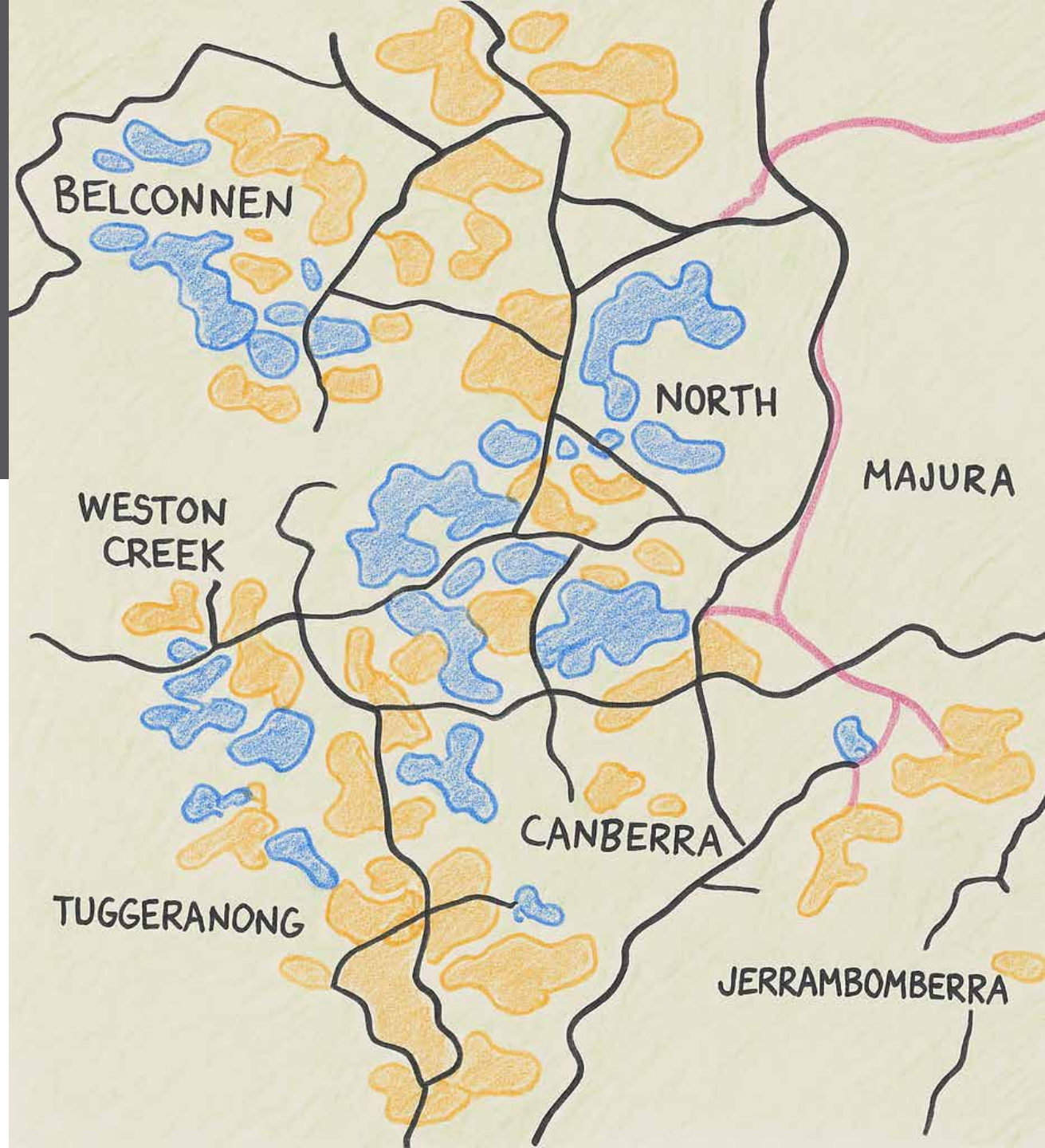
Navigating Ambiguity

Lessons from Our Journey Towards a Zero Gas Future in the ACT

GPA evoenergy Jemena bringing energy to life



Acknowledgement of Country

We acknowledge the traditional custodians of the land on which we meet today, the Turrbal and Jagera people, and we also acknowledge the traditional custodians of the other lands on which we live and work.

We pay our respects to all First Nations elders, past and present, and celebrate all First People's continuing connections and contributions to Country.

Silk painting artwork created by GPA Engineering staff with Tjimari Sanderson-Milera from Kumarninthi Cultural Education

This presentation addresses a sensitive topic for the APGA industry, but it reflects the current reality we face, and we believe it is crucial to share the lessons we have learned, forewarned is forearmed.

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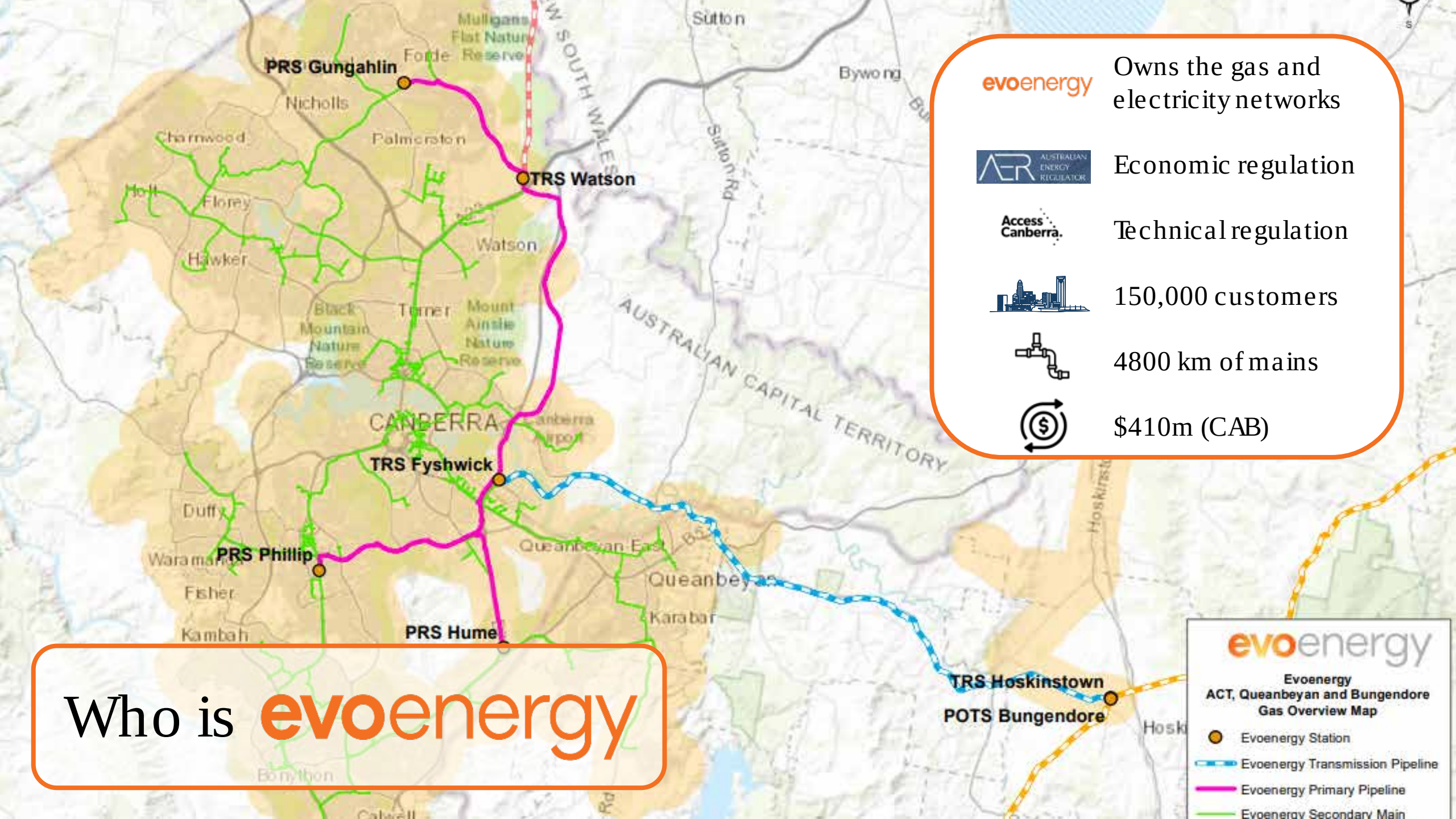


evoenergy — Owns the gas and electricity networks

AER Australian Energy Regulator — Economic regulation

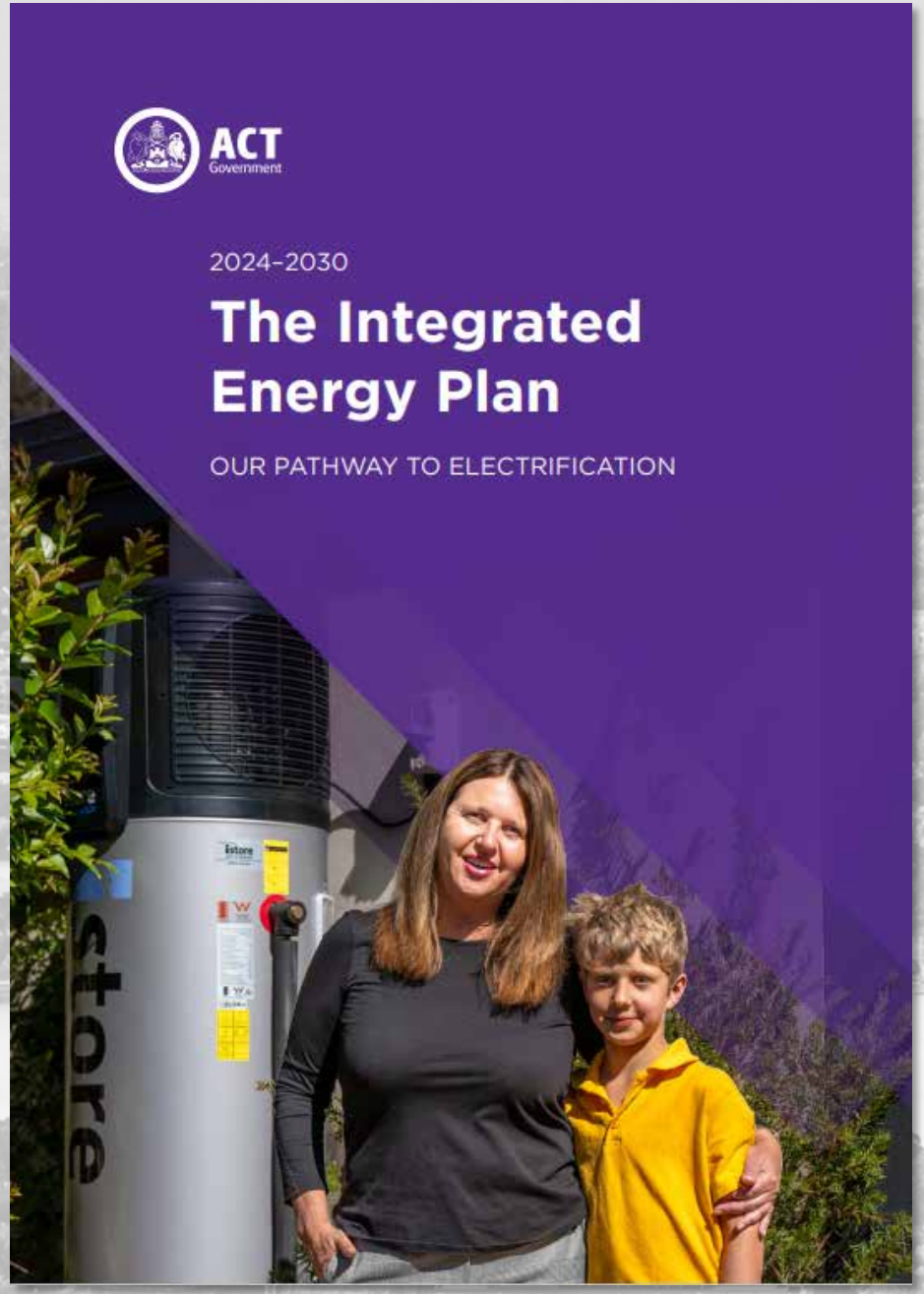
Access Canberra — Technical regulation

150,000 customers

4800 km of mains

$410m (CAB)

Who is evoenergy



2024-2030

- Electrify all public &community housing
- Provide support to help households improve efficiency &electrify
- Legislation to aid complex building electrification
- Support businesses to electrify

2030-2035

- Focus on actions to accelerate the transition
- Plans for complex building will be implemented

2035-2040

- Majority of households will be electric
- ACTwill have met its reduction target of 90-95% of 1990 levels

2045

- ACTwill be at net-zero

State Regulation and Targets

	ACT	NSW	VIC	QLD	SA	WA	NT	TAS
Legislated net zero emissions by 2045	~	~	~	~	~	~	~	~
Ban on new gas connections	~	~	~	~	~	~	~	~
Gas Network decommissioning from 2035 or earlier	~	~	~	~	~	~	~	~
Hydrogen not being explored	~	~	~	~	~	~	~	~

Preference for Electrification Strongest in the ACT

Research from ECA, Sagacity and CIE shows strong ACT gas motivation to electrify.

The ECA reports:

- 65% of ACT gas customers intend to switch off gas in the next 5 years
- 35% of Australian gas customers intend to switch off gas in the next 5 years

Sagacity forecasts:

- up to 32% increase in the proportion of Evoenergy customers likely to electrify in the next five years

ACT Government Policies Accelerating the Transition

The ACT Government (ACTG) leads in electrification policies, implementing ambitious reforms.

Key initiatives include:

- 'Integrated Energy Plan': targets net zero by 2045, and 'all-electric households' by 2030 goal
- ACTG plans to start gas network decommissioning as early as 2035
- ACT is the first to ban new gas connections
- Strong financial incentives for diverse customer types to electrify
- ACTG aims to 'electrify all feasible public and community housing by 2030'

Unique Demand Characteristics in the ACT

The ACT has the highest proportional residential load across jurisdictions.

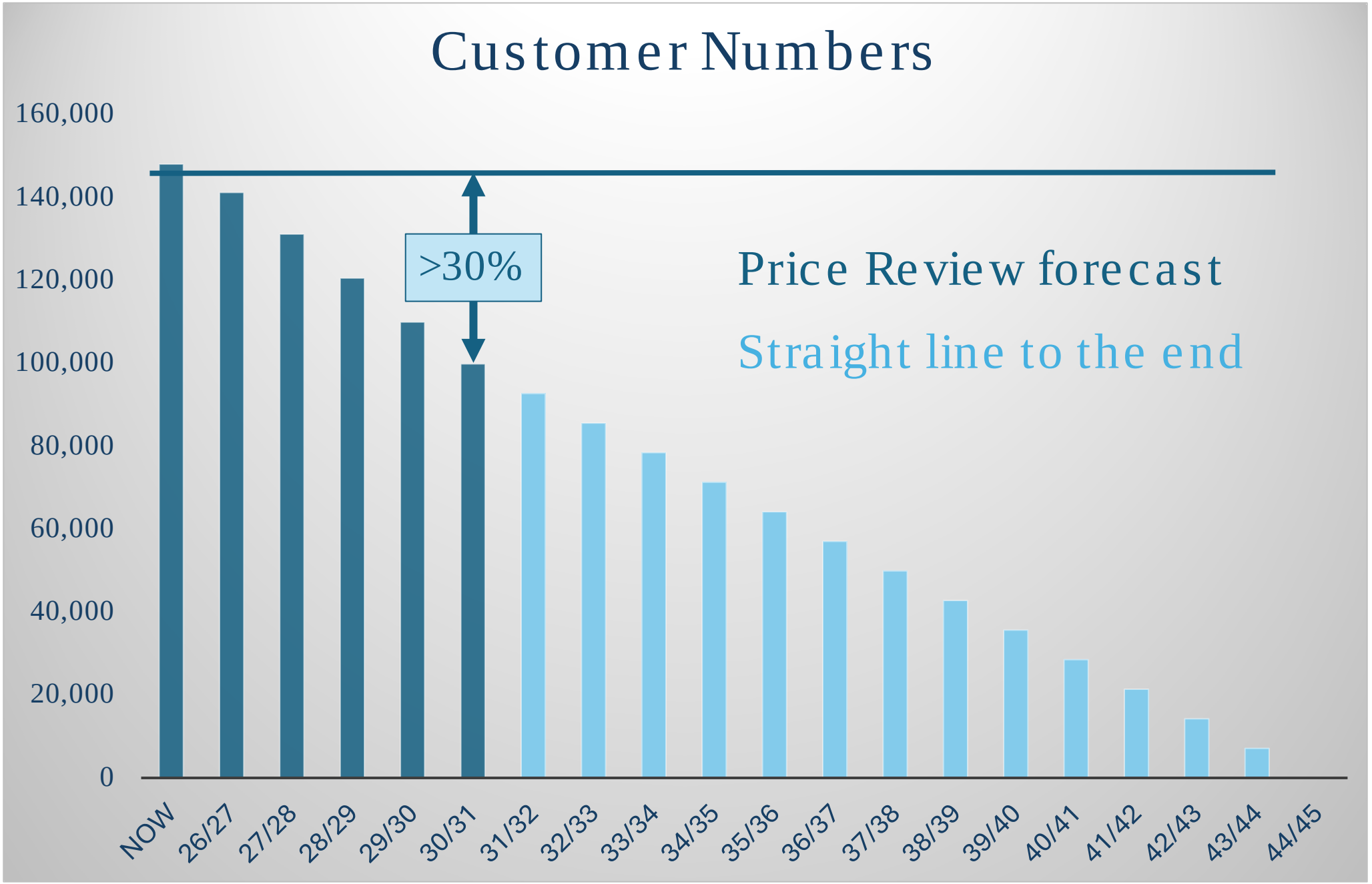
almost 2x NSW and SA

The ACT has the smallest industry base load.

only 1/3 of NSW and SA

ACT demand is highly seasonal with large peaks and toughs.

July demand is 5x January demand.


Customer Numbers
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
>30%
Price Review forecast
Straight line to the end
NOW
26/27
27/28
28/29
29/30
30/31
31/32
32/33
33/34
34/35
35/36
36/37
37/38
38/39
39/40
40/41
41/42
42/43
43/44
44/45

Problem Statement

How to safely, compliantly, efficiently and effectively decommission the ACT gas distribution network over the next 19 years, navigating a wide variety of stakeholders interests, whilst minimising Evoenergy's exposure to this fundamental change.

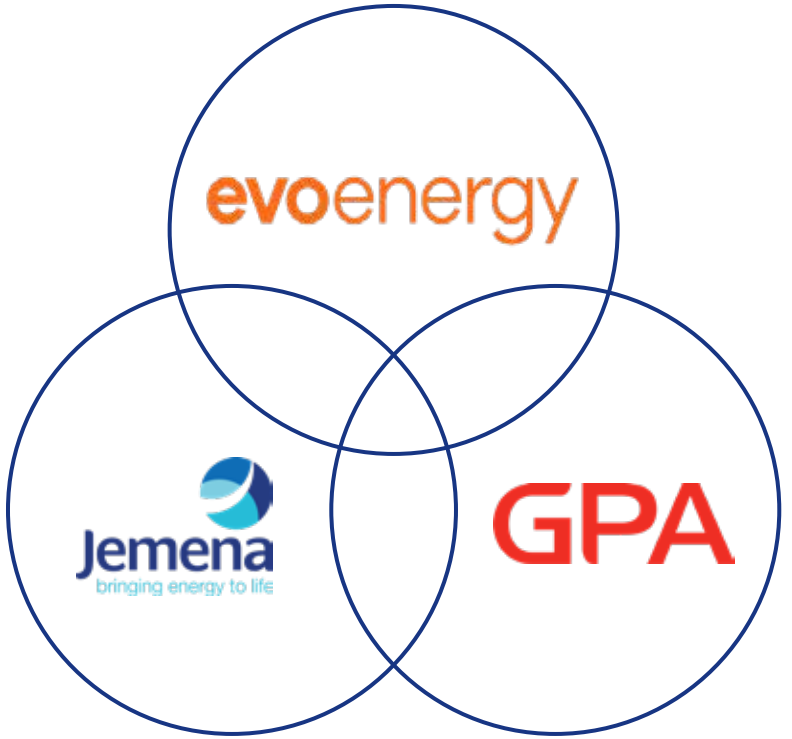
The task?
Develop a Playbook

Identify

- Pathways
- Scenarios
- Endstates

Considerations

- Safety
- Compliance
- Customers
- Government (Policy)
- Evoenergy's electricity business
- Price review cycles
- Schedule
- Cost
- Evoenergy's NSW Assets
- Resource allocation / availability
- Shareholders
- …



The Playbook – Development

Opportunities

- ENGAGE WITH THE RETAILERS
- SUPPORT CUSTOMERS' TRANSITION
- MATCH ELECTRICAL UPGRADES
- REDUCE RELIABILITY
- ELECTRIFY BROKEN ASSETS
- CREATE CRITERIA TO FORCE DISCONNECTION
- RULE CHANGES
- INCENTIVES
- MANDATING A TIMELINE
- INCENTIVISING RETAILERS

Pathways

How to disconnect customers?

- TEMPORARY
- PERMANENT
- CONNECTION TYPE
- STREET/AREA

How to decommission the network?

- BY STREET
- BY AREA
- VIA NETWORK STRUCTURE
- ISOLATE

Rates and Timing

- At what rate will decommissioning occur?
- At what rate will customers disconnect?
- How can we align these options with planned regulatory cycles?
- What percentage of customers will choose each option?
- In what order will these options play out?

Scenarios

- IEP TRANSITION
- FORCED TRANSITION
- SHARED TRANSITION
- ACCELERATED TRANSITION

End States

- No gas network in the ACT
- Connection on high pressure network remain for specific users
- Connection to Queanbeyan remains
- Connection to Queanbeyan and hard to electrify areas remain

The Play(s)

The Play — An adaptable combination of approaches that minimises risks & maximises benefits

The Priorities — Strategic objectives that underpin the Play

Threats

- INCENTIVES
- RULE CHANGES
- MAJOR POLICY CHANGES
- POLITICAL CHANGES
- STAFFING LEVELS
- FINANCIAL RESPONSIBILITY
- REPUTATION DAMAGE
- ACCELERATED DISCONNECTION

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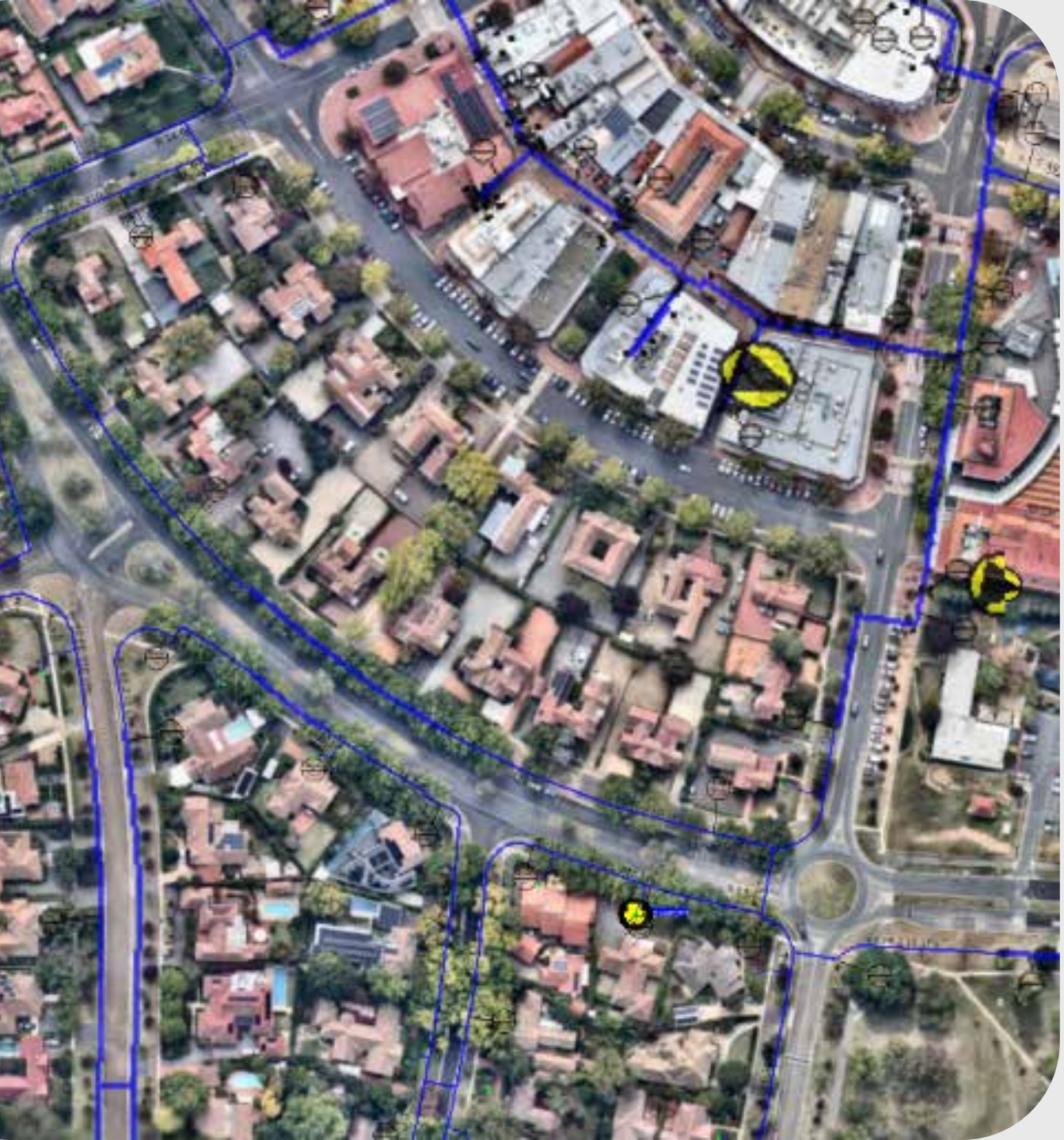
Pathways considered

Increasing influence of Evoenergy

Decreasing influence of Customers

Pathway	Description	**Disconnect** Customers	**Decommission** the Network	**Isolate** the Network
Temporary	Gas flow to property stopped by authorised technician	●		
Permanent	Irreversible and permanent isolation of gas to property	●		
Zoning type	Staged disconnection by customer type	●		
Street by street	Staged disconnection one street at a time	●	●	
Area by area	Staged disconnection one area at a time	●	●	
District Regulators	Isolate at the SDRSs and stop gas flow	●	●	●
Stations	Isolation at PRS, CTS and TRS to stop gas flow	●	●	●


C
Stay on gas until the end
D
Get off gas as soon as
E
Yet to decide
D
D
D
D
D
D
D
D
D
D
D
D
D
D



But of course, no street is homogeneous

To aid in the next example, we have use AI to generate a set of fictional characters, their photos and their backstories….

We did note we were in the midst of the ESG/DEI section and thus we have instructed the AI program to take this into consideration…and cannot be held responsible for any faults of the AI generator…


C
D
E
E
C
D
C
Stay on gas until the end
D
Get off gas as soon as
E
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C
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C

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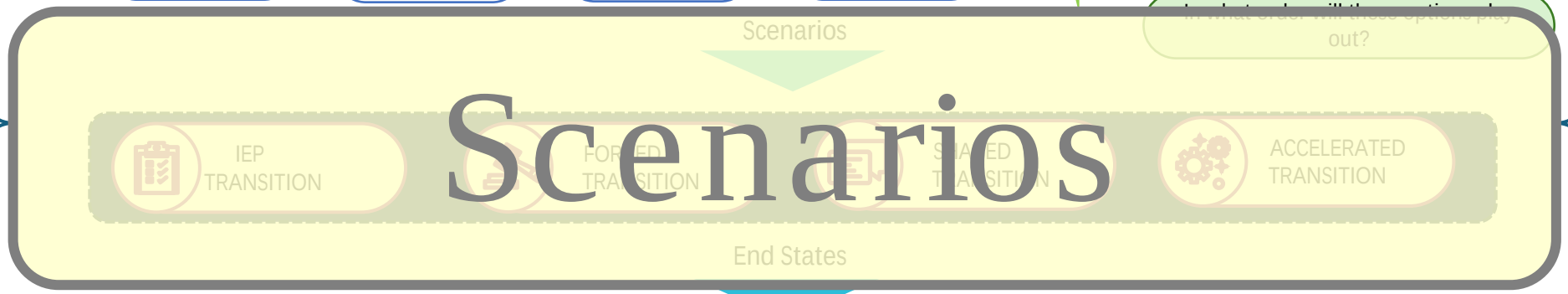
Scenarios



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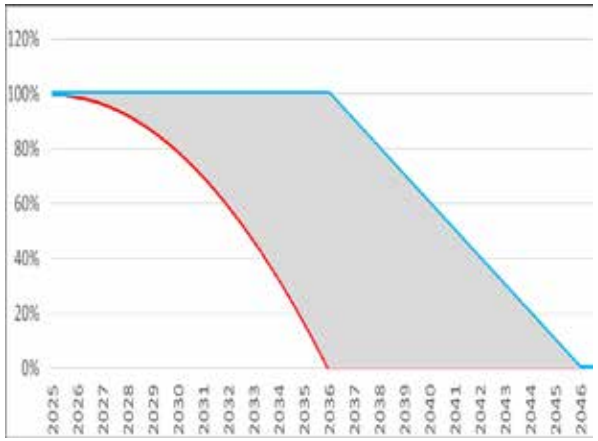
Analysing the gap
Customer disconnection vs network decommissioning

Percentage of original customer base consuming gas

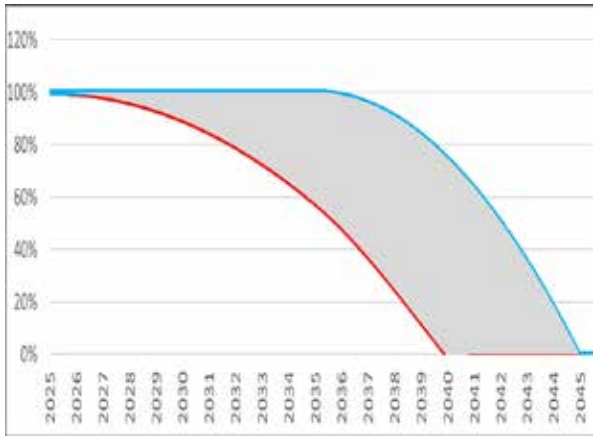
Percentage of network in commission

ACCELERATED TRANSITION



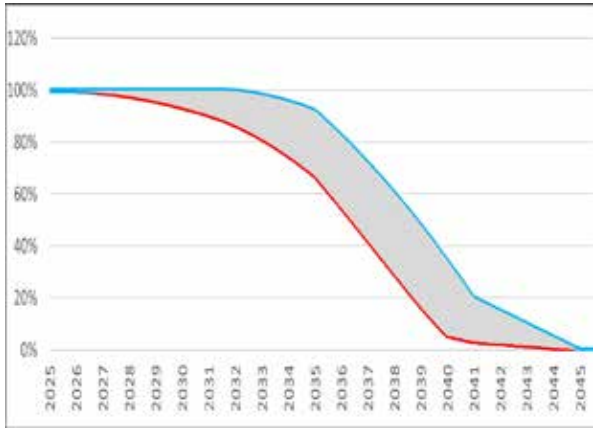
In this scenario, customers are disconnecting from the network quicker than the network is decommissioned, leaving gas assets underutilised and generating high OPEX. This gap is the graphical representation of the death spiral between high OPEXand inability to cover operational costs.

IEP TRANSITION



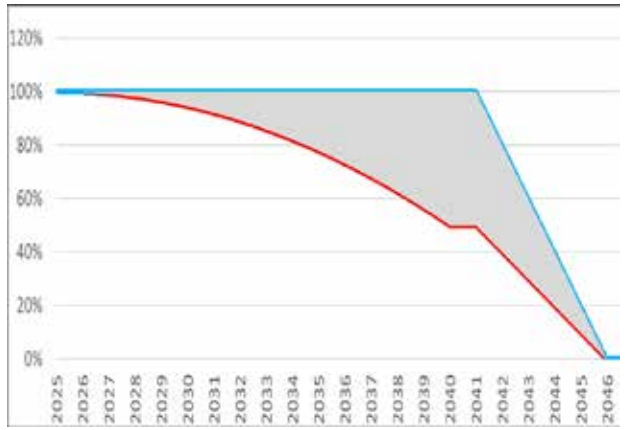
If customer disconnection and network decommissioning are following the IEP timelines, the tipping point gap is reduced due to customers staying on the gas network for longer, which allows for cost recovery across a larger customer base.

SHARED TRANSITION



In the Shared Transition, the gap between the network in commission and customer disconnections is minimised, with equitable cost recovery across a larger customer base and manageable disconnection rates.

FORCED TRANSITION



Customer disconnection and network decommissioning are delayed, with only few customers disconnecting voluntarily over the initial years. This reduces the gap between the network in decommissioning and the number of customers remaining on the network.

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End-states

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Explored end states

We know where we are starting, but what does the future look like?

End state	No gas network in the ACT	Connection to Queanbeyan remains	Connection to Queanbeyan and hard to electrify areas remain	Connection to Secondary Mains remain for specific users
Gas network scale	No active gas network.	Approx 25km of Steel Mains, 8 SDRSs, Fyshwick TRS.	Approx 50km of Steel Mains, 100km of Plastic Mains, 20 SDRSs, Fyshwick TRS.	Approx 200km of Steel Mains, 30 SDRSs, All Stations.
	No active gas network in the ACT. Queanbeyan is connected through NSW.	No active gas network in the ACT, but Queanbeyan (approximately 10,000 customers) remains connected to the network and gas is still transferred through the ACT pipeline.	A residual gas network in the ACT feeding specific users in specific areas (Hume, Fyshwick, Mitchell Airport, NCA) and Queanbeyan.	A residual high pressure gas network in the ACT feeding specific users (Commercial and Industrial customers) connected to the steel mains and Queanbeyan.

Summary

Decommissioning the network is a complex challenge	The ACT Government's Integrated Energy Plan (IEP) requires full decommissioning of the ACT gas distribution network by 2045. Whilst the policy direction is defined, the implementation pathway remains uncertain. The long timeframe, combined with limited precedent, contributes to a high degree of complexity and ambiguity regarding the approach and sequencing of decommissioning activities.
Impacts vary...	The decommissioning of the gas network carries significant financial implications with no clear way to meet them. It further creates organisational challenges, including workforce scale up and downs and maintaining the reliability and safety across both the gas and electricity network during the transition phase. Upon the decommissioning of the network, the ACT will operate in a fundamentally different energy landscape.
A flexible approach and clear priorities are necessary	To manage the uncertainty of the challenge, the proposed "Play" is designed to remain flexible. Timings of disconnections and decommissioning can be adapted based on developments in customer, government or other stakeholder environments. The "Play" is underpinned by five strategic priorities, that position Evoenergy to respond to regulatory, operational and customer-facing challenges.

My tea is nearly ready and the
sun has left the sky;

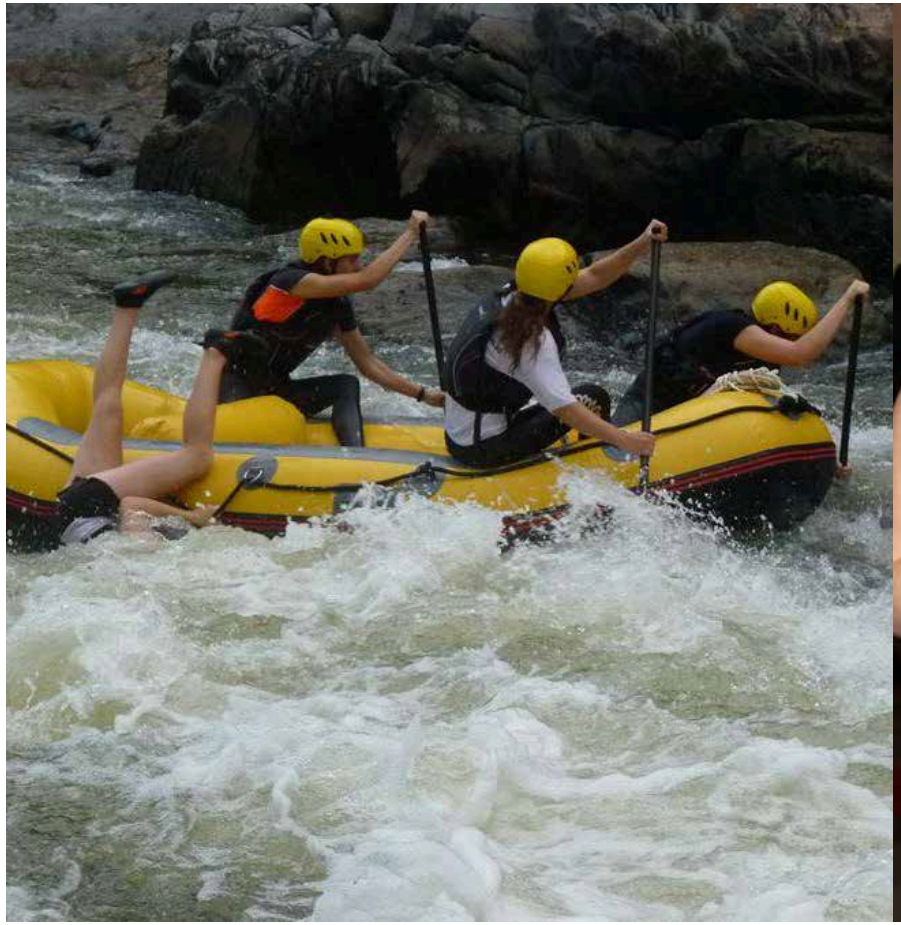
It's time to take the window to
see Leerie going by;

For every night at teatime and
before you take your seat,

With lantern and with ladder he
comes posting up the street.

Robert Louis Stevenson,
'The Lamplighter', 1885

What is our future identity?



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