

# Greening Australia's Gas Network



## The Problem

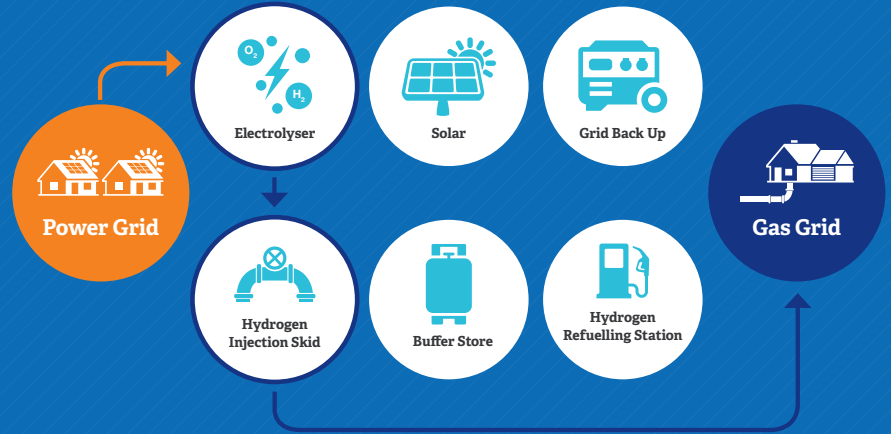
How do we develop affordable energy storage to complement renewable energy when the sun doesn't shine and the wind doesn't blow?

## What is Jemena doing?

Introducing *The Western Sydney Green Gas Project*. The Power to Gas Project is the first stage in investigating how excess renewable energy can be converted into and stored as hydrogen gas.

Hydrogen is a versatile, safe, carbon neutral, green gas enabling an integrated energy system.

Hydrogen can also support the gas grid and Australia's hydrogen vehicle industry.



## The Western Sydney Green Gas Project

The Green Gas Project is expected to be operational in **2020**

It's a **five year** project

The project will test how existing gas infrastructure can be repurposed to support new energy forms

The project will address the energy trilemma – affordability, reliability and sustainability

## Why Hydrogen?

Hydrogen is a flexible fuel - it can be used as hydrogen or converted back into electricity bringing renewable energy to homes, business and industry as well as exported internationally.

Hydrogen produced from *The Green Gas Project* could:

- Generate enough power to support 250 homes
- Provide daily electrical storage of up to 3MWh using the gas network as a battery
- Provide refuelling stations for hydrogen vehicles



## The Green Gas Project potential

*The Green Gas Project* will test:

- if Power to Gas technology can be adopted more broadly across the NSW gas network
- long term storage options for excess renewable energy
- if hydrogen could enable renewable energy to be stored for weeks or months rather than minutes or hours (as batteries currently do).



*The Green Gas Project* will make a significant contribution to decarbonising the entire energy sector.

## Project partnership

*The Green Gas Project* is a \$15 million program, co funded by Jemena and the Australian Renewable Energy Agency (ARENA) with both organisations contributing \$7.5m in funding.



## About Jemena

With more than a century's experience and expertise in the utilities sector, Jemena owns and operates a diverse portfolio of energy and water transportation assets across the east coast of Australia.

Contact [www.jemena.com.au](http://www.jemena.com.au)

