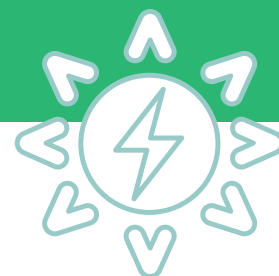
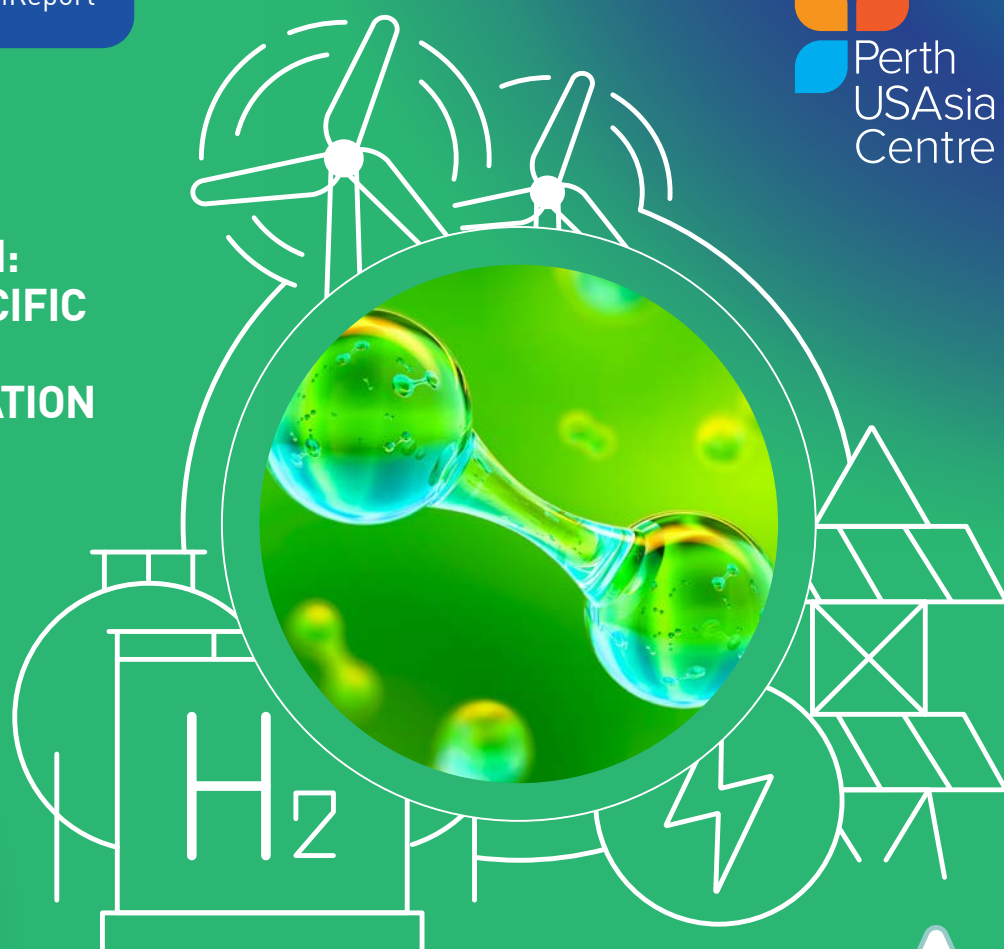




## FUELLING COOPERATION: THE INDO-PACIFIC HYDROGEN TRANSFORMATION

AUGUST 2021



### EXECUTIVE SUMMARY

**Integrating hydrogen into energy systems has become a major international priority.** The principal objective is to exploit hydrogen's potential to unlock greater renewables penetration, and thus avoid the most extreme effects of climate change. However, energy security, technology leadership, and infrastructural concerns also support the hydrogen agenda.

**Many governments are seeking to establish hydrogen in the Indo-Pacific energy system.** The leading players – including Japan and Korea – are from the region and have led the past development of new energy markets. Extra-regional players, principally from Europe, are also drawn to the Indo-Pacific's huge hydrogen opportunities.

**The creation of an integrated Indo-Pacific hydrogen market would transform regional geopolitics.** It would help avoid the worst effects of climate change. It would also sustain greater levels of energy security and regional interdependence. New winners and losers will emerge from new structures of energy production, consumption, and trade. The strategic effects of a hydrogen transition are likely to be overwhelmingly positive for Australia and its regional partners.

**Australia can become a regional hydrogen superpower.** It has the natural resources and technical capacity for large scale production of 'green' hydrogen, and is an established and reliable energy supplier to the region. Indeed, Australia's emergence as a hydrogen exporter is essential to create an integrated regional market that delivers shared environmental, economic, and strategic dividends.

**However, international cooperation will be essential to create an Indo-Pacific hydrogen market.** The major priorities including mobilising investment in dedicated energy infrastructure, establishing regional standards, and sharing the benefits and risks when creating cross-border value chains.

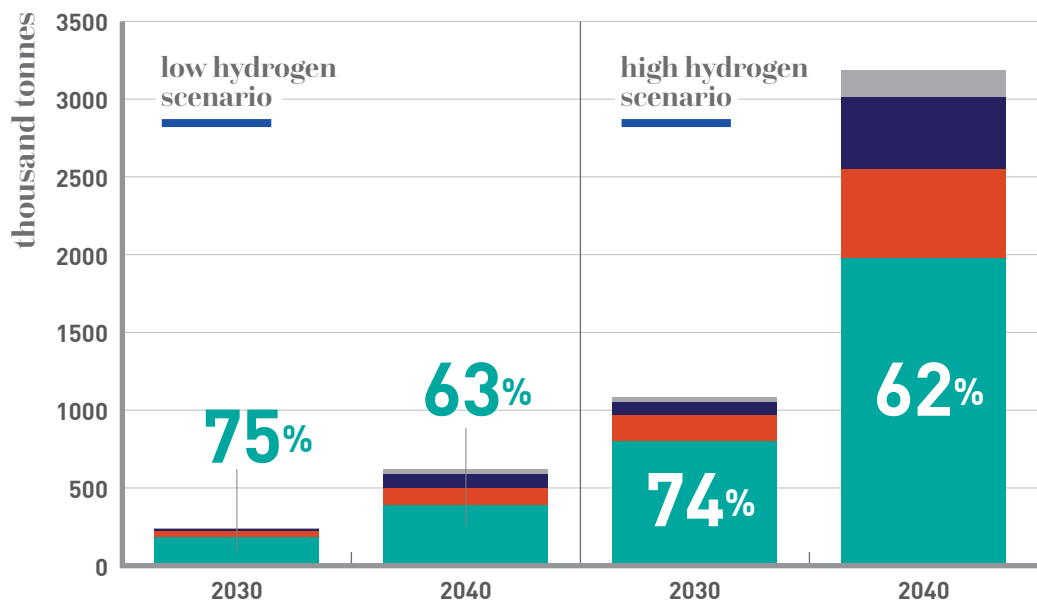
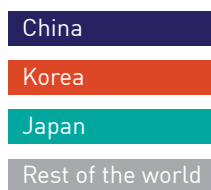
**There are several steps Australia can now take to help realise the Indo-Pacific hydrogen vision.** At home, governments should prioritise accelerating domestic hydrogen development, with a focus on export-oriented green hydrogen projects. Internationally, it will be essential to work with partners to establish regional platforms for trade, investment, and energy system integration.

## POLICY RECOMMENDATIONS

- 1 Establish specific hydrogen targets**  
 Australia should signal its hydrogen potential to regional partners by setting clear targets for future growth in production and export levels.
- 2 Develop a value chain pilot using Australian green hydrogen with Indo-Pacific partners**  
 Australia should advance commercialisation pathways for Australian green hydrogen by working with Indo-Pacific partners on a green hydrogen value chain pilot project.
- 3 Strategically elevate hydrogen ties with Japan, Korea, and Germany**  
 Australia should elevate emerging hydrogen relationships with Japan, Korea, and Germany by incorporating regular intergovernmental policy dialogues and greater involvement of private sector players.
- 4 Pursue leadership on hydrogen in international fora**  
 Australia should pursue leadership in multilateral institutions such as the International Energy Agency, G20 and Hydrogen Energy Ministerial to better promote its hydrogen agenda.
- 5 Develop a public-private international hydrogen cooperation body**  
 Australia should follow the lead of countries such as Germany and Korea and develop a public-private body to engage on regional hydrogen market development.
- 6 Prioritise hydrogen within existing Indo-Pacific infrastructure efforts**  
 Australia should respond to the massive need for new hydrogen infrastructure by prioritising hydrogen developments in existing Indo-Pacific infrastructure investment vehicles.

### AUSTRALIA'S HYDROGEN EXPORT MARKETS, LOW- AND HIGH-PENETRATION SCENARIOS, 2030 AND 2040

#### LEGEND:



#### About the author



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From 2015 to 2017 he worked at the International Peace Institute in New York City, editing its flagship Global Observatory publication and contributing to programs on countering and preventing violent extremism. He has also consulted for international political risk firms active in Australia.

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