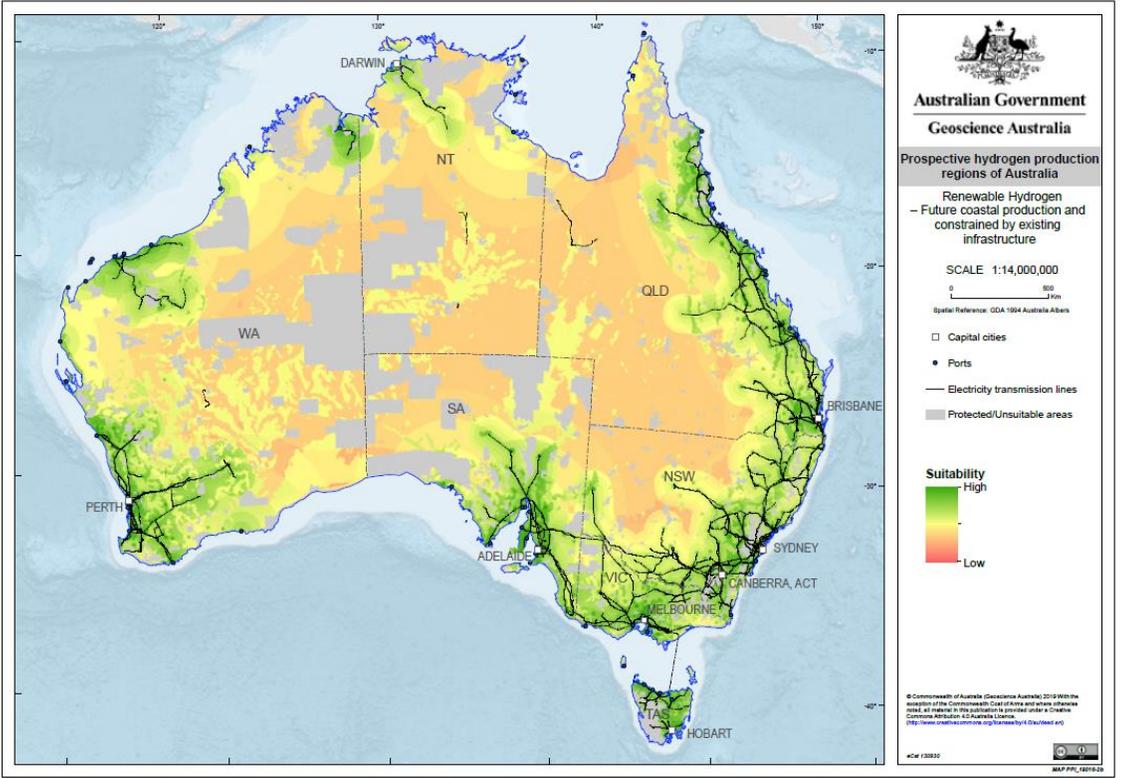
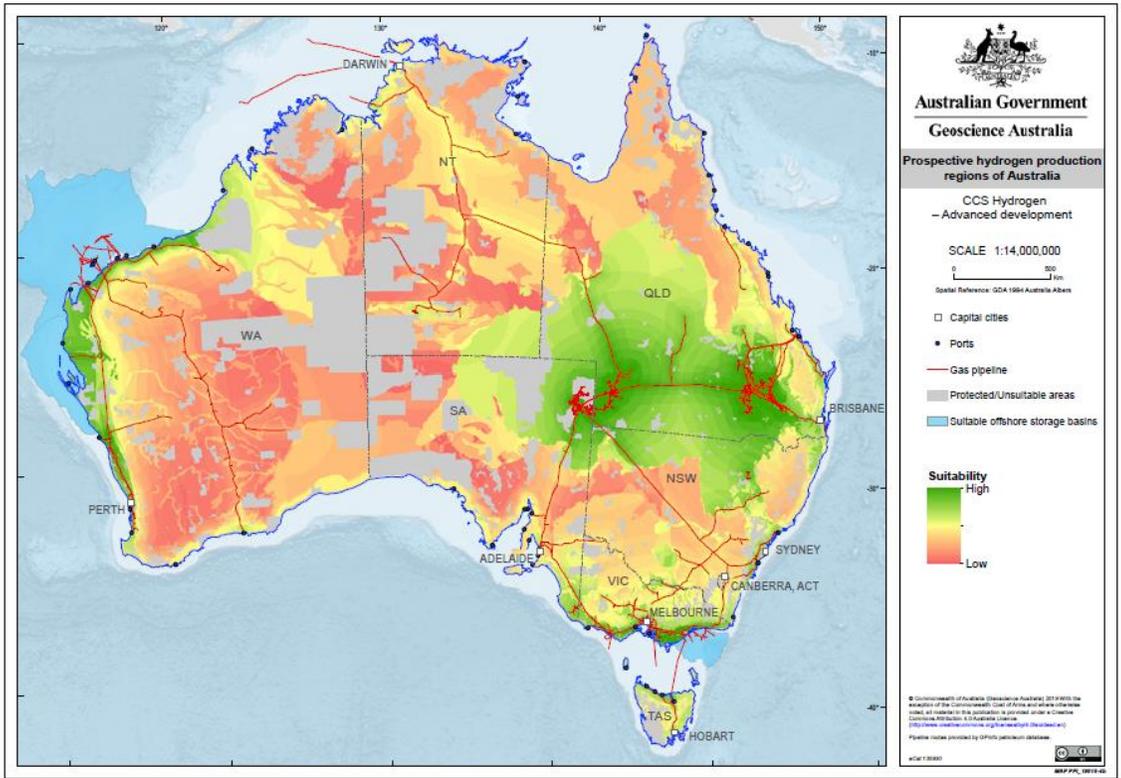


Why hydrogen for Australia?

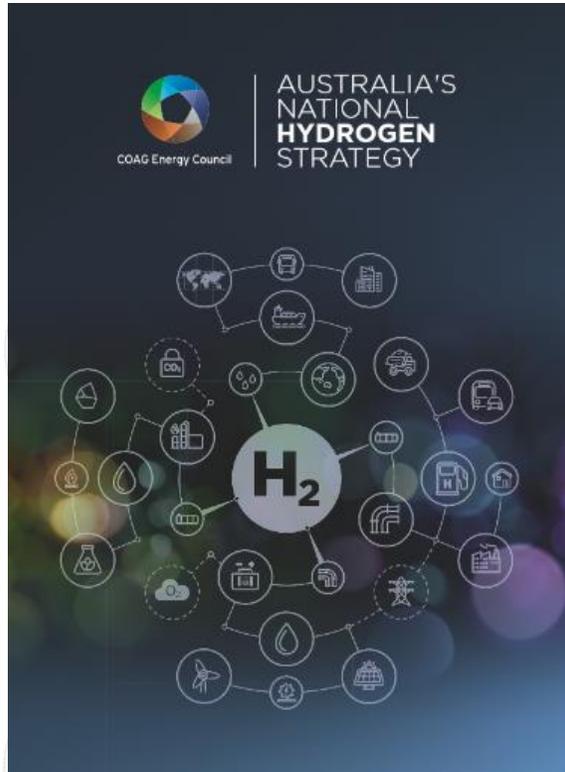
Highly Prospective Production Areas Renewable Hydrogen



Highly Prospective Production Areas CCS Hydrogen



Australia's National Hydrogen Strategy

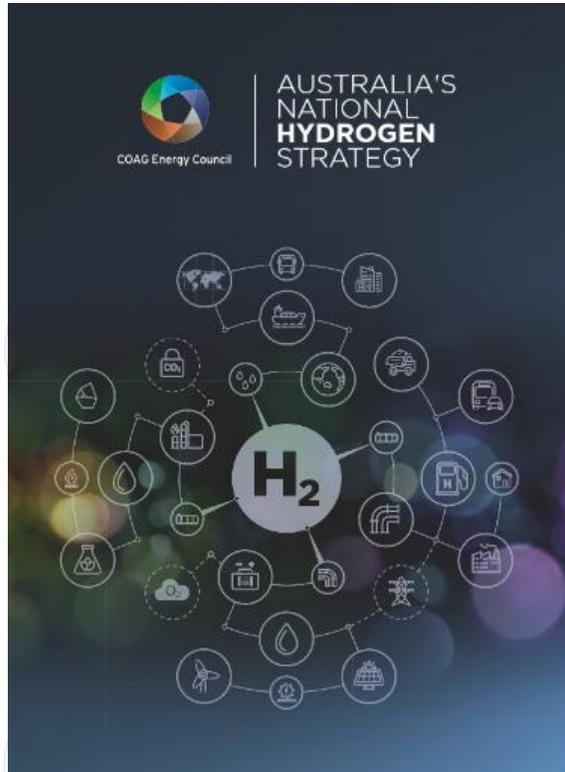


Released 22 November 2019

Jointly developed by all Australian governments

An adaptive industry development framework

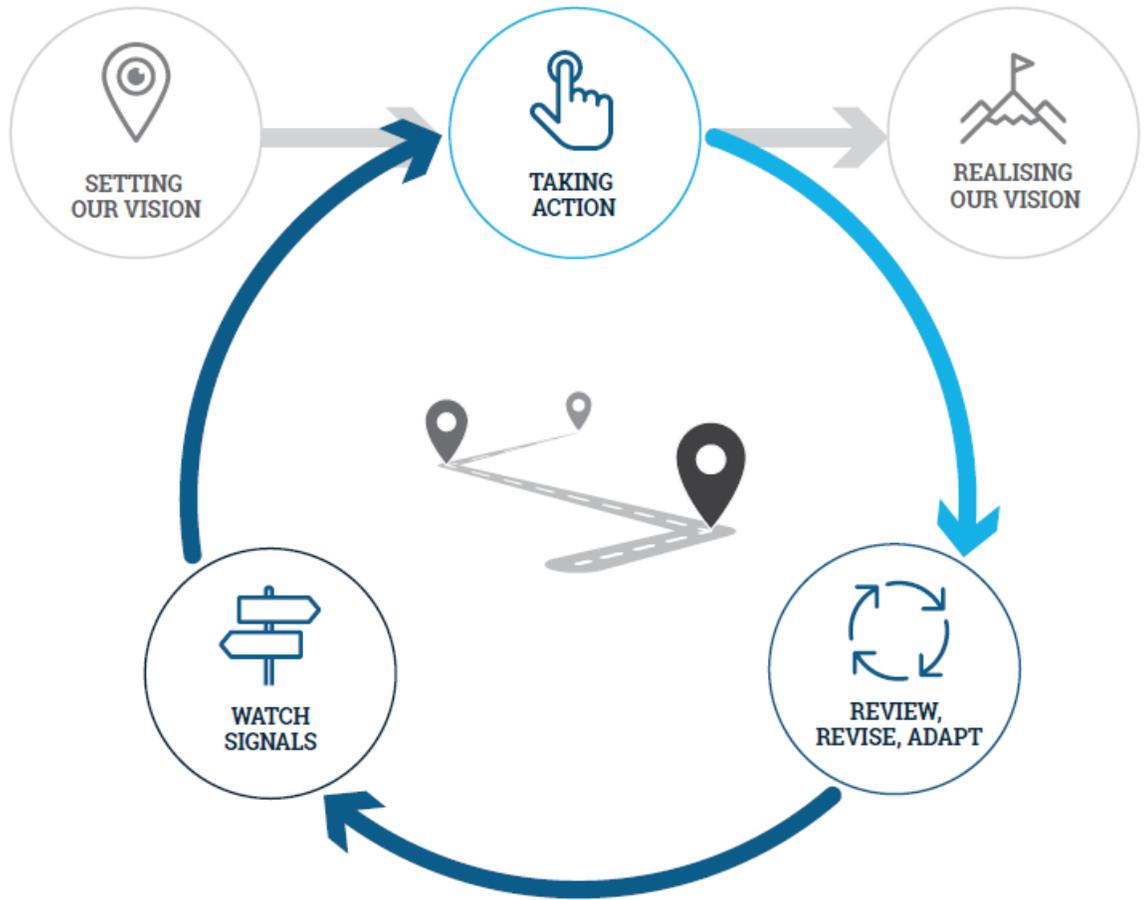
57 initial actions



- Strong competitive advantage
- Proven technology, but commercially risky
- Increasing momentum
- Scale is key, as is demand

An adaptive approach

The vision: a clean, innovative, safe and competitive Australian hydrogen industry that benefits all Australians and is a major global player by 2030



AUSTRALIA is one of the top three exporters of hydrogen to Asian markets



AUSTRALIA has an excellent hydrogen-related safety track record



HYDROGEN is providing economic benefits and jobs in Australia



AUSTRALIA has a robust, internationally accepted, provenance certification scheme in place

The adaptive pathway – phase 1

FOUNDATIONS AND DEMONSTRATIONS

→ TO 2025 

Scale-up activities



Advance priority pilots, trials and demonstration projects



Assess supply chain infrastructure needs



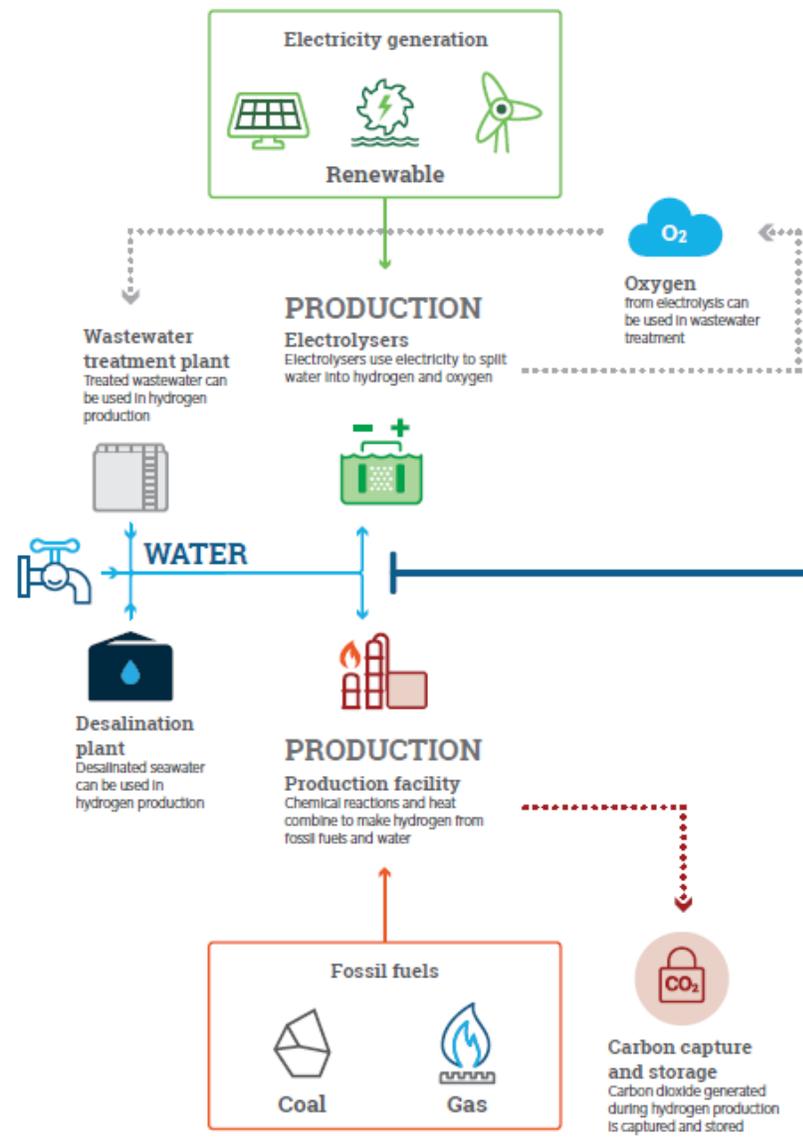
Build demonstration scale hydrogen hubs



Develop supply chains for prospective hydrogen hubs

Hubs are regions where various users of hydrogen across industrial, transport and energy markets are co-located.

Hydrogen hubs



HYDROGEN HUB

Hubs make the development of supply chain infrastructure more cost-effective by aggregating various users of hydrogen into one area. These may be at ports, cities or remote areas. Hubs could also foster innovation and promote sector coupling.

Industrial use
Hydrogen can be used by industry as a chemical feedstock or as a fuel for heating, electricity generation or mobility applications.

NH₃

STORAGE
Hydrogen is stored under pressure

H₂

Natural gas distribution network

Exports
Hydrogen is liquefied or converted to another chemical for shipping

Gas blending
Hydrogen can be blended with natural gas to supply lower emissions heating and cooking

Transport
Hydrogen can power buses, cars, ships, trains and trucks.

The adaptive pathway – phase 2



FROM 2025



LARGE-SCALE MARKET ACTIVATION



Identify signals that large-scale hydrogen markets are emerging



Scale up projects to support export and domestic needs



Build Australian hydrogen supply chains and large-scale export industry infrastructure



Build and maintain robust and sustainable export and domestic markets and supply chains



Enable competitive domestic markets with explicit public benefits

Supply chain infrastructure includes powerlines, pipelines, storage tanks, refuelling stations, ports, roads and railway lines and any other facilities needed for hydrogen supply.

**Over half a billion
\$ in support**



ARENA



Australian Government

**Australian Renewable
Energy Agency**



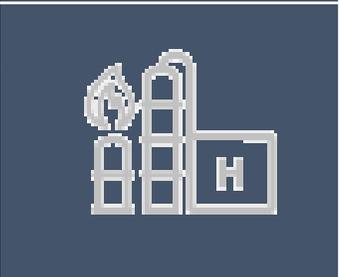
Implementation | 2020 priorities



International partnerships and engagement



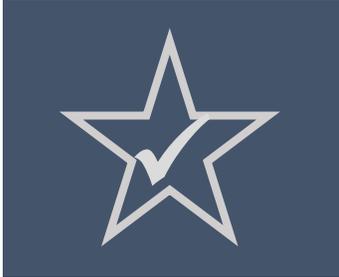
Reviews supporting use of hydrogen in Australian gas networks



State of Hydrogen report



National coordination



Guarantee of Origin Certification scheme



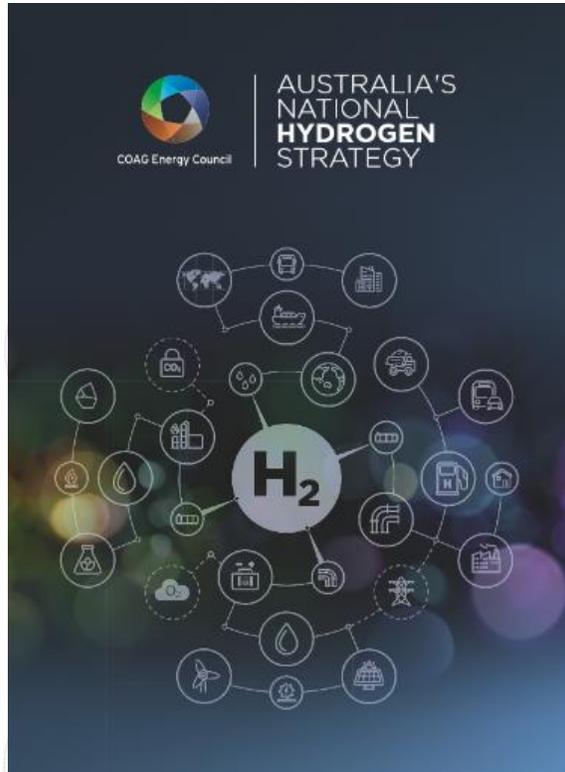
Legal framework reviews



Skills and training



Support for pilots, trials and demonstrations



www.industry.gov.au/hydrogen

- Read the Strategy and supporting reports
- Sign up for our newsletter

Thank you for your attention

