

Session 7: Infrastructure: Can Australia propel the hydrogen future?

2023 Frontier Advisors Annual Conference

Chair:



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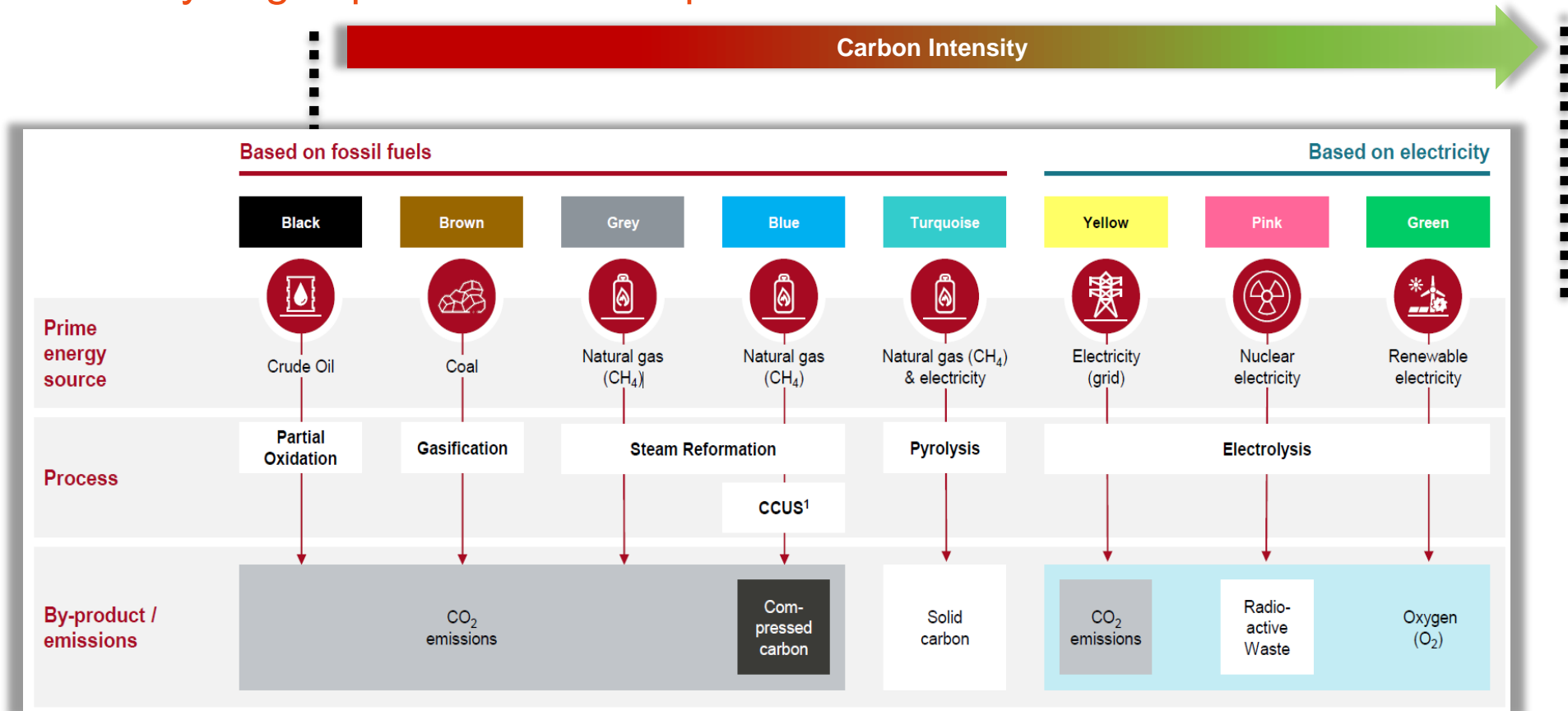


Ella Hurley

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BlackRock

Evolution in hydrogen production

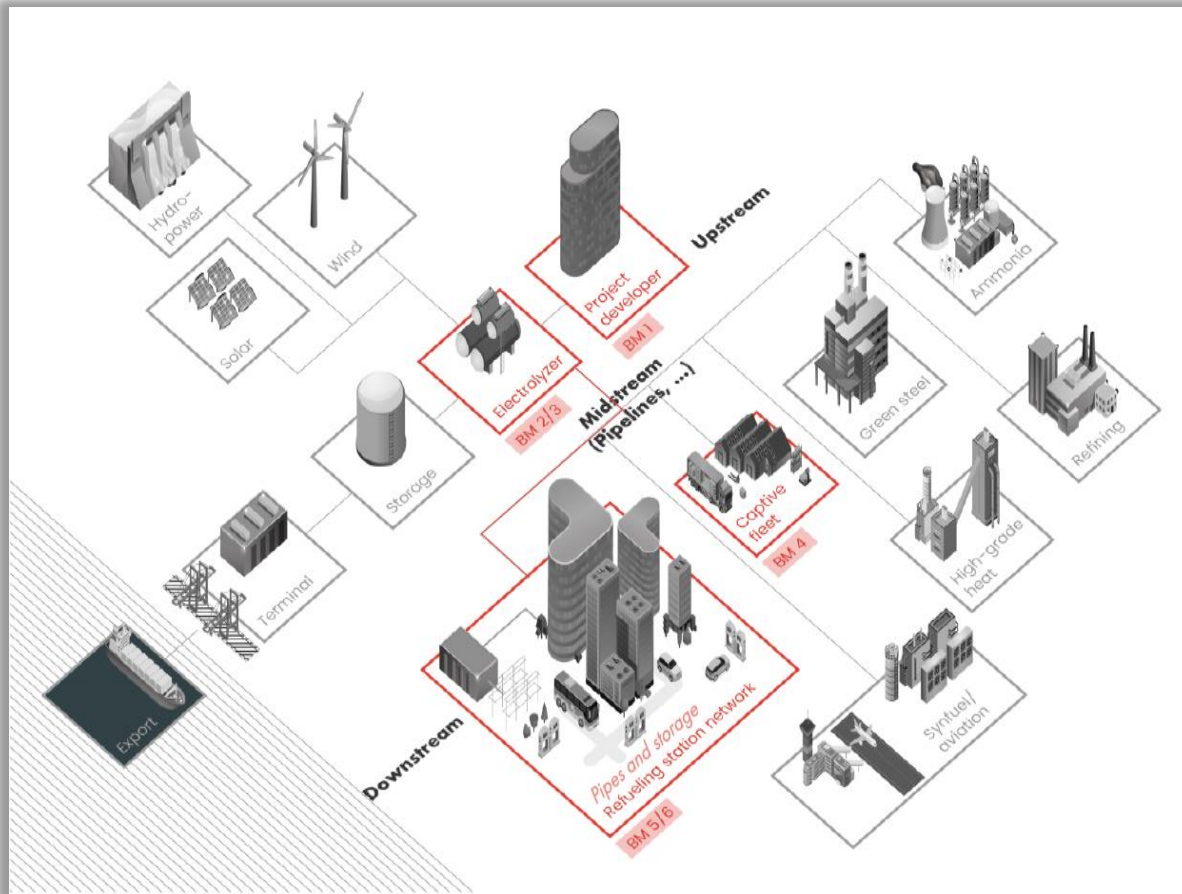
Green hydrogen production is the pinnacle for net zero emissions



Source: Manager data.

Hydrogen infrastructure and demand drivers

Significant need for infrastructure to support extensive demand application

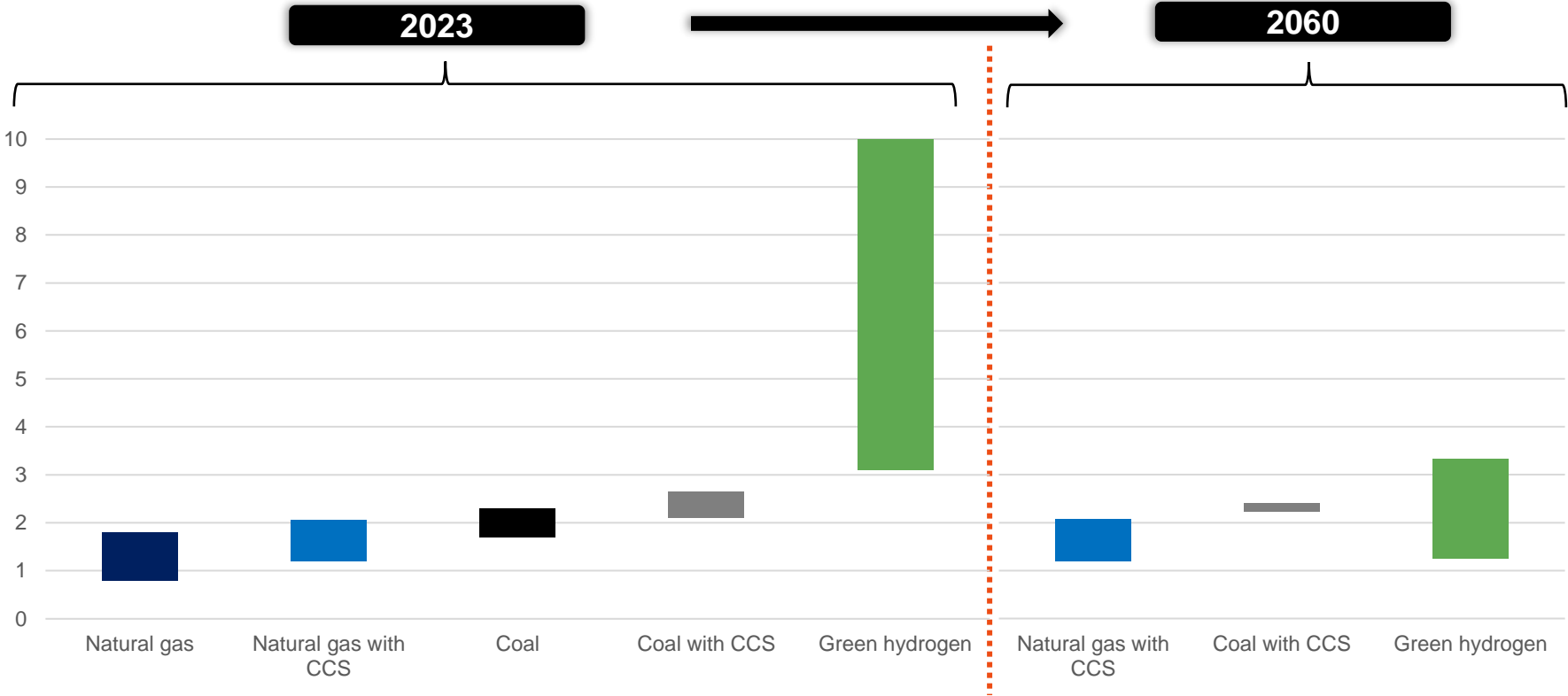


Scenario	Demand
	Green electricity or green hydrogen
	Biogas distribution or green hydrogen
	Hydrogen fuel cell vehicles (HFCV)
	Green hydrogen fuel blend
	Ammonia or green hydrogen blend

Source: Manager data; National Hydrogen Infrastructure Assessment: Final Report, ARUP.

Fossil fuel and green hydrogen cost curves

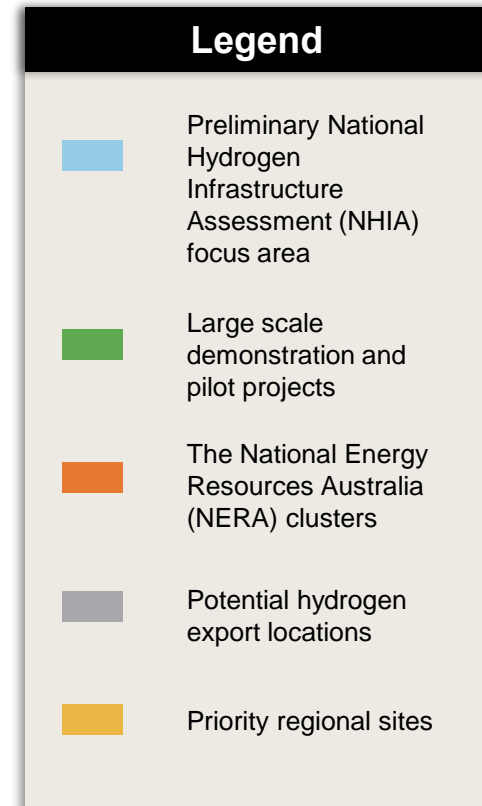
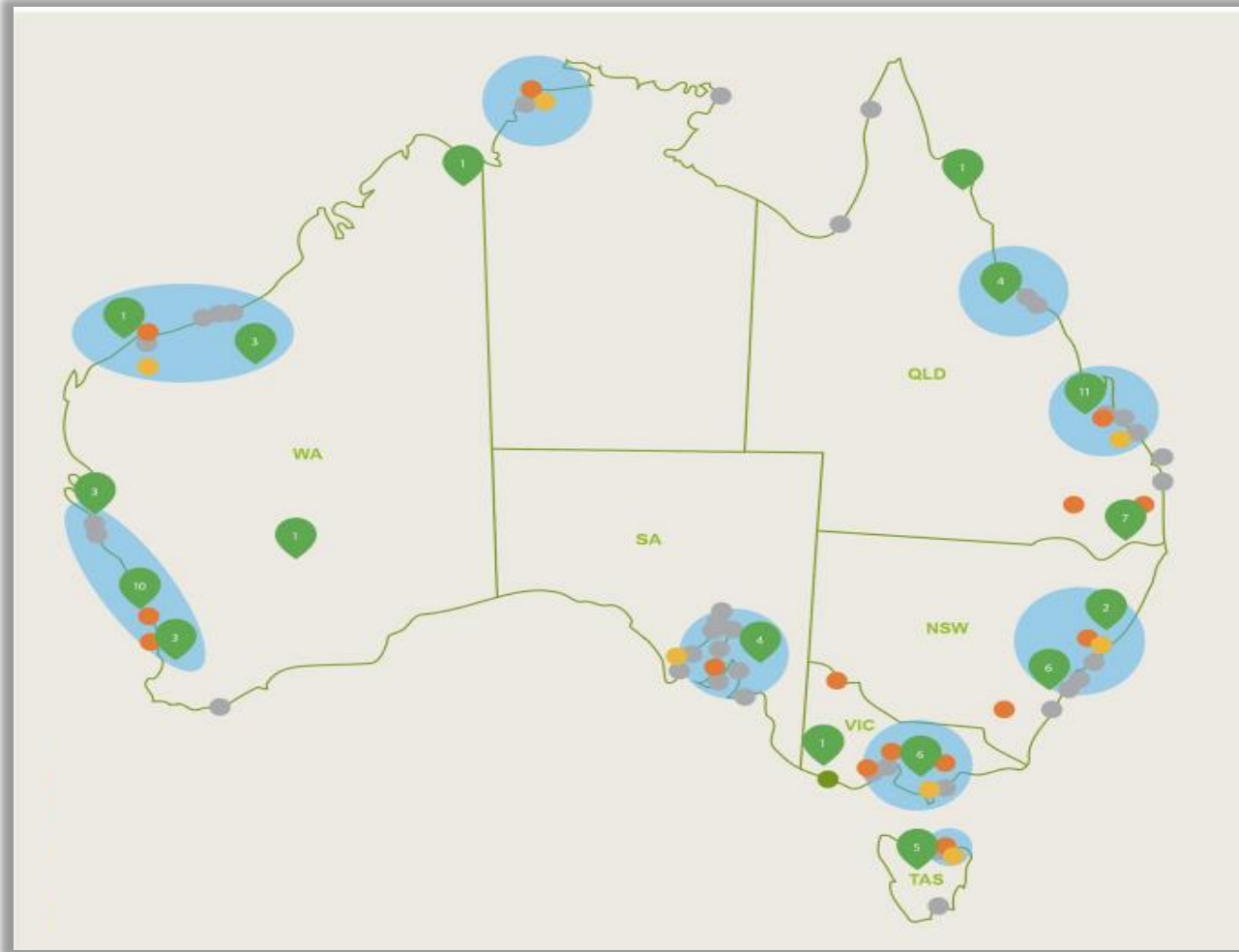
Mass adoption and scale may lead to reduction in cost of green hydrogen production over the long-term



Source: International Energy Agency



Designated regions for Australian hydrogen industry



Source: National Hydrogen Infrastructure Assessment: Final Report, ARUP.

Hydrogen arms race has begun

Several markets have announced substantial subsidy programs to support hydrogen

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Clean Transportation

**Can the US\$369 billion
inflation reduction act unlock
a green hydrogen economy?**

Hydrogeninsight

**Federal budget includes A\$2bn for
new Hydrogen Headstart programme
'to bridge the commercial gap for
early-stage projects'**

REUTERS

**Japan to invest US\$107
billion in hydrogen supply
over 15 years**

ZAWYA
BY REFINITIV

**Saudi Arabia's hydrogen
strategy targets \$36bln of
investments by 2030**



Investor takeaway

- **Green hydrogen:** while still nascent, will have a crucial role to play in the future in the decarbonisation of the Australian and industrial economies.
- **Australia is well placed:** to develop a future hydrogen industry, given ample wind and solar resource, government support, expertise and foreign interest.
- **Government subsidy:** an initial A\$2 billion Headstart scheme will support select pilot programs to progress to commercial operations.
- **ESG:** Indigenous land use agreements, water usage (electrolysis), and availability of labour (re-training from resources/engineering sectors) are key considerations.
- **Investment opportunities:** range from upstream (renewables, processing), mid-stream (pipelines) to downstream (auto fleets, storage) to roads, export terminals.
- **Interested investors:** Frontier is tracking the development of green hydrogen eco-system and is well positioned to assist investors with their interest.



Thank you for joining us.

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