Advisory Board

Session 5, 1 February 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

Welcome

01
Reflections from session 4

02
Develop a common understanding of each response area

03
Understand initial any views:

- Pre-conditions and interdependencies
- Prioritisation
- Reasonable response range
- Any further work

Your Advisory Board Chair

Rosemary Sinclair AM
CEO
auDA

Your facilitator

Dr Matt Pearce
Partner
KPMG National Lead for Energy & Utilities

Agenda for today

Topics we will cover	Duration
Section 1: Welcome	*5 total*
Acknowledgement of Country, introduction and agenda for today	
Section 2: Reflections from Session 4	*20 total*
Feedback and responses	15
What we need from the deep dives	5
Section 3: Adjusting our new connections approach	*55 total*
Presentation	25
Q&A	25
5 minute break	
Section 4: Addressing capital recovery pace	*65 total*
Presentation	30
Q&A	35
Section 5: Compensating capital recovery risk	*25 total*
Presentation	15
Q&A	10
Section 6: Session wrap-up and close	*10 total*
Feedback and reflection from today's session, next steps	

In order to…

01 Develop a common understanding of each response area

02 Understand initial any views or additional information required (which will be revisited in our March and April 2023 meetings with the scenario outcomes)

Reminder: This session is being recorded

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Recap: Advisory Board series overview

1	2	3	4	5	6	Opt-in 1	Opt-in 2	7	8
13 Oct	28 Oct	25 Nov	9 Dec	1 Feb	21 Feb			22 Mar	18 Apr

Project, approach, challenges, tools	**Explore response areas**	**Explore response areas**	**Explore response areas**	**Explore response areas**	*Model opt-in session*	*Renewable gas opt-in session*	**Testing responses**	**Equip and engage**
Discussing the project and approach Co design engagement principles What success looks like Defining the problem statement, challenge and the tools	**Deep dive 1** • Adjusting our asset management approach • Facilitating renewable gases	**Deep dive 2** • Purpose and use of scenarios • Investing in renewable gases • Market transition • Support for renewable gas generation and demand	**Deep dive 3** • Adjusting our new connections approach • Addressing capital recovering (i.e. depreciation profile over time) • Compensating capital recovery risk	• Problem statement recap • Understand and introduce model • Capture additional views especially for March session. • Reflect on UK experiences. • Introduce opt-ins.	***Optional session (tbc)*** • *Provide key details and deep dive of the model.*	***Optional session (tbc)*** • *Provide key details and a deep dive on renewable gas.*	• Expert Panel Scenario insights of potential responses outcomes • Deliberate on what responses perform best • Prioritising and packaging potential responses	• Recap and refine outcomes and packages of options based on previous meeting • Discuss narrative • Feedback for customer forum approach • Next steps

Co-design
Establish our process

Inform & Consult
Understand and investigate ways Jemena could respond

Involve & Collaborate
Target which response options to engage our customers on, and how we will do so

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Reflections from Session 4

Reminder… Working problem statement

We want to explore how Jemena can be a partner to achieve consumers' and community objectives for:

Safe services

Reliable and resilient services

Stable and affordable prices

A decarbonised energy supply

Through a fair return on agreed investments.

An Advisory Board member suggested the addition of 'resilience' be included alongside 'reliable services'

An Advisory Board member commented that 'affordable' will mean something different to different customer segments

An Advisory Board member noted that 'environmental impacts and considerations' including the visual impact of decarbonisation should be included here, and Peta discussed environmental biodiversity.

An Advisory Board member commented that the 'fair return on investment' should be achieved through 'agreed activities'

An Advisory Board member commented that the 'fair return on investment' should be for both Jemena and customers

An Advisory Board member commented on capturing 'tipping points' and timing for taking action

An Advisory Board member spoke about 'fair and equitable treatment of risk'

An Advisory Board member suggested including 'efficiency' somewhere in the problem statement and Jemena noted this is captured in agreed investments

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Session 4 playback

What we have heard	How we have responded
Customer forum engagement: suggestions	• Placeholder dates are sent for customer forums. • There will be 'key voices' engagement also hosted and placeholder dates will be sent soon. • Suggest Advisory Board members use customer feedback to inform deliberations • Discussion of engagement with customers including attendance, role of observers, potentially obtaining permission to record the session from participants.
Working problem statement: suggestions about community and customer perspectives, fair and equitable treatment of risk	• Majority of members expressed support for the problem statement, some who supported with conditions (note 1 member absent). • We heard Advisory Board feedback on some additional desired outcomes set out in the statement. • We will capture this and further feedback throughout the deep dives via a feedback map on the working problem statement to revisit in session 6 after the deep dives.
Scenario planning: suggestions about optionality, no regrets actions, unpacking what's affordable to our diverse community and customer base and social license to operate	• We heard Advisory Board feedback of additional elements to consider when developing responses to the scenario planning. • We will share the Expert Panel scenarios report after this meeting.
Additional feedback: thinking ahead, feedback so far on process of engagement	• Thinking about whole of energy system including customer and Jemena investments. • Customer impact include choice, price and equity. • Risks and no regrets: think about this when using scenarios and prudent options that preserve optionality. • Big policy settings – thinking about highlighting this in the customer forums. • Pathway choices to decarbonise, and order of ways to decarbonise. • Members constructive and positive feedback as to the sessions so far and links to future sessions.

Do you have any questions or comments you want to raise?

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Recap | Deep dive response areas

Response areas	Key response options		
Adjusting our asset management approach	Stay in business	Shrink the business	Transition to renewable gases
Supporting renewable gases	Green gas policy	Market making	Supporting renewable connections
Adjusting our connections approach	Increase connection charges	Make connections contestable	Stop connections
Addressing existing capital recovery	Shorten asset lives	Change depreciation profile	Compensate recovery risk

Adjusting our new connections approach

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Recent changes in Building Sustainability Index (BASIX)

In NSW, BASIX sets the minimum standards for new buildings and renovations over $50K. As part of its updates effective October 2023, the NSW Department of Planning and Environment (DPIE) will introduce measures that will impact the landscape for gas

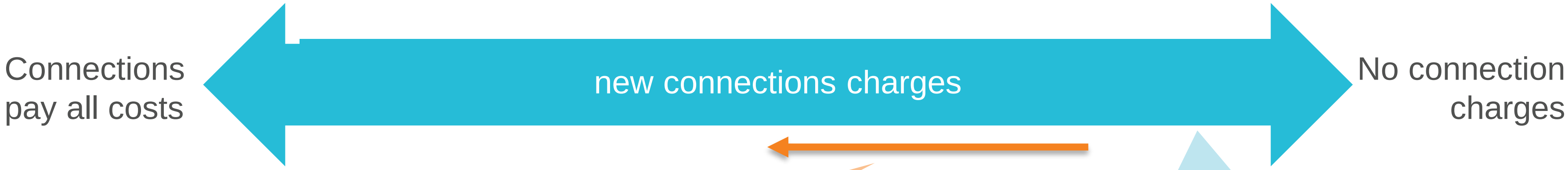
	Current	Post 2023	Impact on gas
Detached Residential	Gas (mains or bottled) appliances score well in BASIX due to the low greenhouse gas intensity of gas compared to (coal-generated) electricity.	BASIX will **mandate** standalone houses or semi-detached dwellings using gas or less efficient electrical hot water/space heating appliances to install solar PV to meet the “net equivalent energy usage” requirements	The cost to join the gas network will **increase** for standalone houses or semi-detached dwellings, driving new developments towards electrification
High Rise Residential	DPIE encourages connection to gas mains via higher scores given via the BASIX certification scheme.	DPIE’s apartments design guide has a **preference** for **all-electric buildings** in new high rise buildings	Less appetite to join the gas network. Major developers—MIRVAC, Stockland & Frasers Property— have set net zero emissions targets. Local councils starting to activate proposals to electrify this segment of the market
Non-residential	DPIE doesn’t have any standards that would prevent non-residential developments from joining the gas network.	New offices, services apartments, hotels and State significant developments will need to be **all electric** or capable of converting to operate without fossil fuels by 2035	Should gas network <u>not</u> become green by 2035 JGN will lose these customers, however such measures could have an impact on the appetite of other developers to join the gas network.

Increasing new connections charges

What is the response area?

Changing the scale of costs that JGN incurs for any co-contribution when a customer connects, versus what the connecting customer pays towards its connection costs.

What is the option range and where are we now?



What next? Should we:

- Limit which connections have a JGN co-contribution?
- Allow developers to build and gift assets (like in water and electricity)?

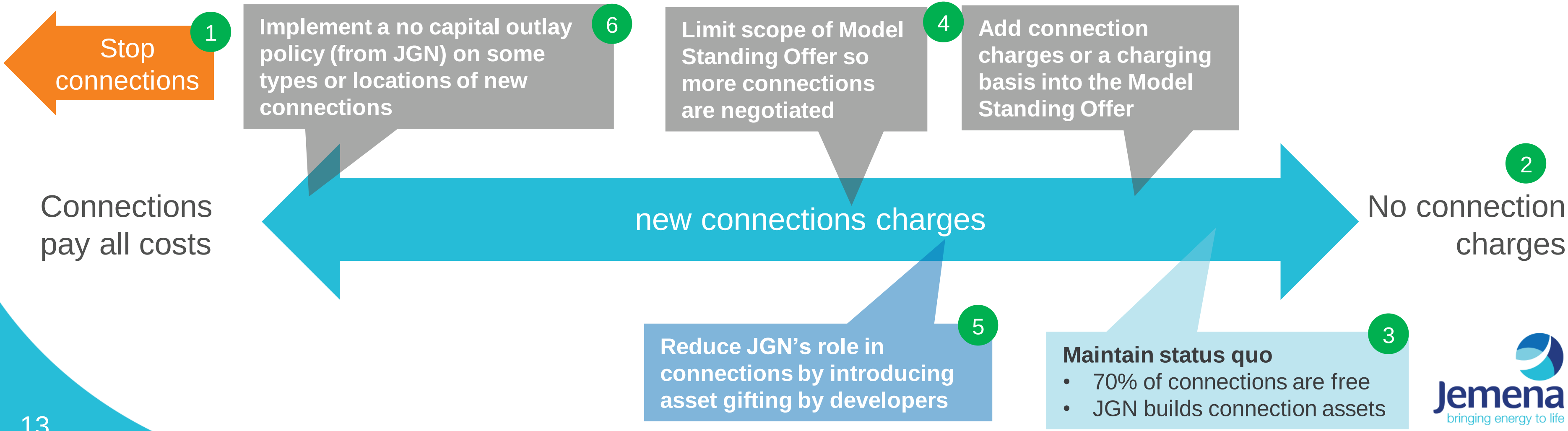
Now

- 70% of new connections are “free” of an upfront charge under AER-approved Model Standing Offer
- 30% are negotiated and subject to a connection viability test
- JGN builds all connection assets itself

Options

Stop connections | Make connections contestable | Increase connection charges

- **Bookends** — stop connections, or have no connection charges
- **Status quo** — closer to no connection charges
- **Increasing connection charges** — introducing a charge into the MSO or increasing services that are negotiated. This changes the relative cost recovery from connection charges paid by new customers versus RAB capitalisation to be paid for by all customers over time
- **Changing the scale of costs that JGN incurs** — make connections contestable, that is builders able to construct connection assets, recover costs directly from customers as part of house costs, and gift assets to JGN? (like electricity)
- **Zero outlay** — based on customer size or locations (applies to negotiated connections)



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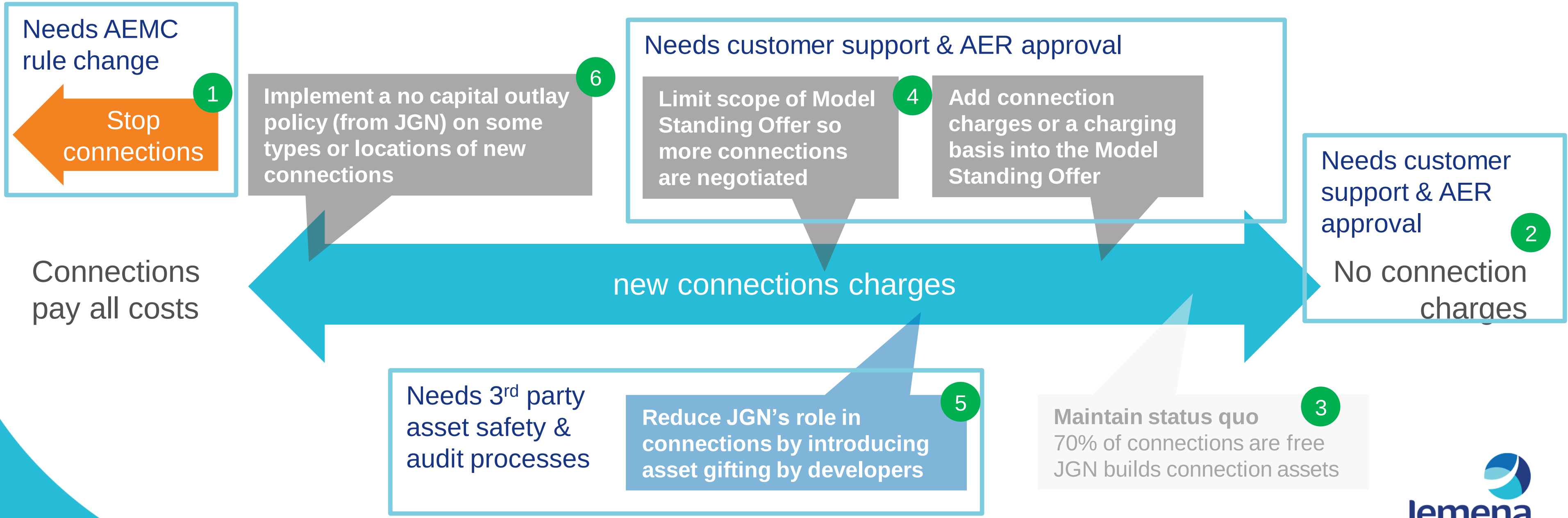
Conditional use

Stop connections | Make connections contestable | Increase connection charges

Are there any preconditions for this response?

- Some changes to connection charges require others' support or approval
- JGN cannot stop offering connections without a rule change (r.112)



Adjusting our new connections approach

How can this response impact customer outcomes?

- New customers face increased costs to connect
  - this may reduce the number of new connections
- Existing customers may face:
  - downward pressure on bills because less JGN investment
  - upward pressure on future bills if less customers were connected to share costs.

Timelines for new connection changes

Change	Priority	Timeline
Constraining outlay	6	Started this for new estates based on capital contributions model.
Increase connection charges	4	Post-2025 & conditional on customer support & AER engagement
Make connections contestable	5	~2-3 years given required changes in NSW legislation and market/business impacts
Stop connections	1	AEMC Rule change 2-3 years

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Addressing capital recovery pace

Recap | Our capital recovery context

Current regulatory settings for capital recovery

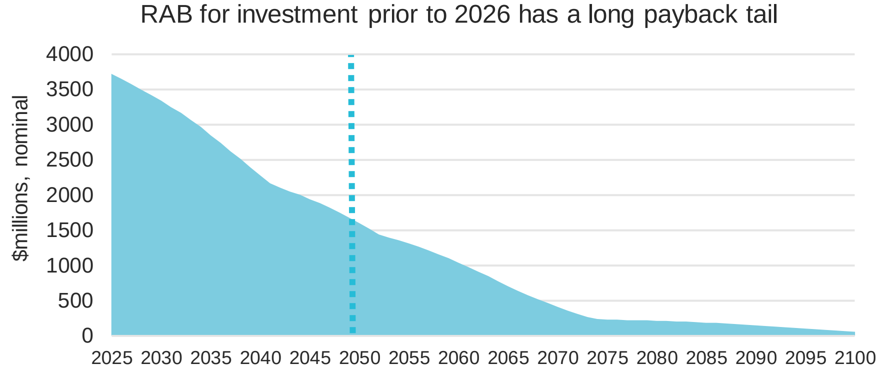
Currently capital recovery means the payback of our new investments:

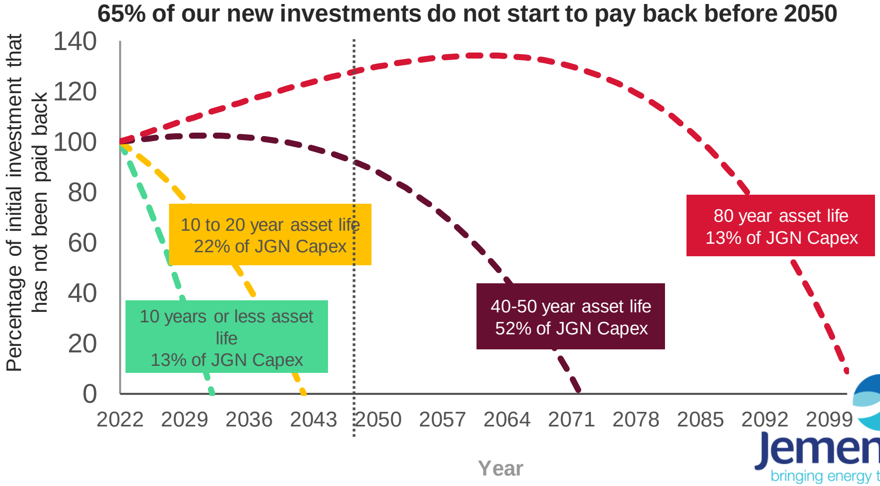
- will be beyond 2050 for more than half of our new investments
- is back-ended due to indexation applied to the investment

We are not provided any capital risk compensation. We get the same rate of return as electricity networks.

Key considerations

- How long do most customers want to be using our asset, and therefore over what horizon should we recover our investment?
- If there is a risk of not recovering our investment, how do we reduce this risk and how should we be compensated for this risk?

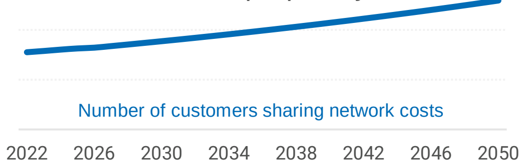




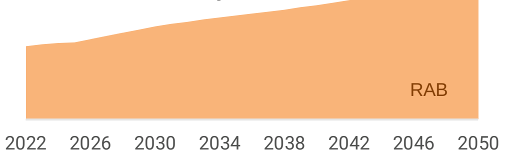
Why we’re adjusting pace of capital recovery

Historical status quo

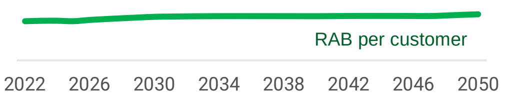
Customer base expected to grow to perpetuity



Investments (RAB) expected to grow and utilised over 50-80 years

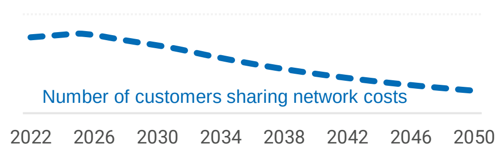


Investments (RAB) to be recovered from each customer remains flat

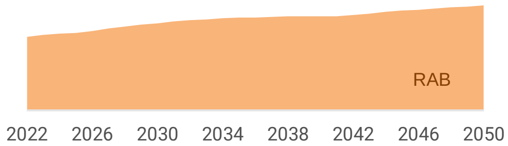


Uncertain demand

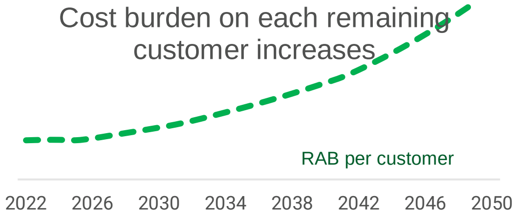
Uncertainty in future gas demand



RAB continues to grow even with minimal new investment, due to long payback period

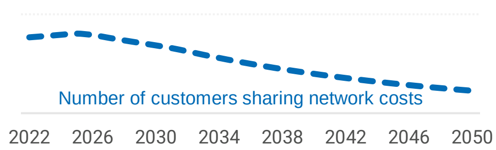


Cost burden on each remaining customer increases

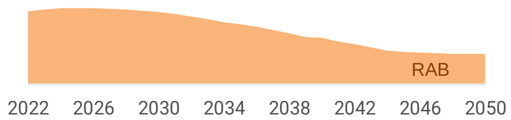


Accelerate recovery

Uncertainty in future gas demand



Align remaining RAB to remaining customer base by accelerate capital recovery



Maintain flatter cost burden on customers over time

How customers benefit from accelerated depreciation?

Fairness: ensure that future customers do not carry the cost burden of current customers who have higher gas demand or leave the network earlier than others

Affordability: ensure gas remains affordable in the longer term for customers

Choice: increase the likelihood of having affordable renewable gas as a choice in the future

Access to gas network: reducing stranding risk can prolong the life of gas networks and help us provide customers access to our gas network for longer

Reliability: encourages continued investment to maintain network reliability

AER's Victorian draft decision

The AER accepted accelerated depreciation

*"We consider that accepting accelerated depreciation **leaves open the option to change course at future reviews**, where more accelerated depreciation or reversals at a future date may be required to promote efficient growth (including negative growth) of the market as required under the NGR." (AER, Dec 2022)*

AER in its Victorian draft decisions:

- noted the opportunity and flexibility for depreciation adjustment is **greatest when it acts as soon as it can**
- accepted accelerated depreciation is **guarding against risk of an earlier wind down of the network** and the **price spike** that may result if demand falls faster than expected
- targeted 0% per annum real price change, and adjusted proposed depreciation for Ausnet and MGN to meet this target, encouraging networks to look at accelerated depreciation in the context of other components of the total revenue requirement.

AER also approved accelerated depreciation and price increase for APA VTS, noting that it will **prevent customers leaving gas networks prematurely** and **creating 'death spiral'.**

Reference: APA VTS final decision: p 8 of AER's final decision, attachment 4, regulatory depreciation – December 2022

Increasing pace of capital recovery

Faster recovery

Pace of capital recovery

Status quo
– past technical
engineering life

What next? Should we:

- Accelerate depreciation for assets at risk of stranding
  Remove inflation indexation
- Or a combination of both?

Now

- Use inflation indexed, straight line depreciation
- Set asset life at past engineering life, of JGN’s capex: 52% is 40-50 years and 13% is 80 years

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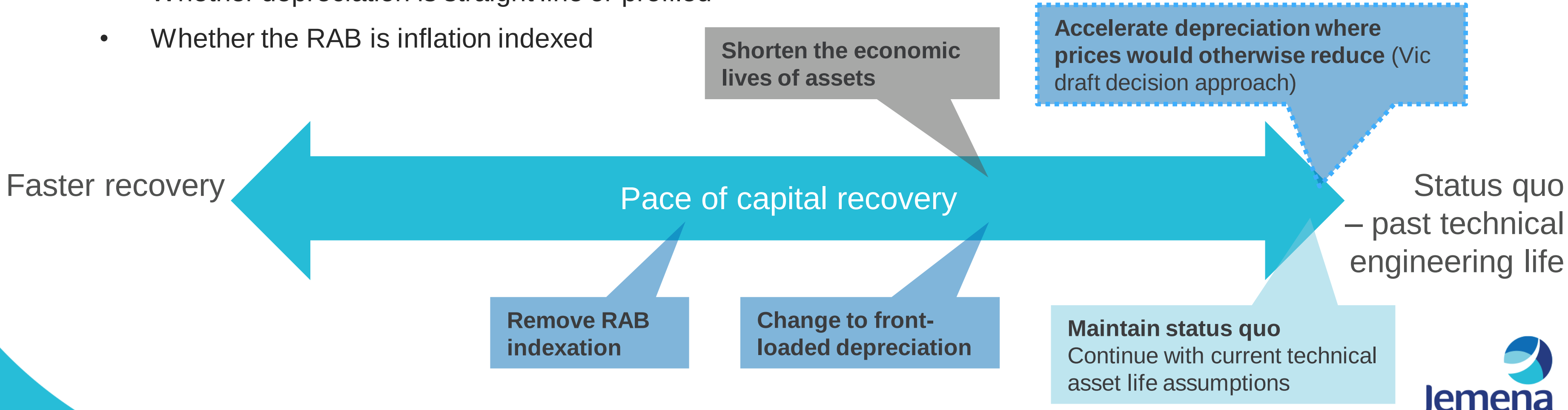
Options

What affects the range of options?

- Asset life assumptions:
    - Whether the asset lives used in depreciation calculation are:

      technical based on engineering design or *economic* based on forecast customer demand
    - Which assets have shortened economic lives
- Depreciation profile:
    - Whether depreciation is straight line or profiled
    - Whether the RAB is inflation indexed



Conditional use

Asset life assumption

Depreciation profile

Are there any preconditions for this response?

All options for increasing pace of capital recovery require AER approval.

Some have already been approved in recent decisions.

Needs AER approval and AER has approved recently

Shorten the economic lives of assets

Needs AER approval and price reduction environment

Accelerate depreciation where prices would otherwise reduce (Vic draft decision approach)

Faster recovery

Pace of capital recovery

Status quo – past technical engineering life

Remove RAB indexation

Change to front-loaded depreciation

Needs AER approval

RAB indexation seen as a '*fundamental change to regulatory framework*' in its uncertainty paper

Maintain status quo
Continue with current technical asset life assumptions

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Increasing pace of capital recovery

How can this response impact customer outcomes?

- upward pressure on near-term bills
- downward pressure on future bills
- less financing costs over asset life
- maintain intergenerational equality
- supports future choice of using gas and reduces price impacts
- support service reliability by encouraging continued investment into the network

Timelines for pace of capital recovery change

Asset life assumption

Depreciation profile

- AER approves asset lives and depreciation profile in each 5 year regulatory period. Next is 2025-30
- AER can adjust the pace of capital recovery at each price review

As the AER has stated, using accelerated depreciation leaves open the option to change course at future reviews for asset life and/or depreciation profile

Compensating capital recovery risk

Compensating for capital recovery risk

Sufficient risk compensation

Capital recovery risk / Stranding risk

High risk of non-recovery

What next?
Should we:
- Provide stranding risk allowance in the revenue requirement
- Adopt a higher equity beta for gas networks pipelines to electricity networks

Now
- AER estimates equity beta for gas through the Return Instrument process
- Assumes the risk to gas pipelines is the same as for electricity networks

What is the equity Beta?
It measures a firm’s exposure to systematic risk compared with that of the market. A higher beta results in a higher required return to account for more risk in that asset relative to the whole market of possible investments.

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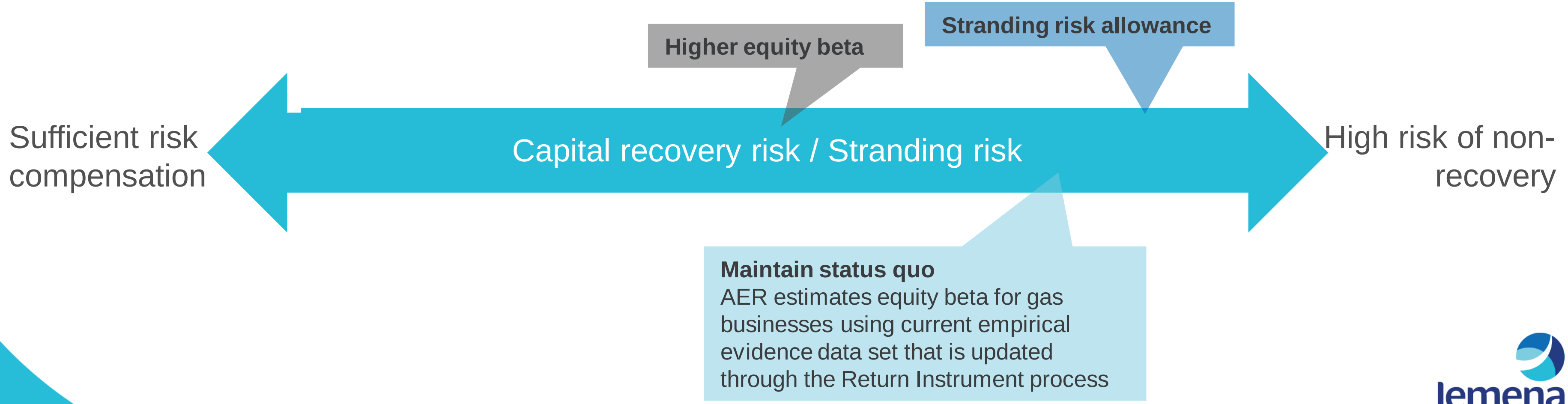
Options

Rate of return (market risk estimate)

Specific allowance (quantify stranding risk)

What affects the range of options?

- Deciding what is a reasonable risk sharing arrangement between customers and industry
- Deciding if risk compensated as:
  - a market estimate in rate of return
  - a specifically quantified risk



Conditional use

Rate of return
(market risk estimate)

Specific allowance
(quantify stranding risk)

Are there any preconditions for this response?

Introducing a risk stranding allowance or estimating a higher equity beta requires AER approval

AER approval at each RORI review

Higher equity beta

Subject to AER approval in price review, and involves overcoming challenges to estimate appropriate compensation

Stranding risk allowance

Sufficient risk compensation

Capital recovery risk / Stranding risk

High risk of non-recovery

Maintain status quo
AER estimates equity beta for gas businesses using current empirical evidence data set that is updated through the Return Instrument process

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Compensating for capital recovery risk

How can this response impact customer outcomes?

- May increase prices pending movements in other building block parameters
- Maintain the provision of safe and reliable services.

Timelines for pace of capital recovery change

Rate of return

(market risk estimate)

This is outside the scope of our 2025-30 price review

- AER approves the risk-based compensation in its RORI each 4 years period. Next one is now due in Feb 2023. It will not include compensation for this risk.
- AER can increase or decrease the compensation at each RORI review.

Specific allowance

(quantify stranding risk)

We do not propose to apply for this in our 2025-30 price review.

- AER sets the revenue building blocks at each 5 year price review. Next one is 2025-30.
- AER can increase or decrease the compensation for information on the future of gas at each price review.

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Session wrap-up and close

Rosemary’s playback

Thank you

Please contact us if something comes up, you didn't get a chance to raise an issue, or you just don't feel heard.

E: GasNetworks2050@jemena.com.au

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