

Future Gas Network

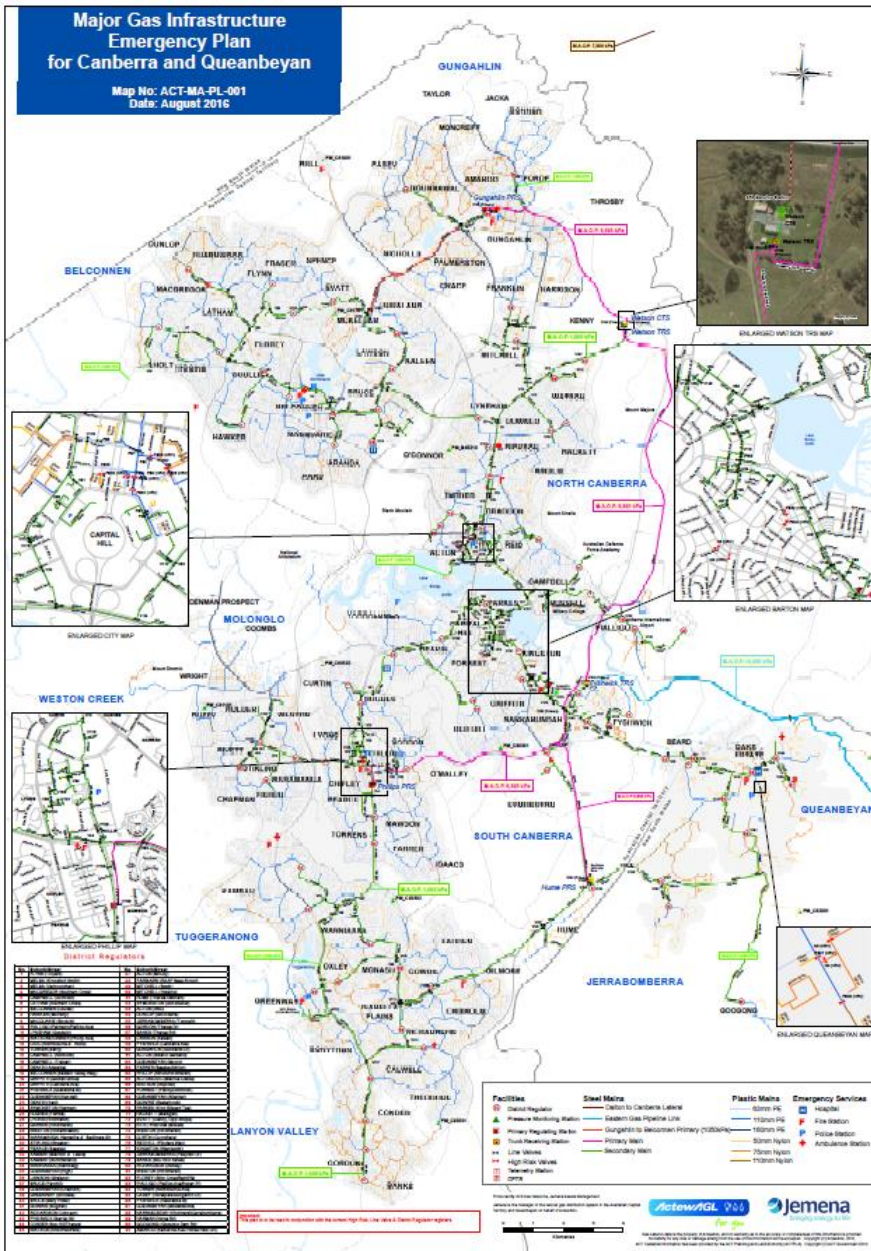
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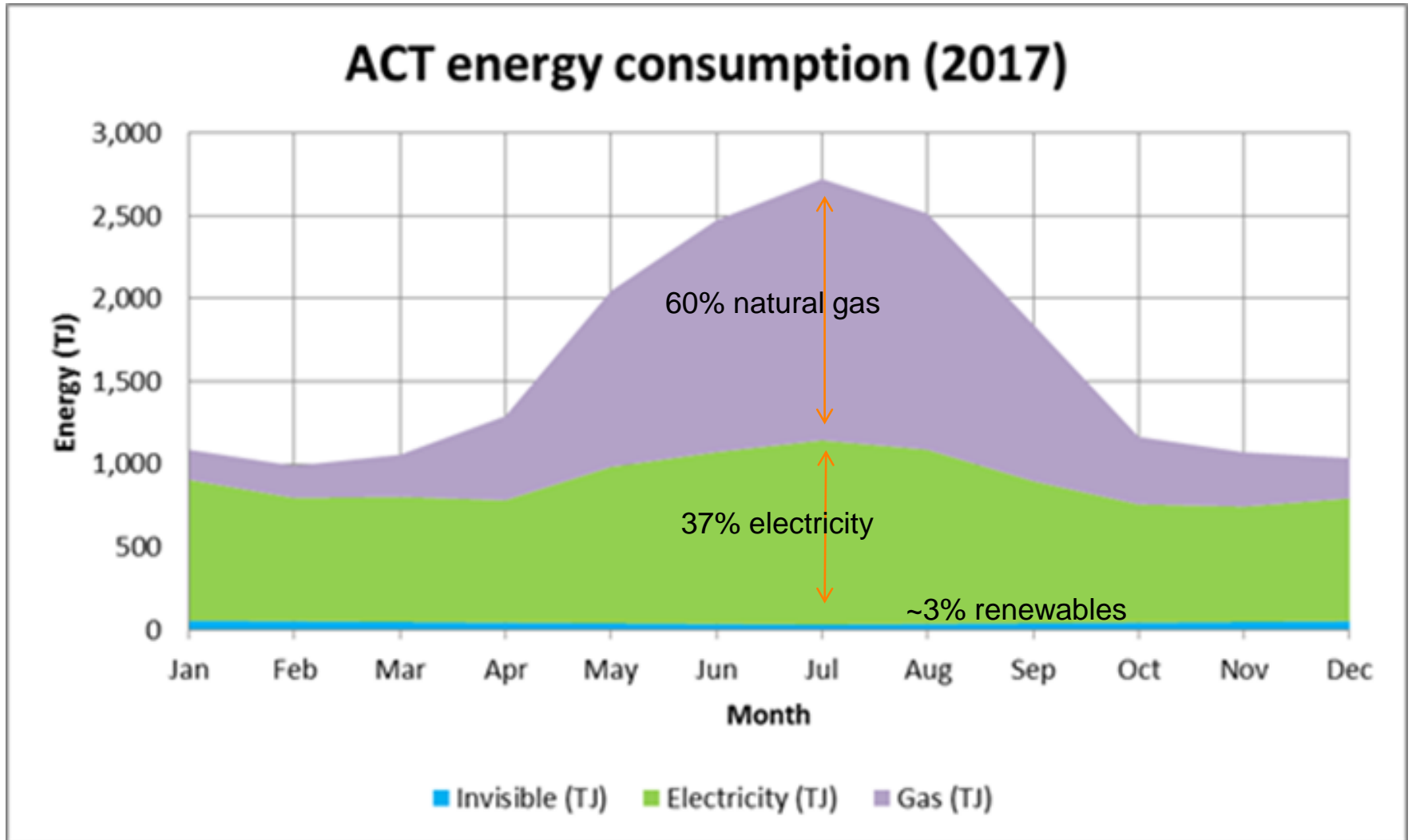


Who we are

- 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.



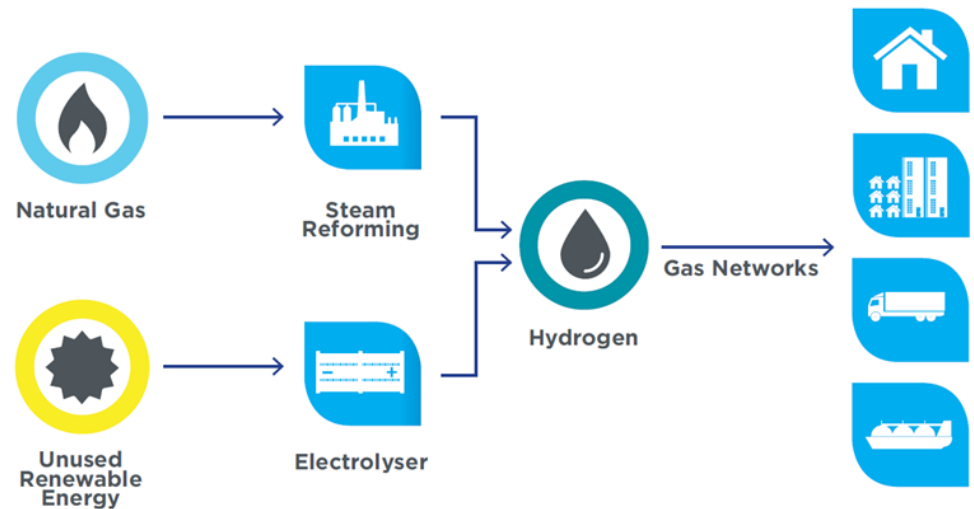
The Canberra Climate



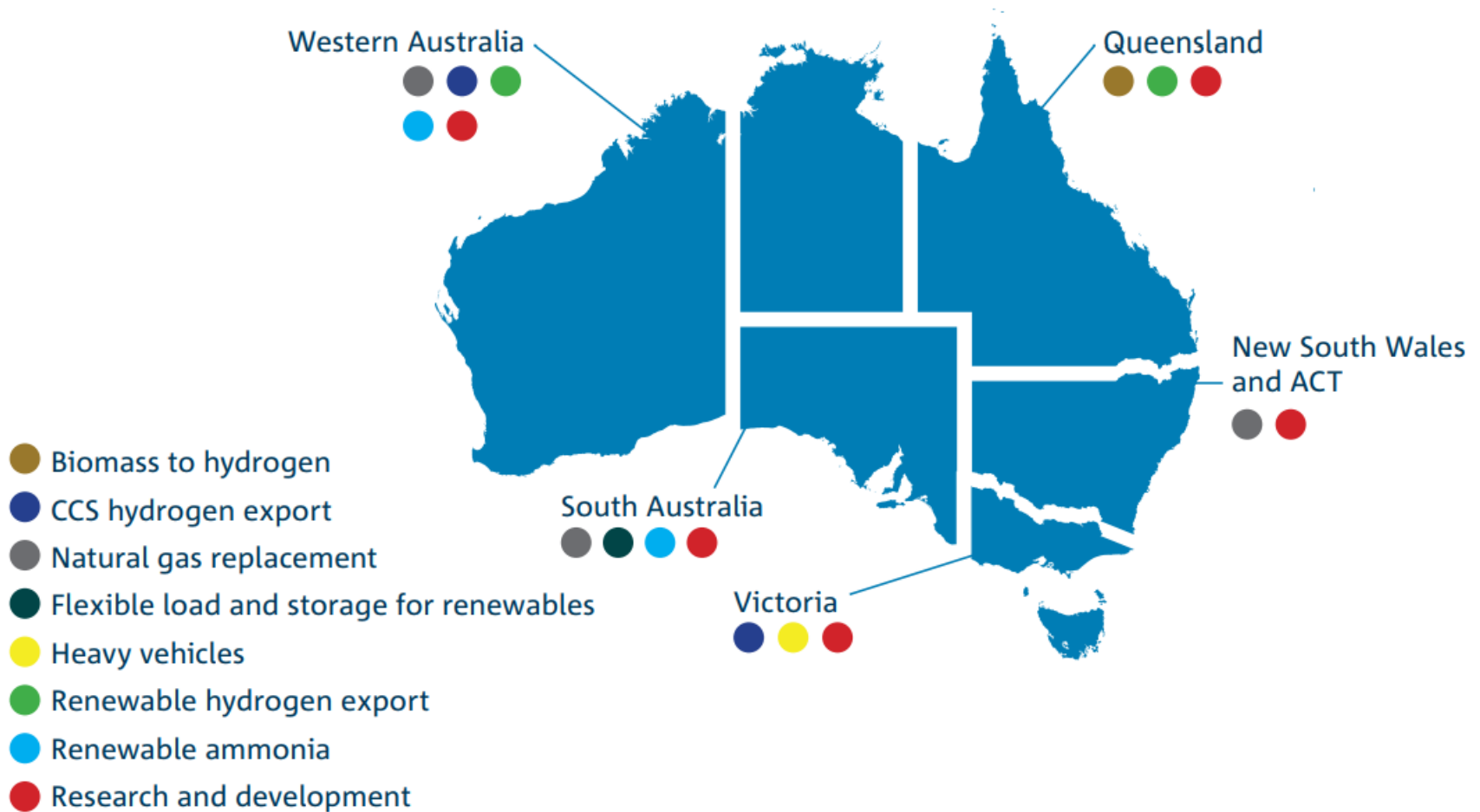
Towards Decarbonisation

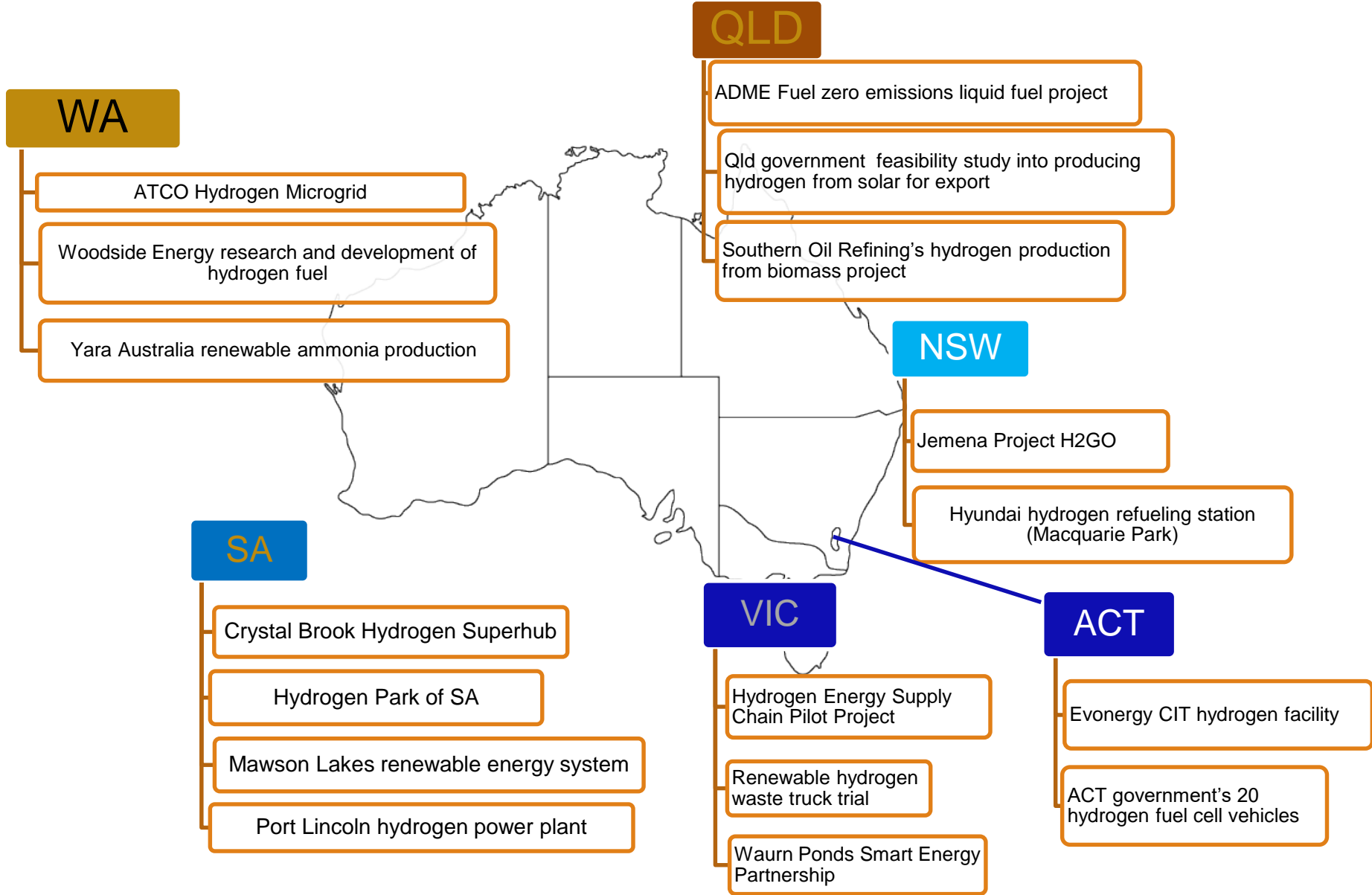
- ACT 2045 net zero emission target.
- Hydrogen and biomethane transition.

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



Hydrogen Activity: Australia





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...

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**.

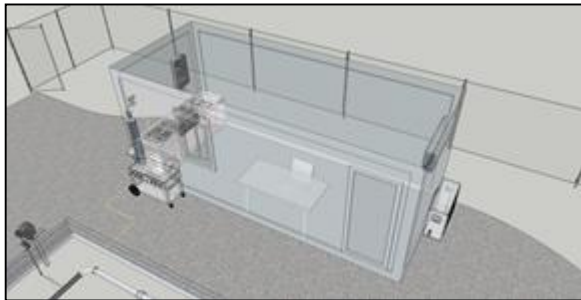
Evoenergy C.I.T. Hydrogen Test Facility



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 pipping, 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.

