AUSTRALIAN HYDROGEN COUNCIL

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Ms Jo Evans
Deputy Secretary
Department of Industry Science Energy and Resources
GPO Box 2013, Canberra, ACT, 2601

Submitted electronically.

Re: A Hydrogen Guarantee of Origin scheme for Australia

Thank you for the opportunity to make a submission in response to the Discussion Paper, A Hydrogen Guarantee of Origin scheme for Australia.

The development of a credible and transparent hydrogen certification scheme is critical for Australia to reach its hydrogen production and export objectives. A Guarantee of Origin (GO) provides evidence of the provenance of energy sources and supply chains. Our international trading partners are already asking for this.

A globally recognised certification scheme, developed in consultation with industry and administered by a trusted body, will ensure that buyers of Australian hydrogen understand and value the emissions characteristics of the product they are using.

AHC appreciates DISER's engagement with relevant stakeholders to ensure that a hydrogen GO scheme will meet the needs of domestic and international consumers.

The approach outlined in the paper appears to balance the sometimes-competing objectives of meeting the expectations of the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE) member nations with the need for administratively simple arrangements based on Australia's existing regulatory architecture. We commend DISER for their work in finding this balance and working towards designing a scheme which meets the needs of its users.

Scheme Coverage

AHC envisages that the hydrogen GO scheme will one day cover a range of hydrogen products and carriers. We agree with the proposed suggestion that a more broad-based approach be developed following the initial introduction of a scheme which is confined to hydrogen in its pure form. This approach will allow a scheme to be developed and implemented more quickly as the scope is relatively narrow and the production pathways clearly defined. Any learnings from the introduction of a relatively simple hydrogen only scheme can be used to iterate towards a more comprehensive and complex scheme over a period of time.

We note that in its initial incarnation, the scheme will be narrowly constructed to certify hydrogen produced through the current key production pathways. It will be necessary for coverage to be expanded to additional production pathways over time as alternative technologies such as methane pyrolysis and waste to hydrogen mature. The development of a mechanism to seamlessly incorporate new production pathways should be made a priority to ensure that they are able to compete on level ground with those covered under from the commencement of the scheme and do not face unnecessary delays to being certified for sale to domestic and international markets.

In developing a hydrogen GO scheme, it is particularly important to set appropriate boundary conditions for carbon accounting; that is, deciding where the boundaries lie for emissions data capture and reporting. To this end, we agree with DISER's proposal that only Scope 1 and 2 emissions should be reported. This will ensure that there is no overlap or double counting of emissions, such as a producer's Scope 3 emissions also being captured as part of the consumer's Scope 1 reporting.

The approach reflects AHC's stated policy position that certification of hydrogen should be 'well to gate' and reported at a facility level rather than a unit level. It is also consistent with National Greenhouse and Energy Reporting (NGER), which potential producers are likely to be familiar with.

Overarching framework for the development of a hydrogen GO scheme.
Because a hydrogen GO scheme will have a focus on ensuring that an Australian hydrogen production industry can develop to satisfy international and domestic demand, it stands to reason that the overarching framework be based on existing, internationally recognised frameworks. This approach will ensure the credibility of the scheme with Australia's export partners and align with the carbon accounting processes already in use by Australian based businesses.

AHC agrees that ISO standards and the GHG protocol are the correct overarching frameworks. For detailed emission calculation guidance, AHC supports the use of IPCC guidelines and the NGER determination. With respect to the Climate Active electricity accounting rules, to ensure international alignment the GHG protocol scope 2 guidance is preferred. The Climate Active electricity accounting rules should support where specific detail in the GHG protocol is not available e.g. certificate vintage and detail surrounding retirement of LGCs. As with all elements of the scheme, guidance on these matters should align with IPHE member expectations. In addition, the Australian Government should publish state based residual mix factors to allow for greater accuracy in accounting for emissions.

Offsets and the Use of Carbon Capture and Storage (CCS)
Prior to the release of the discussion paper, AHC understood that Australia's involvement in the IPHE process would cover green hydrogen and blue hydrogen where CCS was used to sequester carbon emissions from Steam Methane Reformation or Coal Gasification. The use of Australian Carbon Credit Units for any reason other than to track sequestered emissions appears at odds with this approach.

AHC support an approach whereby the use of CCS as per the NGER determination is the sole means of negating carbon emissions from hydrogen production. This appears to be consistent with that of the broader IPHE and consequently is likely to impact on the willingness of Australia's export partners to recognise the scheme. Given that export to foreign markets is likely to play major role in helping bring Australian hydrogen production to scale, alignment on this front is a key consideration for AHC and its members.

We consider that Option 1 in the discussion paper is the approach most likely to deliver the type of scheme needed to expedite hydrogen production in Australia.

Administration and Regulatory Framework
AHC agrees that to provide total transparency, certification should be undertaken by an appropriately trusted and authoritative organisation. Certification by a central body is preferable to assurance by individual businesses that self-audit. This approach will grow trust in the emerging hydrogen industry from the earliest stage.

The Commonwealth Government's involvement in the development of the scheme provides a level of assurance that the needs of Australian producers will be met, and its involvement as the central assurance body will play an ongoing role as the industry and the scheme itself evolve.

We support the Clean Energy Regulator taking on the role of administering hydrogen certification.

As the body entrusted with the administration of the Renewable Energy Target, the Clean Energy Regulator is appropriately experienced in overseeing a certificate scheme. AHC consider that establishing the hydrogen GO scheme as a certificate scheme will allow Australian producers to leverage existing processes for tracking and reporting carbon emissions and provide an appropriate degree of transparency. We note that once again, this approach appears to be favoured by IPHE members which is key to ensuring that an Australian scheme is accepted by trading partners.

AHC does not have a preferred approach for the regulatory framework to support a hydrogen GO scheme however it is crucial than any direction taken is subject to further consultation and engagement with industry.

Tracking Emissions

DISER's approach to tracking emissions makes use of methodologies which will be familiar to many entities who will be using the scheme. The NGER scheme was established in 2007 and has become an integral part of the compliance and reporting process of many businesses. Building an approach which leverages the existing processes of entities which are likely to make use will minimise the administrative burden posed by the scheme. Making use of these methodologies while adhering to the GHG Protocol as a broader overarching framework will ensure that the scheme is user-friendly for Australian businesses while providing an assurance that it will be internationally recognised.

While we consider DISER's preference to adopt a market-based method for Scope 2 emissions is reasonable, we consider that it may be worth exploring ways to incorporate more granular approaches which reflect a time of use approach to hydrogen production. We acknowledge that this approach would require the scheme to have internal alignment across Scope 1 and 2 emissions so that overall accounting is accurate in order to ensure the integrity of the scheme.

Verifying the use of renewable electricity to produce hydrogen

AHC supports the use of Large-scale Generation Certificates (LGCs) to verify the consumption of renewable electricity in the hydrogen production process. The use of this existing instrument will aid compliance and lower the administrative burden for hydrogen producers. This view is however based on the assumption that the approach will be accepted by other IPHE members, as some may deem certain types of LGCs unacceptable or require an approach which more closely aligns the production of renewable electricity with the production of the hydrogen (either on a locational or temporal basis). An alternative approach will need to be explored if should the use of LGCs not meet international requirements.

DISER has adequately identified the shortcomings of the LGC approach and AHC considers that the creation of a new certificate type will allow for below baseline and other categories of renewable electricity not eligible to create LGCs to be recognised. The establishment of this new certificate type at the commencement of the scheme will ease the transition post 2030 when LGCs will no longer be created. We understand however that this certificate type would be used solely for the purpose of certification under this scheme and consider that further consultation may be required to ensure that it does not lead to a proliferation of new certificate schemes to serve other purposes following the end of the Renewable Energy Target scheme in 2030.

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AHC has no issues with other sources of renewable electricity being recognised however the scenarios listed in the Paper appear more suited to a relatively low level of electricity consumption which is unlikely to yield significant hydrogen production.

Attribution of emissions to co-products
AHC agree that emissions should be attributed to co-products where they are sold and that ISO standard 14044 should be followed to determine the emissions attributed to these co-products.

Materiality Threshold
AHC agree with the concept of allowing entities to exclude a small amount of total emissions from the analysis. This statement is predicated on the expectation that entities will be able required to provide suitable evidence outlining the rationale for how the exempt amount has been ascertained. In reality the materiality threshold will act as a margin for error in calculation or attribution of total emissions and in doing so will assist in ensuring the overall integrity and accuracy of the scheme.

We agree in principle that, on the basis of its inclusion in the GHG protocol, 2.5-5% is a reasonable threshold for the commencement of the trial phase and that this figure can be adjusted should the trials demonstrate a need to do so.

Conclusion
AHC is broadly supportive of DISER's approach to the development of a hydrogen GO scheme. The proposals outlined in the Discussion Paper align with industry views on how the task should be undertaken in order to develop Australia's hydrogen production capability. This is needed capitalise on the opportunity that Australia has to meet potential domestic and international demand. Adopting processes and principles which align to existing carbon accounting and reporting requirements will minimise the administrative and compliance burden on participants and help to ensure accuracy. In doing so, the scheme will have the best opportunity to ensure that Australian hydrogen becomes a trusted, internationally recognised brand.

The comments made in this submission are made without the benefit of first hand knowledge of the views of other IPHE member countries and are made on the basis that proposals outlined by DISER have broad acceptance within IPHE. We further consider it vital that the scheme be regularly assessed to ensure that the requirements align with international expectations and that new production pathways are added as the technology matures.

We commend DISER on its approach so far and urge that consultation and engagement with industry stakeholder on this matter continues.

If you would like to discuss any aspect of this submission, please contact me on 0413 266 081 or via email to jkremzer@h2council.com.au

Yours sincerely

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