

Net Zero Industry and Innovation Hydrogen Hub Development initiative

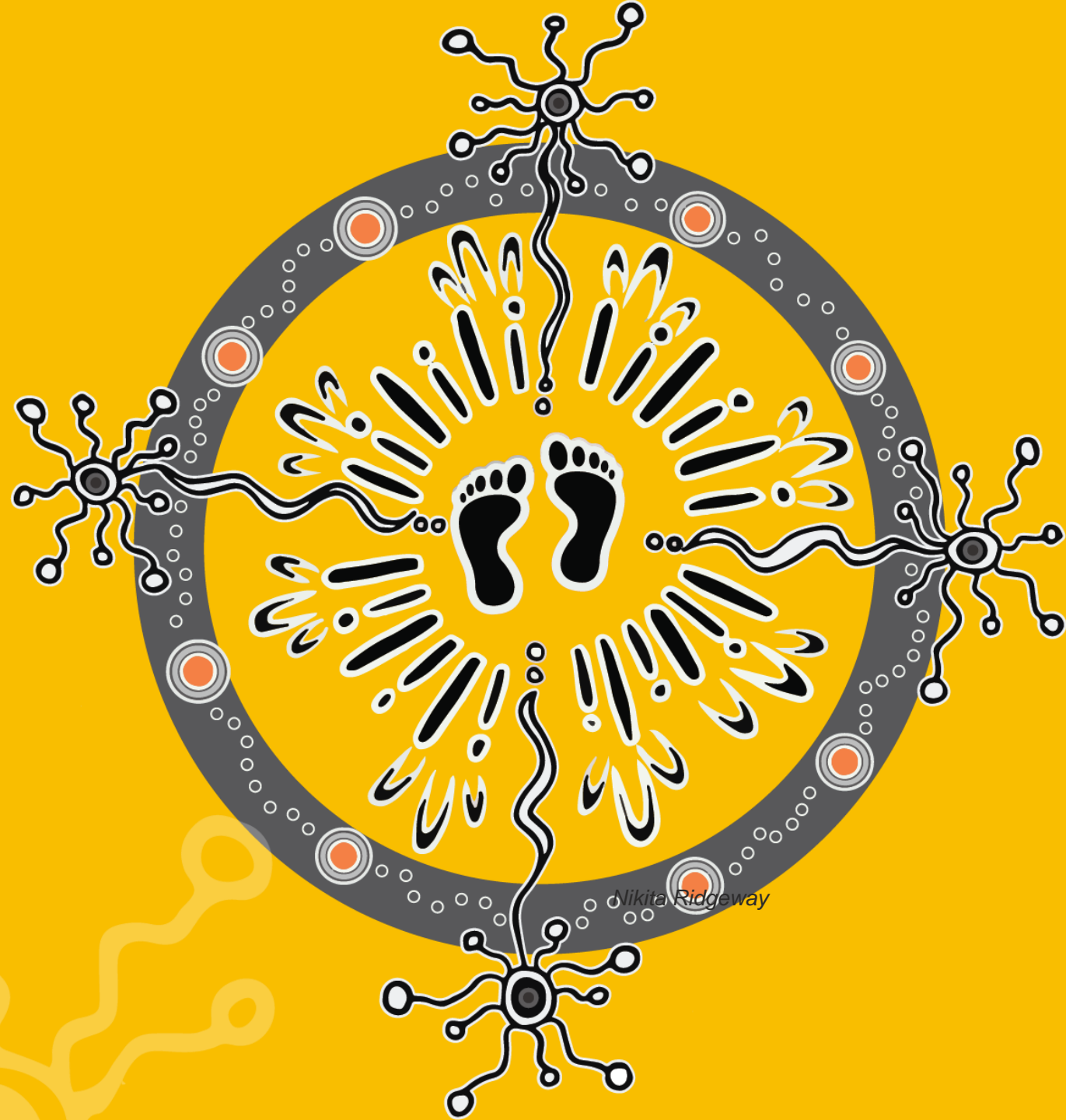
NewH2 - Hydrogen Cluster Breakfast

Manuel Weirich – Manager, Hydrogen and Clean Energy

Acknowledgement of Country

We acknowledge that today we meet on many Aboriginal lands.

We acknowledge the traditional custodians of the lands and we show our respect for elders past, present and emerging.



Planning,
Industry &
Environment

Foundational policy support for hydrogen



NSW competitive advantage



1

Large domestic market across heavy transport, ammonia, steel and gas

2

Access to low cost renewable energy resources

3

Existing hydrogen production, industrial bases and skilled workforces

4

Potential for hydrogen export terminals in Port Kembla and the Port of Newcastle to access large scale export market opportunities

5

Access to 30 day planning approvals through Special Activation Precincts

The Hunter-Central Coast REZ

- Hunter-Central Coast REZ is one of five REZs legislated in the Electricity Infrastructure Investment Act 2020
- The region was selected because it benefits from:
 - strong resources: solar, wind, pumped hydro
 - existing infrastructure and expertise: transmission, heavy industry, skilled workforces, access to export
 - investor interest: 10 large-scale energy projects in the planning system – over 1 GW worth around \$1 billion.
- Following detailed investigation, the Minister will formally declare the Hunter-Central Coast REZ including:
 - a map of the geographic area
 - intended network capacity
 - appointment of an Infrastructure Planner
 - an access regime that authorises or prohibits access to, and use of, specified network infrastructure.
- NSW is in early-stage planning for the Hunter-Central Coast REZ, which will take a number of years and require significant consultation with communities and industry.



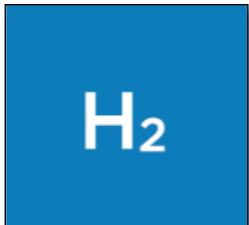
Department of Planning, Industry and Environment

NSW Ambition and Vision

The NSW Government is working to:

- transform NSW into Australia's largest consumer of clean hydrogen
- unlock the hydrogen heavy transport market, prepare for export opportunities and host new hydrogen enabled low-emissions industries
- establish safe and sustainable supply chains that drive cost-reductions for hydrogen.

NSW recognises the opportunity to become a market leader in the following areas:



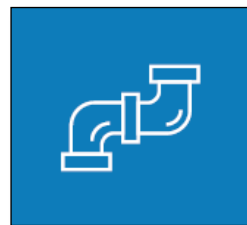
Clean Hydrogen
Production



Heavy
Transport



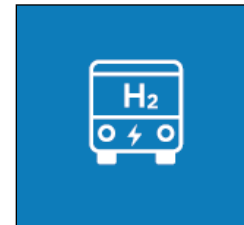
Renewable
Energy



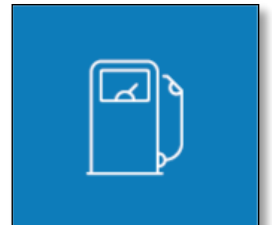
Gas
Blending



H2 under
\$2/kg











Government
Fleets





Refuelling
Network

Integrated hydrogen economy

Map legend

-  Hydrogen Hub
-  Renewable Energy Zone
-  Port
-  Special Activation Precinct
-  Licensed waste water treatment
-  Key road freight routes
-  Key rail freight routes
-  Inland Rail

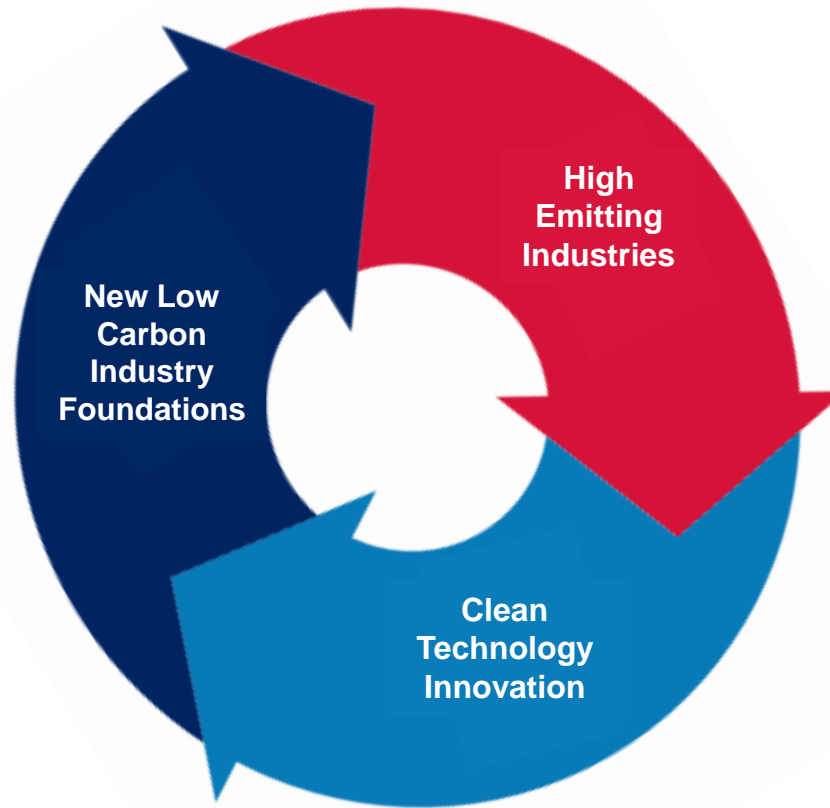
Annual hydrogen production capacity from waste water (Mt)

 Location	Mt	 Location	Mt
Moree	0.6	Hay	0.6
Narrabri	0.1	Wagga Wagga	1.2
Armidale	0.6	Hunter	8.8
Dubbo	0.7	Illawarra	11.7
Parkes	0.6		



NSW Net Zero Industry and Innovation Program

\$175 million to lay the foundations for low emission industries, including **at least \$70 million** for hydrogen hub development.

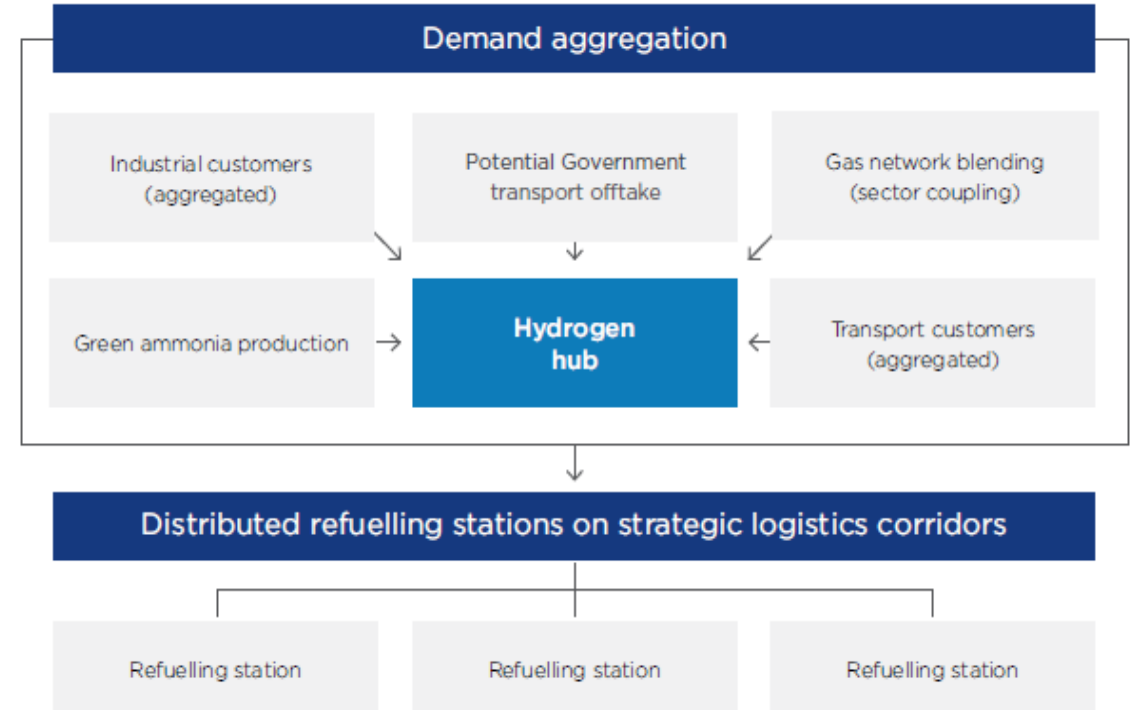


\$380 million to deploy low emissions technologies and infrastructure

\$195 million to support the development and continued innovation of emerging clean technologies

NSW Hydrogen Strategy and Hydrogen Hub Initiative

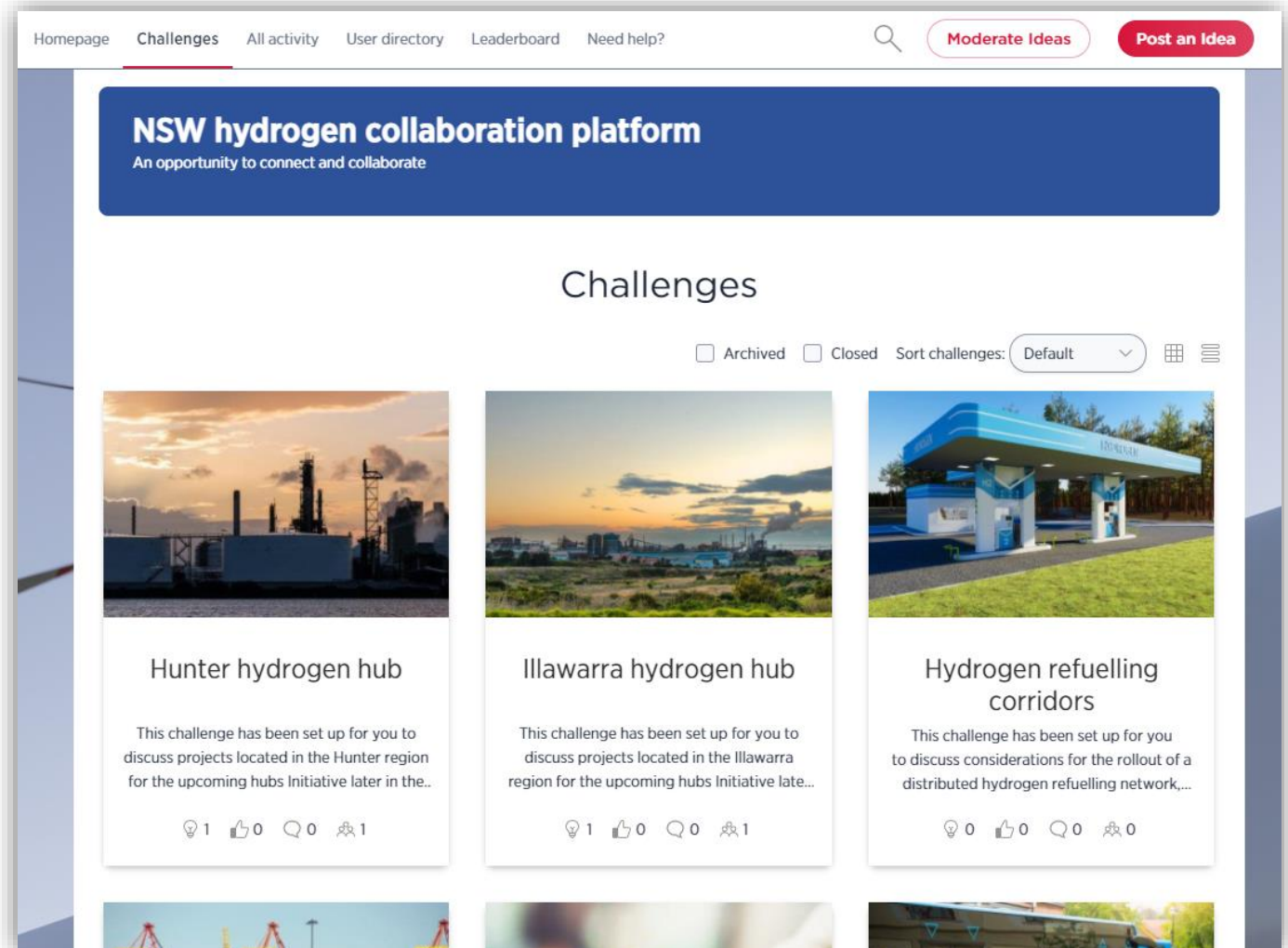
- The NSW Government is currently developing a hydrogen strategy that will detail the vision and direction for developing a hydrogen industry to 2030 and beyond.
- We are committing at least **\$70m** to the Hydrogen Hub Initiative with planned launch of applications in Q4 2021.
- We are considering various policy actions to support the NSW hydrogen economy, including:
 - industry development targets
 - allocation of funding under the \$750m Net Zero Industry and Innovation Program
 - infrastructure and planning requirements
 - measures to achieve our aspirational 10% hydrogen gas blending target by 2030.



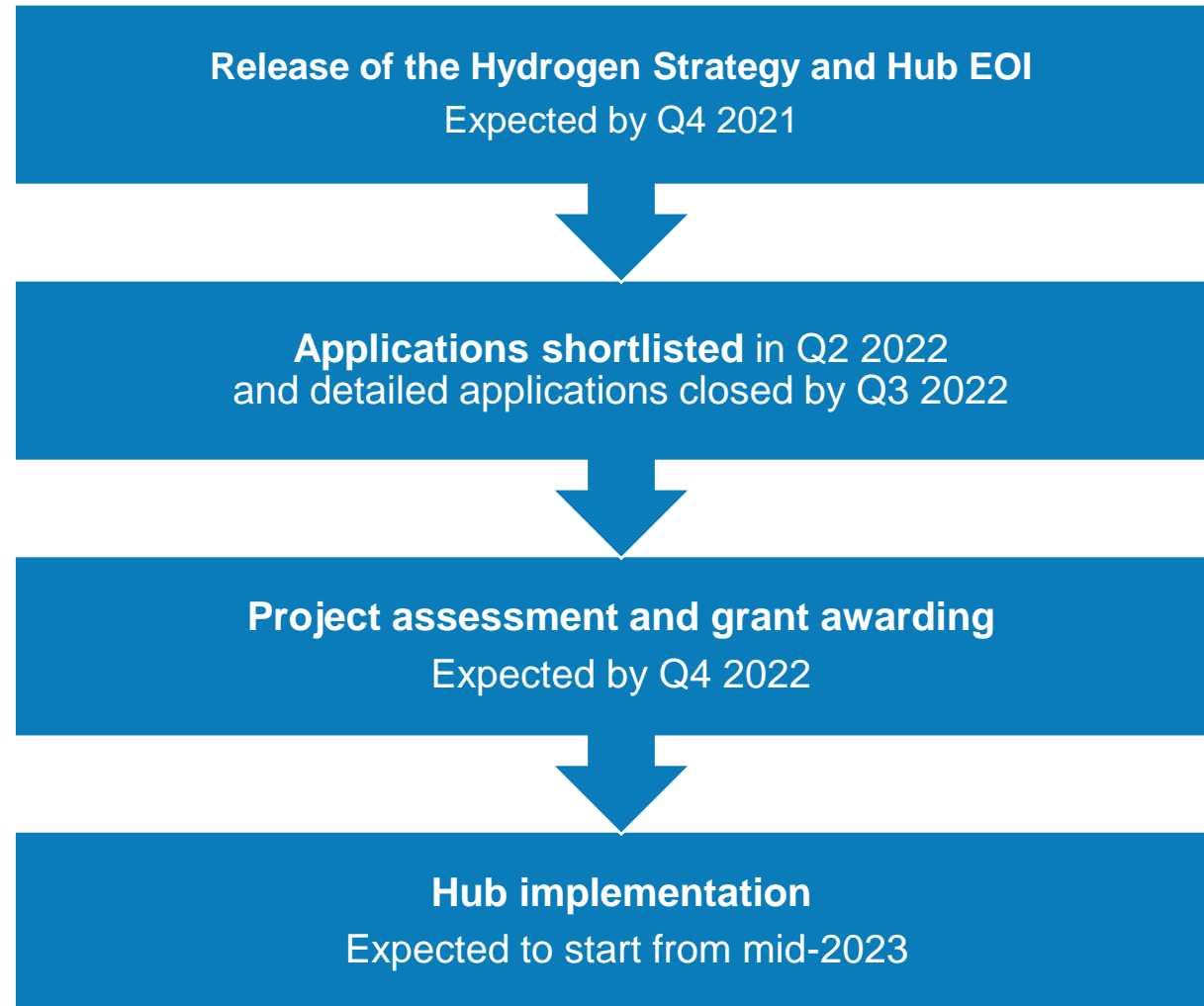
Collaboration platform

We have launched a digital platform to drive collaboration on hydrogen in NSW and facilitate connections between Projects and Hydrogen Consumers who plan on applying for the Hydrogen Hub Initiative.

Please contact the Department at hydrogen@planning.nsw.gov.au if you would like to participate in the platform.



Next Steps





DPIE Hydrogen and Clean Energy

hydrogen@planning.nsw.gov.au

Department of Planning, Industry and Environment