Consultation on Australia's Guarantee of Origin Scheme Design

Australian Hydrogen Council
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Introduction

The Australian Hydrogen Council (AHC) is the peak body for the hydrogen industry, with over 100 members from across the hydrogen value chain. Our members are at the forefront of Australia's hydrogen industry, developing the technology, skills and partnerships necessary to ensure that hydrogen plays a meaningful role in decarbonising Australian industry.

The AHC welcomes the opportunity to engage with the Australian Government's consultation paper *Australia's Guarantee of Origin (GO) Scheme Design*.

The AHC has responded to the GO consultation by focusing on four key policy areas covering the interoperability and practicality of the scheme, as well as the cost recovery mechanism and the proposed review.

Interoperability of the GO Scheme

A key objective for the Australian GO Scheme is the creation of an emissions accounting framework to create a standardised process of tracing and certifying the provenance of hydrogen and the associated environmental impacts, and which can be utilised for not only domestic schemes such as the Hydrogen Headstart, but also sets accepted methodologies and standards for international export.

As part of this, we recognise the role that the Department of Climate Change, Energy, the Environment and Water (DCCEEW) has played in the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE) and designing the GO Scheme to align with global norms and expectations as well as funding pilots[1] trialling proposed methodologies.

In May this year, the AHC also welcomed the budget announcement for the Clean Energy Regulator (CER) to develop the implementation guidelines for the GO scheme[2] and the inclusion of an assessment criterion on compliance with the GO scheme in the Hydrogen Headstart proposed funding guidelines.[3]

2023 has been a busy year in carbon monitoring legislation. In August, consultation was held on the revisions to the scheme governing Australian Carbon Credit Units (ACCUs)[4] and in September, the Commonwealth conducted targeted consultation on the hydrogen production variable for the Safeguard Mechanism. Alongside these schemes and also in August, the pilot for the Renewable Gas Guarantee of Origin (RGGO) scheme was launched[5] and Minister Bowen announced the Commonwealth government commitment to a 'carbon leakage' review to explore the possibility of

[1] CER (2023) *Trial projects*, Australian Government, https://www.cleanenergyregulator.gov.au/Infohub/Markets/guarantee-of-origin/trial-projects.
[2] DCCEEW (2023) *Guarantee of Origin scheme*, Australian Government, https://www.dcceew.gov.au/energy/renewable/guarantee-of-origin-scheme.
[3] DCCEEW (2023) *Hydrogen Headstart: Consultation Paper*, Australian Government, Australian Renewable Energy Agency, July, https://consult.dcceew.gov.au/hydrogen-headstart-program-consultation.
[4] DCCEEW (2023) ACCU Review Discussion Paper, Australian Government, https://consult.dcceew.gov.au/publishing-accu-scheme-information.
[5] GreenPower (n.d.) *Renewable Gas Certification Pilot*, https://www.greenpower.gov.au/about-greenpower/renewable-gas-certification-pilot.

establishing an Australian carbon border adjustment mechanism (CBAM), particularly in relation to steel and cement (including clinker and lime).[6]

Table 1 below sets out some of the details of these national and jurisdictional schemes, in particular noting where they might impact hydrogen producers. Although the intent of these schemes is different, the fact that they often apply to the same producer of hydrogen and are governed and administered by different bodies creates not only confusion about interoperability but also additional layers of administration, as each of the schemes looks to measure and account for carbon intensity.

Scheme	Details
GreenPower Renewable Gas Certification Pilot	- National scheme managed by GreenPower to accredit renewable gas projects and to certify gas based on key attributes (including associated emissions) for each GJ of gas. - The Pilot is intended as an interim measure to enable the development of voluntary Renewable Gas markets until a permanent scheme for certification of Renewable Gases commences. - The Pilot will initially cover biogas, biomethane (upgraded biogas), and hydrogen. - The Pilot may be expanded to cover other fuels in the future. - The certificates (Renewable Gas Guarantee of Origin - RGGOs) will be created by accredited renewable gas producers who will sell them to certificate traders. Traders, mainly gas retailers and certificate brokers, can then trade the certificates with other traders, or sell and retire them on behalf of business and commercial gas consumers. - The certificates can be traded bundled with the gas sales or separately. - Should no permanent scheme become available, GreenPower will consult with the industry to enable the Pilot to be extended or converted into an ongoing scheme.
NSW Renewable Fuel Scheme (RFS)	- A NSW-specific certificate scheme to incentivise the production of green hydrogen in NSW. - The certificates will be created for each GJ of green hydrogen produced. - The scheme participants are gas producers, gas retailers and industrial gas users who have a scheme liability based on their proportion of total NSW gas use as outlined in the NSW Electricity Supply Act 1995. - The scheme will be managed by IPART and the NSW Office of Energy and Climate Change.
ACCUs	- The Emissions Reduction Fund (ERF) offers incentives to businesses and landholders for avoiding releasing greenhouse gas emissions or removing and sequestering carbon from the atmosphere.

[6] "Many other countries are also stepping up efforts to tackle climate change. But the level of ambition differs between jurisdictions. This creates the potential for production to shift from countries with more ambitious emissions reduction policies to those with lower (or no) emission reduction policies, and potentially resulting in increased global emissions. Where such shifts in production occur solely because of different policy settings, they are termed 'carbon leakage'." Reference: DCCEEW (2023) *Terms of Reference – Carbon Leakage Review*, Australian Government, https://www.dcceew.gov.au/sites/default/files/documents/review-carbon-leakage-terms-of-reference.pdf.

Scheme	Details
	- Several activities are eligible under the scheme and participants can earn Australian Carbon Credit Units (ACCUs) for each ton of CO2 emissions sequestered or avoided. - Incentives are awarded through regular auctions where the Australian Government buys ACCUs and participants can also access voluntary markets for carbon offsets. - Projects that produce biomethane and biogas from certain feedstocks are eligible to receive ACCUs. Methods for the production of hydrogen are under development. - ACCUs are recognised by Climate Active, CERT, NGER and the Safeguard as a means for emissions reduction claims.
Safeguard Mechanism	- The Safeguard Mechanism does not currently cover any hydrogen facilities. However, targeted consultation has recently occurred to develop the draft production variable definitions for hydrogen, including the measurement of gaseous and liquified hydrogen in tonnes. This will then inform the facility baseline for hydrogen.

Table 1: Selection of Australian carbon monitoring schemes

In addition to the multiple national schemes in simultaneous operation, there is also limited information on Australia's overall carbon accounting approach, including how the GO scheme will operate alongside initiatives such as the proposed Australian CBAM and the sector decarbonisation strategies[7] currently under development.

Other countries are also developing similar policies and legislation, and global policy and legislative trends indicate that the remit of carbon border adjustment schemes will increase to cover a range of products beyond fossil fuels or their replacements such as hydrogen, ammonia and methanol.

For example, the first phase of the EU's CBAM[8] (from October 2023) covers cement, iron and steel, aluminium, fertiliser, electricity and hydrogen. The *PROVE It* Act in the US,[9] should it be passed, would require the Department of Energy (DOE) to study and compare the carbon emissions of products that are produced in the United States vs. other countries. Within two years, the DOE will publish a study comparing the carbon output of U.S. goods, like aluminium, cement, crude oil, fertilizer, iron, steel and plastic, to goods made elsewhere, paving the way to a CBAM.

[7] Climate Change Authority (2023) *Parliament refers sectoral pathways review to the Climate Change Authority*, https://www.climatechangeauthority.gov.au/parliament-refers-sectoral-pathways-review-climate-change-authority.

[8] Taxation and Customs Union (2023) Carbon Border Adjustment Mechanism, European Commission, https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en.

[9] Congress.gov (2023) *S.1863 - PROVE IT Act of 2023*, https://www.congress.gov/bill/118th-congress/senate-bill/1863/text. See also: Citizens' Climate Lobby (2023) *Tell Congress: Pass the PROVE IT Act!*, https://citizensclimatelobby.org/get-loud-take-action/prove-it-act/.

Japan also recently passed legislation for the establishment of a scheme combining emissions trading and a carbon levy[10] and in early October, the Tokyo stock exchange began trading carbon credits.[11]

The Australian Government has a role to play in ensuring that the international standards for CO_2 reporting and monitoring that are likely to apply to all traded goods at some point in the future – including hydrogen and derivatives – are developed in a timely manner to provide clarity to producers and manufacturers, as well as to agree on the oversight bodies and independent auditors of these global schemes.

This also speaks to interoperability – many of the large-scale hydrogen and derivatives projects proposed for Australia have export ambitions and are keen to ensure consistency across international jurisdictions. In addition, AHC industry members are calling for multilateral operability rather than point to point (e.g. Australia-EU, Australia-Japan) interoperability.

There is also a need to clarify process and timing to align with accelerating global demand for low carbon fuels across diverse sectors. For example, since 2018, large ships over 5,000 gross tonnage loading or unloading cargo or passengers at ports in the European Economic Area (EEA) have been expected to monitor and report their related CO_2 emissions and other relevant information:

> *To ensure that the maritime transport sector contributes to the EU's increased climate ambition, the Commission is proposing to extend the scope of the EU's Emissions Trading System to cover CO_2 emissions from large ships (above 5000 gross tonnage), regardless of the flag they fly. The extension will include all emissions from ships calling at an EU port for voyages within the EU (intra-EU) as well as 50 per cent of the emissions from voyages starting or ending outside of the EU (extra-EU voyages), and all emissions that occur when ships are at berth in EU ports.*[12]

As of 2024, shipping companies will need to pay for the emissions they have reported in the previous year. The EU legislation has developed a phased approach: in 2025, they will pay for 40 per cent of the emissions reported in 2024; in 2026, they will pay for 70 per cent of their 2025 emissions, and from 2027 onwards, they will pay for 100 per cent of their reported emissions, the intention being to create a price signal and incentive for decarbonisation.

In July 2023, the EU passed regulations to mandate at least 1 per cent 'renewable-energy derived fuels' for shipping by 2034. The regulations also set emissions reduction targets on the shipping sector as a whole, including expectations of a 2 per cent reduction on 2020 levels by 2025, ramping up to 80 per cent reduction by 2050.[13]

Should Australian producers of methanol and ammonia wish to trade and supply marine operators looking to reduce their emissions (and therefore also their liabilities under this scheme) they must

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[10] Obayashi, Y. and Golubkova, K. (2023) 'Explainer: Japan's carbon pricing scheme being launched in April', *Reuters*, 31 March, https://www.reuters.com/markets/carbon/japans-carbon-pricing-scheme-being-launched-april-2023-03-30/.

[11] Obayashi, Y. and Golubkova, K. (2023) 'EXPLAINER-Japan's carbon pricing scheme kicks off at Tokyo Stock Exchange', *Reuters*, 11 October, https://www.reuters.com/article/japan-carbontrading-tse-idAFL8N3BH09P.

[12] European Commission (n.d.) *Reducing emissions from the shipping sector*, https://climate.ec.europa.eu/eu-action/transport-emissions/reducing-emissions-shipping-sector_en.

[13] Parkes, J. (2023) 'European Parliament signs off new rules on hydrogen filling stations and H2-based shipping fuels', *Hydrogen Insight*, 12 July, https://www.hydrogeninsight.com/policy/european-parliament-signs-off-new-rules-on-hydrogen-filling-stations-and-h2-based-shipping-fuels/2-1-1484863.

comply with EU regulations. The methodology developed in Australia should ensure alignment to enable Australian producers to take advantage of this and other emerging export opportunities.

Emphasising practicality

The GO Scheme consultation notes that the scheme design is intended to streamline the creation of profiles, reporting and regulatory burden in order to incentivise the use of the voluntary scheme. The GO Scheme has been designed to allow transparency of emissions across the hydrogen value chain so that users can make informed decisions.

The CER oversees a number of similar schemes and has administrative responsibilities for:

- The National Greenhouse and Energy Reporting scheme
- The Emissions Reduction Fund
- The Renewable Energy Target
- The Australian National Registry of Emissions Units (ANREU)
- The Safeguard Mechanism.[14]

None of these schemes is industry specific, or focusses on emissions thresholds. In contrast, the Proposed GO Scheme is specific to the hydrogen industry, and tracks and records emissions from production to delivery gate as part of whole of supply chain monitoring of carbon emissions. In order to ensure competitiveness for the emerging clean molecules industry, AHC and its members caution against setting higher thresholds for compliance and monitoring than those that govern existing, high emitting incumbent industries.

A number of AHC members also sought clarity regarding the data which would appear on the public register, including clarification on what the CER would consider commercially sensitive information. For example, whilst all members supported the reporting of production volumes, they were opposed to real time reporting as that risked the creation of market distortions.

Principles for cost recovery

Section 5.2 of the consultation paper describes the proposed cost recovery mechanisms, which will be designed for equitability and proportionate to the service workload. This includes fees for specific services, as well as levies to cover the administration of the scheme. The paper also considers whether nascent industries, such as hydrogen, have a temporary exemption from some of these cost recovery measures.

AHC is supportive of a temporary exemption of fees and levies for the emerging hydrogen industry, especially as the commerciality gap remains an investment risk. AHC and industry members encourage DCCEEW to consider setting the parameters or thresholds that would need to be met by the industry in order for the temporary exemption to be lifted.

[14] CER (2022) *What we do*, Australian Government, 26 October, https://www.cleanenergyregulator.gov.au/About/What-we-do.

Queries regarding proposed review and revision

Section 5.3 of the consultation paper notes a review of the effectiveness and functionality of the GO scheme will take place in 2027. Further reviews are proposed to be conducted every three years, assessing integrity, effectiveness and efficiency.

AHC is supportive of a periodic review, however we suggest a transparent approach to the periodic evaluation, with greater information provided regarding which elements of the scheme would be likely to be reviewed. One of the primary concerns of members was the potential for sunk costs should the review result in a change of methodology following the establishment of whole-of-business or supply chain monitoring and compliance. Members were also keen to understand whether part of the review process would examine the shift from a voluntary to mandatory scheme and the triggers for such a decision.

Much like the product expansion process which is proposed to provide a periodic assessment of new products prioritised for consultation and immediate or future implementation, ideally the proposed review and revision will provide adequate transparency to ensure confidence in the scheme and allow planning time (where possible) for upcoming modifications to monitoring, modules required, reporting, associated costs, etc.

Conclusion

Thank you again for the opportunity to respond to the consultation on the design of the GO Scheme. We look forward to further engagement as the scheme is developed.

If you wish to discuss any element of this submission in further detail, please contact at kaleksoska@H2council.com.au or 0436 661 767.

Kind Regards,

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