

Major Milestone for Victoria's World-First Hydrogen Project

Latrobe Valley, Victoria: The Hydrogen Energy Supply Chain (HESC) Pilot Project today announced the commencement of operations at both Victorian sites of its world-first integrated supply chain.

HESC Project Partners, together with the Australian, Victorian, and Japanese Governments and distinguished guests today marked both milestone at the gasification and gas refining facility in the Latrobe Valley.

The HESC Pilot is developing a complete hydrogen supply chain, creating hydrogen gas via the gasification of Latrobe Valley coal, transport to the Port of Hastings for liquefaction, and shipment to Japan.

The commencement of the Australian arm of operations, using Latrobe Valley coal to produce hydrogen, is a world first and a great leap forward for the country's ambition to be a key player in the emerging global hydrogen economy.

The HESC Pilot is being delivered by a consortium of experienced industry partners from Japan and Australia including Kawasaki Heavy Industries, J-POWER, Iwatani Corporation, Marubeni Corporation, AGL and Sumitomo Corporation, supported by the Victorian, Australian and Japanese Governments.

Hirofumi Kawazoe, from Hydrogen Engineering Australia (Kawasaki's subsidiary company based in Melbourne), said the progress of the HESC Pilot places Victoria and Australia at the forefront of the global energy transition to lower emissions via the fuel of the future, clean hydrogen.

"The next major HESC Pilot development will be the first shipment of hydrogen between Australia and Japan, aboard the world's first purpose-built liquefied hydrogen carrier, the Suiso Frontier. The eyes of the world will be on Victoria, when shipments of liquefied hydrogen commence this year," Mr Kawazoe said.

The HESC Pilot is proving it is possible to take Latrobe Valley coal and safely produce and transport hydrogen. It is yielding data and insights that feed into the pathway to commercialisation.

Jeremy Stone from J-POWER Latrobe Valley said the HESC Pilot has created approximately 400 jobs across the Victorian supply chain.

"A commercial-scale HESC can leverage and build local skills, potentially creating thousands of jobs. This will include long-term employment in a new clean energy industry for the people of Gippsland," Mr Stone said.

"Latrobe Valley has a proud history powering Australia and today we celebrate the next generation of energy technology in the region."

The Victorian and Commonwealth Governments' CarbonNet Project is developing in parallel with HESC and is essential for the hydrogen pilot's commercialisation. If both projects are commercialised, CO₂ captured during hydrogen production would be transported and stored by CarbonNet using carbon capture and storage (CCS) technology. Rather than entering the atmosphere, CO₂ emissions will be safely stored in rocks 1.5 kilometres beneath Bass Strait, similar to the way oil and gas has been trapped naturally for millions of years.

A commercial-scale HESC project could produce 225,000 tonnes of clean hydrogen annually with carbon capture and storage.

“We estimate our project could reduce CO2 emissions by 1.8 million tonnes per year, equivalent to the emissions of some 350,000 petrol cars, Mr Stone said.

Victorian Minister for Economic Development Tim Pallas says: “This project has the potential to provide clean hydrogen for Victorians, as well as kick-start the emergence of a new, global export industry with huge local jobs and economic benefits.”

The HESC Project will also help develop the infrastructure and highly skilled workers that are crucial ingredients for the emergence of an Australian hydrogen industry.

The HESC consortium thanked its staff and contractors in both the Latrobe Valley and Hastings for their work to date, including overcoming the many challenges COVID-19 presents.

“Without the support of the local communities, the Victorian, Australian and Japanese Governments, this project would not be possible,” Mr Kawazoe said.

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