

Three policy areas the hydrogen industry needs to accelerate in 2021

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The inauguration of Joe Biden as US President is likely to cement the global shift to sustainable energy use. Biden's ambitious \$2 trillion climate proposal includes an emissions-free electricity grid in 15 years and a target of net-zero emissions across the entire economy by 2050. Part of his climate proposal includes using renewables to produce carbon-free hydrogen at the same cost as that from shale gas.

This reinforces the hydrogen opportunity – hydrogen's time has most definitely arrived and now we need to make it happen at scale. In Australia, we have a goal to get hydrogen under \$2 per kilogram. We can do this if Australian policy settings match the pace of industry development.

Here are three policy areas the hydrogen industry needs to accelerate in 2021.

Certify Australian hydrogen

Hydrogen can be produced a range of different ways, with the current main method of production relying on fossil fuels.

However, the future of hydrogen is clean and green.

As the world transitions to powering economies with clean energy, more and more consumers will want to know how the hydrogen they purchase has been produced. Australia needs a certification scheme to develop a credible, valuable and differentiated hydrogen product for our international partners.

The Australian Government is currently engaging with a number of countries to develop a hydrogen certification scheme that is consistent across jurisdictions. The Australian Hydrogen Council has been working to support the Government behind the scenes. We are keen to see a certification approach locked down in 2021 so that producers and consumers can have investment certainty on this front.

Put social licence into practice

While hydrogen has been produced and transported in large quantities as a chemical and industrial gas in Australia for many decades, public understanding of hydrogen's role, both now and in the future, is still relatively low.[1]

The large-scale development of clean and green hydrogen – and, in fact, the anticipated growth in renewable electricity infrastructure regardless of hydrogen – brings a new requirement to engage communities about land and water use, and about the safe use of hydrogen for a range of purposes.

The emerging hydrogen industry also reflects regional opportunities, and we can expect Australian regions to be keen to bring new jobs and skills to their communities.

With over 56 hydrogen projects announced across Australia, we can see that the emerging industry has a clear responsibility to engage with communities about our industry and its opportunities, especially communities close to hydrogen clusters and hubs, from Bell Bay in Tasmania up to the Daintree in Far North Queensland and over to Denham in Western Australia.[2]

The Australian Hydrogen Council has developed a framework for the industry to work with communities and manage natural resources responsibly. We look forward to sharing this with people in 2021 and in working with our stakeholders to create and deliver a range of further materials to support consumers and communities.

Keep our eye on net zero

Our trading partners are laying out plans to achieve net zero and are investing in the technologies they will use to get there.

This represents both risk and opportunity. Risk because Australia is a major exporter of coal and natural gas. Opportunity in the possibility of hydrogen and hydrogen-enabled products – such as green steel – being major new Australian exports.

To get there, we need fit-for-purpose government policy to match the ambitions of industry.

This means we need to understand what's at stake and to plan accordingly. The Australian Federal Government's Technology Investment Roadmap is a start, with a strategy to accelerate development and commercialisation of low emissions technologies. The Roadmap has pegged hydrogen as a priority technology for strong economic and emissions reductions outcomes.

However, we need more. We need to come to grips with the scale of the task ahead and to plan a response that manages risks and provide a clear investment path. This is about more than hydrogen; it is about a national response to the energy transition.

The energy transition requires institutional change as well. For example, regulatory systems built for incremental modification are not well-suited to new means of thinking about energy and its value.

This needs to be the year that Australia shows the world its seriousness in investing in its economy and its emerging hydrogen industry.

The Australia Hydrogen Conference will run the 24-25 May 2021. Full details here.

References

[1]https://arena.gov.au/knowledge-bank/the-australian-publics-perception-of-hydrogen-for-energy/

[2]https://portal.ga.gov.au/persona/hydrogen

