



Australian Government

Department of Foreign Affairs and Trade

# Australia's Clean Hydrogen Initiatives

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# A renewable energy superpower



**#2**  
for solar  
power  
potential in the world



**3 million+**  
households  
(around 30%) have rooftop  
solar PV power



**#6**  
for solar  
production  
largest producer of solar  
electricity in 2021



**3rd**  
lowest cost  
for generating solar  
power among major  
solar-power producers



**Highest**  
ratios  
of renewable energy patents  
in the world – on par with the  
US and Germany



**1st**  
country  
to export hydrogen



**6th**  
most attractive  
country  
for renewable energy investment

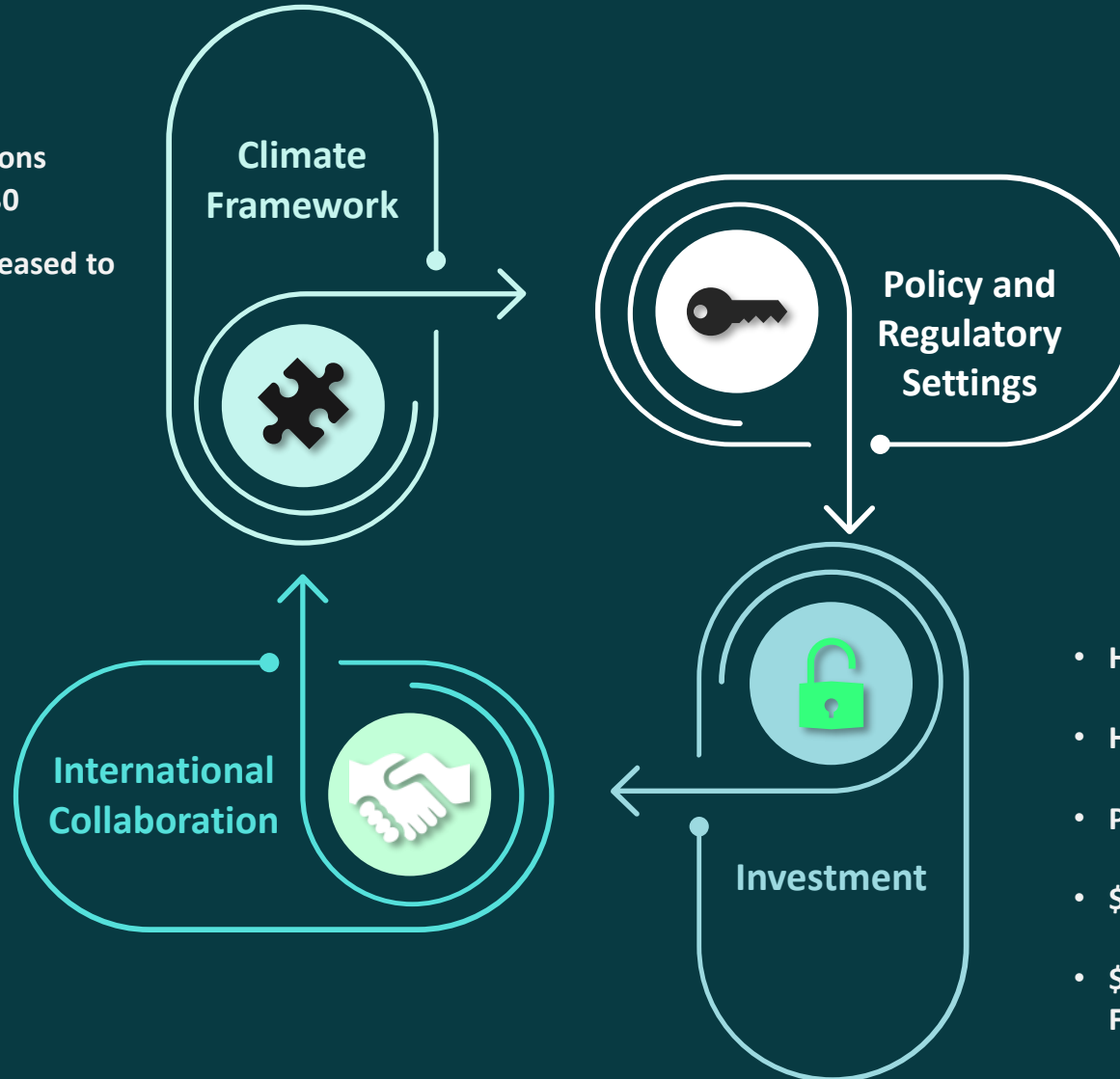


**Largest**  
producer  
of lithium in the world

# Growing Australia's hydrogen industry

- Net zero by 2050
- Greenhouse gas emissions reduced by 43% by 2030
- Renewable energy increased to 82% by 2030
- Net Zero Authority

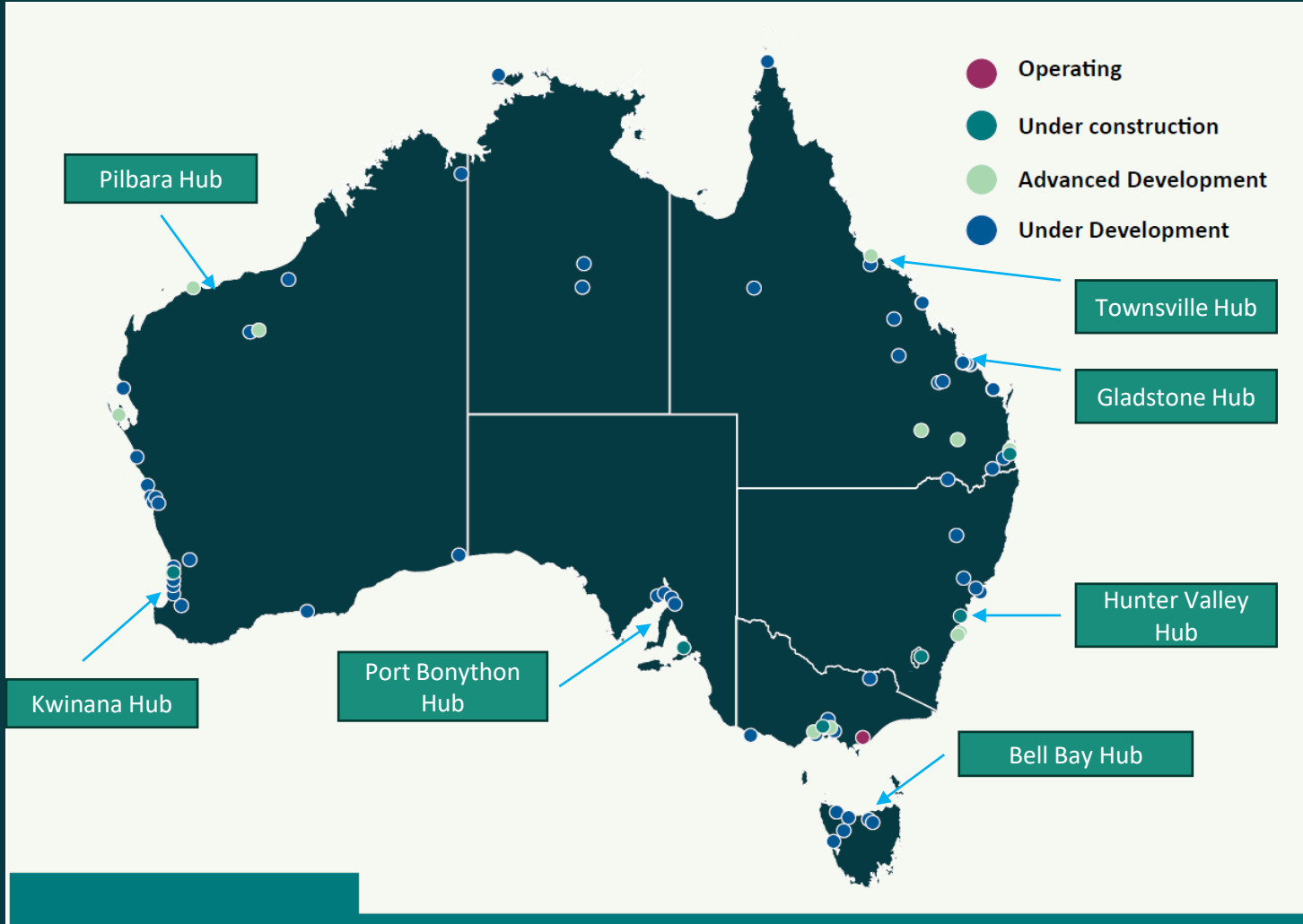
- Eight Clean Energy Partnerships
- Multilateral forums including:
  - Mission Innovation
  - Clean Energy Ministerial
  - IPHE
  - Breakthrough Agenda.



- National Hydrogen Strategy
- Guarantee of Origin Scheme
- Legal frameworks review
- National Hydrogen Infrastructure Assessment

- Hydrogen Headstart (\$2 Billion)
- Hydrogen Hubs (\$500+ Million)
- Project pipeline \$230-300 Billion
- \$20 billion Rewiring the Nation
- \$1.9 billion Powering the Regions Fund

# Australia's Hydrogen Projects



- 100+ announced clean hydrogen and hydrogen derivative projects in Australia
- 15+ projects reached final investment decision, currently only 2 larger than 10MW.
- \$230B - \$300B investment pipeline
- 7 Hydrogen Hubs - will significantly increase production capacity

# Australia's National Hydrogen Strategy

## National Hydrogen Strategy:

- Provides a framework for governments and industry to work together to build Australia's hydrogen industry.
- Supports all production pathways to producing clean hydrogen – using renewable energy, or fossil fuels with CCUS.



# Australian Government Support: *Hydrogen Headstart*

## Hydrogen Headstart Program:

- **AU\$2 billion** to accelerate the development of Australia's hydrogen industry
- Designed to **bridge the gap** between the market price for renewable hydrogen and production costs
- **Production credit** for up to ten years – agreed price per kilogram of hydrogen
- **Shortlisted projects announced early 2024.**



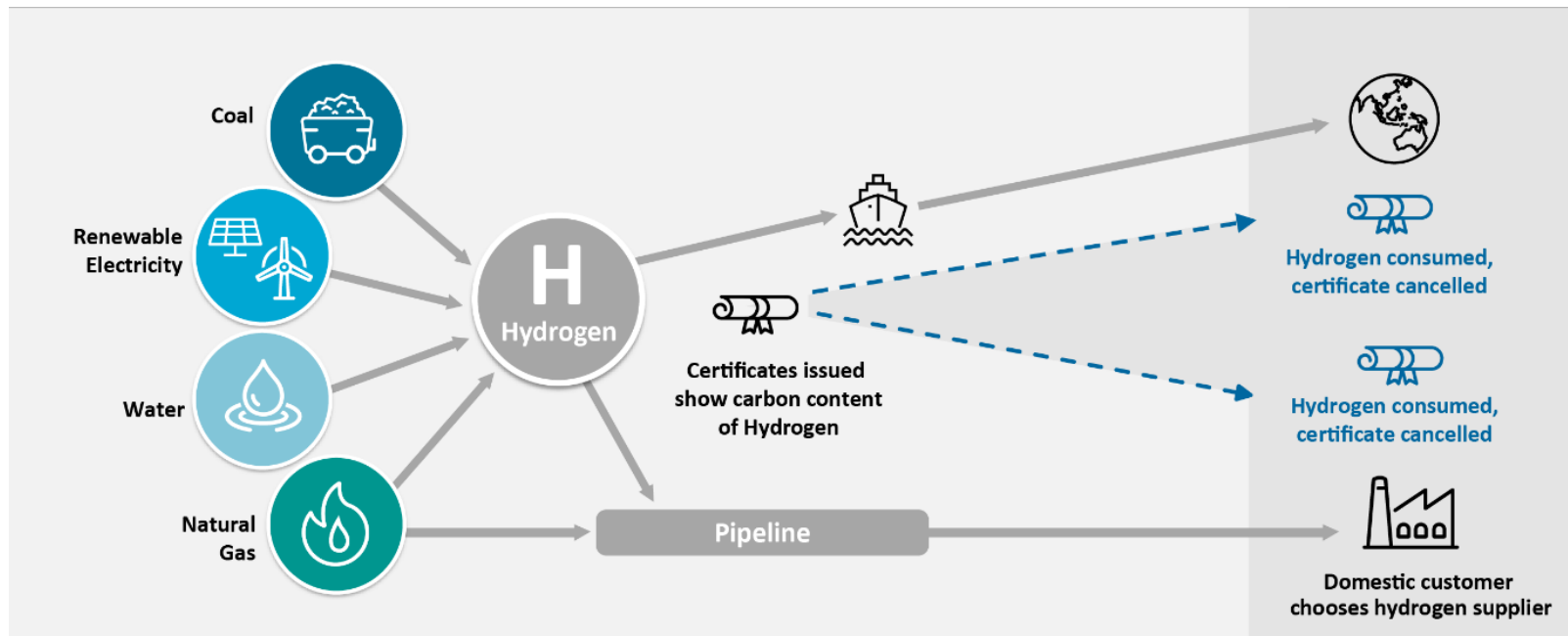
# Australian Government Support: *Hydrogen Hubs Initiative*



- Over AU\$500 million allocated for hydrogen hubs across Australia.
- Hubs bring together hydrogen users, producers and potential exporters to accelerate industry growth.

# Guarantee of Origin Scheme

A product-based emissions accounting framework that measures and tracks emissions and associated information across the value chain.



- \$38.2M committed to develop scheme
- Aligned with international standards to support global trade
- Provides transparency to industry on emissions and energy source used



# International Collaboration



## Germany:

- Australia-Germany Hydrogen Accord
- HyGATE
- HySupply



## Singapore:

- Green Economy Agreement
- MoU on Low Emissions Technologies and Solutions



## Japan:

- Japan-Australia Energy and Resources Dialogue
- Japan-Australia Partnership on Decarbonisation Through Technology



## United Kingdom:

- Australia-UK Clean Technology Partnership



## Republic of Korea:

- Australia-ROK Low and Zero Emissions Technology Partnership



## United States:

- Climate, Critical Minerals and Clean Energy Transformation Compact
- Net Zero Technology Acceleration Partnership



## The Netherlands:

- MoU on Cooperation in the Field of Hydrogen



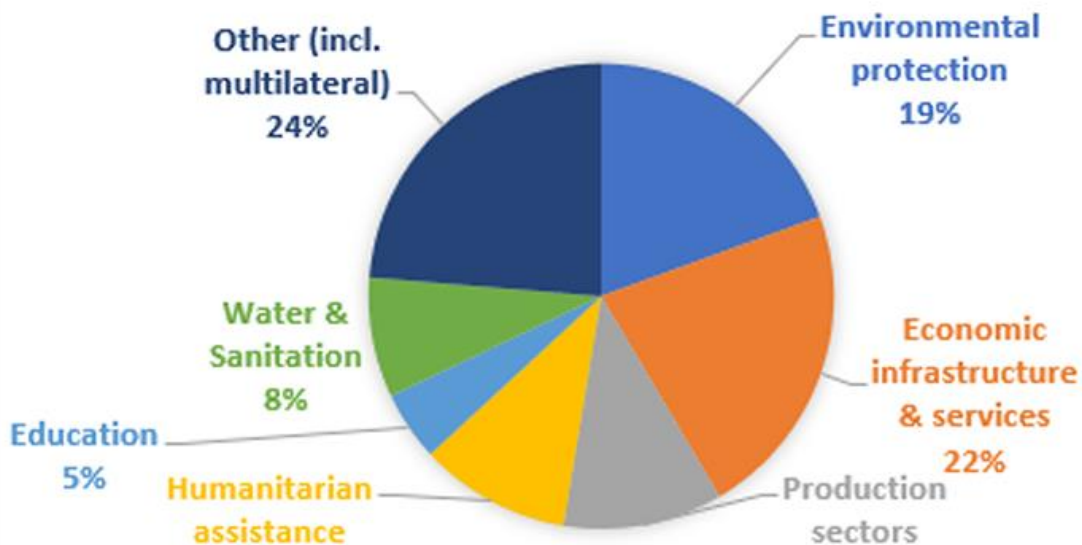
## India:

- Letter of Intent on New and Renewable Energy Technology
- Green Hydrogen Taskforce
- Solar Taskforce

# Climate Change Development Cooperation



**TOTAL CLIMATE FINANCE 2021-22  
BY SECTOR**



Climate Finance Provided and Mobilised	2020-21 Actual \$m
<b>Recipient country/region</b>	<b>\$million</b>
Pacific Islands bilateral and regional (includes Papua New Guinea)	223.7
Southeast and East Asia	56.5
South and West Asia	13.2
Other Asia#	33.8
Africa and the Middle East	9.5
Global programs (including multi-regional) and core contributions to multilateral organisations#	111.5
<b>Sub-total: ODA Climate Finance - Grants and Loans (per ODA Statistical Summary)</b>	<b>449.2*</b>
Non-ODA Grants and Loans	64.8
Private Climate Finance Mobilised	126.2
<b>TOTAL</b>	<b>640.2*</b>



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