

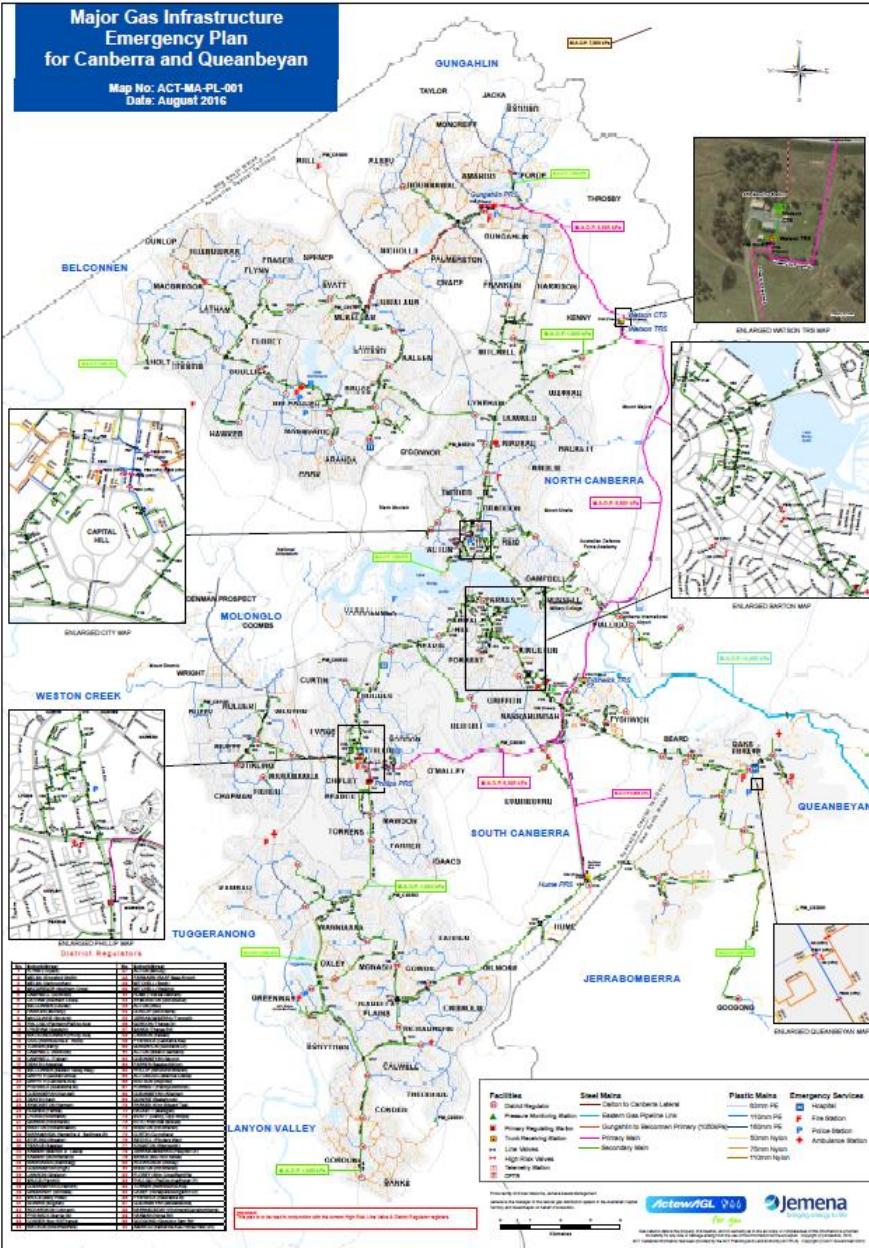
Future Gas Network

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Who we are



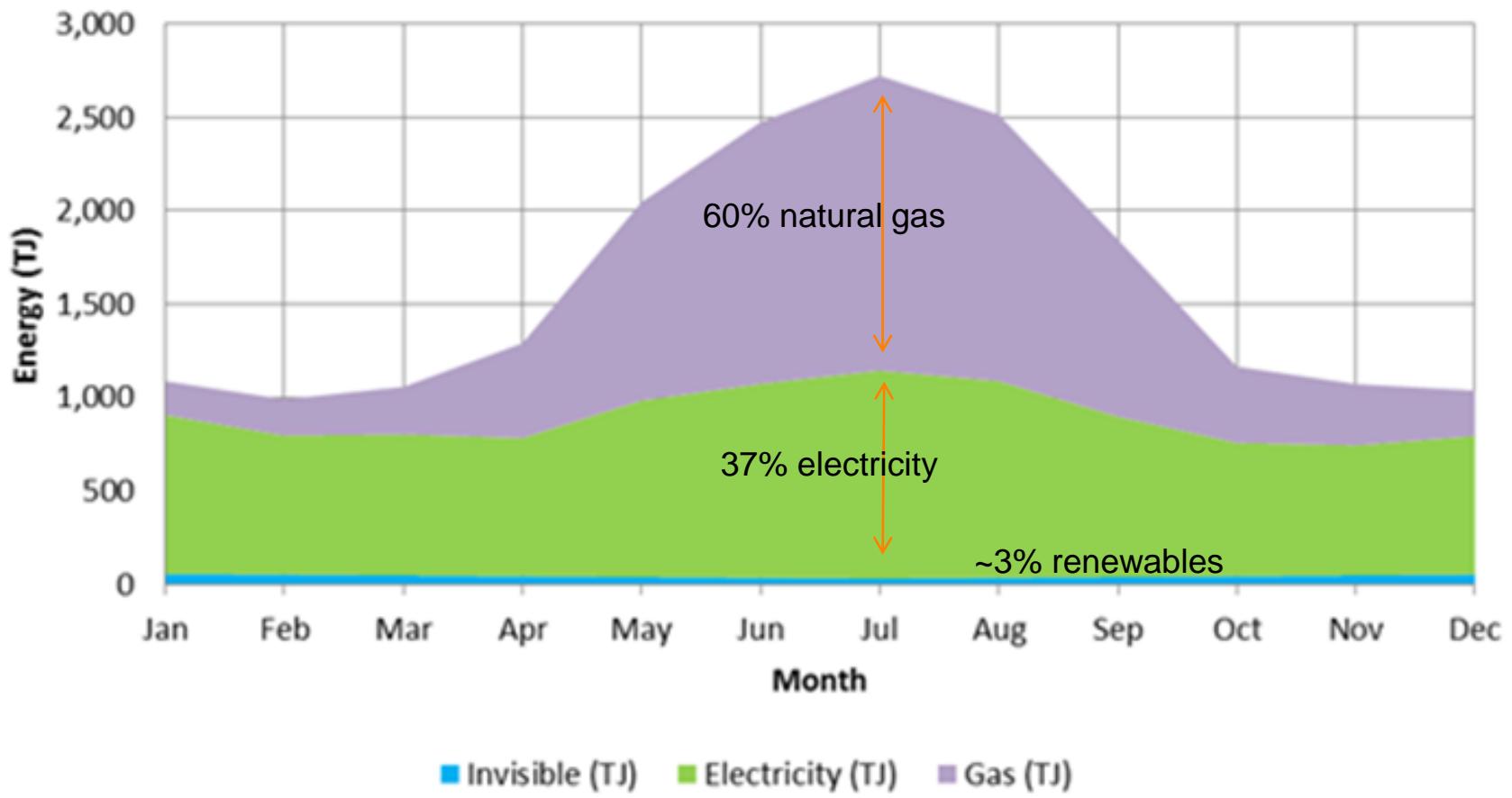
- Evoenergy operates the natural gas and electricity networks in ACT and surrounding areas.
- Natural gas network serves 148,000 homes and businesses in ACT.
- \$300m assets with two independent sources. One of the most reliable energy supplies in the country.
- 74% residents connected to gas. Steady customer growth 3% per annum.



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The Canberra Climate

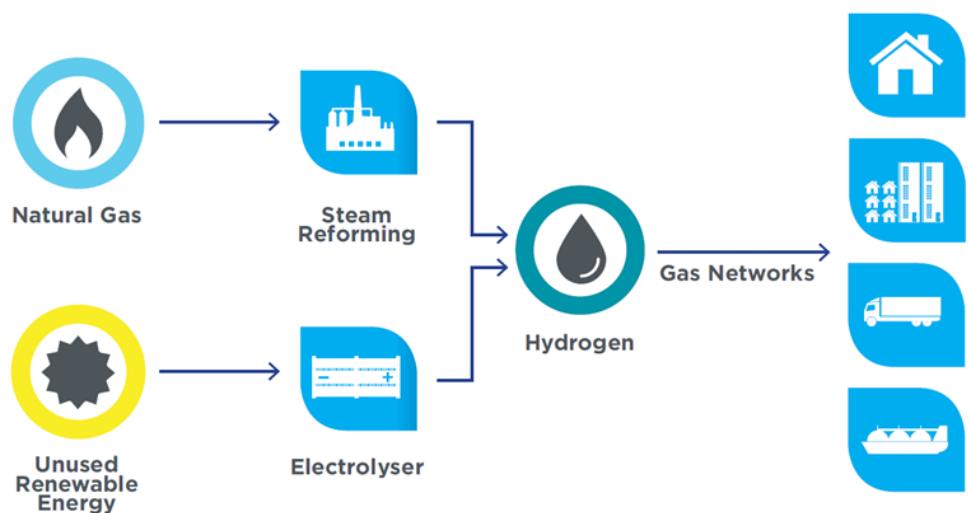
ACT energy consumption (2017)



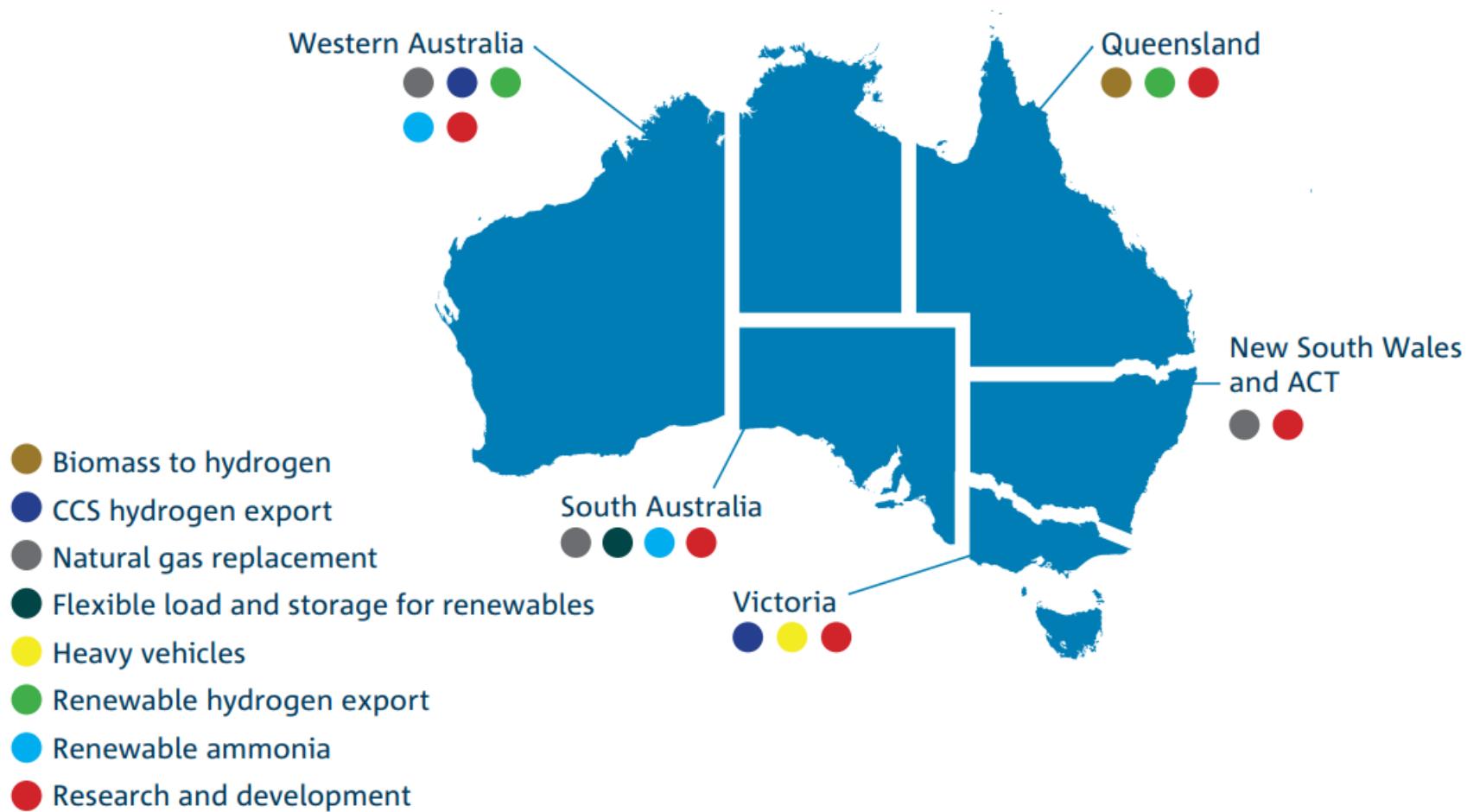
Towards Decarbonisation

- ACT 2045 net zero emission target.
- Hydrogen and biomethane transition.

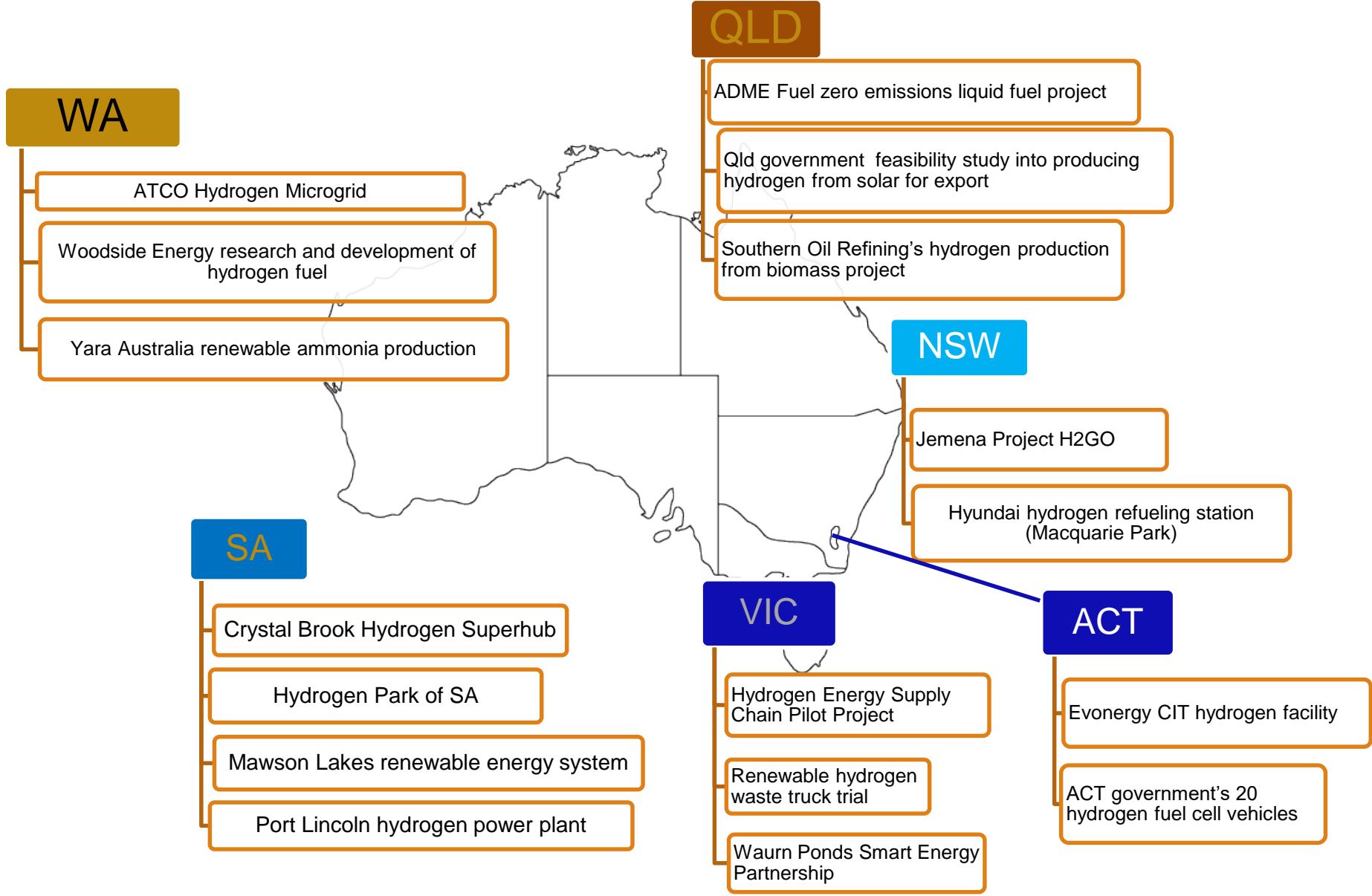
- ✓ Clean burning
- ✓ Multiple applications
- ✓ Efficient production using surplus renewable energy
- ✓ Utilisation of existing infrastructure
- ✓ Potential stored energy



Hydrogen Activity: Australia



Source: Hydrogen Strategy Group – Hydrogen for Australia's future, August 2018



Alan Finkel
Hydrogen leadership group

CSIRO Hydrogen Roadmap
First half 2018 – involvement of networks, ENA, APGA

SA R&D Roadmap
Announced in Dec 2017

ARENA R&D Round
Focused on hydrogen exports.
\$20 m from 2018 to 2022

ANU Energy Change Institute Grand Challenge
Research into Australia Trade to deliver Zero-Carbon Energy for the Asia-Pacific

Hydrogen Activity: Globally



The world's first hydrogen fuel cell passenger train is now running in northern Germany



Swedish transport firm Scania to develop hydrogen fuel cell trucks



German district Groß-Gerau expanding public transport service using emission-free buses. Initial order of 22 hydrogen fuel cell powered buses.

And more...

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Our vision

Evoenergy believes decarbonisation of the natural gas network can be achieved by transitioning to biomethane and hydrogen.

- ✓ addresses emissions and offers potential to address transport emissions moving to a net zero-emission target;
- ✓ utilises existing infrastructures and avoid the risk of stranded assets.
- ✓ continues to provide consumer choice across ACT and NSW; and
- ✓ connects natural gas and electricity as a **single energy solution**.

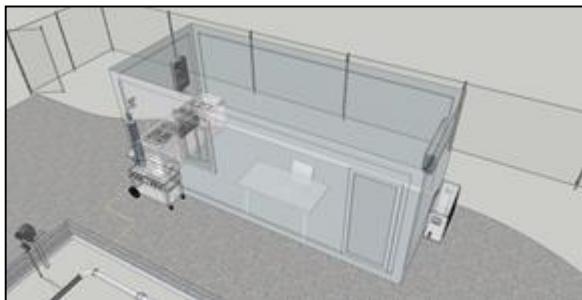
Evoenergy C.I.T. Hydrogen Test Facility



GENERATION – Demonstrate viability of hydrogen manufactured from excess solar generated electricity as a zero CO2 emissions fuel.



TRANSPORT – Testing of hydrogen in existing ACT gas network infrastructure in various pipings, fittings, meters and regulators.



UTILISATION – Verify the acceptable level of hydrogen and natural gas mix on existing gas appliances.

Powering on...

- 60% of winter energy needs in the ACT delivered to 148,000 connections.
- Hydrogen offers an opportunity for conversion to a renewable energy storage and distribution network.
- Around the world and in Australia, hydrogen has been embraced as the fuel of a low carbon future.
- Hydrogen production and use is today's technology.

There's so much to love
about natural gas.



and Hydrogen
Natural Gas. Better now. Better tomorrow.
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