



Australian Government

Department of Climate Change, Energy,
the Environment and Water

Australia's Guarantee of Origin Scheme Design

Policy paper

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Executive summary

Accelerating emissions reduction ambitions across the world are increasing the demand for renewable energy and clean energy products. Unsurprisingly, governments, industry and consumers are calling for producers to provide objective and verifiable information to substantiate the claims being made about their products' emissions and sustainability attributes. These conditions present a clear need for transparent, consistent, interoperable, and trusted emissions accounting frameworks to underpin the creation, use and export of renewable energy and clean products.

To address this need, the Australian Government has been working domestically and internationally over the past three years to develop an internationally aligned Guarantee of Origin Scheme (GO scheme) to measure, track and verify the carbon emissions and other attributes of Australian clean energy products (including hydrogen and hydrogen energy carriers) and to certify renewable electricity.

The voluntary GO scheme is a foundational policy to underpin the development of clean energy markets and international trade in renewable energy and low-emissions products. It will provide a framework for tracking renewable electricity claims and quantifying the embedded emissions and other clean attributes of hydrogen and hydrogen energy carriers, with the intent to expand to other clean energy products over time. The GO scheme will:

- Stimulate market creation by allowing clean energy products to be fairly valued for their emissions attributes.
- Incentivise clean energy product innovation across the supply chain.
- Accelerate the uptake of clean energy products.
- Play a key role in helping new projects secure finance and improve the effectiveness of other Commonwealth efforts to scale up renewables and the hydrogen industry.

The GO scheme will serve as an information source that could link to government or industry-led schemes that provide incentives for low-emissions products or provide branding for 'green' or 'clean' products. Schemes that may use GO scheme information include the Australian Government's Hydrogen Headstart Program (announced as part of the 2023-24 Federal Budget), and State and Territory schemes such as the New South Wales (NSW) Government's Renewable Fuel Scheme, the Western Australian (WA) Government's target for production of hydrogen and the Northern Territory (NT) Government's renewable energy targets.

The Australian Government Department of Climate Change, Energy, the Environment and Water (the Department) released a pair of [consultation papers](#) in December 2022 which proposed high-level design positions for a Guarantee of Origin (GO) scheme. In the 2023-24 Budget, \$38.2 million was provided to design and implement a GO scheme in line with the approach proposed in these papers.

The Clean Energy Regulator (CER) will be responsible for administering the scheme, including compliance monitoring and assurance functions that are set out in this paper.

This scheme design paper expands on, and addresses feedback received on the December 2022 consultation documents. It seeks feedback on the detailed design elements and the expectations for participation in the GO scheme.

The detailed GO scheme policy design elements comprising this paper include:

- Part 2: GO scheme enrolment, registration processes and relevant integrity controls.
- Part 3: GO certificate creation, consumption and compliance measures.
- Part 4: Data sharing provisions.
- Part 5: Other scheme design elements (including scheme expansion, cost recovery and review).

Part 2: GO scheme enrolment, registration processes and relevant integrity controls

The GO scheme will provide a streamlined enrolment and registration process for prospective participants. This is intended to promote simplicity while ensuring accuracy and efficiency of information collection. The key steps required in this scheme design element include:

1. Prospective scheme participants apply to be enrolled in the GO scheme.
2. Registration of reporting profiles – most of the information required for GO certificates is collected once in reporting profiles. Registered participants nominate relevant ‘production’ and ‘post-production’ profiles relevant to the products they produce. Production profiles contain core information about the facility producing the product – including the product type, facility name and location, and emissions accounting methodology. Post-production profiles contain core transport and storage information – including transport/storage methods and key information enabling emissions accounting. This upfront reporting approach reduces the ongoing reporting burden of the scheme.
3. Integrity assessment – upfront reporting is assessed for compliance via an initial desktop assessment, limited scope technical review (third-party assurance process) and final review.
4. Fulfilment of registered participant obligations – once registered participants have registered relevant profiles, they will be required to keep the information up-to-date and comply with scheme requirements including cooperating with CER monitoring and audit programs.

Part 3: GO certificate creation, consumption and compliance

GO Certificates will be the core mechanism for recording and tracing information – such as emissions – through the GO scheme. Scheme participants will input GO certificate data that covers emissions throughout a product life cycle. The GO certificate captures this data in a way that can be shared with product recipients. The information included on GO Certificates will form the basis of the valuation and trade of GO products and renewable electricity. Importantly, they provide registered participants with the ability to claim the attributes of associated products or electricity generated once they are ‘consumed.’

The GO scheme will include **two categories** of GO certificates:

- **Product GO Certificates (Product GOs)** associated with the product-based emissions accounting framework. These will initially cover hydrogen and hydrogen energy carriers.
- **Renewable Electricity GO Certificates (REGOs)** associated with tracking renewable electricity generation.

This scheme design paper details the operation of Product GOs. The high-level policy issues for REGOs are discussed in a separate paper *The Renewable Electricity Guarantee of Origin paper*.

The Product GOs will use a mass balance chain of custody approach, which allows tracking and tracing of attributes from production to delivery gate applied on a batch or consignment basis. This approach links attributes evidenced by the certificate to a physical product consignment. It allows for the blending of certified and non-certified products if there is a ‘reasonable physical link’

between the production and consumption of the product. That means the quantity of certified product entering the blending point is balanced with the quantity of verified product being claimed at the other end.

Key features of the GO certificate creation and consumption lifecycle include:

1. GO certificate creation – registered participants submit GO certificate creation claims corresponding to the production of a product. The CER then validates the claim.
2. GO certificate consumption – GO Certificates can be surrendered to claim the attributes of the product. The surrender process requires reporting consumption information associated with the surrender.
3. Annual reconciliation check – the CER will conduct an annual monitoring process to ensure that information provided by registered participants complies with scheme requirements. During this process, registered participants may be required to provide supporting documentation validating information they provide throughout the year and comply with limited scope technical review requests initiated by the CER.
4. GO certificate corrections – If an error is identified a correction process will be initiated to correct identified errors on GO certificates.

Part 4: Data sharing provisions

The GO scheme will be administered through an online GO Registry. This registry will provide a platform for participants to interact with the scheme and will display key information of interest. The ability to report and access information through the GO Registry will be integral to the operation of the scheme.

A broad range of GO Certificate information will be publicly available on the registry including facility details, product information (including period and production date) and emissions information. The Department is proposing that commercially sensitive information such as supplier details will not appear on the registry.

The CER will be empowered to establish formal data sharing arrangements with administrators of other schemes – such as Climate Active, the NSW Government and GreenPower – to safeguard the accuracy, efficiency and reliability of the registry.

Part 5: Other scheme design elements (scheme expansion, cost recovery, scheme review)

The GO scheme is being designed to expand and incorporate new products beyond hydrogen and its carriers. This aims to ensure that it remains responsive to the emergence of new markets for clean energy products, international trends, and the need to appropriately certify emerging Australian energy products. New products will be incorporated into the scheme through a three stage ‘product prioritisation and implementation’ process. These steps include:

1. Product/methodology prioritisation – Publication of an annual product prioritisation list will provide stakeholders with transparency over the products being considered for incorporation into the GO scheme. This list will include three ‘tiers’ displaying the level of priority for incorporation. Products will be prioritised based on several factors relating to their emissions, economic, domestic and international policy relevance, and technology and market readiness.
2. The initial product prioritisation list – proposed to be published in March 2024 – will be based on a public feedback process closing on 19 November 2023. Stakeholders are invited to submit information on products proposed for inclusion via the Consultation Hub survey form.

3. Subsequent annual prioritisation lists – proposed to be published in January/February of each year thereafter – will be based on an ongoing Departmental review and an annual public feedback process.
4. Methodology development process – The Department will commence development of methodologies for products deemed suitable for scheme incorporation based on the prioritisation process. A Methodology development tracker will be published to provide stakeholders with transparency over the methodology development process.
5. Methodology Implementation – new methodologies will be incorporated into the scheme through the enactment of delegated legislation.

The GO scheme will be cost recovered. The approach will broadly include the use of fees for specific services, and levies to cover the costs of administering the scheme. The approach will promote equity and proportionality by apportioning costs based on the relative burden on participating industries. Cost recovery may include exemptions from fees and levies for nascent industries such as hydrogen to mitigate the burden on emerging industries.

The Department proposes to provide an initial review of the scheme in 2027 and then an ongoing review every three (3) years thereafter. The review will assess effectiveness, integrity and efficiency of the scheme and identify areas for amendment.

Consultation package overview

This consultation package includes this paper and its two attachments, the **Emissions Accounting Approach** and **Renewable Electricity Guarantee of Origin paper**, and the **Guarantee of Origin Emissions Calculator (the GO calculator)**. Collectively, these papers detail the proposed GO scheme design elements, implementation requirements and the regulation of scheme participants.

The Department is also consulting on products that would form the initial prioritisation list for inclusion in the GO scheme. To nominate a product for inclusion, please complete the form at the department's [consultation hub](#).

This scheme design paper provides a practical perspective on what participants will be able to expect from the scheme once it commences.

The Emissions Accounting Approach (methodology) attachment provides detail on how emissions will be estimated for Product GOs. The GO emissions calculator (GO calculator) is a calculation tool that provides a practical illustration of the framework. Feedback received on this attachment will help shape the emissions accounting approach of the GO scheme.

Feedback sought

The Department is seeking stakeholder views on the elements of scheme design outlined in this paper. We are seeking to understand how well the regulatory burden of the scheme is balanced with the need for scheme integrity and how practical it is to provide the required information.

How to have your say

Submissions on the scheme design paper will be open until **17 October 2023**. Responses to this discussion paper can be provided directly through the Department's [consultation hub](#).

Part 1. Background

The Department has been developing the GO scheme since the release of the 2019 [National Hydrogen Strategy](#). The scheme design elements detailed in this package represent the culmination of learnings from various international engagements and stakeholder consultation processes over the past three years.

The Department has played a leadership role in the [International Partnership for Hydrogen and Fuel Cells in the Economy \(IPHE\)](#) to ensure the scheme is aligned with international approaches to emissions accounting. The IPHE is the main forum for developing internationally aligned emissions accounting methodologies for hydrogen, comprising over 23 member countries, including most of Australia's priority trading partners. The IPHE has produced a working paper, covering emissions accounting methodologies for hydrogen from various production pathways, alongside energy carriers such as ammonia and liquified hydrogen. These methodologies form the basis of the GO scheme's design.

The CER in collaboration with the Department ran [Hydrogen Guarantee of Origin trials](#) from March 2022 to April 2023. These trials engaged numerous prospective scheme participants to test various proposed elements of the GO scheme design including metering approaches, reporting frameworks and emission intensity calculation methods. Learnings from these trials have been used to refine the scheme design. A summary of learnings are available on the CER's [website](#).

The Department released a pair of [consultation papers](#) in December 2022. Engagement with the consultation process was significant, with the papers receiving submissions from over 90 distinct stakeholders. Individual submissions and an overall summary of these submissions is available on the Department's [website](#).

The feedback received on the December 2022 consultation papers was broadly supportive of the proposed policy positions. However, stakeholders called for greater clarity on how the scheme would operate in practice. One of the primary intentions of this paper is to clarify outstanding stakeholder questions.

A robust IT system build is being developed by the CER to deliver the GO scheme's various functions. The CER is also developing several information gathering, sharing and verification processes underpinning the scheme.

Outcomes from consultation to date on Product GO

Based on the feedback from the consultation processes listed above, the Department is developing a Guarantee of Origin scheme based on the following policy positions.

Upfront reporting model

The scheme's reporting model will include a combination of pre-fill data specific to a facility or supply chain (submitted upfront when registering products) and batch data specific to production (submitted at the point of certificate creation). This is intended to provide a practical reporting process, reduce regulatory burden, and enable the timely assessment and creation of GO Certificates. There was broad support for this model. However, feedback highlighted that it will likely require periodic reviews for accuracy, compliance, and efficiency.

GO certificates will be housed on a public register

Product GOs will be housed on a publicly visible register with general information and the ability to share specific information with other scheme participants. This proposal was strongly supported on

the basis that publicly available information is critical to ensuring credibility and trust in the scheme. However, respondents highlighted the importance of balancing this with a regard to the commercial confidentiality of some data.

Scheme eligibility

There will be no minimum emissions-intensity requirements established to set participation in the GO scheme and participation will be voluntary for Product GOs. This means a product will be eligible if the scheme contains a methodology corresponding to the product and production process under consideration. Respondents to the 2022 discussion paper were broadly in favour of not including minimum emissions intensity as the scheme would have more scope and flexibility to provide complete market information about emissions intensity.

Integrity controls

The CER will undertake compliance monitoring and will have regulatory powers to address non-compliance. Limited Scope Technical Reviews (LSTRs) will provide assurance over the information reported in the GO scheme. The need for LSTRs will be front loaded, requiring less as time goes on. These proposals were broadly supported and are further fleshed out in this document.

'Well-to-delivery gate' system boundary for Product GOs

Emissions accounting for Product GOs will cover the supply of raw materials, production, and transport and storage to the point of consumption or international departure (Well-to-delivery gate). The December 2022 consultation paper previously referred to this system boundary as 'well-to-user', however, the Department has revised GO scheme system boundary terminology to 'well-to-delivery gate' to provide greater clarity. No material changes to the system boundary design were affected by this name change.

Feedback overwhelmingly supported this measure as it would enable transparency of emissions over the full product supply chain, support enhanced credibility of the scheme and is consistent with international trends and practices.

Mass balance approach for Product GOs (previously provenance principle)

The Product GOs will use a mass balance chain of custody approach, which allows tracking and tracing of attributes from production to delivery gate applied on a batch or consignment basis. This approach links attributes evidenced by the certificate to a physical product consignment. It allows for the blending of certified and non-certified products if there is a 'reasonable physical link' between the production and consumption of the product. That means the quantity of certified product entering the blending point is balanced with the quantity of verified product being claimed at the other end.

Some stakeholders sought greater clarity over the definition of a 'reasonable physical link'. This is provided in Part 2 of this paper.

Treatment of Australia Carbon Credit Units

Carbon offsets from third parties will not be recognised within the GO scheme. This includes Australia Carbon Credit Units (ACCUs) issued for emissions reductions outside of the system boundary and international offsets.

Most stakeholders supported this approach and considered it helpful to prevent double counting between the proposed GO scheme and the existing Australian Carbon Credit Unit (ACCU) Scheme (formerly known as the Emissions Reduction Fund). Many respondents considered that the use of

offsets generated outside of the system boundary would risk harming the credibility of the scheme and its acceptance internationally.

Recognition of Renewable Electricity Certificates

REGOs and LGCs can be surrendered against electricity consumption to claim the use of renewable electricity in Product GO certificates. LGCs and REGOs will have a 12-month validity to be used in the GO scheme and will be stamped with the date and time of generation. There will be no requirement for LGCs or REGOs to be matched to the time of production. However, a mechanism providing producers with the option to demonstrate time matching on RECs will be developed over time.

This means that when a Product GO certificate creation claim is initiated, any Renewable Energy Certificate (RECs) such as a REGO and LGC surrendered against associated electricity use must have a time of generation that is within 12 months of the hydrogen production.

Requirements for time matching renewable generation with its associated product is emerging internationally and through some private corporate demand. This proposed scheme design position ensures the GO scheme maintains alignment with such developments. Respondents broadly deemed an upper limit of 12 months validity appropriate in anticipation of these likely trends in the future.

Part 2. Scheme enrolment and registration

Feedback sought:

The Department is seeking feedback on the practicality of the proposed scheme enrolment and registration processes.

Feedback is particularly sought on the following:

- Does the proposed approach to enrolment and profile registration sufficiently cover how [you] expect to participate within the scheme?
- Is there any data proposed within the reporting profiles that is not suitable for reporting upfront?

Summary

Scheme enrolment and registration is the entry point for the GO scheme. The proposed process is based on the processes to enrol persons and [accredit a power station](#) under the Large-scale Renewable Energy Target (LRET) scheme.

The proposed enrolment and registration process for the scheme is:

1. Prospective scheme participants apply to be enrolled in the GO scheme. The applicant provides identifying information and undergoes fit and proper person checks.
2. Once approved, participants can register reporting profiles that contain the static upfront data. This forms the upfront reporting model where data in reporting profiles is combined with batch-specific data to enable GO certificate creation.

There are three broad types of reporting profiles: production profiles, post-production (which covers transport and storage) and consumption profiles. They cover the core information required to certify renewable electricity generation and calculate and verify the emissions associated with a product.

3. The CER assesses the information provided in the reporting profile and may require audits to be completed.
4. Once profiles are approved, participants can begin creating GO Certificates.

Section 2.1 Participant enrolment

The enrolment process allows a streamlined way for participants to register in the GO Scheme. In the December 2022 consultation paper, it was proposed that participants could register as one of four account or participant types: GO Producers, GO Intermediaries, GO Agents, and GO Consumers. While broadly supportive, stakeholders raised concerns about how these roles would work in practice.

In response, the Department proposes a single registered participant ('participant') account type to provide a broad suite of functionalities to engage with the GO scheme. These functions include being able to register reporting profiles and create, transfer and surrender GO Certificates. The application would include identifying information and undergo fit and proper person checks.

The Department considers this will provide individuals with a straightforward method of enrolling into the GO scheme. The participant types proposed in the December consultation paper are instead reflected in the reporting profiles. The CER may develop additional administrative processes and IT accounts over time to give flexibility to participants.

Section 2.2 Profile registration and eligibility

The GO scheme 'upfront' reporting model ensures most of the information required for GO certificates is captured once in reporting profiles. Certificates can then be created by providing a smaller amount of 'batch' specific data after production or generation has occurred. This approach reduces the ongoing reporting burden of the scheme.

The system boundary for Product GOs created under the GO scheme covers the 'well-to-delivery gate', which can be broken down into a production boundary (well-to-production gate) and post-production boundary (production gate-to-delivery gate).

The Department proposes three different types of profiles to support this chain of custody approach across the full system boundary:

- **Production profile:** captures the core information about the facility producing the hydrogen. This profile type captures the well-to-production gate portion of the system boundary.
- **Post-production profile(s)** captures information about the transport and storage of the product. These profile types capture the production gate-to-delivery gate portion of the system boundary. There are two proposed types of post-production profiles initially:
 - **A transport profile.**
 - **A storage profile.**
- **Consumption profile:** these are used to attribute GO Certificates to an end consumer.

Product GOs will use a mass balance chain of custody approach, which allows tracking and tracing of attributes from production to delivery gate applied on a batch or consignment basis. This approach requires a reasonable physical link be demonstrated between the certificate and a physical product consignment. Unlike other chain of custody approaches, the mass balance approach allows for the blending of certified and non-certified products if the quantity of verified (or certified) product entering the blending point is balanced with the quantity of verified product being claimed at the other end.

Likewise, products verified through the GO scheme can be blended with other products and still claimed with appropriate transfer and/or surrender of GO Certificates. The mass balance approach allows for a high integrity scheme that still enables various business models for the production and supply of products. Common reasons for blending within the GO scheme include to reduce

emissions within gas pipelines by blending natural gas with low-carbon alternatives like hydrogen, to transport fuels within tankers on trucks or ships, and for bulk or long-term storage.

Participants will be able to register production, post-production and consumption profiles to create, complete and consume Product GOs. The information proposed to be collected in these profiles is detailed in the sections below and includes locational information to support validating the reasonable physical link throughout the system boundary.

The Department expects that in most cases a single participant will complete profiles for their entire supply chain. However, this may be difficult for some participants as they may not have full visibility over their post-production processes. The Department therefore proposes that participants will be able to transfer the responsibility to provide post-production and consumption information to other participants.

The information proposed to be collected in the Product GO profiles is set out below. Feedback is sought from stakeholders on their ability to provide this information upfront, as well as how this information may need to be expanded upon as new products and production pathways are incorporated into the GO scheme.

Production profiles

Production profiles will collect information about the production boundary, as well as general information to assist with the administration of the scheme. The scheme will initially cover three production pathways for hydrogen including electrolysis, steam methane reformation (SMR), and coal gasification.

At a high level, the production profiles will need to capture information to calculate:

- Upstream emissions from the acquisition, processing and transport of necessary feedstocks such as water, fuels or chemicals.
- Direct emissions involved in the manufacture of products including combustion emissions, relevant fugitive emissions and industry process emissions.
- Emissions from the consumption of electricity.
- Relevant emissions removals such as those from carbon capture and storage processes or through the allocation of emissions to co-products that are on-sold.

Further details on the specific processes and emissions sources that are within the production boundary scope is available in Part 1 of the Emissions Accounting Approach attachment. The information in Table 1 below is proposed to be the initial production profile requirements. Over time, and as new production pathways and products are incorporated into the scheme, the Department may need to revise and expand these requirements.

Table 1: Production profile data (hydrogen)

Category	Information requirements
General information	<p>The general information reported through the production profile will include general eligibility requirements and identifying information such as:</p> <ul style="list-style-type: none"> - Product type. - Facility name. - Facility location. - Production activities (i.e., production pathways). <ul style="list-style-type: none"> ○ Key component(s)/modules

	<ul style="list-style-type: none"> - Process diagrams that illustrate the operating process for the facility. - Facility capacity in kilograms of product per year. - Pressure and purity at production gate. - Facility location which must be in either Australia's: <ul style="list-style-type: none"> o Mainland, (postcode/region or co-ordinates) o State and Territory's coastal waters, (co-ordinates) o Territorial sea, or (co-ordinates) o Exclusive Economic Zone (co-ordinates) - Facility operator <ul style="list-style-type: none"> o Certificate owner if not the same - Date of first production. - Participation in other schemes and programs (for example Hydrogen Headstart). - Details of Indigenous community endorsement for facilities operating on Native Title lands (where applicable).
Production boundary	<p>The below information will be used to set the production boundary as outlined in Part 1 of the Emissions Accounting Approach attachment. It will include:</p> <ul style="list-style-type: none"> - Measurement groupings and how emissions sources will be measured and reported. - Production inputs including fuels, chemicals, utilities and renewable electricity certificates. - Production outputs from the process, including hydrogen, co-products and carbon capture and storage. - Relevant non-emissions information relating to production inputs (such as water source).
Methodology information	<p>This information will set out how emissions intensity for the well-to-production gate (or production) portion of the system boundary will be calculated (Part 2 and Part 3 of the Emissions Accounting Approach attachment). It will include:</p> <ul style="list-style-type: none"> - Measurement approaches for production inputs and outputs. - Modelled values where appropriate for co-product allocations and non-attributable processes. - Default emissions factors where they are intended to be used for the purpose of estimating emissions. - Where emissions are allocated to co-products (products aside from hydrogen produced through the production process) participants will need to demonstrate they were on sold or used internally.

Post-production profiles

Post-production reporting profiles include transport and storage profiles, which capture information about the transport and storage steps in the supply chain respectively. The post-production profiles are intended to broadly cover the following:

- Emissions related to the transportation of the product from the production facility to the delivery gate (via road, rail, pipeline, and coastal shipping).
- Emissions associated with the storage of the product.
- Emissions associated with post-production processes including venting and leakage.

- The quantity of product lost between production and delivery gates, and emissions attributable to losses.

Table 2 below outlines the proposed information requirements for transport and storage profiles. The Department is seeking feedback on whether these activities are appropriate, and if there are any additional activities that should be considered.

Table 1: Proposed transport and storage profile data requirements

Category	Information requirements
Transport profile requirements	
General information	<p>The general information reported will include information such as:</p> <ul style="list-style-type: none"> - Transport type, either road, rail, pipeline or maritime. - Location information. - Transport provider details including company name and an Australian Business Register (ABN) number, Industry Capability Network (ICN) number or Australian Company Numbers (ACN). - The recipient company's details including company name and ABN, ICN or ACN.
Methodology information	<p>This information will set out the information used to set the post-production boundary and approach to estimating emissions in Part 1, Part 2 and Part 3 of the Emissions Accounting Approach attachment. It will include:</p> <ul style="list-style-type: none"> - Transport start and end locations. - The emissions calculation method (must be one of the recognised methods in the Emissions Accounting Approach attachment). - The emissions factors that will be used to calculate transport emissions. - The fuel efficiency values may be required for some methods. - The approach to measuring the load mass may be required for some methods, - The approach to measuring product losses. - The approach to measuring load mass and distance travelled by other products where required for allocation of transport emissions.
Storage profile requirements	
General information	<p>The general information will include information such as:</p> <ul style="list-style-type: none"> - Storage method, including geological storage or short-term buffer storage. - Storage provider details including company name and an ABN, ICN or ACN. - Storage location. - The recipient company's details including company name and ABN, ICN or ACN. - Details of Indigenous community endorsement for facilities operating on Native Title lands (where applicable).

Methodology information	<p>This information will set out the information used to set the post-production boundary and approach to estimating emissions in Part 1, Part 2 and Part 3 of the Emissions Accounting Approach attachment. It will include:</p> <ul style="list-style-type: none"> - Approach to measuring production inputs and outputs, including measuring losses. - Modelled values where they are the proposed measurement approach for co-product allocation and non-attributable processes. - Default emissions factors where they are intended to be used for the purpose of estimating emissions.
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Consumption profiles

Product GO consumption profiles will be used to report the end consumption of Product GOs and their associated products. The Department proposes that these profiles will need to at a minimum capture the details of the end consumer and confirm the reasonable physical link with the delivery gate for the product. These consumption profiles may also contain additional optional information about the intended use of the related product, and any relevant emissions accounting schemes or frameworks.

The end consumer location will be used to validate the reasonable physical link with the delivery gate in the post-production profile. This must be within Australia. The Department proposes the reasonable physical link can be validated in the following scenarios as follows:

- Where hydrogen is blended into a natural gas network, the reasonable physical link can be demonstrated by an end consumer being within the confines of an Area Distribution Authority's boundary.
- Where hydrogen is shipped to another country, the reasonable physical link extends only to the location of the last Australian port it was in before being exported.

The Department proposes the process for registration of consumption profiles will be light touch relative to the other profile types. There will be no assessment process enshrined in legislation, however the CER will develop monitoring and compliance processes to provide assurance over the claims being made in these profiles.

Section 2.3 Assessment process

As most of the information to create GO certificates is collected through reporting profiles, it is important the scheme has strong integrity controls to provide assurance over this information. This allows for a lighter touch when validating certificate creations.

The Department proposes that reporting profiles will need to pass an assessment process undertaken by the CER prior to being capable of creating GO Certificates. The proposed assessment process includes three steps: an initial assessment, a limited scope technical review (where applicable), and then a final decision.

The initial assessment would involve the CER reviewing the information provided in the reporting profile to confirm it aligns with the legislative requirements. Where errors are identified, the participant would need to resubmit information as required by the CER.

Limited scope technical reviews (LSTRs) are a mechanism to provide additional third-party assurance for the GO scheme. The Department proposes that LSTRs will be required for production profiles and may also extend to elements of transport and storage profiles. In addition, the CER will have the

discretion to require an LSTR for renewable electricity production profiles where there are significant compliance concerns.

The minimum requirements for an LSTR would be specified in the GO scheme legislation and broadly cover process flow charts, main equipment lists, energy and mass flow diagrams and metering points. The CER would have the discretion to specify additional matters that the LSTR must have regard to.

The CER will be required to articulate the requirements of the LSTR and the use of any discretionary powers to the participant. Then the participant will need to commission an LSTR by an approved, National Greenhouse and Energy Reporting scheme qualified third-party auditor at the participant's expense, which will include an in-person or virtual site visit.

The Department proposes that the CER would have 8 weeks from the profile information and LSTRs (where applicable) being submitted to approve or reject the profile registration.

Section 2.4 Ongoing obligations

The Department proposes that once participants and profiles have been registered, there will be obligations to ensure the provided information remains up to date and accurate to support the ongoing integrity of the GO scheme. Participants will be responsible for ensuring relevant data is captured and records are appropriately kept.

Profile variations

Participants will be responsible for notifying the CER where there are material changes to the production or post-production processes. These changes may lead to a profile variation and assessment process.

The CER will have the discretion to request an LSTR or additional information following a material change to the product facility. However, where the variations are minor or low risk, they will be able to be signed off by a professionally registered engineer.

Compliance

The CER will have a variety of tools to monitor and enforce compliance with the ongoing obligations of reporting profiles. The approach to monitoring compliance will include the development of risk-models and verification checks consistent with approaches used for the LRET and ERF. This will also involve the development of a CER compliance monitoring and audit program.

Where non-compliance is detected, the CER will have the power to suspend the registration of reporting profiles, accept enforceable undertakings and pursue legal action for breaches of civil penalty provisions. The CER may require audits to be completed where there are significant compliance concerns.

Deregistration

Reporting profiles can be deregistered at the discretion of the participant that owns them, or by the CER due to unaddressed non-compliance with scheme requirements. If deregistration is initiated by the CER, the participant will be notified and be able to seek a review of the decision prior to finalisation.

Part 3. GO Certificates

Feedback sought

The Department is seeking feedback on how well the proposed approach to engaging with GO Certificates reflects contracts and business models between producers and consumers (and any intermediaries).

Feedback is particularly sought on the following:

- Should Renewable Energy Certificates (RECs) be required to be surrendered prior to any GO Certificates being created?
- What information should be mandatory in consumption profiles to provide evidence of valid surrender and claims of the GO certificates?
- What are the expected causes of errors in data reported?
 - o Do the proposed provisions for an Annual Reconciliation Check process and approach for correcting errors within REGOs and Product GOs provide sufficient integrity to the scheme and information on the certificate?

Summary

Guarantee of Origin Certificates (GO Certificates) are the mechanism for recording and tracing information in the GO scheme. The GO Certificates will package information in a transparent manner and are expected to be the primary mechanism to evidence the production and consumption of products and renewable electricity with verified attributes.

There are two main stages within the GO Certificate lifecycle:

1. Certificate creation, and
2. Certificate consumption.

Certificate creation

GO Certificate creations can be initiated after production or generation has occurred, by combining batch specific data with profile data. Product GOs will need post-production information to be completed.

Through the creation process, renewable electricity certificates (both LGCs and REGOs) may be used to track the use of renewable electricity as an input into a Product GO. Voluntary cancellation of Australian Carbon Credit Units (ACCUs) and Safeguard Mechanism Credits (SMCs) will not be recognized in the GO scheme.

Certificate consumption

Once a Product GO Certificate has been completed and validated by the CER, they can be surrendered – through reporting consumption information associated with the surrender – to claim the attributes of a product. Completed GO Certificates can be transferred between participants to align with contractual or commercial arrangements.

To ensure claims are valid, GO Certificates will also be subject to Annual Reconciliation Checks (ARC). ARCs will be used to confirm data reported throughout the year and offer an opportunity for corrections to be made.

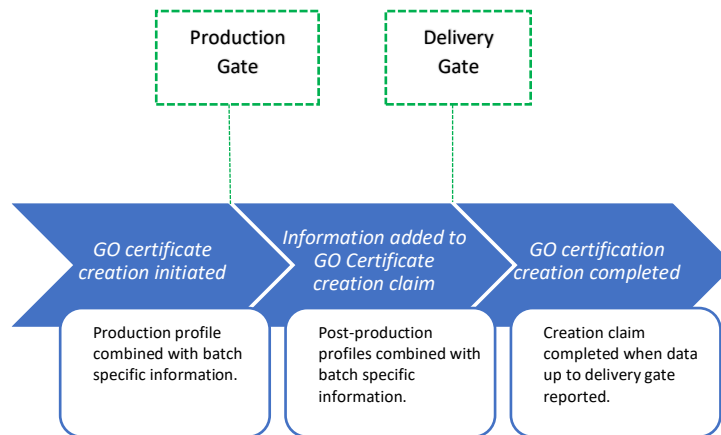
Section 3.1 Product GO Certificate creations

Participants with a registered production profile can submit a creation claim for GO certificates following the physical production of hydrogen or another product covered by the scheme. The Department proposes Product GO Certificates will be created on a 'batch' basis.

A 'batch' for the purpose of the GO scheme would be defined as a period over which production can be considered broadly homogenous. Participants will be able to define their batch periods for creations, but it must range between one hour and 12 months.

The CER will validate creation claims that meet the information requirements of the scheme. This will involve automatic checks to ensure facility components, measured inputs and outputs are appropriate for the type of production profile. The review will also ensure any renewable electricity certificates surrendered to demonstrate the use of renewable electricity comply with the eligibility criteria.

Product GO Certificates have multiple stages within their lifecycle recognising that the physical movement of products, and hence the ability to report data across the well-to-delivery gate system boundary may be a withdrawn process. The following figure represents the basic GO certificate creation process.



Product GO Certificate initial creation

Initiating the Product GO creation process will involve participants providing batch specific data associated with a registered production profile to estimate the emissions intensity of hydrogen. The approach to calculating the emissions will include combining the upfront production profile with batch specific data using the approach in Section 2.2 of the Emissions Accounting Approach attachment.

Once these data fields have been reported, the certificate creation process is initiated, and an 'incomplete' Product GO Certificate is created. Incomplete GO Certificates cannot be surrendered or used to make a claim to attributes contained within the certificate.

Recognition of Renewable Electricity Certificates (RECs)

Emissions from the consumption of electricity will be measured through a market-based approach. This allows for renewable electricity use to be demonstrated through the purchase and surrender of renewable electricity certificates. The surrender of Large-scale Generation Certificates (LGCs) and REGOs will be the only certificates that may be used to evidence renewable electricity use under the GO scheme.

The only eligibility requirement placed on these certificates will be a 12-month vintage rule. This means the generation of the renewable electricity must have occurred within 12 months prior to the batch period for the Product GO. Where participants directly surrender LGCs or REGOs, this will need to be done as part of the initial GO certificate creation, the CER is exploring the ability for automatic surrenders.

Indirect surrenders, such as from the renewable power percentage, jurisdictional renewable targets and GreenPower will be accounted for using the approach suggested in Part 3.1.3 of the Emissions Accounting Approach attachment. This may include additional evidentiary requirements to ensure participants are eligible.

Future expansion to include optional time and location matching

Product GOs are intended to be capable of demonstrating compliance with a diverse range of domestic and international requirements as they emerge and evolve. Such schemes are increasingly considering temporal or spatial restrictions on renewable energy certificates.

The market-based approach used in the GO scheme is intended to be refined in the future to allow the optional tracking of additional temporal and spatial information. This will include data matching and validation processes and will be supported through the development of more granular residual mix factors published through the NGA Factors.

Process to complete Product GO Certificates

The participant that initiated the creation of the Product GOs will assume responsibility for reporting information about post-production processes to complete their certificate creation claim. Alternatively, the participant may transfer ownership and the responsibility to complete Product GO Certificates to another participant. This transfer will need to be able to demonstrate a reasonable physical link between the transferring party and the receiving party.

The participant will be able to use transport and storage profiles it owns alongside any batch specific information about the processes. This information will then be used to calculate the emissions intensity of the quantity of hydrogen at the delivery gate in accordance with Section 2.3 of the Emissions Accounting Approach attachment.

Product GO Certificate completion and issuance

Once all the batch-specific data has been reported with profile data and validated by the CER, the Product GO Certificates are complete and issued to the participant. Each complete Product GO Certificate will represent 1 kilogram of delivered hydrogen. Where the delivered quantity in kilograms is not a whole number, it will be rounded to the nearest whole number.

The Department proposes incomplete Product GOs associated with product losses between the production and delivery gate will be voided, and emissions associated with the lost product will be displayed on the complete Product GOs. The approach to calculating this loss correction term is detailed in Section 2.4 of the Emissions Accounting Approach attachment.

Recognition of other units and certificates

The GO scheme will not initially recognise the use of any other certificates or units, beyond LGCs and REGOs. However, over time this approach may be revised as new products and sectors are incorporated into the GO scheme, and international preferences continue to develop.

Product GOs

The GO scheme will provide an embedded emissions accounting framework that commences with hydrogen and then expands to other product over time, which may use hydrogen as an input. The Department intends for Product GOs for upstream products to be recognised as inputs for downstream products. For example, hydrogen can be used as an input into the production process for ammonia and likewise the Hydrogen Product GOs could be used as an input into Ammonia Product GOs.

The exact relationship between Product GOs will be explored as new products are incorporated into the GO Scheme.

Australian Carbon Credit Units

Australia's Carbon Credit Unit Scheme (formerly known as the Emissions Reduction Fund) allows for Australian Carbon Credit Units (ACCUs) to be issued for various activities such as Carbon Capture and Storage (CCS) and fuel switching. These ACCUs can in some domestic emissions accounting frameworks be voluntarily cancelled to represent a tonne of emissions stored or avoided.

The voluntary cancellation of ACCUs will not be recognised in the GO scheme. ACCUs will be required to be cancelled where they are issued in relation to emissions reductions within the system boundary. If these emissions reductions are issued ACCUs and they are not cancelled, the associated emissions reduction would be added back on to the Product GO's reported emissions intensity.

These positions are to ensure that the emissions accounting approach to Product GOs is internationally consistent and supports recognition of the GO scheme. The information on Product GO Certificates will represent an inventory, and participants will still be able to voluntarily cancel ACCUs against these emissions or for other compliance reasons.

The Department may review the approach to ACCUs in the future as international preferences become clearer, or when and if the GO Scheme expands to cover agricultural products.

Safeguard Mechanism Credits

The recent revisions to the Safeguard Mechanism will now allow the creation of Safeguard Mechanism Credits (SMCs) for each tonne of emissions below the mechanism baselines. These SMCs do not represent a claim to a tonne of additional emissions reductions in the same way an ACCU does. Rather SMCs are generated under a regulated emissions limit and can only be used to meet liabilities under the Safeguard Mechanism.

The Department proposes the GO scheme will not recognise cancelled SMCs as a tonne of emissions reduction. In addition, the GO scheme will not require emissions related to SMCs to be added back on to Product GOs. The recognition of emissions reductions in both SMCs and Product GO Certificates does not introduce a double counting risk as SMCs are unable to be voluntarily cancelled for other purposes.

Renewable Gas Guarantees of Origin (RGGOs)

The GreenPower Renewable Gas Certification pilot is intended to certify Renewable Gas Guarantees of Origin (RGGOs) for biomethane. These RGGOs can be independently traded separately from the underlying product and are intended to represent a claim to the use of the biomethane.

The Department proposes that RGGOs will not be recognised initially in the GO scheme. However, there may be an opportunity to recognise these RGGOs in the GO scheme once a domestic market-

based approach to recognising these claims has been developed. The Department is engaging closely with GreenPower to explore this option further.

Section 3.2 Consuming GO Certificates

Product GO Certificates present information about a product, however the ability to claim the attributes of the product are not realised until the GO Certificates are consumed. The consumption process allows GO Certificates to be surrendered and the consumption information can be recorded.

A registered person with ownership of Product GO Certificates will be able to surrender their certificates using a consumption profile. This surrender process will have some restrictions as a physical link between the delivery gate and the end consumer will need to be confirmed in accordance with Section 2.2.

The Department proposes Product GOs will be able to be surrendered by a participant on behalf of another entity or individual. The Department also proposes that where GO Certificates have been surrendered on behalf of another person linked through the consumption profile, they will be able to see surrenders made on their behalf. This is intended to provide a simple method for supporting transparency of proxy surrenders as part of the GO scheme.

Once a GO Certificate has been surrendered, they are withdrawn from circulation and will be unable to be used again. However, error corrections can still occur until the GO Certificates are finalised.

Section 3.3 Annual reconciliation check (ARC)

The Annual Reconciliation Check (ARC) is a proposed annual process that is intended to monitor the ongoing compliance of information provided over the prior year. The ARC process will commence in the end of July each year with a summary report of the information provided to date throughout the year by participants.

The summary report will include information provided through profiles and batch specific data used in GO Certificate creation claims. This is summarised in the table below.

Table 2: Required contents of annual summary report

Reports	Summary contents
Product summary report	<ul style="list-style-type: none"> • Profile details, • Measurement data reported throughout the year, • Reported co-product information, • Reported transport and storage allocations.

The participants may be required to upload additional supporting documentation and will be required to declare that the information provided throughout the year is accurate and up to date. The CER will develop guidelines that cover the supporting information that will be required and the process for uploading this documentation. It may include information such as receipts, metering records and invoices.

In addition to the above, the participant may be responsible for providing an LSTR. These will be required in the first year of registration for hydrogen profiles, and at most every five years thereafter. The CER could request an LSTR where it has a significant compliance concern, for either hydrogen or renewable electricity production profiles.

The CER may specify requirements for these audits but at a minimum they are proposed to check:

- Technical compliance – verification of process flow charts, main equipment lists, energy/mass flow diagrams, metering points on system diagrams, valid calibration certificates.
- On-site verification to confirm reported production parameters and metering.
- Facility records exist to demonstrate and support that information provided is correct.

The participant will have until the end of September to submit their declaration and supporting documentation and if applicable, the LSTR. The CER will be responsible for assessing these materials and will have the option to approve, dispute, or refuse declarations, with the possibility of compliance action being initiated.

Any errors identified throughout the process will need to be corrected in accordance with the section below. Once this process has been completed the GO Certificates can be considered finalised and no longer requiring corrections. The CER will have the discretion to invalidate any GO Certificates with information that is not able to be finalised through the ARC process.

Section 3.4 GO certificate corrections

The information reported through GO Certificates may be incorrect due to errors in either the profile or batch specific data. These errors may either be self-identified or identified through the ARC process or through other compliance monitoring activities conducted by the CER. Once an error has identified there will be an error correction process.

Errors may occur from incorrect information being reported about feedstocks or the quantity of outputs. The participant that was responsible for providing the incorrect information will need to amend any Product GO Certificates they created with corrected values. The variation will be automatically validated in a similar manner to the CER's creation checks mentioned above. Once the variation has been completed the GO Certificate will be updated with the new information. Other scheme participants that have interacted with the Product GO Certificate will be notified of the change.

Where an error is identified prior to or as part of the ARC process the Product GO will be amended to reflect the correct information. This approach will ensure information is transparent and trustworthy. However, it will require scheme participants to manage the risk of incorrect information through commercial arrangements outside of the GO scheme.

Part 4. Data sharing

Feedback sought:

The Department is seeking feedback on the level of transparency provided through public registers. In addition, feedback is sought on the flexibility for scheme participants to share information beyond the public registers and ability to disclose data.

Feedback is particularly sought on:

- The information that should be publicly available on the GO Registers compared to privately available information that can be shared.
- The data disclosure provisions available to the Clean Energy Regulator.

Summary

Information collected through the GO scheme will be housed on a GO Registry data holding system that stores the information captured by every GO Certificate. A broad range of GO Certificate information will be made publicly available on the registry, except for some commercially sensitive information. The CER will also be able to develop formal data sharing arrangements with other entities to support the accuracy, efficiency and reliability of the scheme. These systems are intended to enable scheme participants to disclose information about their certificates.

Section 4.1 GO Registry

The GO Registry is the main interface for scheme participants seeking to interact with the GO scheme. Enrolling to participate, registering profiles, and creating and surrendering GO Certificates will all be done through the GO Registry. The ability to report and access information through the GO Registry will be integral to the operation of the scheme.

The GO Registry will cover scheme registration information as well as certificate lifecycle information. For comparison, the existing REC Registry transparently reports registers of registered accredited power stations, registered persons and LGCs as required under the *Renewable Energy (Electricity) Act 2000*. Similarly, the public information requirements outlined below are proposed to be included in the legislation giving effect to the GO Scheme.

Participant and profile information

The Department proposes that there will be a public register showing all registered participants and production profiles.

The register will include information about registered participants including account names, account types and the status of these accounts. The register will also include details of production profiles including information about the participant that owns the profile, the name of the facility, the energy source or production pathway, the state it is in, its registration date and the status of the profile.

Scheme participants will be able to view through their account any profiles they own and summaries of the information that has been provided to date through those profiles. They will be able to use their profiles to create, update and surrender GO Certificates and will be able to see their holdings.

GO certificate information and data visibility

Feedback from the GO trials indicated that prospective scheme participants are comfortable with a broad range of information being publicly visible on a GO Certificate. The only information that was noted as being commercially sensitive was supplier details.

The table below provides a list of data attributes that are proposed to be publicly visible for Product GOs.

Table 3 – Hydrogen GO certificate information visibility

Category	Data attributes
General information	<ul style="list-style-type: none">- Certificate ID.- Name of entity operating or owning the product facility.- Facility details and production pathway.- Functional unit of product.- Status of GO certificate.- Creation date.- Production period.- Product purity.- Consumption purpose (where applicable).
Emissions information	<ul style="list-style-type: none">- Well-to-user emissions intensity.- Well-to-production gate emissions intensity.- Production gate-to-delivery gate emissions intensity.- Percentage of total electricity used that is renewable.- Associated upstream GO Certificates.

Section 4.2 Data disclosures

In the December 2022 consultation paper, the Department proposed that the CER will have the power to establish formal data sharing arrangements with the administrators of other schemes, such as Climate Active, GreenPower, and the NSW Government. No stakeholders disagreed with this proposed position and considered it integral to ensuring the GO scheme provides a single source of truth. Some stakeholders called for an additional government role for data sharing.

It is considered the CER will be able to negotiate data sharing arrangements with entities under Section 49 of the *Clean Energy Regulator Act 2011*. The CER will also be able to develop a process to enable participants to provide consent for disclosures under Section 51 of the Act. This data sharing permission is intended to sit separately from the scheme participation process.

Part 5. Other elements of scheme design

Feedback sought:

The Department is seeking feedback on the process for expanding the GO scheme and methods that should be prioritised.

In particular, feedback is sought on:

- Whether the prioritisation process is equitable and provides for sufficient industry input.
- The steps for developing new methodologies and whether this process will ensure that they are appropriately aligned with relevant international standards.
- Products that should be prioritised, by completing the form on the department's [consultation hub](#).

Section 5.1 Scheme expansion

The Guarantee of Origin scheme will expand to incorporate products beyond hydrogen and its energy carriers. Expanding the scheme will ensure it remains responsive to the emergence of new markets for low-emissions products, international trends, and the need to appropriately certify emerging Australian energy products.

The Department proposes to conduct an ongoing prioritisation and methodology development process to identify, prioritise, develop and incorporate new emissions accounting methodologies into the GO scheme.

The Department will aim to expand the scheme by approximately four methodologies per year subject to priorities, resourcing constraints and the complexity of development and implementation.

Product prioritisation list

The Department will release an annual product prioritisation list to provide GO scheme stakeholders with transparency over the products it is considering for incorporation into the scheme. The list will include three tiers of prioritisation:

- **Shortlisted for methodology development (Tier 1)** – These products are high-priority for methodology development and are likely to be escalated for development in the coming year.
- **Actively monitored (Tier 2)** – These products are considered a moderate priority and are being actively monitored for escalation to Tier 1.
- **Aware (Tier 3)** – The Department considers these products relevant for scheme incorporation in the medium to longer-term.

The process for assessing and sorting products into the product prioritisation categories listed above will have regard to five classification dimensions:

- **Emissions relevance**, which considers the potential emissions reduction impact of decarbonisation of the product from a domestic and global perspective.
- **Economic relevance**, the impact of decarbonising the product on Australia's export opportunities as well as to the domestic economy such as investment and employment,
- **Policy relevance**, how relevant the product or industry are to international policies in development or operation as well as how well it aligns with Australia's policy objectives.

- For example, this would cover the extent to which incorporating product into the scheme supports the energy transition.
- **Technology readiness level**, which covers how technologically ready the industry/product is.
- **Method complexity**, the relative ease with which the GO scheme can be extended to cover the additional products and production pathways, including whether the extent to which international consensus has been reached on the approach.
 - The Department has developed this approach based on work undertaken by the Australian National University to develop a rigorous multi-criteria analysis for identifying and prioritising industries.

The Department will review the relative priority of the products on the product prioritisation list on an annual basis. These reviews will include considering new products for prioritisation and publishing an updated list.

The Department is seeking public feedback to inform the first product prioritisation list. Feedback can be provided via the Department’s [consultation hub](#), with submissions closing 14 November 2023. The first prioritisation list will be published on the Department’s website in March 2024.

Subsequent annual product prioritisation lists – published in January/February of each year – will be based on a Departmental review of the current prioritisation list, annual public feedback process (September-November of the previous year) and considering the classification factors. Stakeholders will be permitted to provide feedback on:

- Recommending new products to be added to the prioritisation list.
- Recommending existing products be escalated to a higher list tier.

The Department may, where appropriate, commence development of any methodology at any time to respond to significant domestic/international developments and shifting priorities.

Table 5: Prioritisation process timeline

Annual product prioritisation cycle (2024 - onwards)	
Suggested timing (TBC)	Proposed Step
September	Open public feedback process on products that should be prioritised for scheme incorporation
November	Close of public feedback process
January/February	Publication of product prioritisation list
Ongoing (throughout cycle)	Ongoing list review to inform next publication
Ongoing (throughout cycle)	Decision to commence methodology development

Methodology development process

The methodology development process will broadly include designing an applicable product specific methodology and obtaining necessary assurances.

Consultants, technical experts, industry and partnering governments may be engaged to co-design or consult on draft methodologies where appropriate. The extent of engagement will depend on

factors such as design complexity, departmental expertise and resourcing, and potential industry impact.

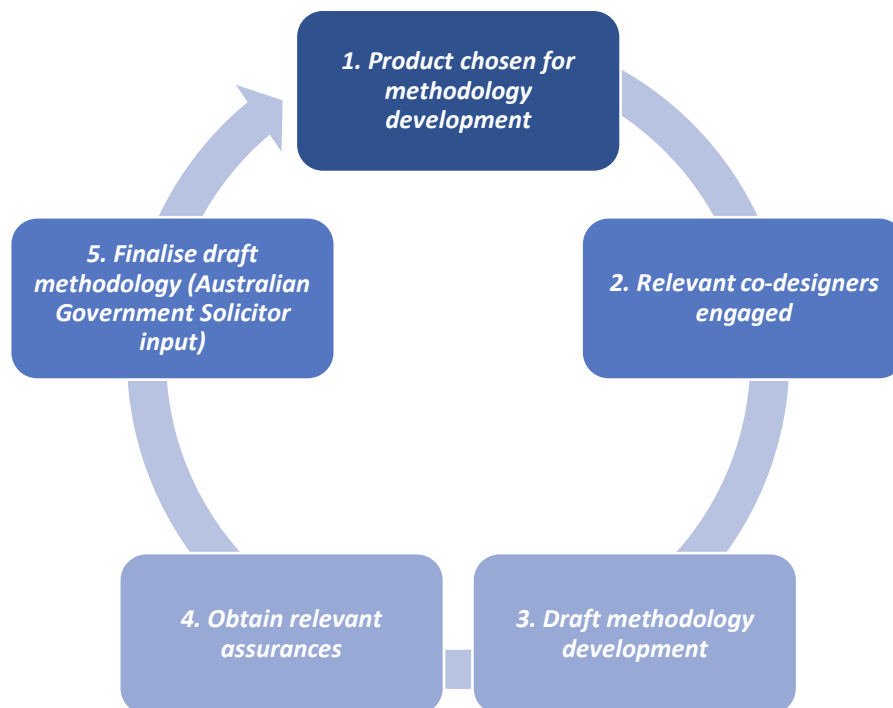
The Department will engage relevant international partners during methodology development processes where it relates to work under a bilateral/multilateral partnership or initiative, or if the product is expected to be traded. This will promote the ongoing relevance of the scheme and ensure that Australia meets its international partnership and harmonisation obligations.

The Department may seek assurances to ensure that draft methodologies are internationally aligned, comprehensive, and meet emissions accounting development best practices. These assurances may be obtained through international partners/forums, industry groups or external consultants and bodies (e.g., ISO or LGA). The Department will seek to establish an appropriate avenue for assurance (e.g., international forum/working group) where one does not yet exist.

Following assurance, the Department will consult on the details of the proposed methodology.

Methodology development commencement and process timeframes will be flexible and depend on factors such as ease of design, and assurance requirements. The Department will publish an active 'Methodology development tracker' to provide high-level transparency over methodology development progress.

The following figure summarises the methodology development process.



Governance and implementation

New methodologies will be incorporated into the scheme through the enactment of delegated legislation.

The Minister (or an appropriate delegate) will determine whether to implement proposed methodologies as delegated legislation following consideration of Departmental advice. In deciding whether to enact the delegated legislation, the Minister or delegate must be confident that the underlying proposed methodology:

- Aligns with any internationally agreed equivalent, with allowance for acceptable deviations to meet domestic requirements.
- Is accurate, complete and reflects international standards on emissions accounting methodology development.
- Is consistent with existing scheme methodologies and GO scheme methodology development principles.

Section 5.2 Cost recovery

The GO scheme will be cost recovered in accordance with the Australian Government Cost Recovery Guidelines. The approach to cost recovery will be developed in consultation with GO scheme stakeholders through the Cost Recovery Implementation Statement (CRIS). The approach will likely include the use of fees to recover the costs of providing specific services, and levies to capture the broader costs for the CER to administer the scheme.

There are a few potential charge points under consideration including: as part of scheme enrolment, profile registration and certificate creation processes. These charge points will be finalised following a review of the CRIS consultation process. There may also be flexibility for the CER to amend and revise these charge points as the scheme develops.

The cost recovery approach will apportion costs, ensuring they are applied in an equitable and proportionate manner based on the amount of work involved for respective industries. The approach will also take into consideration the maturity of involved industries and may be phased in for different Product GOs. This may include a period of exemptions from certain fees and levies for nascent industries such as hydrogen. This recognises the need to mitigate the burden on certain emerging industries to avoid growth suppression. Fees and levies may also differ to reflect the relative effort required to assess applications across different products and stages.

Renewable electricity will not be subject to exemptions to ensure alignment and equality with the LRET. The LRET's cost recovery framework will also be reviewed to ensure alignment with best practice and to target equal participation costs to produce LGCs and REGOs.

The precise fee and levy structure will be determined as part of development of the CRIS which will include additional consultation with stakeholders. It will be subject to regular reviews.

Section 5.3 Scheme review

The GO scheme is proposed to be subject to an initial review commencing in 2027 and ongoing reviews every 3 years thereafter.

The initial review will focus on the effectiveness of the scheme design and any potential amendments to improve functionality. These reviews will assess the ongoing integrity, effectiveness and efficiency of the GO scheme and identify any necessary amendments.

Part 6. Next steps

The Department will assess the public feedback provided on this consultation package and will use it to inform the following:

- The final legislation giving effect to the GO scheme.
- The drafting of subordinate legislation.
- Scheme expansion and product prioritisation.
- Ongoing work within international forums (including the IPHE) to develop internationally aligned emissions accounting methodologies.

It is anticipated that the legislation giving effect to the GO scheme will be in place in 2024.

Part 7. List of terms and acronyms

Term or Acronym	Definition
ACCUs	Australian Carbon Credit Unit , which represents a single tonne of carbon dioxide equivalent abatement and are issued under Australia's carbon crediting scheme.
ARC	Annual Reconciliation Check , a compliance process following the end of each financial year.
Australia's Carbon Credit Unit Scheme (formerly known as the Emissions Reduction Fund)	The Australian Carbon Credit Unit (ACCU) Scheme offers landholders, communities and businesses the opportunity to run projects in Australia that avoid the release of greenhouse gas emissions or remove and sequester carbon from the atmosphere.
Book and claim approach	Book and claim is a type of chain of custody model, where the claim to using a product can be separated from the product itself.
CCS	Carbon Capture and Storage - the process of capturing and permanently storing carbon emissions
CER	The Clean Energy Regulator is the Government body responsible for administering legislation that will reduce carbon emissions and increase the use of clean energy.
CERT	The Corporate Emissions Reduction Transparency report is a voluntary initiative for eligible companies to present a snapshot of their climate-related commitments, progress and net emissions position, published by the CER.
Certify/Certification	The act of issuing GO certificates corresponding to a product covered under the GO scheme.
CRIS	Cost Recovery Impact Statement
Climate Active	An ongoing partnership between the Australian Government and Australian businesses to drive voluntary climate action. Climate Active certifies business that have credibly reached a state of carbon neutrality by measuring, reducing and offsetting their carbon emissions. Certification is available for organisations (business operations), products and services, buildings, events and precincts.
Delivery gate	The delivery gate is the point of consumption for domestic uses or the last domestic port prior to export overseas.

Fit and proper person check	A key control to protect the integrity of the schemes administered by the CER. This check generally considers a person's past compliance with the law, whether they are insolvent, and whether they have the necessary capabilities and competence to effectively fulfil their intended scheme role.
GreenPower	GreenPower is a government accredited renewable energy product offered by most electricity retailers to households and businesses in Australia.
Hydrogen Headstart	A contract for difference measure to scale up large scale green hydrogen in Australia. Funding will bridge the commercial gap between the cost of hydrogen production from renewables and its current market price for early projects.
IPHE (International Partnership for Hydrogen and Fuel Cells in the Economy)	An international government-to-government partnership whose goal is to promote the advancement of technical hydrogen industry standards and protocols that are expected to underpin future trade and investment in hydrogen.
LGC	Large-scale Generation Certificates ...
LRET	Large-scale Renewable Energy Targets ...
LRET	The Large-scale Renewable Energy Target incentivises the development of renewable energy power stations in Australia through a Renewable Energy Certificate Market for the creation and sale of certificates called large-scale generation certificates (LGCs).
LSTR	Limited scope Technical Reviews , these are third party audits with a limited scope.
Mass balance approach	Mass balance is a type of chain of custody model, where products are tracked throughout their supply chains using the principle of a 'reasonable physical link'.
NGER scheme	National Greenhouse and Energy Reporting (NGER) scheme - A single national framework for reporting company information about greenhouse gas emissions, energy production and energy consumption. The NGER scheme is administered by the Clean Energy Regulator.
Post-production Boundary	A subset of the system boundary which covers the production gate-to-delivery gate.
Product GO Certificates (Product GOs)	Product Guarantee of Origin Certificates are issued for products certified under the GO scheme, initially covering hydrogen and hydrogen energy carriers.

Production Boundary	A subset of the system boundary which covers the well-to-production gate.
Production gate	The point of production, which is the last point in the production process where processing steps for different transport requirements are homogenous. This is defined in more detail in the Emissions Accounting Approach attachment.
REC	Renewable Electricity Certificate , e.g., an LGC or REGO Certificate.
Registered participant ('participant')	Registered participants are a person that has enrolled to participate in the GO scheme.
REGO Certificates	Renewable Electricity Guarantee of Origin Certificates , which will each represent a single megawatt hour of renewable electricity.
Renewable Power Percentage	A LGC surrender requirement that liable entities (generally electricity retailers) are required to meet to satisfy LRET obligations.
RET	The Renewable Energy Target is an Australian Government scheme designed to reduce emissions of greenhouse gases in the electricity sector and encourage the additional generation of electricity from sustainable and renewable sources.
System Boundary	The system boundary outlines the emissions accounting scope for the GO scheme, it covers well-to-delivery gate.