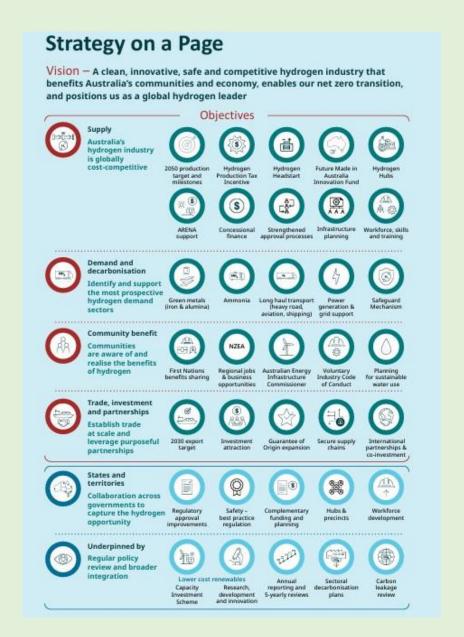
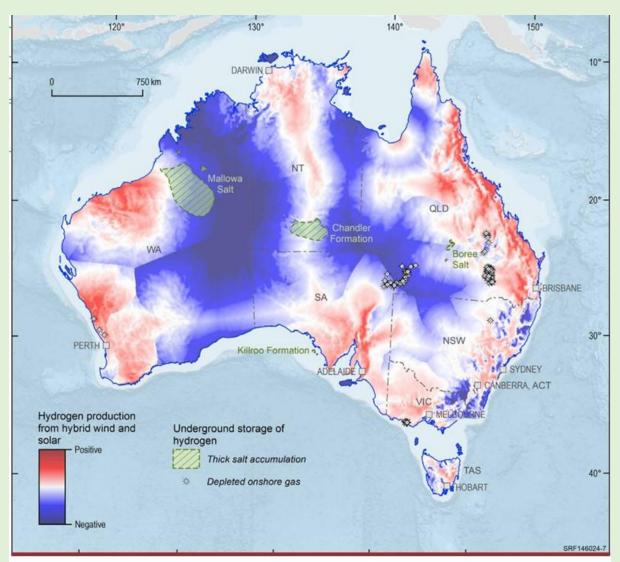


# **Australia**

## National Hydrogen Strategy, 2024







Australia's hydrogen production potential





Hydrogen has many potential applications, but the strategy focuses on the use-cases that are currently most prospective. These demand sectors are more likely to support the hydrogen sector to scale up, contribute to domestic decarbonisation, and contribute to our economy through large-scale export.

These use-cases align with priority industries in the Future Made in Australia agenda and will create new jobs and opportunities for our country.

Chapter 3 of this strategy details the actions supporting this objective.



#### Green metals (iron & alumina)

Global demand for green iron and steel is forecast to grow significantly by 2050. Hydrogen can provide a clean source of industrial process heat to the refining of our mineral resources and enable the export of hydrogen embodied green metals, such as iron and alumina.



#### Ammonia

Clean hydrogen is the only viable pathway to decarbonising current ammonia production, which is essential to manufacture fertilisers and explosives. Ammonia also represents a viable means to transport hydrogen to other countries and will play a role as a fuel in a decarbonising maritime industry.



## Long haul transport (heavy road, aviation shipping)

There are good prospects for hydrogen to play a role either directly or indirectly through the production of low-carbon liquid fuels in the decarbonisation of the long-haul road, aviation and shipping sectors.



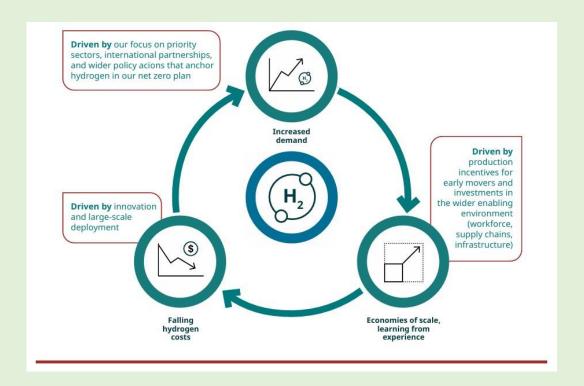
#### Power generation & grid support

Internationally, Australian hydrogen can support other countries to reduce emissions from their power sectors and achieve energy security goals. Domestically, the ability to produce hydrogen with excess renewable generation and store this energy for use in peak demand also presents an opportunity for hydrogen to support the increased use of renewables in our electricity grids.



#### Safeguard Mechanism

The Safeguard Mechanism provides a strong incentive for large industrial companies to decarbonise their operations, including by adopting hydrogen technology.





### Strategy on a Page

Vision — A clean, innovative, safe and competitive hydrogen industry that benefits Australia's communities and economy, enables our net zero transition, and positions us as a global hydrogen leader



Supply Australia's hydrogen industry is globally cost-competitive





2050 production target and milestones



Hydrogen Production Tax Incentive



Hydrogen Headstart



Future Made in Australia Innovation Fund



Hydrogen Hubs



ARENIA support



finance



Strengthened approval processes



Infrastructure planning



Workforce, skills and training



Demand and decarbonisation

Identify and support the most prospective hydrogen demand sectors



Green metals



Ammonia



Long haul transport (heavy road, aviation, shipping)



Power grid support



Safeguard Mechanism



Community benefit

Communities are aware of and realise the benefits of hydrogen



First Nations benefits sharing



Regional jobs & business opportunities



Australian Energy Infrastructure Commissioner



Industry Code of Conduct



Planning for sustainable water use



Trade, investment and partnerships

Establish trade at scale and leverage purposeful partnerships



2030 export target



Investment attraction



Guarantee of Origin expansion



Secure supply



International partnerships & co-investment



States and territories

Collaboration across governments to capture the hydrogen opportunity



approval improvements



Safetybest practice regulation



Complementary funding and planning

8



Hubs & precincts



Workforce development



Underpinned by

Regular policy review and broader integration



Scheme

wables Capacity development and innovation Investment



Annual reporting and 5-yearly reviews

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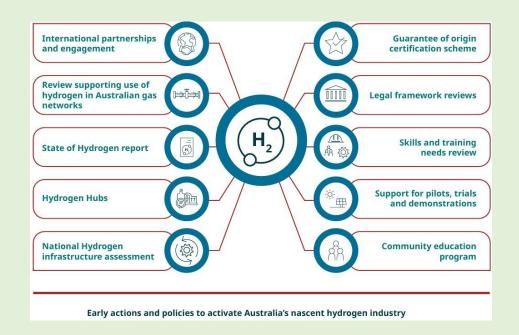


Sectoral decarbonisation plans



Carbon leakage review







Credit: Hysata. Hysata electrolyser manufacturing facility at Port Kembla.



#### Hydrogen Production Tax Incentive

The \$2 per kilogram Hydrogen Production Tax Incentive will provide time-limited, demand-driven production support to eligible producers of renewable hydrogen through Australia's tax system, forming the basis of government support to the sector to 2040.



#### Hydrogen Headstart

The Hydrogen Headstart program represents an early strategy action to address the current financial gap between the production cost and sale price of renewable hydrogen. It is focussed on industry early-movers with well developed projects.



#### Future Made in Australia Innovation Fund

Renewable hydrogen is a National Interest Priority industry under a Future Made in Australia. The Future Made in Australia Innovation Fund will fund deployment of innovative technologies and facilities linked directly to priority industries.



#### Hydrogen Hubs

The Australian Government's existing investment in hydrogen hubs in regional Australia remains an important building block to a large scale hydrogen industry, with expanding linkages to our future clean energy expect legi



#### **ARENA support**

The Australian Renewable Energy Agency (ARENA) will continue to play an important role in funding clean energy technology research, development and deployment (RD&D). ARENA will support improvements in hydrogen technologies and projects and renewable energy generation.



#### Concessional finance

Concessional finance through government special investment vehicles, including the Clean Energy Finance Corporation and the National Reconstruction Fund, will continue to play an important role in enabling large scale projects to proceed, prove new commercial models and provide confidence to capital markets.



#### Strengthened approval processes

Streamlined and prioritised approvals processes at all levels of government are essential to the development of the clean hydrogen industry and the broader transformation of our economy to meet our 2050 decarbonisation goal.



#### Infrastructure planning

Working with states and territories to analyse specific infrastructure needs for the hydrogen industry, as well as regular broad-based assessment at a national level to inform infrastructure prioritisation.



#### Workforce, skills and training

Assuring the availability and safety of a suitably trained workforce will be central to the growth of the hydrogen industry.

Stay informed at the moderated focus-group, <a href="https://bit.ly/3wEL5hY">https://bit.ly/3wEL5hY</a>

### Hydrogen Australia

Charley Rattan Associates operate at the forefront of sectoral developments, click through <a href="https://lnkd.in/eMx4PHv4">https://lnkd.in/eMx4PHv4</a> to view our Hydrogen training and advisory services





