Submission on the *Interim Hydrogen Roadmap*

Name	
Organisation (if applicable)	Certified Energy (NZECS)
Contact details	

Release of information

Please let us know if you would like any part of your submission to be kept confidential.

☒ I would like to be contacted before the release or use of my submission in the summary of submissions that will be published by MBIE after the consultation.

☐ I would like my submission (or identified parts of my submission) to be kept confidential, and **have stated below** my reasons and grounds under the Official Information Act that I believe apply, for consideration by MBIE.

Thank you for the opportunity to provide a submission in response to the consultation paper 'Interim Hydrogen Roadmap'.

This response begins with a brief overview of Certified Energy and the New Zealand Energy Certification System (NZECS), followed by relevant key messages, and closes with some further comments in response to content of the consultation paper, primarily focussing on certification and verification in support of market establishment.

1. Priority messages in response to the consultation

Certified Energy has built the NZECS specifically to support the decarbonisation of our national energy systems.

We acknowledge the ambition of the government to accelerate this decarbonisation, and strongly encourage the government to utilise the NZECS to assist in this acceleration. Certified Energy is actively seeking support in ensuring system rules and processes align with the direction of governmental intent.

Further key messages:

- In relation to the establishment of a market for green hydrogen, we support the view that consumers are likely to want to access the environmental benefits associated with a green hydrogen product in order to justify a premium price.

- Given this demand for the green attributes of hydrogen, and in order to enable and optimise supply across a potentially interconnected distribution network, it is favourable to have a mechanism in place for both certification (the verification of characteristics of production) and attribution (the accurate and credible allocation of production attributes to specific consumption).

- The NZECS has already established an initial framework for certification and attribution of green hydrogen, in conjunction with hydrogen industry stakeholders. This is a preliminary framework, and is likely to need further development over time to properly support the emergence of the market.

- As part of framework development, Certified Energy performed an international assessment and review of existing standards, including engagement with many parties, including the Australian Clean Energy Regulator, regarding the development of the federal Guarantee of Origin programme.

- Given the importance of international harmonisation, the NZECS is designed to relate to external frameworks and standards and provides a platform upon which green hydrogen production in New Zealand can be verified in line with a governmentally developed or approved standard.

- The NZECS is already the provider of energy certification services to the majority of the New Zealand electricity market. Electricity is a precursor to green hydrogen produced via electrolysis. Should hydrogen be produced via steam methane reforming (SMR) the input biogenic methane is also likely to be certified and tracked via the NZECS renewable gas certification framework. Providing this holistic tracking function allows the NZECS to provide full tracking and accounting of the emissions throughout the energy conversion and production phases of green hydrogen.

- Beyond green hydrogen, it is likely that the NZECS will prepare to provide a platform for end-product certification for downstream products such as ammonia. Again, this platform will have the ability to refer back to domestic standards for production verification, or other requirements of regulators or users. By doing so, the NZECS can enable the emissions tracking function required to fully support the establishment of a green hydrogen marketplace.

2. Certified Energy and the New Zealand Energy Certificate System (NZECS)

Certified Energy runs the New Zealand Energy Certification System (NZECS) which has been active since 2018. Our purpose is to guide and support the voluntary market to direct its efforts toward efficient and rapid decarbonisation of our energy systems. We seek to do this through:

a) measuring, tracking and verifying the impact of voluntary consumption, generation and purchasing behaviours in energy markets in New Zealand; and
b) enabling organisations to understand and demonstrate the impacts of their behaviours.

The role of Certified Energy is to ensure that renewable energy information is captured and recorded accurately and to manage the accurate allocation of production attribute ownership between producers and users.

The NZECS is set up to provide both renewable electricity and renewable gas certification, including biomethane and hydrogen production, and is currently developing tracking and certification functions for further sectors in need of decarbonisation, including sustainable aviation fuel (SAF) and freight.

The system has further scope to include non-carbon factors of impact (e.g. productive land-use, cultural considerations) that address environmental sustainability and energy equity considerations.

3. Addressing consultation questions for Section 3

Do you agree with the proposed actions and considerations we have made under each focus area?

Supporting frameworks to allow market trading of hydrogen to occur domestically and internationally

We agree that as a country with a focus on green hydrogen, it will be important to ensure that end users can be confident in the production source of the hydrogen they are purchasing.

The key action here is to continue working with other countries to support the development of emissions-intensity standards that guide trading and certification of hydrogen production, to support the development of a market for green hydrogen.

We do not see a need for the government to create a new hydrogen certification system, where one already exists. Rather, it is useful for the NZECS to receive guidance and support from the government, in order to ensure that it has the confidence of industry.