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## FED UNI SECURES RESEARCH FUNDING TO TEST HYDROGEN VIABILITY IN LATROBE VALLEY

Federation University Australia researchers have been awarded \$1.5 million in funding to support a hydrogen pilot project that is expected to change the way energy is produced in Australia and internationally.

The *Hydrogen Production Evaluation Data Research Project* will be undertaken by Federation University in collaboration with Australian Carbon Innovation.

The research team was awarded the project, in partnership with Australian Carbon Innovation, to analyse the quality and performance of pilot hydrogen plant currently under construction in the Latrobe Valley.

The aim of the research is to evaluate the scalability of hydrogen production as an alternative to the combustion of brown coal in a traditional boiler to produce energy. Conversion of the coal to hydrogen, coupled with efficient carbon capture and storage (CCS) will ensure that the hydrogen is low in greenhouse gas emissions and will complement intermittent renewable hydrogen.

The power plant, located at AGL's Loy Yang facility, will be the first of its size in the world, constructed to produce and transport clean hydrogen from the Latrobe Valley to Japan.

This approximately \$500 million project is being delivered by a consortium of Japanese companies with the support of the Victorian, Commonwealth and Japanese governments and AGL.

Federation University's Carbon Technology Centre researchers will assess hydrogen samples, by-product composition, production efficiency and energy usage, as well as provide analysis of results to inform testing conditions and decision-making to develop an understanding of hydrogen production from brown coal.

The involvement of Federation University will create expertise and upskilling in this fuel of the future, offering employment and economic development benefits to the local region and potentially the nation.

These opportunities will complement the university's research and teaching in the School of Engineering, Information Technology and Physical Sciences which provides students with skills and training they will need to work in new energy industries of the future.

Hydrogen production at the plant is expected to begin in September this year.

### **Quote attributable to Federation University Deputy Vice Chancellor (Research) Chris Hutchison**

*"The partnership with ACI and J-POWER illustrates how Federation University's regional campuses are ideally placed to support the growth of new Industries that will provide high value local employment for years to come".*

**Quote attributable to Federation University Geotechnical and Hydrogeological Engineering Research Group Director Thomas Baumgartl**

*“Our work in analysing and evaluating the performance of the pilot plant will play a significant role in assessing whether hydrogen energy is a feasible economic path for Victoria.”*

**Quote attributable to Federation University Carbon Technology Research Center Associate Professor Vince Verheyen**

*“The key to hydrogen’s energy future is to bring its price down and make it more available. Federation University is pleased to be the local research partner supporting the world first Hydrogen Energy Supply Chain (HESC) Pilot Project. Gasification is a key HESC component and Federation University looks forward to assisting J-POWER in maximising the value of the gasifier research data.”*

**Quote attributable to Australian Carbon Innovation Chief Executive Officer Brian Davey**

*“This agreement is recognition that regional centres of higher learning such as Federation University, are able to provide world class research services to international companies that will help Gippsland transition to sustainable and low emission fuels for the future”.*