

Latest News

Fortescue Future Industries and AGL Energy aim to repurpose coal-fired power plant sites to generate green hydrogen

Dec 8, 2021

Fortescue Future Industries (FFI) and AGL Energy (AGL) have agreed to undertake a feasibility study to repurpose infrastructure at the Hunter Valley's Liddell and Bayswater coal-fired power stations to generate green hydrogen from water, using renewable energy.

Today's announcement reinforces Australia's potential to become a global green hydrogen superpower, in the process creating thousands of local direct and indirect jobs and strengthening economies in regional Australia.

The Liddell and Bayswater power stations currently account for over 40 per cent of New South Wales' carbon dioxide emissions, according to 2019 National Greenhouse and Energy Reporting data.

Successful repurposing of these sites will supercharge NSW to meet its target of halving its emissions by 2030, and prove the role of green hydrogen in decarbonising and demethanising energy and industry here in Australia.

The Hunter Valley Industrial Clean Energy Hub is expected to support thousands of jobs once complete, in addition to creating a new regional domestic and export industry in green hydrogen.

FFI Founder and Chair, Dr Andrew Forrest AO, said, "FFI's goal is to turn regional Australia into the global green energy heartland and create thousands of jobs now and so many more in the future.

"Repurposing existing fossil fuel infrastructure with forward looking companies like AGL to create green hydrogen to help power the world, is the solution we have been looking for.

"I wish to thank my forward-looking friend AGL Managing Director and CEO, Graeme Hunt, who was the first iron ore industry leader to declare my then embryonic iron ore company, Fortescue Metals Group, as a very real future player in the highly competitive iron ore industry – thank you Graeme for exercising the same vision today.

"Green hydrogen is the only true zero-carbon, zero-methane fuel – every other type of hydrogen requires the burning of fossil fuels.

“It is a practical, implementable solution that can collapse emissions and create strong economies worldwide if leaders like Graeme are fully supported by global investors and local government alike.

“This is another important step in turning the corner once and for all, to implement the technologies carbon emitters, like us, to reach net zero,” Dr Forrest said.

Pending the feasibility study's outcomes, initial renewable electricity production through new wind and solar could be 250MW, generating 30,000 tonnes of green hydrogen per year or enough for a hydrogen fuelled truck to drive to the moon and back five times.

Ultimately, due to the scalability of electrolyzers, estimates suggest production will be in the gigawatts. Power for the electrolyser will come from new wind, solar, and supported by new pumped hydro and batteries, generated by FFI, AGL and other parties.

The feasibility study forms part of the non-binding Memorandum of Understanding between FFI and AGL will also assess whether green hydrogen can be used to fuel co-located industries, in addition to export options.

Mr Hunt said, “It's clear that green hydrogen has a critical role to play in our future energy mix and we are excited to explore this proposed development which will showcase AGL's generation expertise alongside FFI's leading development of green hydrogen in Australia.

“Fortescue Future Industries is leading the charge with the development of green hydrogen in Australia and abroad and I am looking forward to working with Dr Andrew Forrest and his brilliant team. I have seen first-hand what extraordinary results organisations led by Dr Forrest can achieve on the back of the enthusiasm he brings to achieve a bold future vision.

“As early investors in wind and other renewables, we want to continue our long history of support for the development of new technologies, including Australia's emerging hydrogen industry. The proposed development plays a significant role in AGL's plans for an integrated industrial ‘Hunter Energy Hub’ which would be powered by clean energy, delivered through grid-scale batteries, solar thermal storage, wind, pumped hydro and the co-location of industry,” Mr Hunt said.

FFI Chief Executive Officer Julie Shuttleworth AM said, “FFI's collaboration with AGL is an exciting opportunity to explore how to harness existing infrastructure in the Hunter Valley region, fast tracking the production and use of green hydrogen.

“Over the next 12 months we will undertake a feasibility study which will identify key operational and commercial projections for the project and enable the development of a production timeline,” Ms Shuttleworth said.

Today's announcement aligns with the New South Wales Government's strategy to develop an innovative and competitive green hydrogen industry that delivers reliable domestic supply of green hydrogen and new export opportunities.



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