

Province Resources

Market capitalisation: \$200m | Employees: 10 | Est: 2020

When Province Resources shifted from minerals exploration to also focus on green hydrogen, Managing Director David Frances says it was with full knowledge that the industry itself is still green.

Frances estimates it will be 10 years before the sector really starts to “hit its straps”.

But with its HyEnergy project in Carnarvon unlikely until to start production until 2027, the ASX-listed company is powering ahead with planning and approvals and expects the technology will catch up.

“As we move through the project, technology is changing,” Frances says.

“The electrolyzer side is changing, so we’re not pinning our hopes on any one technology as yet; we’ll sort of look at those as the project develops.”

The \$22 billion, 8-gigawatt project in Carnarvon in WA’s Gascoyne region is projected to produce 500,000 tonnes of green hydrogen annually for domestic and international markets.

About 70 per cent of its energy is expected to come from about 1500 wind turbines, with the remaining 30 per cent generated from a ~6000-hectare solar farm.

“Unlike mining projects, it’s a rather large project capex-wise, but also longevity,” Frances explains. “Mining and oil and gas tend to have finite resources or reserves . . . whereas as long as the wind is blowing and the sun shining and the ocean has got water in it, you can make green hydrogen.”

He says the carbon-intensive nature of grey hydrogen, which makes up about 95 per cent of existing global output, and the difficulty of capturing and storing carbon from the blue hydrogen process at mass means “green hydrogen really is the only one that works”.

“It really is the holy grail of fuel sources,” he says.

While the technology of creating hydrogen has been around for 100 years, transporting it safely — and at scale — is the challenge.

Province is working with partner Global Energy Ventures to investigate compressed hydrogen, which is emerging as the cheapest and most efficient way to transport the fuel over the distances required to reach end markets such as South Korea and Japan, and would be piped offshore to a ship-loading buoy — negating the need for a port.

It’s also looking at the options of liquid hydrogen and converting hydrogen to ammonia for bulk transport.

“As technology catches up, which it will, it’s



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liquid hydrogen; so within the next 10 years, liquid hydrogen is probably going to be feasible,” Frances says.

Frances describes the global spotlight on hydrogen, fuelled by high-profile project announcements from major resources companies, as following a similar path to the evolution of technology disrupters such as electric vehicles, which was driven by Europe.

Once again, he says, the EU is leading the charge with green hydrogen a major part of the

region’s 2050 emissions reduction targets.

However, Australia has a major opportunity to harness its renewables generation capacity to be a world leader in green hydrogen. Initiatives such as the WA Government’s proposed changes to the land tenure regime to support green energy projects is a welcome start, Frances says.

“With all of these things, they tend to tread water for a long time and then when the pendulum swings, things tend to go exponential,” he says. ●