Jemena
bringing energy to life

# Gas Networks 2050

## Customer Forum

# Welcome

## to the Jemena Gas Networks 2050 Customer Forum

Frank Tudor, Managing Director Jemena

I would like to thank you for your involvement in Jemena Gas Network's incredibly important conversation about our energy transition to net zero carbon emissions and the future of gas.

The energy transition before us is not only one for business, and governments to solve. The challenge, conversation and the response must actively involve and consider customers and communities.

This is complex. But this complexity should not deter us from meeting the challenge head on, with a critical, questioning mindset.

Spending time with customers is always insightful. It's great to understand the issues which are front of mind for many at the moment. What we've heard so far are things like rising cost of living pressures, energy affordability and reliability.

The outcomes from our engagement with you are important as they will directly impact the future of our business, and ultimately, all of our customers. Your feedback will directly feed into our next price and service plan we will submit to the Australian Energy Regulator for approval.

I thank you for committing to join our Customer Forum. In our inaugural November session, you are tasked with considering what the energy challenge means to our 1.5 million customers. In 2023, the Customer Forum will reconvene to determine what is in the best interest of customers as we make key decisions about our future.

This pack provides you with useful background and contextual information. I encourage you to get familiar with this content so you can rigorously and enthusiastically launch your first conversations. While you absorb the material, note down what questions and thoughts come up for you around the future of gas and the challenges that customers might face.

I look forward to what we learn from you through this journey we are taking together.

Yours sincerely,

**Frank Tudor**
Managing Director
Jemena

# The brief

## Introduction

Australia is moving rapidly to reach net zero carbon emissions by 2050 – a target mandated in legislation and policy at both the State and Federal level.

We exist in a world of rapid change, with exciting developments to meet our energy needs.

Governments around the world are developing and implementing different energy policies under a common theme: transitioning towards a zero carbon energy future.

The transition of the gas sector, what it looks like and the role it plays, will be influenced by consumers, technology and policy. Some people think the future should be entirely electric. Others consider that renewable alternatives to natural gas must play a role in the transition.

The common theme is how the energy transition will happen, at what pace, and what a sustainable economy will look like in the future.

**Gas Networks 2050** is a forum created by Jemena for us to collaborate with stakeholders and customers to work through the energy challenge together.

This collaboration has become all the more important as we start to prepare a pricing and services plan covering the period between 2025 and 2030. Jemena has established three key groups as part of our Gas Networks 2050 engagement process.

1. an Expert Panel of energy experts who will develop plausible future scenarios for the NSW energy system, including the role of gas under each scenario
2. an Advisory Board of customer advocates who will advise Jemena through the regulatory process
3. a Customer Forum of end customers (that's you!) who will ensure our business decisions over the next five-year price period and towards 2050 are truly shaped by customer perspectives.

### About this pack

Reading this pack will set you up with a foundation of knowledge to prepare for the launch of the Customer Forum. Inside you will find information to read as well as links to other content including videos.

### Contents



### Acknowledgement of Country

We acknowledge the Traditional Owners of the land on which we operate and recognise their continuing connection to land, waters, and culture. We pay our respects to their Elders past, present, and emerging.

# About Jemena Gas Networks

Jemena Gas Networks started in 1837 when we were created to light Sydney using gas. In 1841 the first gas lamp was lit and within 2 years 165 gas lamps had been installed. Fast forward 185 years, where today, we are the largest gas distributor in New South Wales.

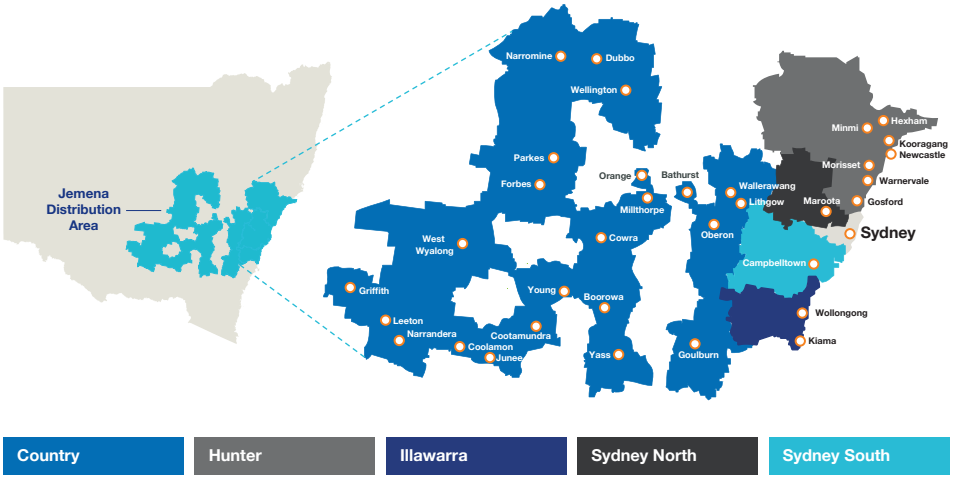
We are not a gas producer; we own and operate the infrastructure and network that supplies natural gas to homes and businesses.

Our gas network is over 25,000 kilometres in length and distributes natural gas hot water, heating, cooking and more, to over 1.5 million customers each year. The network connects gas from major points of supply to residential, business, and industrial sites in Sydney, Newcastle, the Central Coast and Wollongong.

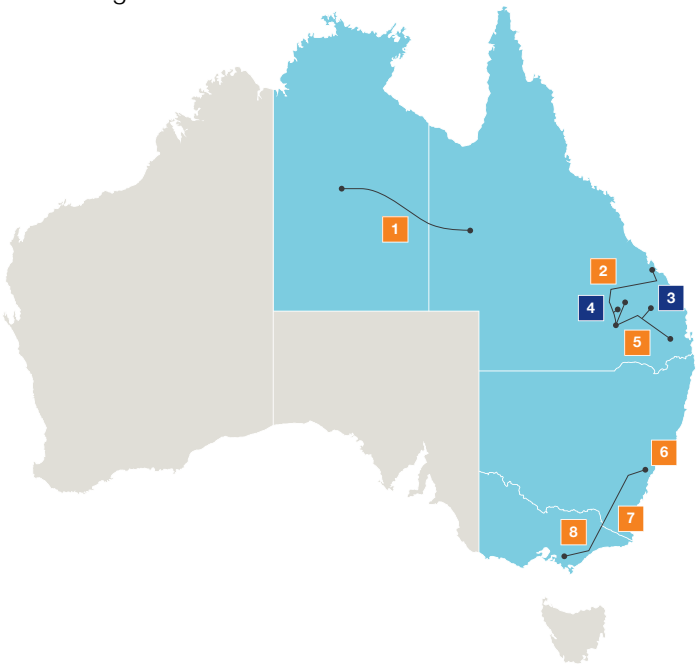
It also covers over 20 regional centres, including the Central West, Central Tablelands, South Western, Southern Tablelands, Riverina and Southern Highlands regions of New South Wales.

## Jemena Gas Network

As the largest gas distributor in New South Wales, we're proud to deliver natural gas hot water, heating, cooking and more to over 1.5 million customers each year.




Jemena owns and operates some of Australia's most important gas transmission pipelines shown in the image below.



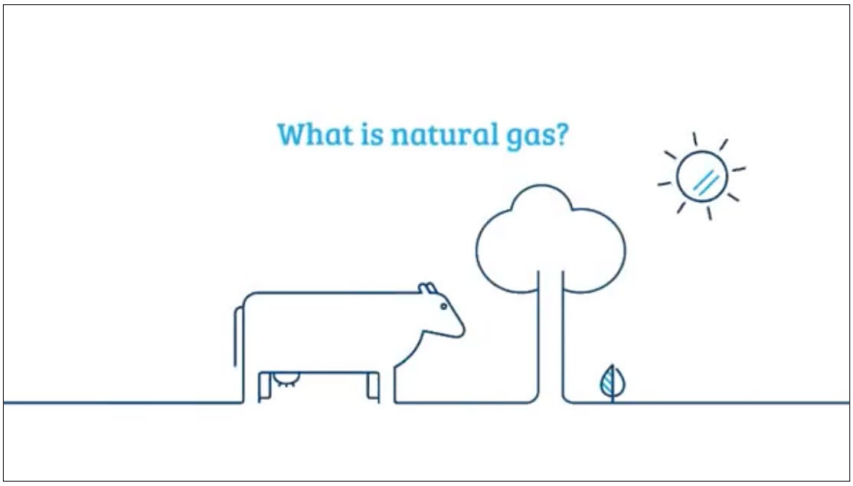

**Gas**

1. Northern Gas Pipeline
2. Queensland Gas Pipeline
3. Atlas Gas Processing Facility
4. Roma North Gas Processing Facility
5. Darling Downs Pipelines
6. Colongra Gas Transmission and Storage Pipeline
7. Eastern Gas Pipeline
8. VicHub

# Video links...

**Learn about natural gas from another gas network company (00:59 seconds)**

youtube.com/watch?v=0Rc0SMAIr3A&t=59s

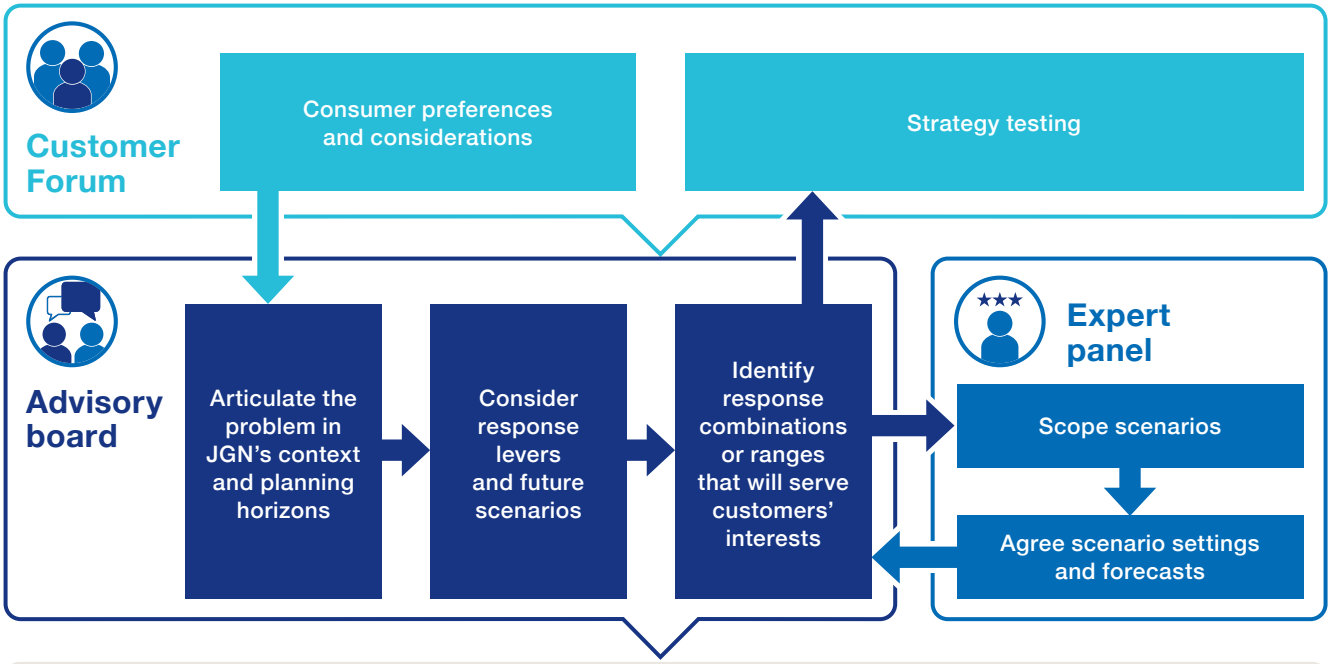



# Jemena's engagement process

## Overview

Your views and active contribution in the Customer Forum will help Jemena shape the future of its business. Together, we will consider the energy transition and how decisions can be made in the best interests of customers, now and into the future.

As well as the Customer Forum, we have called together an Advisory Board and Expert Panel. Each group has a distinct purpose but there are connections between the three and they all rely on one another.




**Objective: JGN's 2023 AA customer engagement can...**

**Engagement on what**

Build upon the well informed and broadly represented deliberations of the Advisory Board process to best target that engagement

**How to engage**

Benefit from Adisory Board communication and evidence feedback

The **Advisory Board** is made up of customer advocates and specialists, providing a critical lens through which decisions for the future must be shaped.

The **Expert Panel** is made up industry and energy specialists, that are responsible for developing plausible long term scenarios for the NSW energy system and considering the role that gas will play in each. These scenarios will be an important input to Jemena's planning process.

**The Customer Forum is made up of everyday customers and potential customers working within a deliberative approach to provide guidance and advice to Jemena about what is in the best interest of customers.**

# Customer Forum

## First session

- Saturday 12 November 2022
- 45 participants
- Jemena Head Office, 99 Walker Street, North Sydney
- 9:30am to 4:00pm

At the end of the session, we will have a clearer understanding of:

- The challenges facing customers
- What you need to be able to explore these challenges within the customer forum

### First customer forum meeting

Setting the scene → Getting to know you → How will we work together in 2023? → Who is Jemena? → Future gas and energy challenges → Customer values and attitudes

# Digital platform

Outside of the online and in person meetings, we will connect through Jemena's Your Network, Your Say digital engagement platform. We don't expect this to be a lot of work or investment of time, but it's important to keep the conversation moving in between our meetings.

yournetwork.jemena.com.au/gas-networks-2050


# Deliberative engagement

The Customer Forum is grounded in deliberative engagement – a process of considering an issue or question in depth as a group. Deliberative engagement puts the community affected by a decision at the heart of the decision-making process. Some characteristics of deliberation are:

- Randomly selected group of people
- Group is provided with detailed information to understand the issue and options for resolution
- Time and support is provided for the group to consider information and ideas, weigh up issues and options and agree on recommendations
- Recommendations are influential and incorporated to the maximum extent possible.

# Video link...

**Learn about deliberative engagement here (2:56 minutes)**

youtube.com/watch?v=_8qB7pPf6Ec&t=113s

# Your involvement

**We appreciate your involvement in our first session, and we would love for you to return to deliberate about the key issues for the energy transition between March and August 2023.**

To maximise your input and role in this project, we've put together some principles of involvement for online, in person and digital engagement:

**Be present.** Whether it's online or in person, make space and remove any distractions for the time period you've committed to.

**Get curious.** There are no silly questions. The point of this is to interrogate the subject matter, and critically question the scenarios and options available. Don't hesitate to ask.

**Have your say.** We have established a group that can represent Jemena's customer base. Your voice is important in the conversation, and your unique experience and insight is what we are here to hear.

**Respect each other.** While we support and encourage all views being shared, even opposing ones, we must draw the line at any behaviour that might cause others distress. Treat each other with respect and make space for other's diverse views otherwise we may have to ask you to leave.

## Other important points to note:

**Filming and photography** – we will be filming and photographing each of the in-person sessions. We will ask you to sign a permission form during the first session to cover the use of images and video that we take.

**Posting to socials and talking to media** – please feel free to speak from your point of view (not on behalf of the group or Jemena) about the process and discussions. We'll also be posting about the process to our social media accounts and website.

# The Energy Transition

Australia has committed to net zero carbon emissions by 2050. Burning natural gas for energy produces carbon dioxide, so meeting this target means decarbonising gas. The energy sector is already shifting away from producing and consuming non-renewable fossil fuels, like natural gas, and towards using low carbon, renewable energy sources, including solar power and renewable gas.

This is a complex and an ongoing process – it's often referred to as the energy transition and is characterised by uncertainty, market volatility, rapid change, and unpredictability.

At the heart of the transition is the net zero emission target by 2050, to curb global warming and limit the catastrophic and irreversible impacts of climate change.

### The Paris Agreement

At the 21st Conference of Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015, almost all participating countries agreed – for the first time ever – to enter a legally binding and universal treaty strengthen the global response to climate change.

196 countries agreed to reduce global greenhouse gas emissions to limit the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C and achieve net-zero emissions in the second half of this century.

Australia is party to the Paris Agreement and a requirement is to submit emissions reduction commitments. These were updated in 2022, committing Australia to reducing emissions to 43% below 2005 levels by 2030.

**Learn more about The Paris Agreement**
unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

## What's driving the energy transition?

What's driving the energy transition is a 'people led' transition. Customer expectation is rising, with a higher awareness of climate change, and a growing opposition to carbon emitting energy sources. Technologically, we are seeing continuing advances in renewables, improvements in energy storage, and digitalisation of energy. In the environment, we are seeing frequent, intense weather events, and awareness of pollution levels and carbon footprints. There are political drivers as governments are needing to deliver on their COP21 commitments, alongside increasing regulation and efficiency standards as well as policy support for renewable energy.

## What is the future of gas networks?

As gas networks currently transport natural gas, a fossil fuel, the future is uncertain.

The future will depend on many factors such as consumer preferences, policy and regulation, technological developments and the economics of different options.

What is clear is that in any net-zero future, the status quo for gas networks cannot remain the same.

We believe that gas networks have a crucial role to play in tomorrow's energy system through a transition to renewable gases such as biomethane and green hydrogen.

**Biomethane** is a carbon neutral gas – it harnesses the energy potential from organic materials such as landfill gas, agricultural waste and wastewater.

**Green hydrogen** is produced using water and renewable electricity, through a process called electrolysis, meaning the entire process is free from carbon emissions.

We believe that renewable gases have the potential to:

1. Provide an alternative decarbonised source of energy with many of the natural gas characteristics such as instantaneous heat as well as the reliability and security of a dual source of energy.
2. Avoiding costly upgrades to the energy network and generation fleet providing a lower cost whole of system decarbonisation pathway.
3. Supporting the decarbonisation of other sectors such as transport or providing a role in supporting the electricity grid.

However, there are challenges and the renewable gas future is not guaranteed. As a result, many believe that gas networks will or should play a much smaller or even no role as homes and businesses electrify.

Examples include:

- The Australian Energy Market Operator. In all of the 2050 net-zero scenarios used in its forecasting and planning publications assume that residential gas loads will be entirely (or almost entirely) electrified by 2050.[1]

  1 2021 AEMO, 2021 Inputs, Assumptions and Scenarios Report, July, p.41. Available here: aemo.com.au/-/media/files/major-publications/isp/2021/2021-inputs-assumptions-and-scenarios-report.pdf

- The ACT Government which advises customers to switch away from gas, see here: climatechoices.act.gov.au/energy/switching-from-gas
- Saul Griffith, an Australian-American inventor, who believes we should electrify everything. See here: youtube.com/watch?v=Qg-p4ZbQ1HU (video 3min 14 seconds)

# Video links...

**For more information on biomethane watch this video about our Malabar biomethane project (1:58 minutes)**

youtube.com/watch?v=PRuBxvMjh_o


**For more information on green hydrogen watch this video (4:20 minutes)**

youtube.com/watch?v=aA36GHDCLUk

## Contact us

If you have any questions about the program please get in touch with Merryn Spencer, Engagement Lead, Jemena on **0401 021 560** or yournetwork@jemena.com.au