles and wires) would be required to meet this demand.

### Maximum demand day in Darwin-Katherine in 2020-21 (MW)



The Panel discussed the use of tariffs to support behaviours that would flatten demand and soak up excess solar from the grid. It was noted that the delivery of price signals through network tariffs is complicated by the fact that residential

customers' electricity bills reflect the Pricing Order Charges, rather than the full cost of supply. The constraints of a lack of smart meters which can record how much a customer uses and when was also discussed.



#### Solar sponge

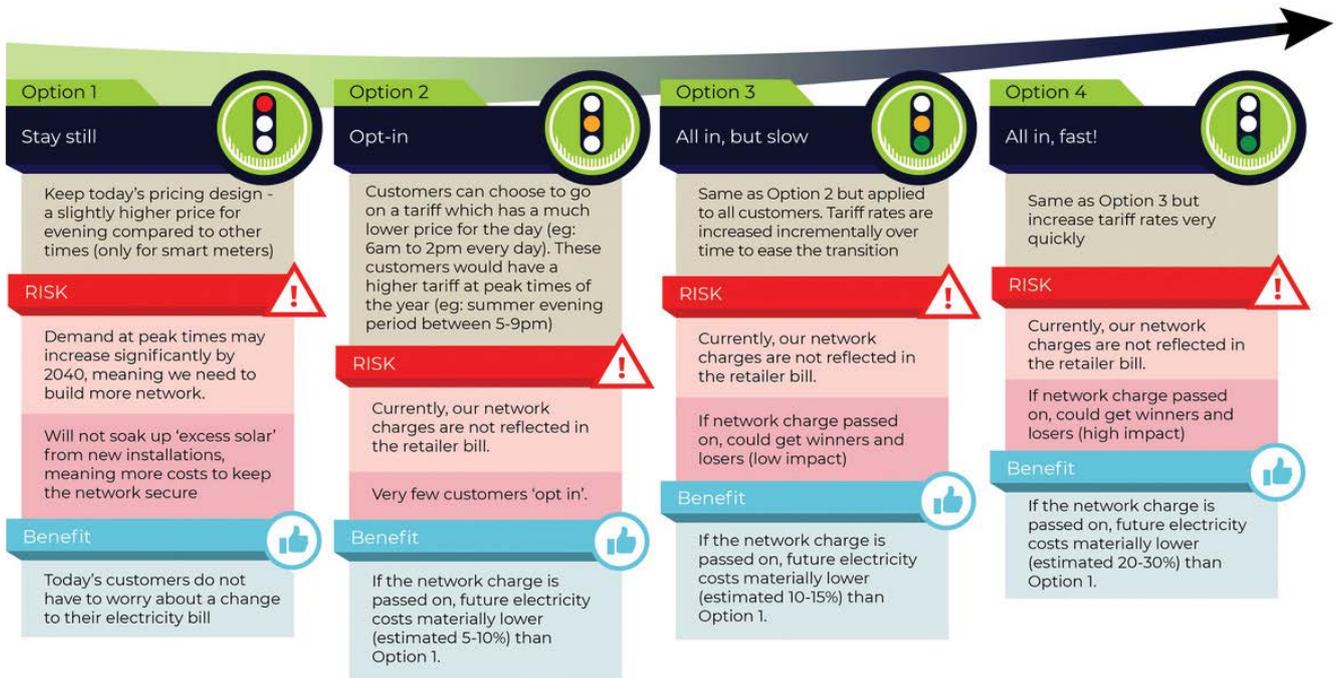
Offer lower rates during the day all year round when solar is available and in excess.



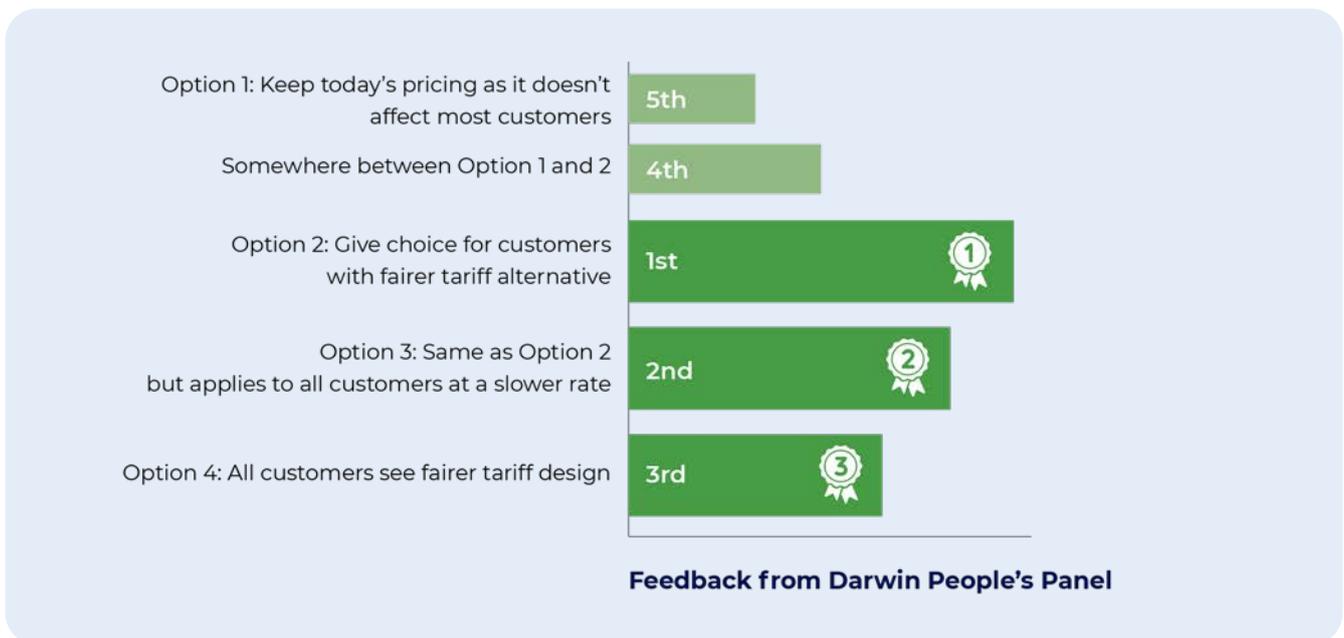
#### Seasonal demand

Charge higher rates in summer months between 5 - 9pm.

Following this exercise, options were presented and participants voted on which option to pursue:



The Panel is supportive of Power and Water exploring new tariffs, with a clear preference to provide the option for customers to choose different pricing arrangements.





After discussions during the Panel, the consensus statement from Darwin is:

- The Panel does not want the status quo. At the very least, they want Power and Water to develop network prices that make it easier for retailers (and government) to pass on better price signals.
- Most participants prefer options for customers to choose from. However, other views suggest a more progressive and informed path.

Caveats on this statement include providing information and education about the options for choice and making it clear there is a difference in usage and network impacts between commercial and residential customers.

# 6

## Feedback on the event

*"In the People's Panel, I've had to... look at my own values and have a look at the values of Power and Water and try and come to a realisation that these are critical in the decision making for the future."*

Alice Springs Panellist



Throughout the sessions, participants were encouraged to reflect and provide feedback on the process and the way we were working with them. The majority of participants responded that they felt engaged in the process, we were listening to what they had to say and we were genuinely engaged in the future of the Northern Territory. Many participants noted the information presented in November meant they were more informed and able to more meaningfully consider the information presented and engage.

At the conclusion of each day, participants were asked how they were feeling and for their feedback.

Responses to the question, 'How did we do?' were extremely positive with participants stating they found the sessions interesting and informative. A summary of participant feedback from the People's Panels is provided below.

Ten participants in Darwin and 13 in Alice Springs responding to 'How did we do?' with the feedback 'Great – I learnt a lot and enjoyed it' and six participants in Darwin and four in Alice Springs responded 'Pretty good – it was interesting'. No participants selected the neutral or negative options.

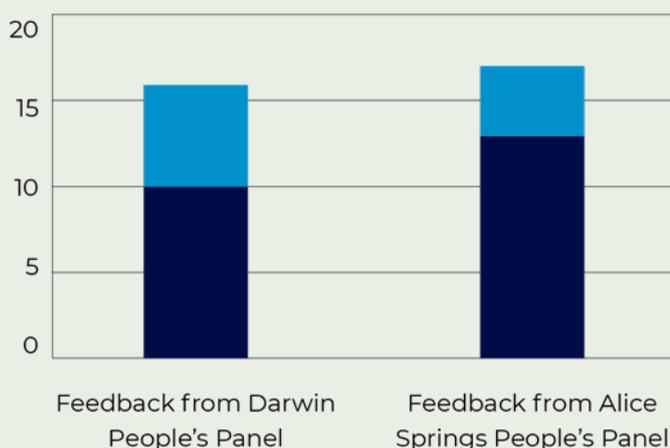


## How did we do?

- Great – I learnt a lot and enjoyed it!
- Pretty good – it was interesting

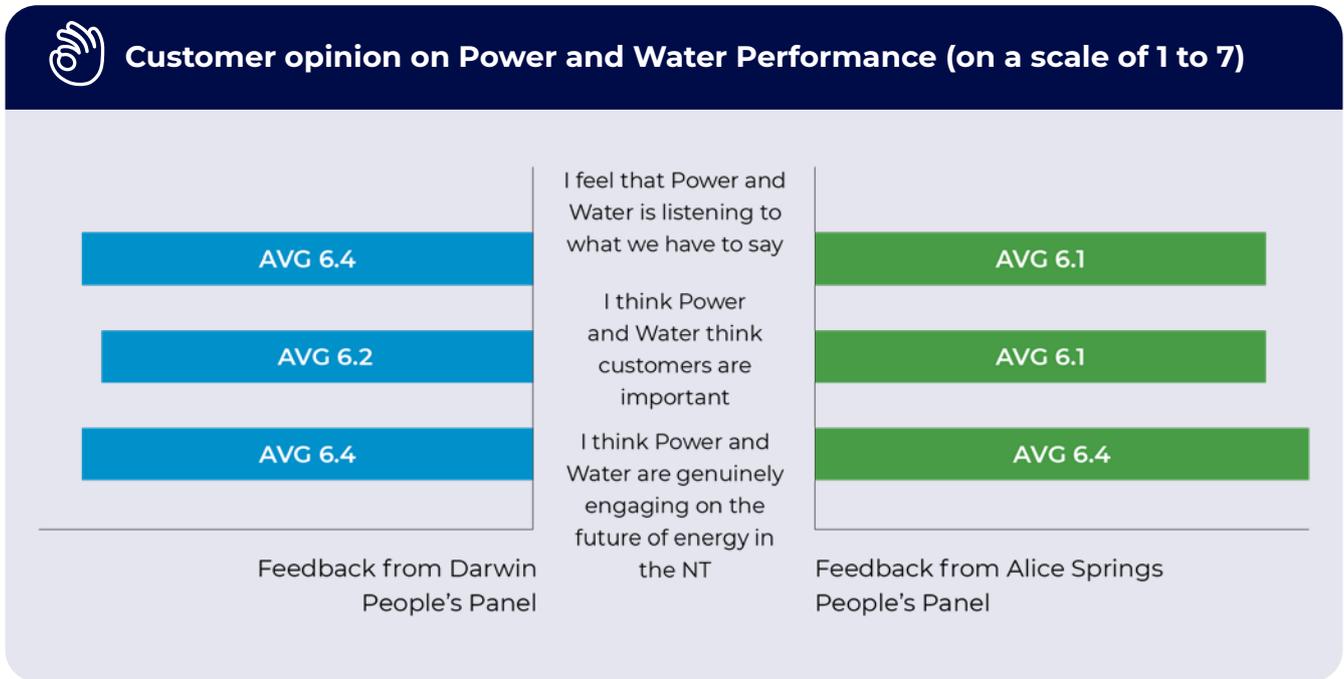
no data

- It was okay
- Too much like hard work for me
- It was really boring



Participants were also asked to provide feedback on our engagement with customers on a scale from '1 – Strongly disagree' to '7 – Strongly agree'.

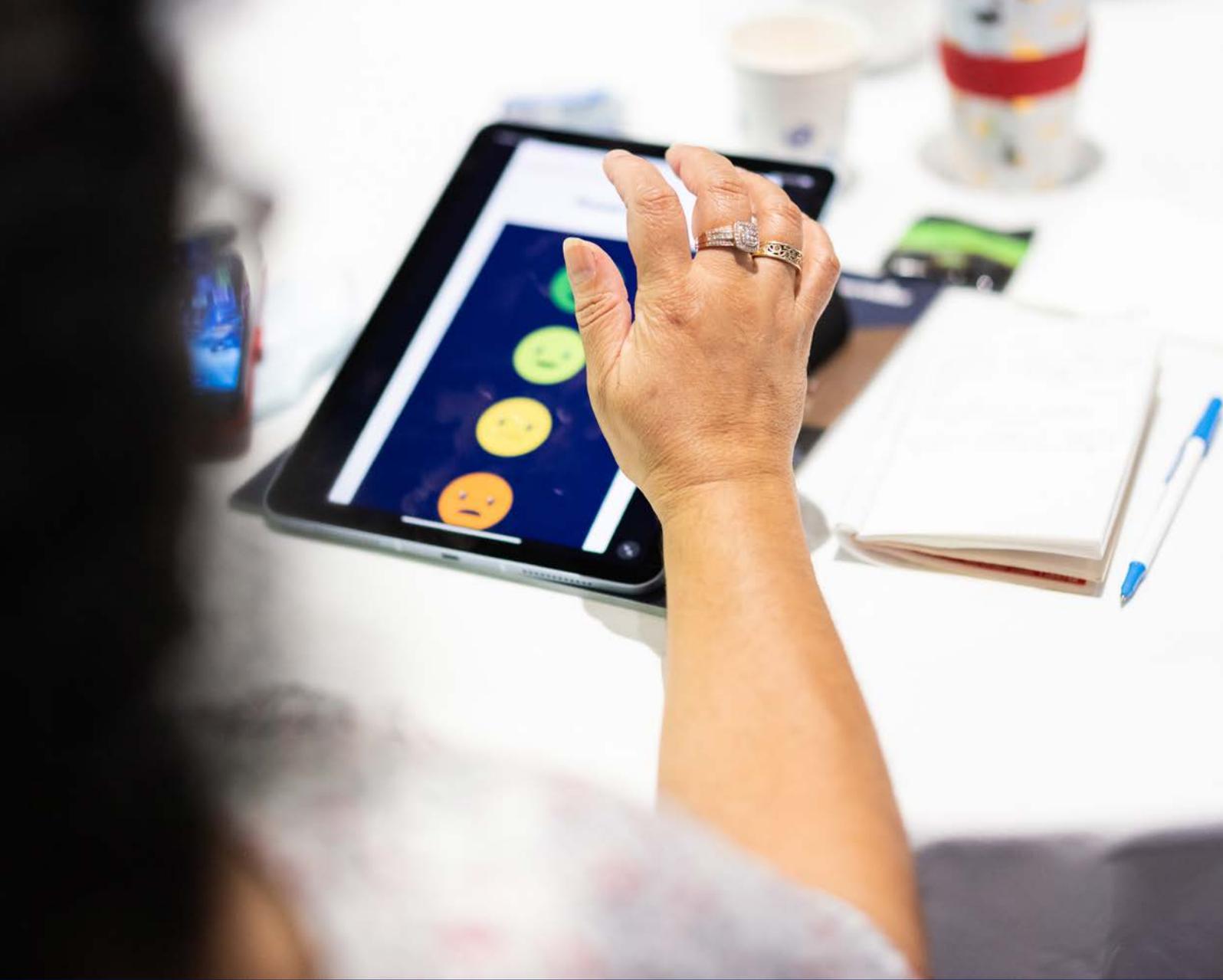
Most participants 'Strongly agreed', with an average above six in both Alice Springs and Darwin.



When participants were asked whether they would be willing to return in August, all participants responded 'Yes, definitely!' with the exception of one participant in Alice Springs who responded 'Maybe'.

Participants were also asked for suggestions on how we could improve future sessions. This feedback will inform development and delivery of the August People's Panels. Some of the suggestions include:

- Increased visuals to support concepts, for example, show what a community battery would look like.
- Better chairs.
- Don't get sidetracked by irrelevant issues.
- More activities to keep us more alert.
- Stop for 1-2 minutes of stretching exercises every hour.
- A little longer breaks, less rushed.
- Take us on a field trip to see the installations.
- Visual aids to help those technologically challenged.



After the Panels, several Panellists were interviewed to provide their perspective on what Power and Water should do about future engagement activities. A clear theme in the responses was that the Panels should be held more often with a wide breadth, but similar number, of people and they felt their opinions were listened to and will be beneficial to the future of the Northern Territory.

***“I think Power and Water should offer these forums for the public more often ... [it] was really worthwhile ... and it makes Power and Water more transparent so we know what we’re dealing with.”***

***“I think the numbers that we have in here right now is a really good number ... it’s not overpowering ... having the small numbers, you understand a lot more.”***

# 7

## Next steps

*Feedback from the People's Panel will be provided to Power and Water's Regulatory Advisory Committee to inform decisions on solutions and investment options and form a key input into the development of our Regulatory Proposal over the coming months.*





We will reconvene the People's Panels in August 2022 to further develop the outcomes from the March and April Panels and provide an update on our anticipated expenditure and revenue forecasts and related pricing impacts.

Feedback relating to other aspects of Power and Water's business, and that of retailers' operations has been communicated to relevant individuals for consideration and action.

# Appendix A- Breakdown of participants



Darwin

Alice Springs



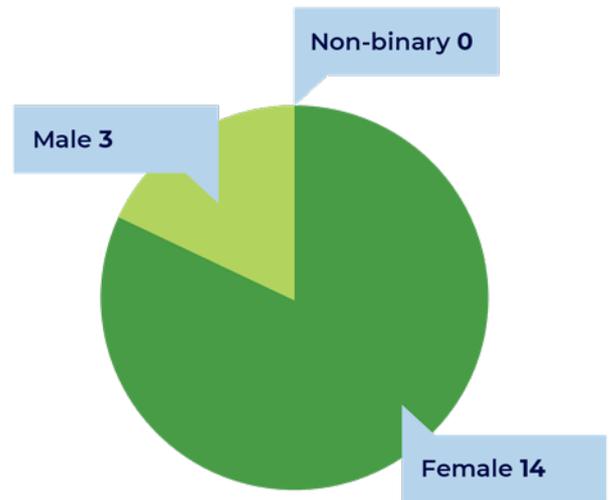
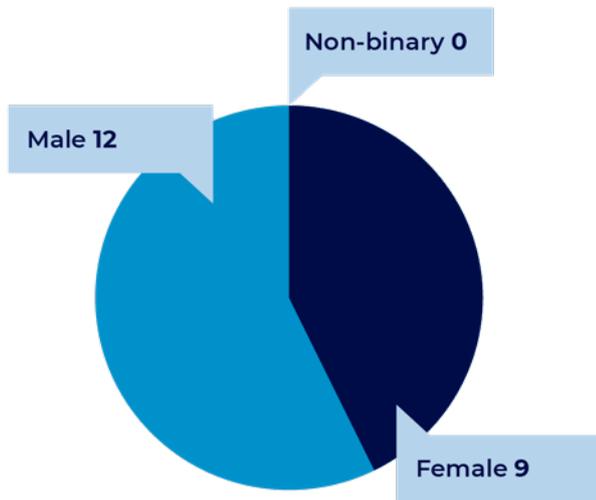
21

Number of participants

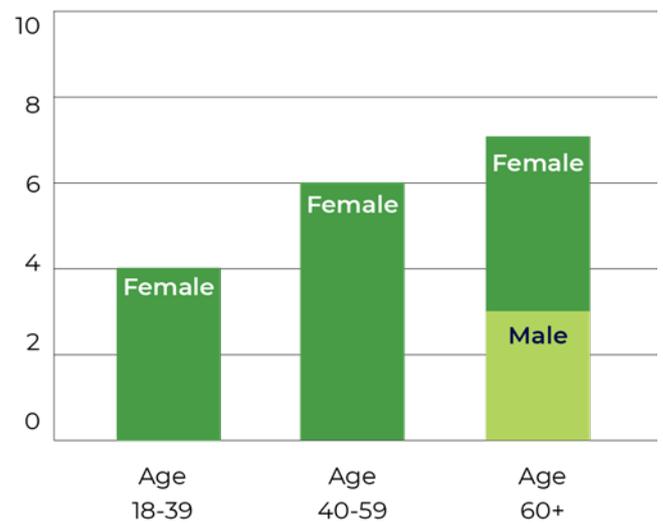
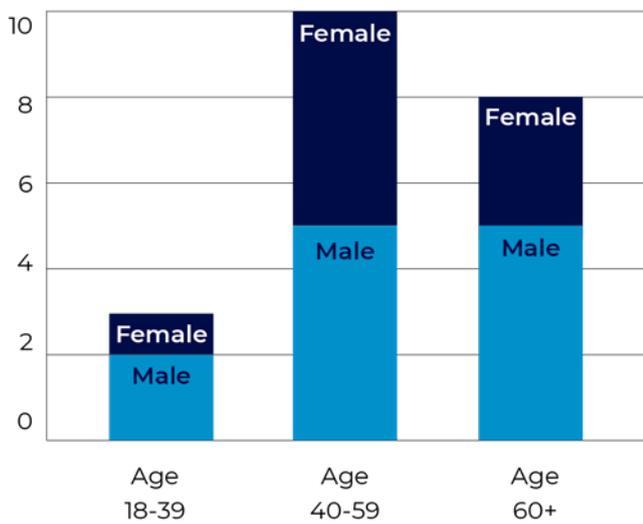
17



Gender

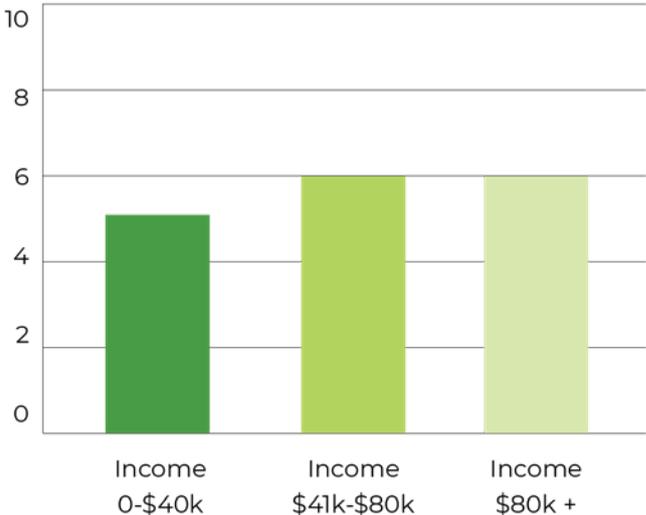
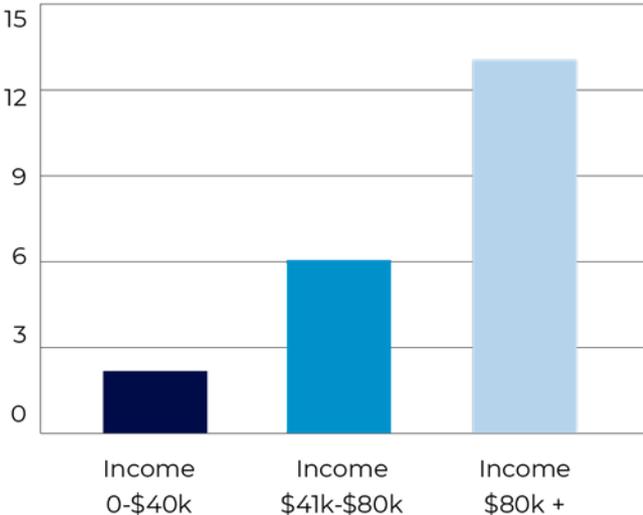


Age

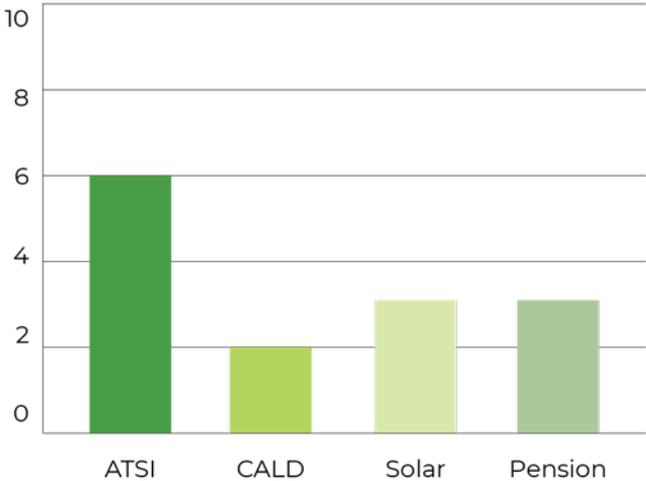
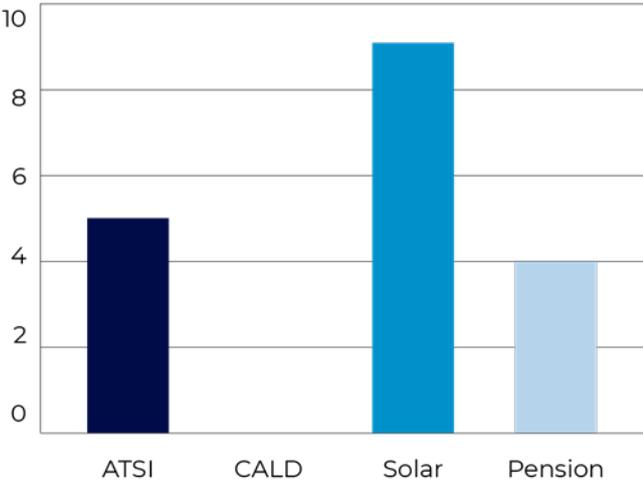


Darwin Alice Springs

Income



Segment





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