

MYTH VS FACT

CLEAN HYDROGEN

✘ Blue hydrogen is not 'clean'

A report from DNV estimated that more than 90% of carbon dioxide can be captured from a blue hydrogen plant with optimal settings. ✓

The report's authors stated: *"Blue hydrogen is a sustainable, useful, and necessary technology in the energy transition to mitigate climate change."*

DNV also found that the greenhouse gas (GHG) emissions from blue hydrogen production met the threshold for low-carbon classification by both the World Business Council for Sustainable Development (WBCSD) and European Union (EU).

✘ Blue hydrogen isn't necessary because we already have green hydrogen

In a speech to the National Press Club in February 2020, Special Advisor to the Australian Government on Low Emissions Dr Alan Finkel AC (then Chief Scientist) stated that blue hydrogen provided a *"safeguard"* against the potential resource limitations faced by green hydrogen produced using renewables. ✓

"[If] hydrogen is produced exclusively from solar and wind electricity, we will exacerbate the load on the renewable lanes of our energy highway," he said.

Blue hydrogen also offers the most cost-effective method of production, particularly as the hydrogen industry continues to build scale.

Current costs for blue hydrogen are reported by the Global CCS Institute to be approximately USD2/kg, compared to USD2.3/kg to USD7.70/kg for green hydrogen.

✘ Blue hydrogen is an excuse to sustain fossil fuel use

A range of energy solutions will form part of our transition towards a lower carbon future, including both blue and green hydrogen. ✓

The IEA notes: *"Clean hydrogen, being produced from renewables, nuclear, or fossil fuels with CCUS, can help to decarbonise a range of sectors, including long-haul transport, chemicals, iron and steel, where it is proven difficult to reduce emissions."*

"Hydrogen can also help to improve air quality in cities and improve energy security. Hydrogen can also support the integration of variable renewables in the electricity system, being one of the very few options for storing electricity over days, weeks or months."



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