



# Australia's Future Fuels Presentation

Presentation to GERG 60<sup>th</sup> Anniversary Research Conference

David Norman, CEO, Future Fuels CRC – 3<sup>rd</sup> December 2021

# About Future Fuels Cooperative Research Centre

Long term, industry-led collaboration between 100 industry, government and academic organisations , co-funded by the National Government



Australian Government  
Department of Industry, Science,  
Energy and Resources

AusIndustry  
Cooperative Research  
Centres Program



# Action orientated, industry led, applied research

Trusted voice of reason and evidenced based knowledge

\$90mAUD of cash and in-kind support (approx. \$65m USD)

Three years in to a seven year research program

90 projects and over 50 PhD scholarships already covering 3 core programs:

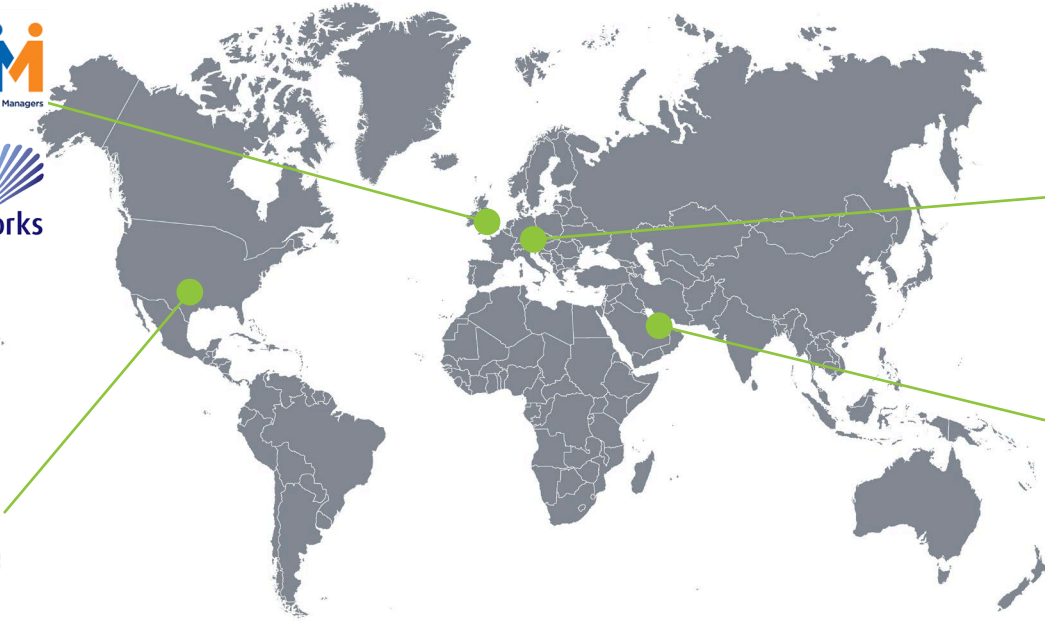
- **Future Fuel Technologies, Systems and Markets**
- **Social Acceptance, Public Safety and Security of Supply**
- **Network Lifecycle Management**

# Steels, plastics and appliances research progressing at pace



- APA Parmelia Gas Pipeline
- Hydrogen embrittlement
- Fracture initiation and propagation
- Long-term plastics testing
- Major program of residential appliance testing. 10% blends and higher
- Commercial and Industrial programs covering most major types

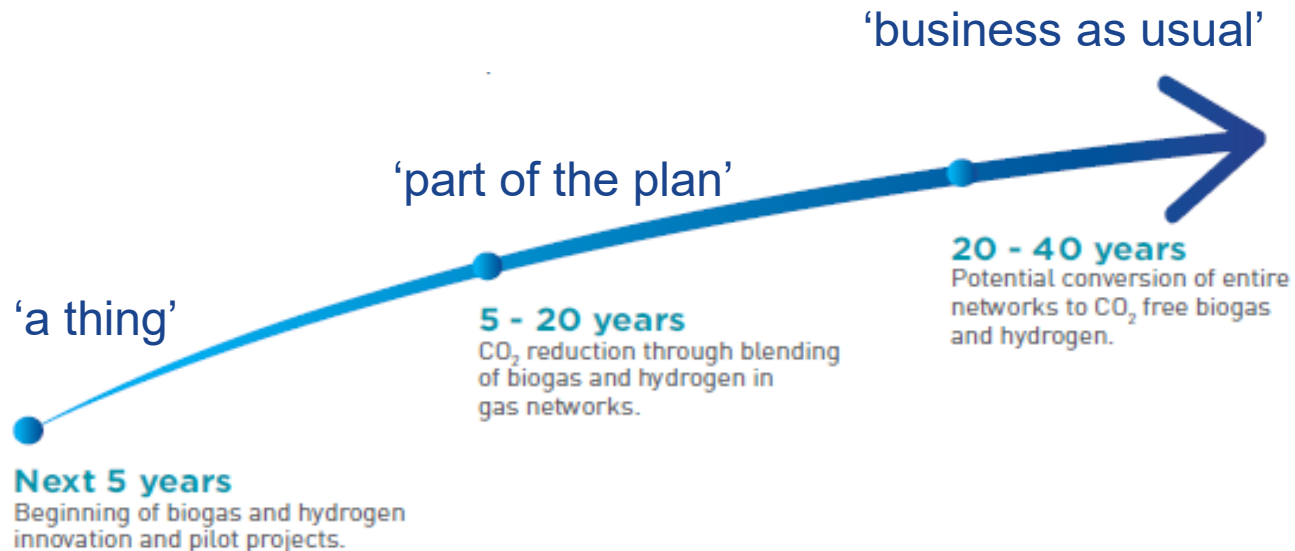
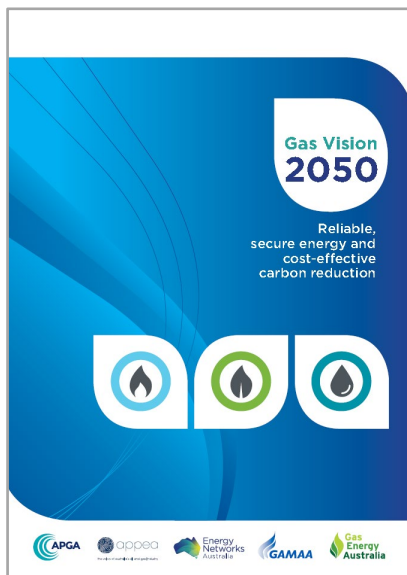
# Our regular international linkages





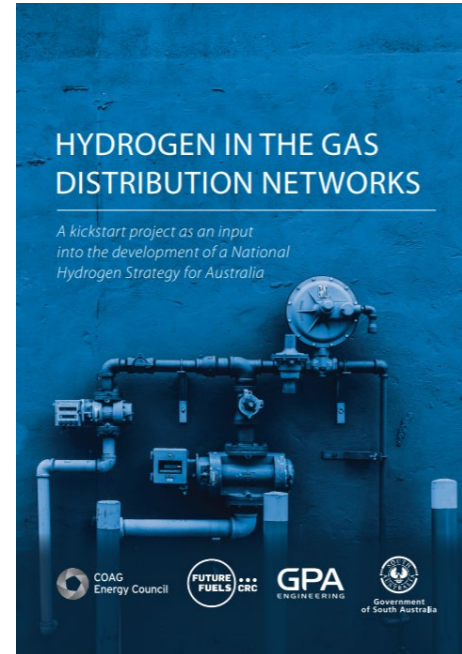
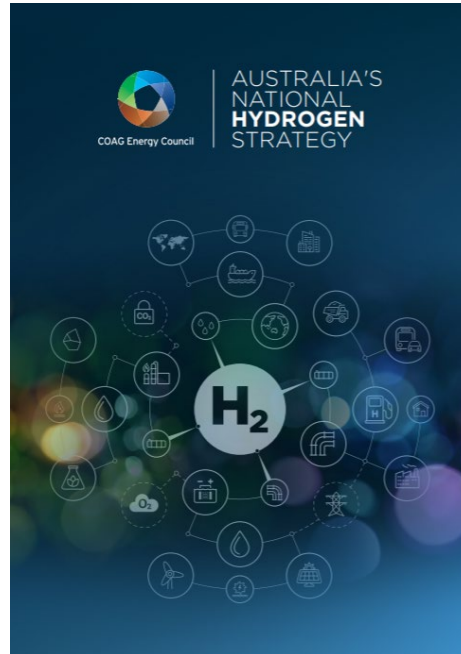
# Australia has come a long way since 2018

Hydrogen and Biomethane becomes:



# Australia's National Hydrogen Strategy

- launched 2019



# Australia has significant advantages

World-leading gas energy industry

Highly-skilled gas energy workforce

Natural resources and space

Existing trade relationships

Geology needed for storage

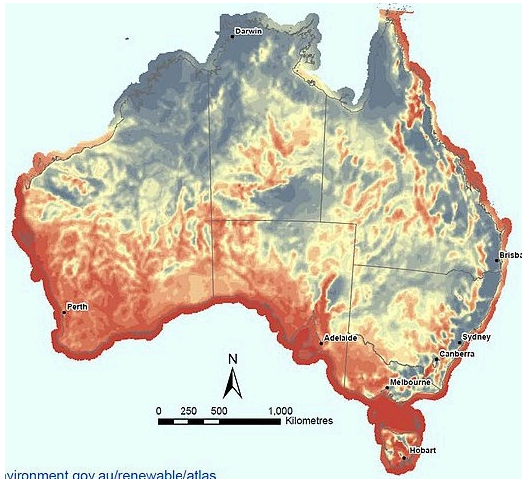
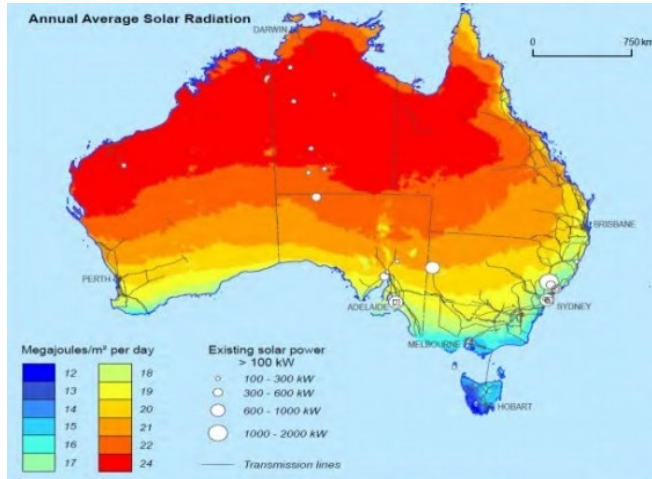
Existing fuel infrastructure

World-class research universities and engineering specialists





# Australia has sun, wind, proximity to Asia...



[environment.gov.au/renewable/atlas](http://environment.gov.au/renewable/atlas)



# ...and space



# 80 industry projects in progress

## West Sydney Green Gas Project



## Hydrogen Park South Australia



# ARENA and Export projects



Already funding 26  
current projects  
including gas blending  
in major networks and  
world-leading  
electrolysers (3x10MW)



Target: 26GW of  
renewable energy for  
hydrogen production by  
2028



Target: 15 million tonnes  
of green hydrogen to the  
world by 2030



# HyResource is following hydrogen projects and R&D

In collaboration with CSIRO, NERA and the Australian Hydrogen Council we have launched HyResource

<https://research.csiro.au/hyresource>





# 18 Hydrogen clusters across Australia

NERA has formed a network of 15 hydrogen technology clusters across Australia, providing seed-funding in partnership with governments and industry to build the skills, capability and commercialisation opportunities in the emerging hydrogen industry.



—  
HYDROGEN  
TECHNOLOGY CLUSTER  
AUSTRALIA  
—

# We are all at the epicentre of incredible change and opportunity

- The gas industry should be proud, courageous and bold about its future
- Every member of the global industry has the chance to benefit from and support the amazing new knowledge that is being created globally.

# More information:

[ARENA](#) Australian Renewable Energy Agency

[Australian Hydrogen Council](#)

[CEFC](#) Clean Energy Finance Corporation

[CSIRO](#) Commonwealth Scientific and Industrial Research Organisation

[Future Energy Exports CRC](#)

[Future Fuels CRC](#)

[Gas Vision 2050](#) Energy Networks Australia, APGA & GAMAA)

[HyResource](#) hydrogen knowledge sharing

[National Hydrogen Strategy](#)

[NERA](#) National Energy Resources Australia



# Enabling the decarbonisation of Australia's energy networks



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Future Fuels CRC is supported through the Australian Government's Cooperative Research Centres Program. We gratefully acknowledge the cash and in-kind support from all our research, government and industry participants.



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