

## Australia's hydrogen opportunity

David Norman, CEO, Future Fuels Cooperative Research Centre, Australia - November 2021, to World Plumbing Conference

### About Future Fuels Cooperative Research Centre

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



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CRC

# Action orientated, industry led, applied research

Trusted voice of reason and evidenced based knowledge

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

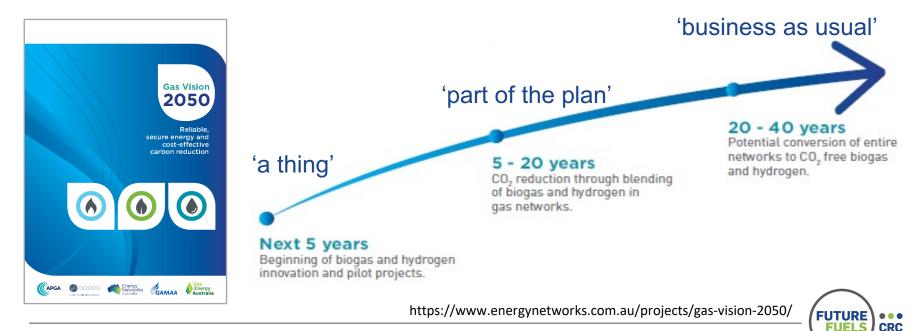
Three years in to a seven year research program 89 projects and over 50 PhD scholarships already covering 3 core programs:

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



# Australia has come a long way since 2018

#### Hydrogen and Biomethane becomes:



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### Australia's National Hydrogen Strategy



https://www.industry.gov.au/data-and-publications/australias-national-hydrogen-strategy



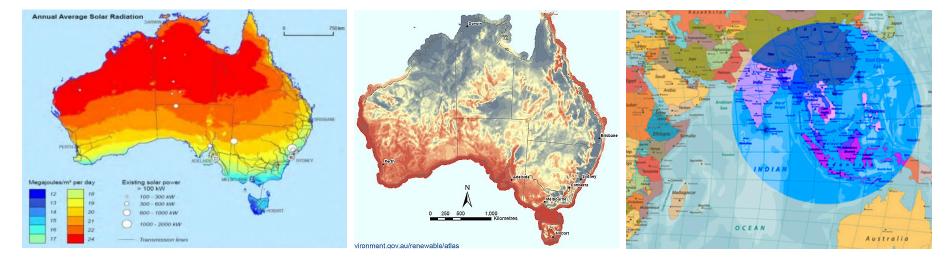
# Australia has significant advantages

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





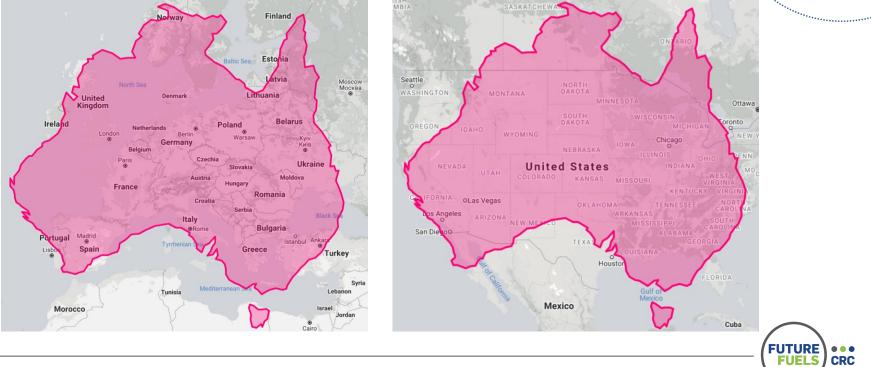
## Australia has sun, wind, proximity to Asia...





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#### ...and space



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### 80 industry projects in progress

West Sydney Green Gas Project



#### Hydrogen Park South Australia





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### **ARENA and Export projects**



Australian Government

Australian Renewable Energy Agency





FORTESCUE FUTURE INDUSTRIES

Already funding 26 current projects including gas blending in major networks and word-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



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# 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



Hydrogen

### 15 technology 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

**<u>CEFC</u>** 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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Australian Government Department of Industry, Science, Energy and Resources AusIndustry Cooperative Research Centres Program