

Pre Reading Pack

Tariff Structures

Small Business Customers

Forum

15 November 2023



Acknowledgement of Country

We acknowledge the Traditional Owners of the lands upon which we operate and recognise their continuing connection to land, waters, and culture.

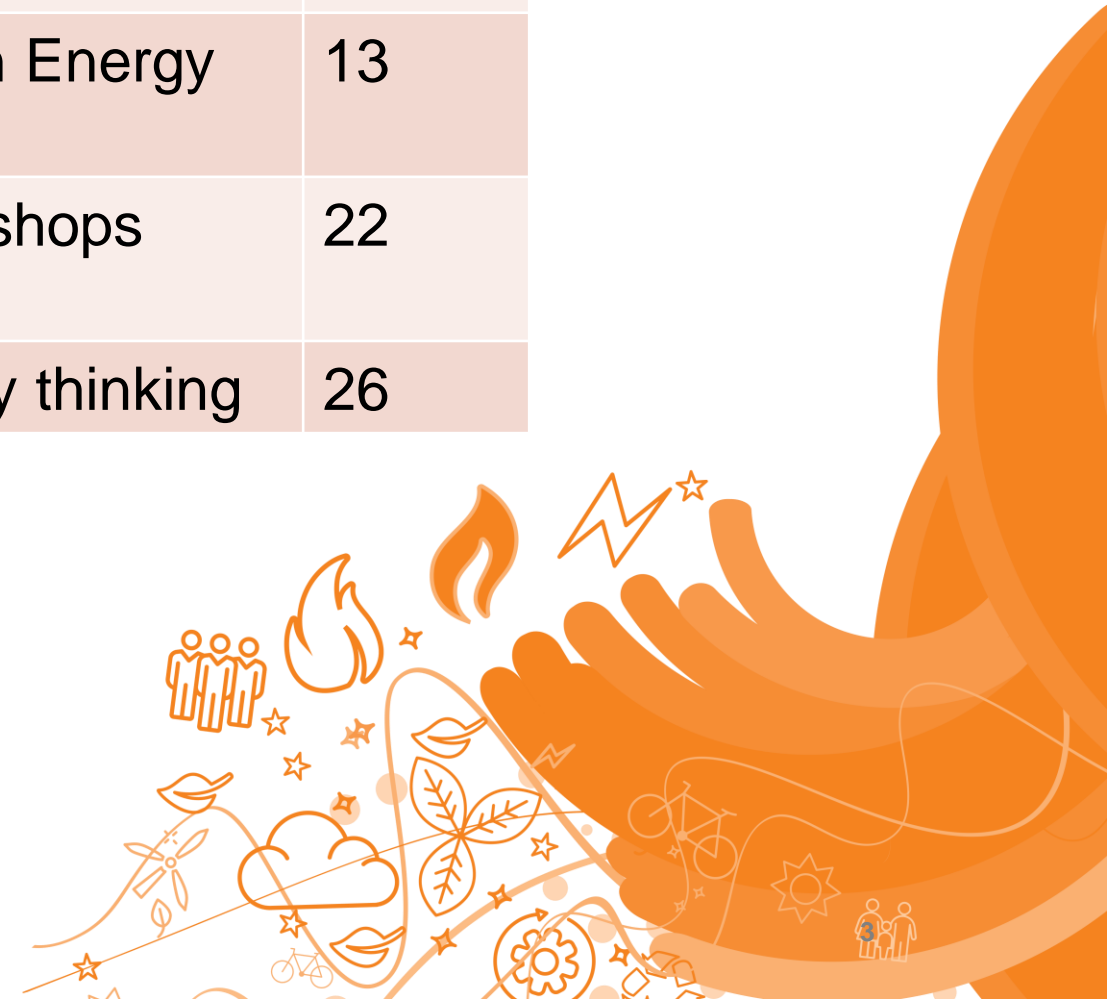
We pay our respects to their Elders past, present, and emerging.

Pictured: artwork by Aboriginal artist Chern'ee Sutton from Mount Isa for our Group's Reflect Reconciliation Action Plan



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Form of Control, tariffs and the regulated environment Jemena operates in

The energy environment is rapidly changing because of net zero targets. What is in the best interests of customers when pricing gas for the next five years (2025-2030 period)?

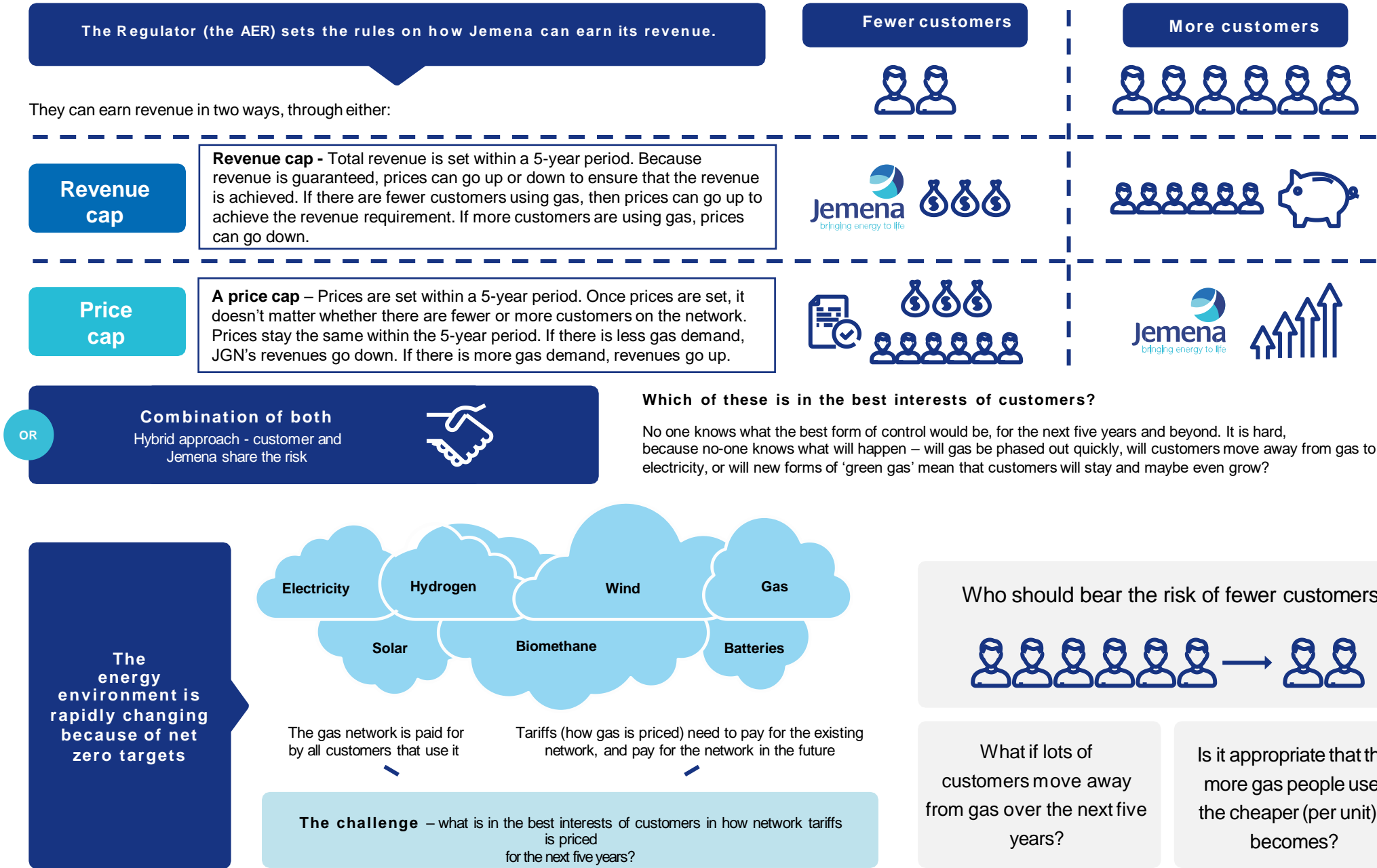
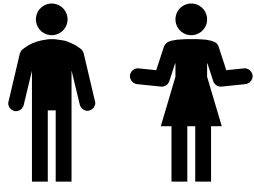


Illustration of revenue impacts under different forms of control

Forecast

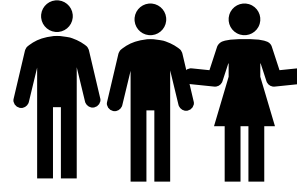


2 customers

Revenue per customer = \$1

Total forecast revenue = **\$2** (\$1 X 2)

Actual



Price per customer
= $\$2/3$ =
\$0.67 per customer

3 customers
(i.e., outperformance)

Revenue cap

Total revenue
= **\$2**

Price cap

Total revenue
= **\$3**

Under a price cap, gas networks can benefit from outperformance



Price per customer = $\$2/1$
= **\$1** per customer

1 customer
(i.e., underperformance)

Revenue cap

Total revenue
= **\$2**

Price cap

Total revenue
= **\$1**

Under a price cap, gas networks bear all the volume risk from underperformance

Tariff facto analogy

All you can eat tacos (\$100 a table)



What is the fair arrangement?



1

Split the bill
-\$20 each

2

Pay by taco -
\$10 a taco

3

Penalise the
unhealthy – Each
taco you consume
costs more

4

Encourage more
tacos – Each taco
you consume costs
Fewer

Should the restaurant be able to charge more if someone turns up?



Should the restaurant offer up a discount for a no-show?



Key concept – price vs. revenue cap

Imagine you and 9 other friends (i.e. 10 of you altogether) are seeking a share house to rent.

You find a landlord that has a big house, which she can rent to all 10 of you for a good price!

The landlord needs to recoup the costs of maintaining the house, and pay off the mortgage. She needs **\$50,000 for the next 5 years** to cover this.

She is happy with collecting the rent from each of you at the end of each year. She just wants to make sure that she has \$50,000 in total, by the end of 5 years.

If all 10 friends stay in the house for the next 5 years, each friend has to pay \$1,000 per year.

$\$50,000 / 10 \text{ friends} / 5 \text{ years} = \$1,000 \text{ per friend per year.}$



Price vs. Revenue cap

Let's say you know that 5 of your friends want to move overseas after two years...

With this information, how would you negotiate the terms of the contract?

Price cap

As a **tenant**, would you write in the contract that the landlord is only allowed to charge each tenant \$1,000 for the next 5 years, regardless of how many people end up staying in the house?



Revenue cap

As a **landlord**, how would you protect yourself against tenants leaving? You could state that if tenants start leaving the house, the rent of the remaining tenants would increase. E.g. if 5 friends leave halfway through, then the remaining 5 friends would have to pay double the rent.

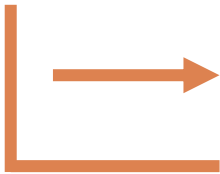


Recap of declining, flat and inclining block tariffs



Declining block tariff

- Most gas networks use this structure right now.
- The more you use the network, the less it costs (unit cost).
- There are two broad categories – demand tariffs (Large Industrial consuming >10TJ per annum) and volume tariffs (Residential and small commercial customers).
- Examples given in the paper are from Jemena in NSW and AGN in Murray Valley (Victoria).



Flat tariff

- Less complex, customers pay a steady or flat unit rate.
- Small volume customers pay less.
- Large customers are generally worse off compared to declining block tariffs.



Inclining block tariff

- The more you use gas, the higher the unit cost.
- Best option for smaller volume customers.
- Large customers are still worse off.
- Incentive to use less gas.

Pricing principles



Cost reflectivity: using the relevant laws here to observe cost reflective prices



Price stability: minimising large tariff increases to help customers manage bills in future



Simplicity: understandable, minimising transaction costs and applicability of overseas pricing structures

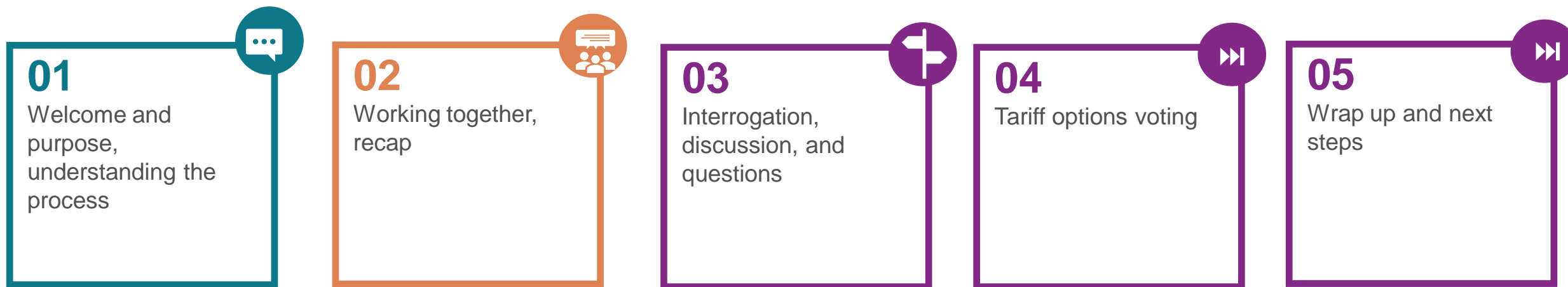


Revenue adequacy: efficient cost recovery



Fairness / equity: usage cost is according to costs of the network and covering equity considerations like cost of living pressures.

What to expect in the workshop



Your guides

We look forward to seeing you there!



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Gas Networks Pricing Lead

Navigating the Zoom Room

The image shows a Zoom Room interface with a background featuring the 'bd infrastructure' logo. The interface includes a top bar with a 'View' menu, a bottom toolbar with various controls, and a central area for video and chat. Several purple callout boxes provide instructions:

- Keep your camera on.**
In video settings click the option to see 49 participants in gallery view
- Chose 'Gallery' view** (points to the 'View' menu)
- Keep yourself on mute - unless you want to speak!!** (points to the 'Mute' button)
- Select a Camera** (points to the 'Video Settings...' option in the camera menu)
 - ✓ FaceTime HD Camera
 - Blur My Background
 - Choose Virtual Background...
 - Choose Video Filter...
 - Video Settings...
- Feel free to use the chat!** (points to the 'Chat' button)
- Use the emojis to tell us what you think!** (points to the 'Reactions' button)
- If you leave the meeting you can rejoin anytime using the original link.** (points to the 'Leave Meeting' button)

The bottom toolbar contains the following buttons: Mute, Stop Video, Invite, Participants (4), Share Screen, Chat, Record, Reactions, and Leave Meeting.

All of you have used zoom before, here's a quick refresher

Guide to using Mural

To add a stick note, double click then type and resize.

To zoom in and out, 'pinch' on the track pad or 'scroll' on your mouse.

To move around, right click mouse and drag, or swipe the track pad.

Click to add in a picture, icon, shape or a sticky note!

Click on the numbers to zoom into the instructions for each activity

Click and drag to move around the board

The screenshot displays the Mural workspace interface. At the top, a browser-like address bar shows 'Jemena Tariffs customer forum - stage 2 w...'. Below this is a toolbar with various icons for adding content (image, icon, shape, sticky note) and editing (text, eraser, lasso). The main workspace is divided into several sections: 'Sandpit' with a photo of a sandbox and pink sticky notes; 'Ways of Working' with a flowchart titled 'How did you find the stage 1 process?' and three rows of yellow sticky notes; and 'Recap' with a diagram and text. On the right, a vertical sidebar lists numbered activities: 1 Sandpit, 2 Ways of working, 3 Recap, and 4 Options and Questions... At the bottom, a status bar shows user avatars (MS, RF) and a zoom control set to 8%.

You are a visitor
You entered as a visitor because you are not a member of this workspace or mural.

Right-click and drag to move
You can now move the canvas around by holding down right-click.

Summary of stakeholder submissions on the Australian Energy Regulator's tariffs review



Context

- On May 5, 2023, the Australian Energy Regulator (**AER**) invited stakeholder feedback on their issues paper titled "*Review of the Mechanism for Varying Gas Distribution Network Reference Tariffs and Declining Block Tariffs*".
- The AER noted that existing price cap mechanisms and declining block tariff structures incentivise gas distributors to expand their network and encourage gas consumption. These approaches have been beneficial as they allow gas networks to recover large fixed costs across a more extensive customer base, resulting in lower unit costs for customers.
- The review is in response to stakeholder feedback on updates to the National Gas Objective to incorporate an emissions reduction component, as well as broader interest on the transition to net zero.

Please [click on this link](#) for the AER's consultation page

Review of gas distribution network reference tariff variation mechanism and declining block tariffs

Issues paper for stakeholder feedback

May 2023

Guide on reading the stakeholder submissions

Purpose

The purpose of this section is to provide a *brief overview* of stakeholder submissions to the AER's Issues Paper. It is **not** a substitute for the stakeholder submissions themselves. If you come across a submission that piques your interest, you can access the full submission on the [AER website](#).

How to use this document

The AER received a total of *18 submissions* from stakeholders. These were from a mix of retailers, academics, gas networks, non-profit organisations, private consultants and industry groups.

This document gives a *very brief summary of some key points* raised in each submission. We recommend reading all these summaries first, then reading the full submission if it interests you.

Collectively, the summaries in this document give a sense of the diversity of views and opinions relating to tariff reform. Tariff reform is a complex topic, and the outcome of any tariff reform depends on a variety of factors.

What next?





We hope you enjoy reading the summaries.

If you have any questions about this document or tariff reform in general, please contact:





- **Lay Na** at Layna.lim@jemena.com.au
- **Emma** at Emma.Wilson@jemena.com.au

Note: On 31 October 2023, the AER published its final decision on its review. The final decision [can be found here](#), and contains a summary of stakeholder submissions.



Summary of retailers' submissions

Stakeholder	Tariff structure	Price cap or revenue cap?	Link to full submission
Red Energy & Lumo Energy 	Support declining tariff structure <ul style="list-style-type: none"> Retain price caps and declining block tariffs until the policy environment becomes clearer. Replacing declining block tariffs with inclining block tariffs is unlikely to reduce gas consumption substantially. 	Support price cap A shift to a revenue cap will transfer risk to customers.	Link to full submission here
EnergyAustralia 	n/a <ul style="list-style-type: none"> Valuing emissions reduction should be considered, incl. use of shadow carbon prices. Network tariffs could be restructured to align with capacity Consideration should be given to more fixed pricing, should there be a move to a revenue cap. 	Support hybrid mechanism Revenue caps have risks too and should be implemented in conjunction with higher fixed tariffs	Link to full submission here
AGL Energy Limited 	Support flat tariffs, but only if gradually implemented Recommends reduction in variances within declining block tariffs and progressing towards flat tariffs in a staggered manner.	In the near term, no compelling reason to move to a revenue cap Does not recommend revenue caps, given that extreme changes in demand are unlikely in the near term.	Link to full submission here
ActewAGL Retail 	Support declining tariff structure Declining block tariffs benefit residential customers that rely on gas, including disadvantaged and vulnerable households, by providing bill certainty.	n/a	Link to full submission here




Summary of customer advocates & climate groups' submissions

Stakeholder	About this stakeholder	Tariff structure	Price cap or revenue cap?	Link to full submission
Public Interest Advocacy Centre 	Independent non-profit organization that works with people and communities who are marginalised and facing disadvantage. Read more here.	Support binding principles <ul style="list-style-type: none"> • Instead of supporting a specific structure, suggested providing binding principles for tariff structures that support demand reduction and cost recovery for high levels of demand. • Recommend differentiation between residential and large commercial/industrial users and low fixed charges for residential consumers. 	Support price cap Noted that price caps may lead businesses to “under-estimate” demand forecasts.	Link to full submission.
Brotherhood of St Lawrence 	A social justice organisation working to prevent and alleviate poverty across Australia. Read more here.	Support flat tariffs <ul style="list-style-type: none"> • Advocates single-rate tariffs. • Acknowledge that low gas users would benefit from abolishing declining block tariffs, and high users would be worse off. However, high gas users who are vulnerable must be supported through the transition. 	Support price cap Moving from price to revenue cap will transfer risk to customers	Link to full submission.
Darebin Climate Action Now 	DCAN was born when a group of Melbourne residents met in 2006 to talk about how they might contribute to raising community awareness of the risks posed by climate change. Read more here.	Support inclining block tariffs <ul style="list-style-type: none"> • Suggested that the AER's ruling on tariffs should be short-term, pending a comprehensive review. • Support inclining block tariffs but emphasize the need for measures to protect low-income individuals. 	n/a Expressed concerns about a shift from price caps to “volume controls” (i.e. revenue caps).	Link to full submission.
Lighter footprints 	A local climate group committed to leading effective climate action. Read more here.	n/a <ul style="list-style-type: none"> • Revised their position on declining block tariffs, stating that changing the profile of block tariffs will have a negligible impact on consumption as retailers set tariffs. • Should focus on making the transition to electricity easier for vulnerable customers. 	Support revenue cap Believes that under a revenue cap, customer bills will be lower and there will be less pressure for increasing demand	Link to full submission.




Summary of consultants' submissions

Stakeholder	About this stakeholder	Tariff structure	Price cap or revenue cap?	Link to full submission
Cambridge Economics Policy Associates 	<p>CEPA Australia provides clients across Asia-Pacific with regional market expertise and services supporting effective decision-making and policy formulation.</p> <p>Read more here.</p>	<p>Support declining tariff structure (but a better designed one)</p> <ul style="list-style-type: none"> A well-designed declining block tariff can reflect efficient consumption levels and marginal costs for larger users. Considerations should be given to the allocation of fixed costs to variable charges to replicate the effect of a carbon tax. 	<p>n/a</p> <ul style="list-style-type: none"> Changing from a price cap to a revenue cap affects the allocation of volume risk in the short term but not in the long term. Under the current framework, under either a price or a revenue cap, customers remain exposed to the risk that, if demand declines substantially, gas distribution network prices will rise in the next access arrangement period. 	<p>Link to full submission.</p>
Institute for Energy Economics and Financial Analysis 	<p>Examines issues related to energy markets, trends, and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy.</p> <p>Based in Asia, Australia, Europe and North America.</p> <p>Read more here.</p>	<p>Support flat/inclining tariff structure</p> <p>Inclining block tariff structure disincentivizes greater gas consumption</p>	<p>Support price cap</p> <p>Revenue cap mechanism is inappropriate: may accelerate the 'death spiral' of the gas network, transferring more risk to customers.</p>	<p>Link to full submission here.</p>




Summary of industry and consumer groups' submissions

Stakeholder	About this stakeholder	Tariff structure	Price cap or revenue cap?	Link to full submission
Energy Consumers Australia 	Represent residential and small business energy consumers to have their voices heard by the sector. Work with other consumer groups to gather evidence-based research with a national perspective, distil it to key viewpoints, and feed it back to the market to influence outcomes. Read more here.	n/a	n/a	Link to full submission.
Energy Networks Australia 	National industry body representing Australia's electricity transmission and distribution and gas distribution networks. Members provide more than 16 million electricity and gas connections across Australia. Read more here.	No preference Noted that "... there are many balancing issues and trade-offs at play, and customers should be thoroughly consulted on, and informed of the consequences of, their risk sharing and tariff preferences through individual access arrangement processes rather than reaching any mandated national approach through this review".	No preference Noted that "Any potential changes to tariff block structure should not be considered in isolation and, to avoid unintended consequences, potential changes to tariffs should be considered alongside a range of other factors".	Link to full submission.
Australian Energy Council 	Represent 20 major electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. Members sell gas and electricity to over 10 million homes and businesses and are significant investors in renewable energy generation. Read more here.	Support flatter tariff structure but only gradually Gradually increasing the fixed charges component and flattening the declining block structure can encourage a reduction in gas connections and promote electrification.	No preference Both price cap and revenue cap regulatory approaches have limitations in addressing net zero 2050 and environmental concerns.	Link to full submission.

Summary of academics' submissions

Stakeholder	About this stakeholder	Tariff structure	Price cap or revenue cap?	Link to full submission
Alan Pears Senior Industry Fellow, College of Design and Social Context, RMIT 	<ul style="list-style-type: none"> Through his consulting practice and links to community and professional organisations, Alan has worked on many projects in the clean energy, planning, climate policy, green building and public education fields. Bachelor of Engineering (Hons) (Monash University) Diploma of Education (Monash University) LinkedIn profile	n/a <ul style="list-style-type: none"> Different versions of declining block tariffs can affect consumers differently. Instead of a definite approach, the criteria for tariff design should ensure social equity is achieved while managing gas network-related costs arising from decreasing gas consumption. Network tariffs are only one element of consumer bills. 	n/a Noted that the “reasonable return on investment” approach should not prioritize network profits over consumers.	Link to full submission here.
Ron Ben-David via Monash Business School   MONASH BUSINESS SCHOOL	<ul style="list-style-type: none"> Senior leadership roles in policy development and economic regulation particularly in Victorian energy and water sectors. Doctor of Philosophy, PhD, Economics (University of Melbourne) Bachelor of commerce, economics (University of Melbourne) Bachelor of Science (University of Melbourne) LinkedIn profile	n/a <ul style="list-style-type: none"> Any proposed network tariffs will have equity implications. Regulators must robustly assess redistributive effects. Although there are theoretical arguments against declining block tariffs, there may be practical reasons to maintain them. 	n/a <ul style="list-style-type: none"> Concerned about the recovery of profits by gas networks. Does not conclude whether a price cap or revenue cap is better for consumers. 	Link to full submission here.

Summary of gas networks' submissions

Stakeholder	About this stakeholder	Tariff structure	Price cap or revenue cap?	Link to full submission
Australian Gas Infrastructure Group 	<p>Own and operate infrastructure that delivers gas to more than two million homes and businesses across Australia.</p> <p>Including SA, NT, Victoria, QLD, WA and the southern part of NSW. Read more here.</p>	Support declining tariffs <ul style="list-style-type: none"> Volume of gas per customer has been declining for several years, challenging the AER's belief that declining block tariffs encourage increased volumes. Flat or inclining block tariffs may reduce demand compared to declining block tariffs, but this does not necessarily reduce emissions overall. 	Support price cap <ul style="list-style-type: none"> The relationship between price caps and connection numbers is unclear. Customer preferences and economic viability also influence connection growth. Revenue caps: Fluctuating prices due to difficulties in demand forecasting may result in more significant price variations for consumers compared to electricity. 	Link to full submission
Evoenergy 	<p>Operates and maintains the ACT electricity and gas network.</p> <p>Read more here.</p>	n/a <ul style="list-style-type: none"> Declining block tariffs are more efficient as they align with the underlying costs of delivering gas. But declining block tariffs do not discourage gas usage during cold periods 	n/a <ul style="list-style-type: none"> Price Cap has benefited customers by incentivizing network expansion, driving efficiency, and lowering prices. However, price caps do not align with emissions reduction or community expectations. 	Link to full submission here
Jemena Gas Network 	<p>Our network distributes natural gas to 1.5 million residential business and industrial sites in Sydney, Newcastle, the Central Coast and Wollongong, as well to customers in more than 20 regional centres.</p>	n/a <p>Preference is to avoid significant changes in risk sharing between networks and customers.</p>	Hybrid approach <ul style="list-style-type: none"> The energy landscape is still evolving. A prudent and cautious approach is required at this stage. Recommend a hybrid cap and collar approach. 	Link to full submission here

What residential customers said in stage one workshops

This section gives a summary of what residential customers said in our workshops in July and August 2023.

What residential customers told us

1. The energy environment is rapidly changing because of net zero targets. What is in the best interests of customers when pricing gas over the next five years?



Jemena bears risk:
Approximately half the participants recommended this with reasons including:

- Jemena has the capacity for analysis and business forecasting
- Jemena is a profit-based company
- Risk is too high for customers with cost-of-living pressures
- Uncertainty of future customer base due to net zero targets.



Sharing the risk:
Approximately half the participants recommended this with reasons including:

- Uncertainty due to net zero targets including around the potential future customer base, so it's right to share the costs
- Jemena has the capacity for analysis and business forecasting
- Risk is normally accepted by customers in the costs of goods and services.

2. In the environment of net zero carbon targets, is it appropriate that the more gas people use, the cheaper (unit cost) it becomes?



Approximately 80% of participants believe it is inappropriate because:

- We need to consider the net zero goals and environmental values
- We need to consider making it more equal or fair for smaller gas users
- We need to consider affordability and environmental factors
- It should be more affordable to encourage connections.



Approximately 20% of participants believe it is appropriate because:

- Business costs will impact the economy and customers if we change
- We must consider larger household customers
- We are still waiting on government policy
- We need to consider affordability for all.

What customers grappled with

As you explored the questions, you grappled with the following:

- Encouraging gas usage – customer bills
- Combined risksharing between Jemena and customers
- Larger customers and their gas usage
- Encouraging gas usage – environmental considerations
- Cost of living pressures
- The retailer passing on changes in tariffs.

A group definition from customers

‘What’s in the best interest of customers?’

Household customers shouldn’t be disadvantaged, and gas supply should be reliable and safe – and we should meet and exceed environmental obligations.

Revisiting these decisions with the best interests of customers in mind

Residential customers agreed either Jemena should bear all OR most of the risk (under a hybrid option).



- Jemena was able to better forecast gas usage and customer base
- Customers should take a role in risk sharing as this was seen to help Jemena stay in business and therefore provide a safe, reliable and affordable gas service.

Nearly all residential customers in our workshops agreed that it was inappropriate to price gas to encourage people to use gas more.



- The need to balance environmental obligations and affordability for household customers
- Household customers are currently disadvantaged by this pricing method

How residential customer feedback is shaping our early thinking



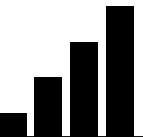
This section summarises our early thinking and why we're proposing these options.

How our early thinking aligns with the pricing principles

	Cost reflectivity	Price stability	Simplicity	Revenue adequacy	Fairness / equity
	<i>Using the relevant laws to observe cost effective prices</i>	<i>Minimising large tariff increases to help customers manage bills in future</i>	<i>Understandable, minimising transaction costs and applicability of overseas pricing structures</i>	<i>Efficient cost recovery</i>	<i>Usage cost is according to costs of the network and covering equity considerations like cost of living pressures</i>
Tariff blocks	Fully aligns	Fully aligns	Fully aligns	Fully aligns	Partially aligns
Fixed vs variable	Partially aligns	Partially aligns	Partially aligns	Fully aligns	Partially aligns
Residential vs commercial	Fully aligns	Fully aligns	Fully aligns	Fully aligns	Fully aligns



Early thinking: keeping customers in mind as they transition

What are we proposing now?	What can we do later?	How does this align with the residential customers feedback?
Separate out Household customers and Large Commercial customers. 	<ul style="list-style-type: none">Develop a different set of tariffs for Household customers and Large Commercial customers.Adjust fixed vs. variable pricing	<u>Affordability and Equity</u> Larger commercial entities and households have different ability to pay for gas and should face different prices.
Combine price cap and revenue cap ("Combination cap"). 	Depending on market developments (such as the pace of electrification and renewable gas), we could further adjust the Combination cap.	<u>Sharing of demand risk</u> <ul style="list-style-type: none">With the Combination cap, JGN will absorb loss of revenues (up to a point) if customers depart the network.On the flip side, any unexpected gains due to a surge in customers won't result in windfalls for JGN.
Streamline declining block tariffs. 	Depending on consumption patterns, we could further flatten tariffs and/or incline tariffs.	<u>Pricing for the environment</u> <ul style="list-style-type: none">The impact of declining / flat / inclining tariffs on gas consumption is still unclear.To avoid bill shock, the transition away from declining blocks should be gradual, not sharp and sudden.

What residential customers told us

Fairness is important for smaller gas consumers

Affordability needs to be prioritised

JGN and customers should share the risk of customers leaving the network

Declining block tariffs are not appropriate in addressing environmental concerns

What are the risks and trade-offs? (Just keep in mind for now)

Historical approach to pricing

- Focused expanding the network through 'free' connections. This strategy aligned well with the Price cap and Declining block tariff.
- Benefits included a stable and growing customer base, which in turn led to average bill reductions.
- Declining block structure encouraged efficient network use.
- Adding new gas appliances to a household correlated with reduced unit costs.



Declining block tariffs

- Declining block tariffs are designed to give customers “smoother bills” in cold months.
- With flatter or inclining tariffs, a household with multiple gas appliances could have higher winter bills.
- The transition to inclining tariffs needs to be gradual to avoid ‘shocks’.



**to hear,
listen
and think**

