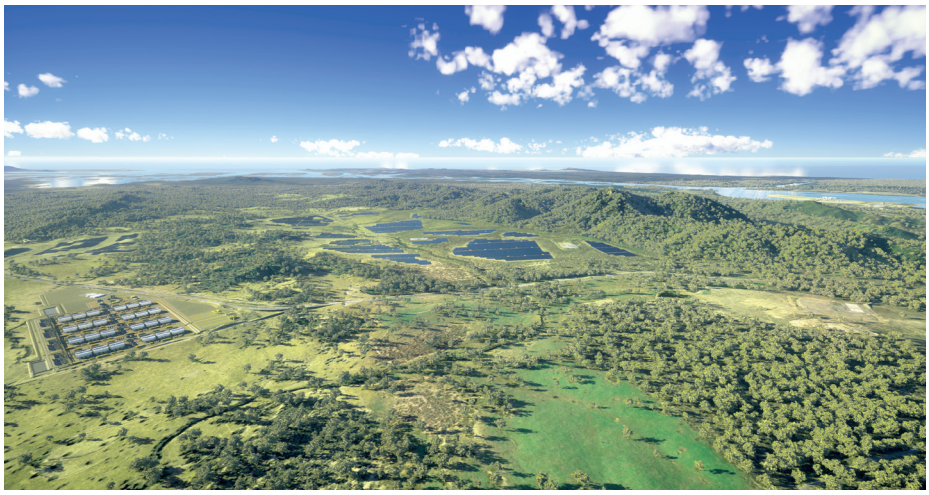
Central Queensland Hydrogen Project



Opportunity at a glance

1,000+ direct and indirect jobs created annually

$8.9 billion increase to Central Queensland economy Gross Regional Product

$9 billion $CQ\text{-}H_2$ will attract around $9b in Foreign Direct Investment

Project phases

	Initial phase	Ultimate phase
Commercial operations commence:	2029	early 2030s
Hydrogen production facility average hydrogen production (tpd)	200	800
Hydrogen production facility installed electrolyser size (MW)	720	2,880

$CQ\text{-}H_2$ acknowledges the First Nations Bailai, the Gurang, the Gooreng Gooreng, and the Taribelang Bunda people as the Traditional Custodians of the land on which we are developing our project.

Australian Government
Australian Renewable Energy Agency

ARENA

The Central Queensland Hydrogen Project ($CQ\text{-}H_2$) is a global collaboration involving domestic and international partners from across the hydrogen supply chain who have come together to develop a global-scale renewable hydrogen project near Gladstone in Central Queensland.

$CQ\text{-}H_2$ will act as the catalyst for Australia's hydrogen future by accelerating the decarbonisation of regional Australia, transitioning the economy away from emissions-intensive activity, anchoring regional economic transition in Central Queensland, and launching a new low carbon export industry.

The $CQ\text{-}H_2$ consortium comprises Japanese foundation companies Iwatani Corporation and Marubeni Corporation, Singapore's Keppel, and Australia's Stanwell Corporation Limited.

Australian chemicals manufacturer Incitec Pivot Limited signed a Memorandum of Understanding in September 2024 with the intent to join the $CQ\text{-}H_2$ consortium in support of renewable ammonia development.

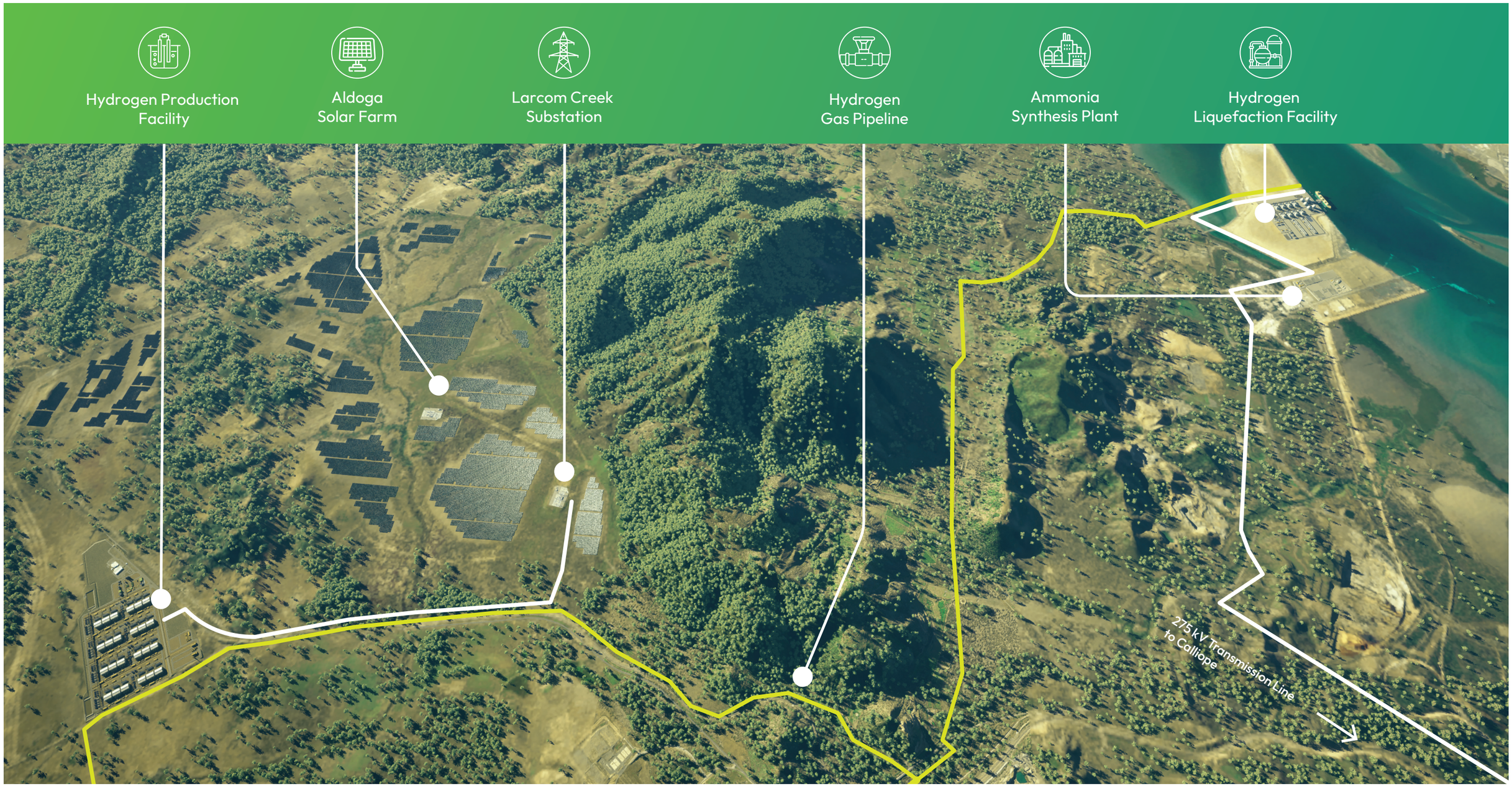
$CQ\text{-}H_2$ is undertaking a Front-End Engineering Design (FEED) study with a commitment of $117 million from government and consortium partners, including $20 million from the Australian Renewable Energy Agency (ARENA) and $15 million from the Queensland Government. The FEED study represents the largest investment in an Australian renewable hydrogen project of its kind to date.

The purpose of the FEED study is to develop the project's technical, commercial, and social requirements to enable a Final Investment Decision (FID) to be made.

The FEED study follows the successful completion of a feasibility study in 2022, supported by ARENA.

$CQ\text{-}H_2$ is on track to reach FID for the Initial Phase in mid-2025.

We aim to deliver renewable hydrogen via its different carriers, to Japan and Singapore, as well as supplying large domestic customers in Central Queensland. Commercial operations are planned to commence from 2029.



Project components

CQ-H_2 will involve the development of a Hydrogen Production Facility, Hydrogen Gas Pipeline, Hydrogen Liquefaction Facility, Ammonia Synthesis Plant, and ship loading facilities at Gladstone Port.

A **Hydrogen Production Facility** will be developed at Aldoga, near Gladstone. The Hydrogen Production Facility will produce hydrogen through electrolysis, using electricity generated from renewable energy sources, such as wind and/or solar power, to split water into hydrogen and oxygen.

A 23km **Hydrogen Gas Pipeline** will connect the Hydrogen Production Facility at Aldoga through the Gladstone State Development Area to the two offtake facilities at the Gladstone Port, the Hydrogen Liquefaction Facility and Ammonia Production Facility.

A **Hydrogen Liquefaction Facility** will be developed at Gladstone Port. The Hydrogen Liquefaction Facility will liquefy gaseous hydrogen before it is made available for domestic or export use.

An **Ammonia Synthesis Plant** will be developed at Gladstone Port. The Ammonia Synthesis Plant will use gaseous hydrogen as a feedstock to produce renewable ammonia. The renewable ammonia produced will be made available for domestic and export use.

Ship loading facilities at Gladstone Port will be developed to facilitate the export of liquid hydrogen and ammonia.

cqh2.energy FACT SHEET: Central Queensland Hydrogen Project | Version 1.3 - Nov 2024

Key objectives

CQ-H_2 is uniquely placed to achieve three objectives for Queensland, Australia and its key trading partners:

1. **Domestic decarbonisation** of hard-to-abate, value-adding, trade-exposed industries
2. **Economic transition** for Central Queensland to create long-term jobs and prosperity in a net zero economy
3. **Creating** a new export industry for Australia to generate revenue and support the decarbonisation of key trading partners.

Project timeline

Capabilities and interests

The CQ-H_2 consortium members have a unique mix of competitive advantages to harness the potential of the project.

	stanwell	Iwatani	Marubeni	Keppel	Incitec Pivot Limited
Renewable Energy	✓		✓		
H_2 Production & Transport	✓	✓	✓	✓	✓
Liquefaction		✓			
Ammonia Supply Chain			✓	✓	✓
Utilisation		✓	✓	✓	✓

General enquiries

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Supporting Queensland's renewable hydrogen sector

We are working with government, industry partners and education providers to support the growth of the renewable hydrogen industry in Queensland.

This includes investigating opportunities to maximise local workforce and manufacturing development, developing skills and training programs, and supporting renewable energy investment.

Supporting long-term benefits for Central Queensland

We are committed to working with the Gladstone community to ensure that the project creates long-term benefits for the region, and will continue to engage with Central Queensland industry and suppliers and continue stakeholder, community, and First Nations engagement activities as we progress towards a Final Investment Decision for our Initial Phase in mid-2025.

CQ-H2
Central Queensland Hydrogen Project

Find out more, scan the QR code