



# LETA

Low Emission Technology Australia

## The potential role for coal in reaching carbon neutrality

Energy Security with Decarbonisation Symposium 2025  
Toranomom Hills, Tokyo  
5 September 2025

# Who is LETA

Low Emission Technology Australia (LETA) is a not-for-profit investment fund that accelerates the development and large-scale deployment of technology solutions to reduce and remove greenhouse gas emissions from critical industries like steel, cement and power generation.

# Our Members

LETA was established by Australia's black coal producers in 2006, and these companies form our Full Member category. To date, LETA's members have been Australia's coal producers, with **92%** of Australian black coal production coming from LETA Members.

The interests of our Full Members are represented by the directors on the LETA Board. Companies represented on LETA's Board include the following:



## Our mission

The work of LETA enables a faster, cheaper pathway to carbon neutrality and a future of coal driven carbon stewardship - where emissions are reduced or removed from every step in the lifecycle of hard-to-abate industries, no matter where in the world they occur.

## Our approach

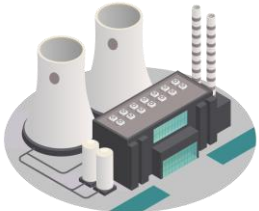
LETA works with our members, key international trading partners such as Japanese industry, governments and research organisations to accelerate the development and deployment of new technologies that will help meet carbon neutral goals.

# Achieving carbon neutrality in the coal value chain

## CO<sub>2</sub> Capture

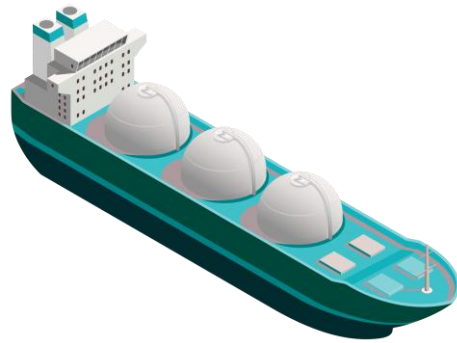
CO<sub>2</sub> capture decarbonises:

- Hard to abate industries including steel and cement
- power generation



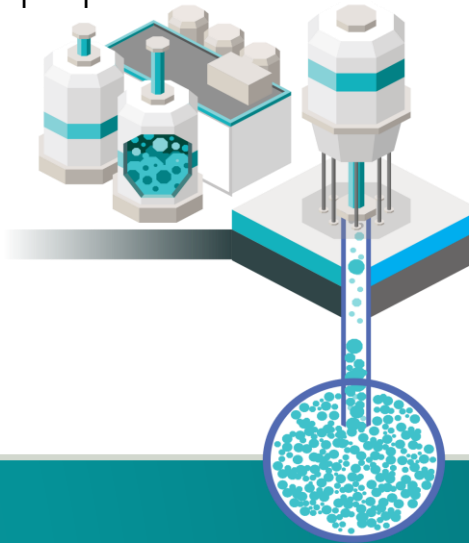
## CO<sub>2</sub> Transport

Transport of CO<sub>2</sub> to local and regional storage locations



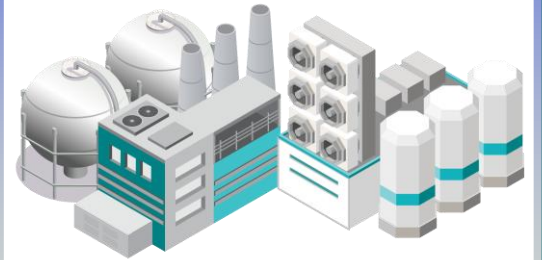
## CO<sub>2</sub> Utilisation & Storage

Offshore and onshore storage, or recycling the CO<sub>2</sub> for additional purposes



## Clean Energy Production

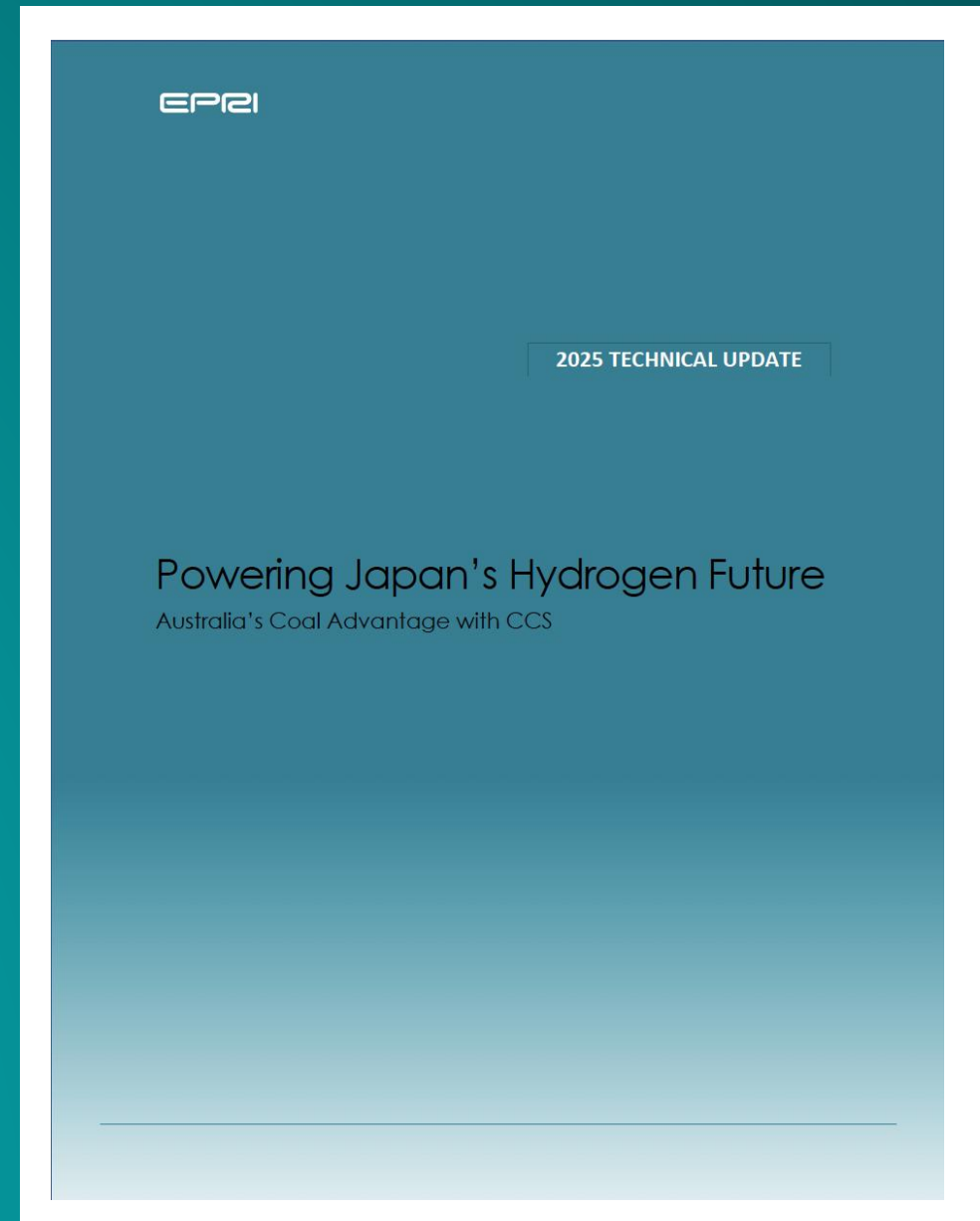
Production and usage of clean fuels such as hydrogen and ammonia





New report:

# Powering Japan's Hydrogen Future: Australia's Coal Advantage with CCS



# Key takeaways

1. Competitive production of low-carbon hydrogen in Japan from imported Australian black coal with captured CO<sub>2</sub> for ship transport and geological storage.
2. Levelised cost of hydrogen under \$4 USD/kg (including CO<sub>2</sub> transport & storage)
3. Environmental performance meets current Japanese subsidy guidance on carbon intensity and is classified as clean
4. Market and deployment readiness: conditions are positive, provided near term action is taken
5. This method does not rely on hydrogen shipping or ammonia cracking
6. Large scale deployment is reliant on permitting, bilateral arrangements under the London Protocol

# Future potential

- Japan has an ambitious hydrogen supply targets;
  - 3 million tonnes per year by 2030
  - 12 million tonnes by 2040
  - 20 million tonnes by 2050
- A build program of twelve plants at the reference scale would meet Japan's 2030 hydrogen supply target.
- The production method is proven and can be done competitively alongside other alternatives such as renewables and natural gas.

どうもありがとうございます。

スキャンしてレポートにアクセスします



Scan QR code to access report

LETA への参加方法についてはスキャンしてください



To join LETA's network of collaborators

どうもありがとうございます。



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