



Australian Government

Department of Climate Change, Energy,
the Environment and Water

Australia's Guarantee of Origin scheme

Consultation summary

Part 1: Overview

The Department of Climate Change, Energy, the Environment and Water (DCCEEW) released a discussion paper on 12 December 2022 outlining a proposed approach to the development of a Guarantee of Origin scheme for Australia.

A Guarantee of Origin (GO) scheme will provide a consistent and accurate framework to track the key attributes associated with low emissions products such as hydrogen, in particular the carbon footprint. A GO scheme would provide much needed transparency to consumers around the environmental impact of low-emissions products being purchased and used and will help facilitate the development of markets for these products.

DCCEEW received 81 submissions in response to the discussion paper. Respondents were generally supportive of the policy positions provided throughout the paper. There was a lack of significant opposition to the policy positions, with negative responses accounting for no more than 16 per cent of respondents on any one position.

Part 2: Feedback from submissions

Scheme design

Legislative overview

Policy position proposal 1: The scheme will be covered under new legislation administered by the CER.

- 58 (72 per cent) respondents broadly agreed that the scheme be covered new legislation
- Two (Two per cent) broadly disagreed, preferring amendments be made to the NGER Act
- 21 (26 per cent) did not specify a response

New legislation was strongly supported by stakeholders. The 72 per cent of respondents that agreed with new legislation considered this would enhance credibility, allow the scheme to leverage other government-led schemes, build trust and facilitate better alignment with international schemes. Six respondents commented on the importance of any new legislation being aligned with international standards; five recommended new legislation be aligned with the NGER Act; three advocated for additional energy sources to be included in the scheme.

On the proposal that the CER administer the scheme:

- 59 (73 per cent) broadly agreed
- One (one per cent) broadly disagreed
- 21 (26 per cent) did not specify a response

Respondents also noted that industry should play a strong role in development of the scheme and should be consulted thoroughly throughout the process.

Scope for products

Policy position proposal 2: The Product GOs will cover the well-to-user system boundary.

- 51 (63 per cent) respondents broadly agreed with the proposed well-to-user system boundary.
- 10 (12 per cent) respondents considered a narrower well to gate system boundary preferable
- Three (four per cent) suggested a wider system boundary
- 17 (21 per cent) did not specify a response

There was a large amount of support for the well-to-user boundary as it would enable transparency of emissions over the full supply chain, support enhanced credibility of the scheme and was consistent with international trends.

The respondents calling for a narrower boundary were generally concerned about the increased complexity of the well-to-user boundary, with some concerned this may be moving ahead of equivalent international schemes could potentially disadvantage Australian industry. Some also suggested that the scheme could initially use a well-to-gate boundary and then transition to well-to-user boundary.

Three (four per cent) indicated that a well-to-grave system boundary was the more appropriate option citing that the GO product does not stop or cease to exist after the transport and storage stage. Four respondents sought clarity over how the boundary would apply to exports and integrate with international certification schemes.

Eligibility

Policy position proposal 3: There will be no minimum emissions intensity requirements for Product GOs and participation will be voluntary for both Product GOs and REGOs.

- 55 (68 per cent) respondents broadly agreed that no minimum emissions intensity requirements be imposed on Product GOs.
- Four (Five per cent) broadly disagreed.
- 22 (27 per cent) did not specify a response.

Respondents in favour of not including minimum emissions intensity requirements considered the scheme would have more scope and flexibility to provide complete market information about emissions intensity.

- 53 (65 per cent) respondents agreed that participation with the GO scheme should be voluntary for eligible renewable electricity power stations, producers of hydrogen and hydrogen energy carriers.
- Six (seven per cent) advocated for mandatory.
- One (one per cent) neither agreed nor disagreed
- 21 (26 per cent) did not specify a response

Respondents who supported voluntary participation noted that hydrogen producers who are not using low emissions technologies would have no reason to incur the costs of complying with the scheme, and as such their non-participation is informative in itself.

Those advocating for mandatory participation commented that a mandated scheme would have the advantage of spreading the costs across the entire industry.

Cost recovery

Policy position proposal 1: The GO scheme will be cost recovered in line with Australian Government policy.

- 35 (43 per cent) of the respondents broadly agreed with the proposed cost recovery measures.
- One (one per cent) broadly disagreed
- One (one per cent) neither agreed nor disagreed
- 44 (54 per cent) did not specify a response

16 respondents who support the proposal noted that this cost recovery should be dependent on industry maturity and adjusted over time.

Five respondents who did not specify a response commented that additional clarity is required around the proposed fee structure so an informed position can be adopted.

Scheme review

Policy position proposal 5: The scheme will be reviewed in 2025 and every five years thereafter to ensure it is fit for purpose and able to support the industry.

- 51 (63 per cent) of the respondents broadly agreed with the proposed review timeframes
- Two (two per cent) broadly disagreed
- 28 (35 per cent) did not specify a response

Among the respondents in support of this proposal, nine advocated for more frequent reviews while 15 respondents suggested reviews should be initiated in response to changes that impact the scheme and developments in the market.

The two respondents that disagreed with the proposal suggested more frequent reviews.

GO certificates

Policy position proposal 6: Product GOs and REGOs will be housed on a publicly visible register with general information and the ability to share specific information with other scheme participants.

Feedback was sought on the information that should be publicly visible on REGOs (e.g. time of generation, grid location, commissioning date, end user, etc) and the information that should be publicly visible on Product GOs (emissions intensity, volume, relevant inputs, etc).

- 53 (65 per cent) of respondents broadly agreed that certificates be housed on a publicly visible register enabling information to be shared with other participants
- Two (two per cent) broadly disagreed
- 26 (32 per cent) did not specify a response

This proposal was strongly supported on the basis that publicly available information is critical to ensuring credibility and trust in the scheme. Among those expressing in principle support for this proposal, 19 respondents indicated more information is required, and 19 also highlighted the importance of balancing this with a regard to the commercial confidentiality of some data. The two respondents who disagreed cited the need to maintain commercial confidentiality.

Provenance approach for Product GOs

Policy position proposal 7: Product GOs will use a provenance approach, while REGOs are able to be traded independently of the electricity they were created alongside.

- 38 (47 per cent) of respondents broadly agreed with the proposed separate approaches to each type of certificate
- Five (six per cent) advocated for the provenance approach to also be applied to REGOs
- 13 (16 per cent) advocated for tradeable certificates across the board
- 25 (31 per cent) did not specify a response.

Respondents were broadly in favour of a provenance approach to Product GO certificates as having the certificates traded alongside the product would support greater transparency and scheme credibility and aligns with international approaches.

The 13 respondents in favour of a tradeable approach to Product GO certificates considered this would create flexibility in market development. Some pointed out that allowing Product GOs to be traded in the same way as REGOs would not preclude a producer from meeting a preference for the certificate and product to be traded together. Some supported the provenance approach initially, but considered a tradeable approach would be needed in the future.

Gas operators considered a tradeable approach to Product GOs would more efficiently stimulate investment in renewable gas and support the purchase of renewable gas products. Note the proposal in the consultation document recognised that certificates could be decoupled from the underlying product where consumers and producers are on the same gas network. Some gas operators recognised this, but sought greater clarity over the definition of 'physical link' between product and certificate.

Scheme participation

Upfront reporting model

Policy position proposal 8: An upfront data reporting model will be implemented to provide a practical reporting process.

- 48 (59 per cent) respondents broadly agreed with the proposed data reporting model
- Nil disagreed
- 33 (41 per cent) did not specify a response

Respondents highlighted a number of points in relation to this proposal including five who commented that the data reporting model needs periodic reviews as part of the CER's compliance functions.

Four respondents indicated further information was required especially around how the model would work with regard to international exports. These points will be clarified and communicated to stakeholders.

Participant roles and responsibilities

Policy position proposal 9: There will be four scheme participant roles with differing responsibilities and permissions.

- 45 (55 per cent) respondents broadly agreed with the proposed GO 'profiles' categories
- Three (four per cent) broadly disagreed
- 33 (41 per cent) did not specify a response

Among respondents agreeing with the proposal, comments were made around the need for clarification of participant roles for international consumers, clarification over who has ownership of the Product GO certificate at each stage of the supply chain and an overall need for outreach to support consumer understanding and engagement.

GO creation process

Policy position proposal 10: The creation process will combine batch data with the upfront profiles to create certificates. The creation period for GOs can range from a single hour to a year.

Feedback was sought on whether the certificate creation period range is suitably practical for businesses.

- 47 (58 per cent) of respondents broadly agreed with the proposed GO creation process
- Two (two per cent) broadly disagreed
- 32 (40 per cent) did not specify a response

This proposal was broadly recognised as practical, and stakeholders acknowledged the flexibility it offers. However, stakeholders sought further engagement during the design phase.

Other variations on the creation period were suggested, e.g. monthly minimum and smaller intervals.

Completing and surrendering GO certificates

Product GOs

Policy position proposal 2: Product GOs will require creation and transport and storage information to be complete. Product GOs can then be surrendered and report consumption information.

- 44 (54 per cent) respondents broadly agreed with the proposed approach to GO completion and surrender
- Two (two per cent) broadly disagreed
- One (one per cent) neither agreed nor disagreed
- 34 (42 per cent) did not specify a response

Respondents generally supported this proposal as it enhances transparency over the greenhouse gas emissions of activities and aligns with international approaches.

Seven respondents commented that transport and storage information may be difficult to source and suggested allowing batch certifications to be saved at each stage and/or default factors be used. Respondents sought greater clarity over how this information would be reported.

Additionally, comments were made including:

- Consideration for information for transport and storage to be optional
- The need for information over different segments of the supply chain to be visible, to enable integration with a variety of certification schemes that have different boundaries.
- Greater clarity over who has ownership of the Product GO certificate at each stage of the supply chain.
- The need for linkage between the certificate and the actual product
- Use of a custodianship mechanism to enable data to be completed

REGOs

Policy position proposal 12: REGOs are proposed to be available to be traded or surrendered after being validly created.

- 45 (56 per cent) respondents broadly agreed with the proposed approach to REGO completion and surrender

- Two (two per cent) broadly disagreed
- Two (two per cent) neither agreed nor disagreed
- 32 (40 per cent) did not specify a response

This proposal was broadly supported. Three respondents suggested time-matching be required for surrender; two suggested an expiration date for REGOs.

Integrity controls

Managing compliance

Policy position proposal 13: The CER will undertake compliance monitoring and will have regulatory powers to address non-compliance.

- 49 (60 per cent) of respondents broadly agreed with the proposed compliance functions and regulatory powers of the CER under the scheme
- Two (two per cent) broadly disagreed
- 30 (37 per cent) did not specify a response

This proposal was broadly supported.

Three respondents commented that consideration should be given to separating issuer and regulator to enhance credibility of the scheme. Other suggested changes include adopting a volumetric allocation-based audit program, using blockchain for compliance monitoring, leveraging NGER data to streamline reporting efforts, a mandatory scheme with stronger compliance mechanisms, penalties for fraud and intentional misinformation for participants.

Audits and third-party assurance

Policy position proposal 14: Limited Scope Technical Reviews (LSTR)s will provide third-party assurance of the information reported under the GO scheme. The need for LSTRs will be front-loaded requiring less as time goes on and participants demonstrate compliance with the requirements of the scheme.

- 45 (56 per cent) of respondents broadly agreed with the proposed Limited Scope Technical Reviews (LSTRs).
- Nil broadly disagreed
- One (one per cent) neither agreed nor disagreed
- 35 (43 per cent) did not specify a response

This proposal was broadly supported. Four respondents advocated for the consideration of onsite verification where appropriate. Two respondents commented that LSTRs appear to occur too infrequently.

Corrections

Product GO certificate amendment

Policy position proposal 15: Where Product GOs have incorrect information, they will be updated to reflect the most up to date information. After the ARC process, Product GOs will be finalised and not subject to further amendments.

- 41 (51 per cent) of respondents broadly agreed with the proposed process for amending GO certificates
- Four (5 per cent) broadly disagreed
- 36 (44 per cent) did not specify a response

Respondents broadly supported the ARC process and this proposal with five additionally suggesting that errors should be published.

REGO - amendment and reconciliation

Policy position proposal 16: Where REGOs have incorrect information, they will not be updated and instead will follow an 'unders' and 'overs' reconciliation process to minimise impacts on the renewable electricity certificate market.

- 41 (51 per cent) of respondents broadly agreed with the proposed process for amending REGO certificates
- Four (5 per cent) broadly disagreed
- 36 (44 per cent) did not specify a response

Respondents broadly supported the proposal. The four that disagreed considered that original and future REGOs may have different values. Two respondents commented that further clarification on the proposal is required.

Interactions with other schemes

National emissions accounting

Policy position proposal 17: The Department proposes the GO scheme methodologies will align where possible with the NGER and the Safeguard mechanism.

- 52 (64 per cent) of respondents broadly agreed that aligning the GO scheme with existing emissions accounting schemes was important.
- One (one per cent) broadly disagreed
- 28 (35 per cent) did not specify a response

Respondents broadly supported the proposal with nine respondents citing reduced administrative burden. Three respondents commented that international alignment is also of importance; two more respondents mentioned alignment with similar domestic State and Territory based schemes.

Incentive schemes

Policy position proposal 18: The CER will be able to establish formal data sharing arrangements with the administrators of these schemes to streamline the creation process.

Feedback was sought on a range of other schemes and how the GO scheme would align with these schemes.

- 48 (59 per cent) of respondents broadly agreed that the CER is best placed to work with the administrators of other schemes.
- Nil broadly disagreed
- 33 (41 per cent) did not specify a response

Among those who expressed support for this proposal, 11 respondents commented that such an approach will yield a single source of truth to support other mechanisms. Some suggested participant approval would be required

Recommended position: CER to establish formal data sharing arrangements with the administrators of existing schemes.

Emissions accounting

Policy position proposal 19: Material emissions sources that must be measured for each product and production pathway will be specified in the methodologies. The sources will be selected based on materiality threshold of 2.5% of total emissions per source.

- 42 (52 per cent) of respondents broadly agreed.
- One (one per cent) broadly disagreed
- Two (two per cent) neither agreed nor disagreed
- 36 (44 per cent) did not specify a response

Various suggestions related to methodologies were received in response to this proposal. Four respondents suggested ongoing reviews of the 2.5% materiality threshold; three respondents suggested that immaterial emissions sources should be measured once and excluded ongoing until subject to review. Six respondents requested more detail on this proposal.

Another concern raised was the definition of CCS as 'permanent storage' in order to be considered an emissions removal. Demonstrating the permanence of CCS was considered as near impossible and as such, the current definition would eliminate possibility of CCS projects connected to hydrogen production facilities. An adjustment in language to 'long-term storage' would enable greater flexibility. The Department will continue to work with the Clean Energy Regulator and National Inventory teams to ensure consistent application of CCS emissions reduction values across Government schemes.

Treatment of offsets and double counting

Policy position proposal 20: ACCUs issued from within the system boundary will need to be surrendered for the emissions reductions to be recognised under the GO scheme. ACCUs or other

carbon offsets cannot be used to reduce the emissions intensity of products listed on GO certificates.

- 46 (57 per cent) of respondents broadly agreed with the proposal.
- Seven (eight per cent) broadly disagreed
- One (once per cent) neither agreed nor disagreed
- 28 (35 per cent) did not specify a response

This proposal relates to the requirement for offsets generated within the system boundary, such as through CCS, to be surrendered to claim the emissions reduction. The vast majority of stakeholders supported this approach and considered it would help prevent double counting between the proposed GO scheme and the existing Emissions Reduction Fund.

The proposal also put forward that offsets generated outside of the system boundary, such as for afforestation, would not be able to be used in the scheme.

Forty-three stakeholders agreed with this approach and many considered that the use of offsets generated outside of the boundary would risk the credibility of the scheme and its acceptance internationally.

Seven stakeholders called for the GO scheme to allow for offsets outside of the system boundary to be surrendered to claim further emissions reductions. This group broadly considered that the use of offsets outside the system boundary would increase the flexibility of business models and supporting greater investment. Three respondents advocated for inclusion of ACCUs from outside the boundary as to remain consistent with Safeguard Mechanism.

Some submitters suggested the scheme should be adaptable to the inclusion of offsets in the future where emissions reductions are permanent.

Tracking renewable electricity

Market-based accounting

Policy position proposal 21: LGCs and REGOs will be used to demonstrate renewable electricity use. Behind the meter or directly supplied renewable electricity will not require certificate surrender if none were created.

- 48 (59 per cent) of respondents broadly agreed with the proposed market-based accounting approach.
- Five (six per cent) broadly disagreed
- 28 (35 per cent) did not specify a response

There was broad support for this proposal and many specifically supporting a market-based approach for renewable electricity accounting for clean products. Despite the broad support, respondents expressed a need for more detail on the mechanics in using both LGCs and REGOs for product GOs.

This proposal suggests if the renewable energy generator never created LGCs or REGOs for the electricity that was directly connected to the H2 facility, then certificates don't need to be created and the producer can simply provide meter data to claim the renewable electricity powering the facility. There were also some differing views presented on the coverage of the

REGO to include behind the meter renewable electricity or generation from small-sized systems (less than 100kW). These views and the recommended policy position will be covered in the summary of REGO submissions.

Residual Mix Factor

Emissions factors and residual mix factors

Policy position proposal 22: A new RMF will be calculated for use within the GO scheme that is updated frequently and can be accessed by other market-based frameworks.

- 47 (58 per cent) of respondents broadly agreed with the proposed market-based accounting approach.
- One (one per cent) broadly disagreed
- One (one per cent) neither agreed nor disagreed
- 32 (40 per cent) did not specify a response

There was broad support for this proposal aligned with the level of support for a market-based approach for renewable electricity accounting. Again a general sentiment that further consultation is required on the details of the RMF, particularly in relation to geographic (national vs. state/territory level) and time-based (annual vs. hourly/monthly) coverage. Four respondents advocated for a Network-based RMF; three respondents suggested Higher RMF time granularity.

REC eligibility requirements for the GO scheme

Policy position proposal 23: RECs used to demonstrate renewable electricity usage in production of a GO product must have been issued within the previous 12 months. Additional information will be captured on REGOs to allow for voluntary time matching at a more granular level.

There was broad support for a flexible approach (capped at 12-months) that would enable voluntary time-matching by producers able to demonstrate this.

- 44 (54 per cent) of respondents broadly agreed with setting a 12-month vintage limit.
- Four (five per cent) broadly disagreed
- 1 respondent (one per cent) broadly disagreed on the basis that time-matching should be mandatory from scheme implementation.
- 32 (40 per cent) did not specify a response

There was a general sense that greater definition around the term “issued” was required but that an upper limit of 12 months was appropriate in recognition that global markets are likely to move towards greater granularity in time correlation between electricity generation and certificate surrender over time. Some expressed a need for more detail on the tracking and management of the vintage requirement was necessary to understand the administrative burden of this requirement.

Other comments received from respondents on this proposal included:

- 10 respondents support voluntary time matching beyond vintage
- Four respondents suggested time match should be made mandatory

Development of product-specific methodologies

International alignment and review

Policy position proposal 24: The GO scheme will expand over time by incorporating new product-specific methodologies. A prioritisation, development and review process with industry input and international engagement will be established to ensure domestic applicability, international alignment, and continued suitability of legislation.

- 53 (65 per cent) of respondents broadly agreed with the expansion plans for the GO scheme.
- One (one per cent) broadly disagreed
- 27 (34 per cent) did not specify a response

Among those in support of this proposal, seven respondents added that a formal mechanism and timeframe for new product-specific methodologies to be incorporated should be established.

Various suggestions for product-specific methodologies to be included in an expanded GO scheme were also received from stakeholders, including:

- Biomethane (5 respondents)
- Methlocyclohexane (MCH) (2 respondents)
- Iron ore, steel and cement (2 respondents)
- Ammonia, methanol and synthetic methane
- Built environment (timber, concrete, glass, steel)
- Critical minerals (zinc)
- Green metals
- Marine fuels
- Partial oxidation, pyrolysis and biomass
- Renewable diesel.