

STANWELL HYDROGEN PROJECT

Stakeholder consultation outcomes

Stanwell has a vision for a large-scale green hydrogen export industry in Central Queensland and is investigating options to bring this vision to life.

One option being considered is a 10 MW hydrogen demonstration plant at Stanwell Power Station, near Rockhampton.

In June and July 2020, public consultation on Stanwell's proposed demonstration plant was undertaken to gain community feedback and inform future stages of Stanwell's hydrogen vision in the Central Queensland region.

Consultation background

The consultation aimed to inform strategies to maximise the social benefit of the project, and minimise any negative impacts which may be identified as part of the feasibility study.

To support the public consultation process, Stanwell engaged Deloitte Access Economics to undertake a social impact evaluation including document review, desktop research, public survey which received 41 responses, and series of 17 semi-structured interviews with key stakeholders. These stakeholders included Rockhampton Regional Council, Queensland Government Department of Environment and Science, Clean Energy Council, Australian Hydrogen Council, regional development groups, Traditional Owners, near neighbours, community members, and Stanwell employees.

Key findings

Top positive impacts

During construction

1. Local employment
2. Economic activity

During operation

1. Local employment
2. Hydrogen industry development and acceptance
3. Cultural partnerships and opportunities
4. Carbon emissions reduction
5. Intergenerational outcomes
6. Hydrogen industry knowledge

Top concerns

During construction

1. Traffic
2. Local labour availability
3. Cultural heritage

During operation

1. Health and safety
2. Water
3. Employment expectations

What you told us

A number of community, cultural, economic, environmental, health, intergenerational, lifestyle, institutional, legal, political and equity considerations were identified throughout the consultation process about the proposed demonstration plant.

Employment

Creating local employment opportunities during construction and operation of the proposed plant was identified as a key positive impact and important to most respondents.

Respondents told us:

- an opportunity exists to enhance local employment by ensuring that local employment conditions are a feature of procurement and supplier contracts during construction;
- that the employment opportunities associated with the demonstration plant were in proportion to the scale of the plant and had the potential to create future economic opportunities for the region both in the short and long term.

Discussion during the interviews indicated the perception that the demonstration project would create “lots of jobs”. While the demonstration project itself would create 66 jobs during construction and 15 jobs across the supply chain during operation, the project would support the development of a large-scale hydrogen industry in Central Queensland, which could have more significant flow-on employment and economic impacts within construction, utilities and heavy manufacturing industries as well as a range of service industries.

Economic activity

An increase in local employment would provide flow-on economic benefits to the community and greater Central Queensland region.

Central Queensland could become a major export hub for green hydrogen and ammonia, creating opportunities for local manufacturing and other complementary industries to meet expected demand from nations such as Japan and South Korea.

The successful operation of the project would provide proof-of-concept for further development.

It would also generate supply chain expertise and develop leadership capacity, increasing the likelihood of long-term employment and economic activity.

Respondents told us:

- there could be potential difficulty sourcing local employment (skilled and unskilled) during the construction phase;
- the demonstration plant would provide further proof of concept for the development of a Queensland hydrogen export hub – generating long-term investment and employment opportunities for the Central Queensland region; and
- the project would positively contribute to the understanding of developing a carbon-neutral hydrogen industry.

Stanwell is engaging with local skills providers to understand the requirements (and existing skill and labour shortfalls) associated with developing a large-scale hydrogen industry in Central Queensland. We will continue to work with these groups and key community leaders to explore opportunities to increase local employment and skills development in the region.

Cultural

Stanwell acknowledges the Traditional Owners and custodians, the Darumbal People, of the land on which we operate Stanwell Power Station.

Our consultation with the Traditional Owners identified potential opportunities for the project to:

- improve outcomes for Indigenous residents through employment, mentorship and education;
- support the preservation of cultural integrity while ensuring an equitable distribution of benefits to Indigenous people; and
- establish partnerships and other opportunities for mutual benefit.

An area of concern with many construction phases of projects is the potential for site development to disturb areas/items of cultural significance.

Stanwell's demonstration plant has a low risk of disturbing areas/items of cultural significance as it would be located on a brownfield site which is already developed.

Traditional Owners recommended Elders visit site to support the Elders to more fully understand the purpose, benefits and impacts of the project.

Stanwell will develop an Indigenous Engagement Strategy in the next stage of the project to ensure opportunities for mutual benefit are realised.

Environment

If progressed, the demonstration plant would produce hydrogen using electrolysis. Electrolysis uses an electrical current to split water and create hydrogen, with oxygen as the only by-product. The project would avoid carbon emissions that are created through other hydrogen production methods which use fossil fuels.

Environmental concerns about water were raised and will be discussed next.

Water

Water is an input required for hydrogen electrolysis. The water needed to operate the demonstration plant will be able to be met by Stanwell's existing water allocation.

During consultation, some concerns were raised regarding:

- the relationship between the establishment of a water-intensive industry and perceived employment benefits;
- value-added to the economy versus water used;
- the distribution of water between established and emerging industries; and
- if waste from operations discharged to water systems would increase.

Stanwell has existing safeguards addressing these issues, including stormwater/wastewater and groundwater monitoring programs as part of current operations.

To ease community concerns, education and greater transparency around Stanwell's water use will be made publicly available.

Health and Safety

Stanwell is experienced in managing hydrogen and high-pressure hydrogen systems at Stanwell Power Station. Our experience in hydrogen handling will help facilitate the safe production and transport of hydrogen.

During consultation, health and safety concerns were raised relating to:

- increased traffic potentially affecting other road users and residents;
- risk of fire and explosion during operation and transport of the hydrogen to offtakers;
- hazards associated with the electrolyser and cooling water.

Respondents suggested potential mitigation strategies including bussing workers to site to reduce congestion, as well as considering the timing of transportation to avoid peak traffic flows. Stanwell will undertake further work regarding traffic management during the later stages of the project, in order to mitigate this impact for near neighbours.

Since the consultation process was conducted, Stanwell has completed a hazard identification study which recommended further safeguards for later stages.

Community, lifestyle and intergenerational impacts of a hydrogen industry

Diversifying Queensland's economic base has the potential to provide job security to future generations.

Consultation respondents noted:

- diversification of the Queensland economy from the development of the renewable energy sector might provide economic resilience, particularly in situations where the physical effects of climate change cause temporary negative impacts on sectors such as tourism; and
- the demonstration plant could increase community acceptance of the hydrogen industry and improved population sustainability in regional Queensland from the development of a hydrogen industry.

Policy and regulation

While there are many benefits for the Central Queensland region, there is potential for increased public reputational risk for government and energy industry stakeholders if regulatory settings are not appropriate.

Stanwell will be compliant with relevant legislation. However, the development and refinement of regulation specific to the hydrogen industry is an impact faced by similar hydrogen projects operating in other locations. It is in the interests of all hydrogen industry stakeholders to have appropriate regulatory settings to ensure the development of the sector overall.

Stanwell will engage with the relevant regulator, Workplace Health and Safety Queensland, to ensure all necessary requirements have been met.

Stanwell is also a member of the Australian Hydrogen Council, which engages with key stakeholders and governments in the development of hydrogen policy and regulation.

Want to know more?

For more information or to provide feedback, please contact hydrogen@stanwell.com or visit www.stanwell.com/energy-assets/new-energy-initiatives/stanwell-hydrogen-project/

