

QUEENSLAND HYDROGEN INDUSTRY

Strategy 2019-2024
PROGRESS REPORT



By 2030, Queensland will be at the forefront of renewable hydrogen production in Australia, supplying an established domestic market and export partners with a safe, sustainable and reliable supply of hydrogen.

Launch
2019



Completion
2024

Unite & Recover

The growth of a Queensland hydrogen industry will play an important role in the state's long-term recovery from COVID-19. The government is supporting the development of the renewable hydrogen industry to drive growth in the state's regions, create jobs and deliver new economic opportunities for Queensland. The Queensland Hydrogen Taskforce has now been established to fast-track the development, production, export and use of hydrogen in Queensland. There is significant investment interest across a diverse range of applications for renewable hydrogen, including transport, remote area power, grid reinforcement, industrial chemistry (green ammonia) and export. Delivering new energy will help grow and power Queensland's industries. It will also strengthen our regions by enabling them to attract new industries and to secure their fair share of the jobs of the future. I look forward to continuing to work with industry to deliver opportunities that strengthen our economy and deliver jobs for Queenslanders.

The Honourable Steven Miles MP
DEPUTY PREMIER and MINISTER FOR STATE DEVELOPMENT



Case study – BOC to deliver a \$3.1 million end-to-end renewable hydrogen project in Queensland

BOC will use renewable power to produce up to 2400 kilograms of hydrogen per month at its Bulwer Island facility in Brisbane.

The Renewable Hydrogen Production and Refuelling Project will supply both industrial customers and the first hydrogen vehicle refuelling station in Queensland. Capable of refuelling a vehicle in less than three minutes, the refuelling station will be available to other users and support a three-year trial of fuel cell electric vehicles for the Queensland Government's fleet.

The project aims to deliver renewable hydrogen production on a commercially viable scale and help progress the commercialisation of hydrogen for vehicle transport in Australia.

By producing renewable hydrogen locally, CO₂ emissions from transporting hydrogen to Queensland will be reduced by 90,000 kilograms.



Queensland
Government

Achievements under the Queensland Hydrogen Industry Strategy 2019-2024

Focus area 1 – Supporting innovation

- Partnered with the Future energy Exports Cooperative research Centre (FEnEx CRC) to support important industry led research and innovation that will help sustain Australia's position as a leading LNG exporter and enable the country to become the leading global Hydrogen exporter.
- Supported the successful export of small quantities of green hydrogen to Japan. This was led by ENEOS in partnership with Chiyoda Corporation and researchers from Japan and Queensland.
- Supported the establishment of QUT's H2Xport renewable hydrogen pilot plant - providing a platform to test various forms of technology and optimise production of renewable hydrogen under Queensland conditions.

Focus area 2 – Facilitating private sector investment

- Four projects were supported through the Hydrogen Industry Development Fund round one, which it is estimated will deliver in excess of \$37 million in investment across a range of renewable hydrogen technology applications.
- Developed and launched the Hydrogen Industry Development Fund round two.
- Coordinated the development and publication of the Queensland Investor Toolkit to provide information on developing hydrogen projects in Queensland. The toolkit provides an overview of the planning system and other regulatory information.
- Released the Queensland Hydrogen Project Map, an interactive project map that provides information about publicly released renewable hydrogen projects
- Identified relevant government programs, technology providers and planning and development requirements to support individual project proponents.
- Organised and hosted the Hydrogen Transport Information Session in partnership with Transit Systems, to provide an opportunity for Queensland stakeholders to learn about hydrogen fuel cell electric transport technologies and network with international technology providers.
- Worked with Australian government agencies to raise awareness about Queensland projects and identify opportunities for collaborative support.

Focus area 3 – Ensuring an effective policy framework for sustainable development

- Commissioned the Gladstone and Townsville hydrogen opportunities study to inform government and the private sector about land use, planning, infrastructure and services required to support potential renewable hydrogen plant development.
- Established a cross-agency reference group to facilitate the safe and sustainable development of the hydrogen industry.
- Advocated for Queensland's interests and provided input towards the development of the National Hydrogen Strategy.

Focus area 4 – Building community awareness and confidence

- Appointed a Strategic Advisor on hydrogen to the Queensland Government and a Queensland Hydrogen Envoy in Japan to enhance the development and promotion of Queensland's capability as a hydrogen producer and export partner.
- Appointed three hydrogen champions to boost the profile of renewable hydrogen across the state's regions and to promote opportunities for renewable hydrogen in Queensland.
- Committed to adopt five hydrogen fuel cell electric vehicles for the Queensland Government's vehicle fleet, providing a practicable demonstration of the safe use of hydrogen fuel and supporting BOC's development of a renewable hydrogen plant and refueller.
- Provided over 300 regional businesses and decision makers the opportunity to hear from leading industry speakers and academics through hydrogen industry forums held in Brisbane, Gladstone and Townsville.

Focus area 5 – Skills and training

- Worked with the US Centre of Hydrogen Safety to enhance capability and skills.
- Strengthened Queensland's capacity to deliver the skilled workforce required for the hydrogen industry through funding commitments including:
 - establishment of a Hydrogen and Renewable Energy training facility at Bohle TAFE in Townsville
 - delivery of a new training facility at Gladstone State High School for the emerging hydrogen industry
 - Construction of the Queensland Apprenticeships Centre in Renewable Hydrogen at Beenleigh's Plumbing Industry Climate Action Centre.