

10 January 2020

Attn: hydrogen@stategrowth.tas.gov.au

GHD response to the Draft Tasmanian Renewable Hydrogen Action Plan

On behalf of GHD, thank you for the opportunity to respond to the Draft Tasmanian Renewable Hydrogen Action Plan.

We acknowledge there is an exciting and unique opportunity to develop a new Tasmanian renewable hydrogen energy export market, leveraging our high-value renewable resources to respond to unprecedented momentum and growing global demand for hydrogen.

The Action Plan provided a synopsis of the steps to be taken and threads emerging for consideration in the development of a large-scale renewable hydrogen production in Tasmania to ensure we are a significant global supplier of renewable hydrogen by 2030.

The success of the renewable hydrogen industry in Tasmania will be strongly linked to the acceptance of the community. Resourcing this element adequately (and early) will be critical to its future success. When it comes to creating social value, those leading the renewable hydrogen industry will need to keep stakeholder and communities at the forefront of their thinking. Community interests and relationships can never matter too much.

The Action Plan outlines aggressive implementation timeframes. These risk being compromised if the community does not have the understanding and comfort to support its development. This will be acutely so when, in order to successfully implement the timeline, the development process will require the garnering of support early.

To succeed, we believe the following aspects need to be considered:

1. Working with communities to ensure maximum social value is derived as the renewable hydrogen industry develops; and
2. Fast-tracking success through industry collaboration

We believe the Action Plan would be enhanced through the consideration and inclusion of a greater focus on collaboration, particularly with the community. This could be the responsibility of the Renewable Hydrogen Development Unit within the Department of State Growth or any community reference group that may be established. An additional action along the lines of

The Tasmanian Government will deliver comprehensive community and industry stakeholder engagement, underpinned by IAP2 principles, to advance the Tasmanian Renewable Hydrogen Action Plan.

We have further elaborated on our thinking in Attachment 1.

By way of background, GHD is heavily involved in the hydrogen industry nationally (and in the UK and Canada), including the following initiatives:

- Successfully brokering ARENA funding for hydrogen demonstration projects (various)



- Involved in the development of the National Hydrogen Strategy with Dr Alan Finkel including the technical report titled, “Hydrogen and the electricity systems” (national)
- Leading the approvals, community awareness and engagement, design and construction of the world-first Hydrogen Energy Supply Chain project {<https://hydrogenenergysupplychain.com/>} (Victoria)
- Key partner of the proposed University of Tasmania’s ARC Training Centre for Future Energy: Social, Technical and Economic Transitions *Action 17* (Tasmania)
- A member of the Australian Hydrogen Council (national)
- Involved in the development of the Canadian Government H2GO hydrogen strategy (Canada)
- Undertaking in-house research on preparing communities for changing environments and infrastructure developments (Vic/Tas).

To learn more about GHD’s hydrogen experience visit www.ghd.com/hydrogen

Close collaboration between communities, government, industry and researchers in the coming year will be of great benefit to us all. We see substantial opportunity for technical and professional services firms, such as GHD, to contribute to shaping a sustainable and thriving new industry of which we can all be proud.

Thank you again for providing the opportunity for us to share our perspectives and contribute to this important government initiative. We would welcome the opportunity to elaborate on the information contained in our response or to further discuss our work in the hydrogen sector.

We look forward the release of the final Tasmanian Renewable Hydrogen Action Plan later this year.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Sarah FitzGerald', written in a cursive style.

Sarah FitzGerald

A GHD Principal



Attachment 1 – Collaboration in the hydrogen industry

One of the key challenges for the development of hydrogen in Tasmania is that it is a new industry in Australia (and Tasmania) and the planning and environmental approval process for large-scale production facilities is yet to be tested.

Planning and approvals pathways

We understand the challenges infrastructure development presently faces in Tasmania, and given the lack of precedence for the hydrogen industry, the system could be equally challenging. This is unlike other industries, including the fossil fuel and renewable energy sector, where legislation has evolved over time and contains specific provisions to permit and control development.

Planning and environmental approval legislation may need to be reviewed and amended to ensure there is a clearly defined pathway, and perhaps provide a streamlined State-led approval pathway that integrates approval requirements.

Flow charts for planning and environmental approval processes would be beneficial so it is clear to proponents as well as the community. This would assist in managing community expectations by identifying key points in the process where they will have an opportunity to provide input.

Community acceptance of the hydrogen industry will likely be strongly linked to perceptions of safety. Based on GHD's community engagement experience on hydrogen projects in Australia, the following actions are suggested:

- Confirming a clear set of standards (whether they be based on existing or new standards)
- A narrative around the comparative risk of hydrogen to other common hazardous activities with which the community is familiar
- Normalising hydrogen. For example, GHD is aware of technology advancements such as work by the University of New South Wales who developed a hydrogen-fuelled electric bicycle and a domestic-scale BBQ – these small-scale applications could help bring hydrogen applications closer to reality
- **Meeting the community where they are at and beginning a process with them from their view point, including early engagement and education ahead of the initiation of a specific project approval**
- Using the whole IAP2 Public Participation Spectrum (not limiting it to the inform phase only).

Early community awareness and thorough engagement as the industry develops

Basing our approach on lessons learnt from oil and gas, mining and other renewable energy sectors, while genuinely acknowledging community concerns of hydrogen project impacts and working to address concerns in practical ways, will be key to us developing a sustainable and thriving renewable hydrogen export market.



Specific approaches and methods the Tasmanian Government could consider to establish and maintain community support include:

- Explaining why, not just what is happening – bring people on the journey around the pros and cons of transitioning to a renewable hydrogen energy future.
- Ensure the local benefits are identified and communicated – economic growth, jobs for locals and new skills.
- Engage on the solutions – site selection, supporting infrastructure needs, waste and water resources, local impacts during construction.
- Engage communities on their preferred engagement and communication channels – tailor those approaches to each community as they will usually have different needs depending on the local context, e.g. current mining town, in need of economic growth, environmentally-sensitive area, agricultural communities.
- Utilise community reference groups appropriately – make them purposeful, have a clear memorandum of understanding in place for members to contribute in a meaningful way and avoid wasting time. This will be particularly critical in the George Town area.
- Utilise information sessions carefully – ensure people have access to the right experts and information at the sessions.
- Measure the social value (social impacts and social benefit outcomes) in a transparent way and report back to communities often.
- Use the ISCA Infrastructure (IS) rating scheme. It is Australia and New Zealand's only rating system for evaluating sustainability across design, construction and operation of infrastructure. IS evaluates the sustainability performance of the quadruple bottom line (governance, economic, environmental and social) of infrastructure development. This rating scheme could be adopted by industry proponents in order for a proposed project to be assessed on its level of sustainability performance and provide benchmarks against which to measure each project. This could provide comfort to communities expecting to be impacted by projects in their region.