

Department of State Growth 4 Salamanca Place Hobart, TAS 7000

By email: hydrogen@stategrowth.tas.gov.au

08 January 2020

Dear Sir/Madam,

Draft Tasmanian Renewable Hydrogen Action Plan

ENGIE appreciates the opportunity to contribute to the development of the Tasmanian Renewable Hydrogen Action Plan ("the **Plan**").

The ENGIE Group is a global energy operator in the businesses of electricity, natural gas and energy services. In Australia, ENGIE has interests in generation, renewable energy development, and energy services. ENGIE also owns Simply Energy which provides electricity and gas to more than 730,000 retail customer accounts across Victoria, South Australia, New South Wales, Queensland, and Western Australia.

Hydrogen is an important component of a future carbon free world

ENGIE believes that hydrogen is the key that will unlock the full potential of renewables and carbon-free energy solutions. It will accelerate the energy transition by allowing numerous green energy technologies to be used with much greater flexibility.

ENGIE is committed to developing solutions based on renewable hydrogen, produced by electrolysis using a green energy supply. Hydrogen is the missing link for a decarbonised ecosystem, allowing for the harmonious progress of cities, territories and societies around the globe.

ENGIE aim is to operate across the entire value chain of renewable hydrogen, from carbon-free power generation to the three key end uses: mobility, industry and energy storage.



ENGIE is already partnering with governments and other businesses on trials, feasibility studies, and early commercial projects in order to develop the know-how that will allow the hydrogen sector to scale up over quickly. This involvement has a global footprint, including projects in (amongst others) France, Singapore and Australia.

In this light, we welcome the Government's initiative in developing the Plan and look forward to opportunities to collaborate with the government in actioning the Plan.

Laying the foundations of the Tasmanian hydrogen economy

The Plan has identified a number of early steps that will assist with the development of a hydrogen industry.

ENGIE agrees that community acceptance and support will be critical to the success of the industry, and this is one area that governments have a very important role to play. Another is policy alignment – as far as possible, Australian governments should be pulling in the same direction and co-ordinating their efforts. Accordingly, the Plan should continue to be well aligned with Australia's National Hydrogen Strategy, which was released publicly shortly after the Plan.

The development of (at least one) hydrogen hub is likely to be an efficient way to configure hydrogen infrastructure and facilitate synergies between different elements of the hydrogen supply chain.

Given Tasmania's focus on "renewable" hydrogen – i.e. hydrogen produced via electrolysis using renewable power with minimal greenhouse gas emissions, the Government is wise to look at the development of certification of emissions profile.

Given the focus on an export industry, this needs to be internationally recognised, which entails consistency of approach with other certification processes. ENGIE is involved in the CertifHy process in the European Union and would be very happy to share its experience with the Tasmanian Government. ENGIE also acknowledges that this is a key objective identified in the aforementioned Australia's National Hydrogen Strategy.

Domestic and export markets

ENGIE notes that the milestones for the Plan are predicated on an export industry emerging before a domestic supply industry. Conversely, the National Hydrogen Strategy seeks to leverage off a strong domestic sector to support the development of an export sector. This inconsistency should be noted but is not insurmountable.

There is a "middle ground", where hydrogen is initially used domestically as a fuel to supplement existing uses (i.e. power to gas) and a feedstock for an industrial process that support other export commodities as a means of developing the domestic sector and paving the way for a strong export supply chain.

Given the Government is in talks with prospective overseas buyers of renewable hydrogen, ENGIE is not suggesting that the Government reverses its priorities, rather that it should retain an open mind about the sequencing of the different hydrogen opportunities and that the Plan should be flexible enough to support the most prospective opportunities at any given point.

ENGIE have long existing partnerships with players in the relevant target countries (Japan, Korea, Singapore) that we could leverage on.



The roles of government and the private sector

ENGIE considers that as in many capital-intensive industries, the major role of governments is in co-ordination, including in development of a potential hydrogen hub and supporting infrastructure, as well as building community understanding and support for the industry. Appropriate planning frameworks are important in this regard.

The private sector, meanwhile, brings capital and expertise. While the primary risk-takers should be the providers of private capital, their need to earn a risk-adjusted return means that some form of risk sharing with governments may be necessary in the early stages to maximise opportunities.

Some support for domestic use cases may help to stimulate domestic market, especially in cases where hydrogen is competing against a fossil fuel equivalent and cost structures do not recognise the zero-emissions benefits of renewable hydrogen.

Adaptability is key to good policy design in an emerging industry such as hydrogen, i.e. the approach should not be "set and forget", but conversely abrupt U-turns in policy and regulation will undermine investor confidence.

Interaction with the electricity sector will need to be carefully thought through, especially given the Government's dominance of the sector. The hydrogen sector can be a major user of electricity but can also contribute to the reliability and security of the system in its role as a storage medium (noting that hydro already plays a major role in this respect).

If the Government envisages that this means that it will own and control hydrogen plants that contribute to the grid in this way – whether via Hydro Tasmania or Tas Networks – then this will crowd out private investment in the sector and use up scarce Government capital that could be better applied elsewhere. Conversely if it is seeking private investment in this use case, it needs to consider how it will ensure a level playing field for competing against Government businesses.

The Plan suggests concessional electricity pricing may be offered to hydrogen plants. This is a double-edged sword. While this may assist early projects to get "up and running" there is a strong risk that the sector becomes dependent on below-market pricing and finds it hard to unwind such subsidies (consider the situation in the Victorian electricity sector where the Government has recently had to intervene in contract negotiations to ensure the viability of the Portland aluminium smelter).

It would be disappointing should community support for the sector be eroded by a false perception that they are paying higher electricity bills so that export markets enjoy lower hydrogen prices. Ideally concessional pricing would be introduced and fine-tuned over time to better manage potential long-term dependency risk and any potential community concern.

Conclusion

ENGIE welcomes the opportunity to provide a submission to the Plan and trusts the information contained in this submission is of assistance. Attached to this submission is a leaflet outlining further information on ENGIE's hydrogen vision and the respective policy settings for governments to consider.



Should you have any queries in relation to this submission please do not hesitate to contact me.

Yours sincerely,

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Jamie Lowe Head of Regulation