

**Looking at the Future of Disruptive
Technologies and New Business Models**

**Trends & Implications from a Network
Operator's Perspective**

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Overview

1

An overview of Jemena

- One of Australia's most significant energy companies

2

The major trends impacting our business

- The trends we are seeing
 - Technology
 - Consumer
 - Regulatory

3

Jemena's response to future trends

- Initiatives to transform the core
- Initiatives to extend the business

Jemena

One of Australia's most
significant energy
companies

Jemena has a broad range of gas, electricity and water businesses across Australia

AT A GLANCE

Jemena Gas Network

Customers: 1.20 million
Revenue: Regulated
Asset: Gas distribution
100% owned

Pipelines*

Customers: 24 shippers
Revenue: Unregulated
Asset: Gas transmission and storage
100% owned

ActewAGL Distribution Partnership

Customers: 310,000
Revenue: Regulated
Asset: Gas and electricity distribution
50% owned

Jemena Electricity Network

Customers: 320,000
Revenue: Regulated
Asset: Electricity distribution
100% owned

Rosehill Recycled Water

Customer: 6 industrials
Revenue: Unregulated
Asset: Recycled water distribution
100% owned

UED

Customers: 640,000
Revenue: Regulated
Asset: Electricity distribution
34% owned

WHERE WE OPERATE



Gas

- 1 Jemena Gas Network
- 2 Eastern Gas Pipeline
- 3 Queensland Gas Pipeline
- 4 Northern Gas Pipeline
- 5 Colongra Gas Transmission and Storage Pipeline
- 6 VicHub
- 7 ActewAGL Distribution Partnership (50%)

Electricity

- 8 Jemena Electricity Network
- 9 United Energy Distribution (34%)

Water

- 10 Rosehill Recycled Water

*Includes Queensland Gas Pipeline, Eastern Gas Pipeline, Colongra Gas Transmission and Storage Pipeline and VicHub.

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What are the major
trends and implications?

Trends that we are seeing now (slide 1 of 2)

1

A shift to **DISTRIBUTED** energy

There is a shift underway towards a greater proportion of distributed energy generation and solutions driven by changing consumer preferences and enabled by solar photovoltaics, battery storage and digitally delivered business models

2

A shift to **RENEWABLE** energy

There is a shift towards a greater proportion of electricity from a range of renewable sources and technologies that allow us to utilise these in new ways

Trends that we are seeing now (slide 2 of 2)

3

A shift to HIGHER ENGAGEMENT

Customers have more choice and more ways to inform that choice. Energy has become a significant part of the household and business budget.

Consumers can now and increasingly will participate across the energy markets in multiple forms.

4

A shift to NEW COMPETITION

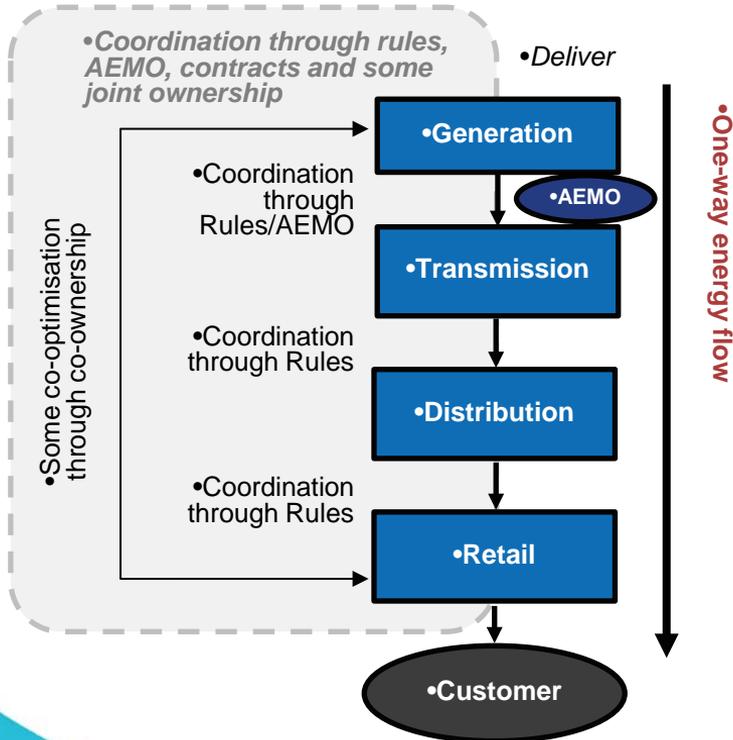
Across generation, distribution, retailing and trading the technology and regulatory landscapes are changing with new entrants and business models creating competitive opportunities.

Reactions to the trends are varied

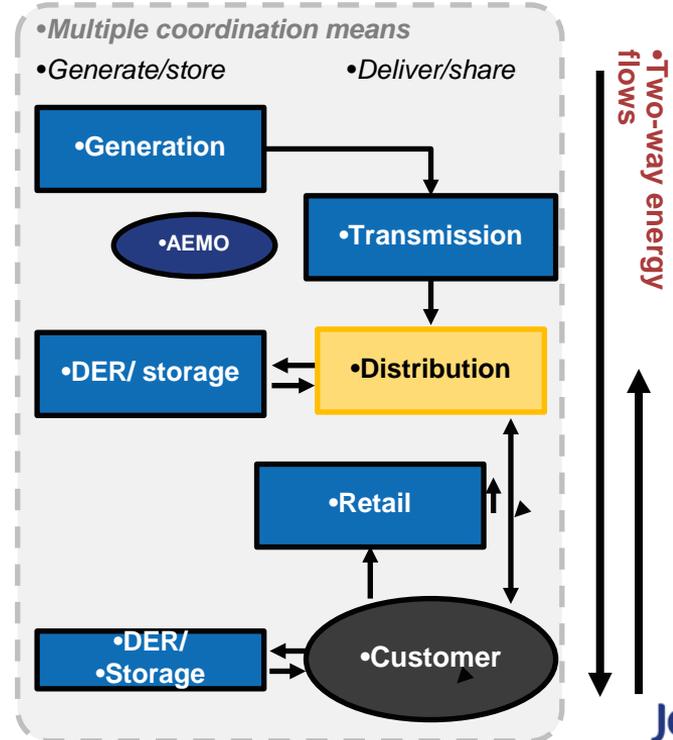
Pilots	New business models		Acquisitions	Industry collaboration
<ul style="list-style-type: none"> To increase technical and corporate understanding of new technology Develop early market? 	Incumbents	New entrants	<ul style="list-style-type: none"> Acquiring smaller players in storage, energy efficiency, data analytics and software 	<ul style="list-style-type: none"> Collaborating with incubators, participating in co-working hubs
				

Changes in policy and regulation will shape further opportunities

Present state of the electricity market



Multiple end-state electricity market potential



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How Jemena is
positioning itself
to respond

Jemena established New Energy Services (NES)

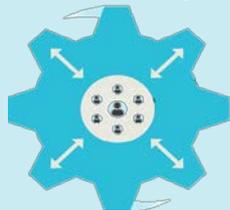
The vision for NES is to:



Create a new pillar of Jemena's business, by developing businesses that profitably leverage the structural shifts in our industry and work with credible counterparties to deliver new energy offerings

Key Lessons

Enterprise Leadership



Agile product development

- Many market entrants
- Both independent and backed by majors
- Tech enables low cost learning & disruption
- Low barriers

Collaboration is key

- Strategic execution is shared responsibility
- Cross-functional knowledge transfer
- Trialling new ways of working

Challenges for incumbents

- New business models may challenge established norms
- Regulation limitations where unable to keep pace
- Risk appetite



Culture anchors

- Test & learn using minimum viable product
- Low bureaucracy
- Online activation
- Enterprise funding pools

- Collaboration models
- No party has the mortgage on good ideas
- Knowing on the Voice of the Customer

- Agile decision making
- Fit for purpose processes/systems
- Need to learn from disruptive experiences in other industries
- Talent challenge (diversity & attracting market-facing skills)

Thank You

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We acknowledge David Hershman, Right Lane Consulting, for his significant contribution to the development of Jemena's NES establishment.