



**Gold Standard**<sup>®</sup>

*Climate Security & Sustainable Development*

# **ACCOUNTING & REPORTING THE EMISSIONS OF CERTIFIED COMMODITIES**

## **GUIDANCE FOR SUSTAINABILITY SYSTEMS TO DESIGN AND IMPLEMENT CREDIBLE 'GREENHOUSE GAS REPORTING SYSTEMS'**

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## 1.0 Introduction

This Guidance provides sustainability systems with approaches to align their commodity certification with greenhouse gas emission reporting good practices.

### 1.1 Context and purpose

The intended users of this Guidance are ISEAL member schemes that are involved in the certification of commodities. The guidance may also be of interest to their communities (certificate holders, applicants, assurance providers, oversight bodies, buyers, governments, civil society and the public).

The Guidance supports sustainability systems to design and implement good practice greenhouse gas emissions accounting, reporting and disclosure strategies for users of their schemes. This approach affords several opportunities for the ISEAL community. Whilst each member will have their own reasons for considering this Guidance, some ideas include:

- Meeting commitments and stakeholder expectations towards good practice in climate disclosure and impact reporting, as part of a wider response to the climate emergency
- To potentially increase price or demand for certified commodities as a response to growing corporate or certificate holder demand associated with climate targets
- To be able to robustly, clearly and transparently communicate the approaches taken
- To improve existing approaches and systems and build a pathway for continuous improvement over time
- To share the good practices of ISEAL and ISEAL members with wider climate efforts and thereby create, influence and improve trust in climate reporting.

The aim of providing this Guidance is therefore to assist member schemes to design, implement, continually improve and transparently communicate a credible reporting system for greenhouse gas emissions, by:

- Identifying the needs and capacities of stakeholders when designing a credible, robust, accessible and equitable system
- Creating accounting approaches that are comprehensive and appropriate to the member's context and sector
- Quantifying emissions data in a way that reflects good practice and recognising the practicalities and capacities of scheme participants
- Attributing emissions data to certified goods such that purchasing corporates can report them towards their corporate inventory assuring no double claiming of the same activities
- Allocating certified goods in a way that is aligned with accounting good practice
- Allowing room for producers to take action to improve their emissions profile in order, for example, to seek beneficial pricing or preferential procurement

To achieve these aims, this Guidance is focused on the creation of a transparent 'Greenhouse Gas Reporting System' (GHG-RS). This will be particular to each sustainability system, though systems are encouraged to collaborate and to share approaches. It is also intended to communicate how their approach to GHG reporting within their commodity certification system works in line with good practices, as relevant to their context.

The GHG-RS is made up of eight key design Elements that work together to inform a credible approach. Combined, they represent a synthesis of existing and new ideas to form recommendations for what should be included in a robust system and are designed to be worked through in order (though this is not essential). It is expected that this guidance and the associated GHG-RSs produced will be 'stress-tested' by application and will need to evolve further to remain relevant.

In the process of development, the capacity of sustainability systems to consider credible, contextually appropriate solutions should also grow, creating a virtuous feedback loop. In short, it is not expected that this Guidance is a perfect fit for all sustainability systems and that some ideas will need to be adapted to suit.

Similarly, no two sustainability systems will be starting from the same point. Some will have fully developed systems already in place and may wish to use this guidance to retrospectively sense check them for areas of improvements. Others will have nothing in place so far and could use this Guidance to design and plan a system that meets their needs. Others still may have some Elements in place but want to use this Guidance as a gap-check to their further planning.

The Guidance is thus intentionally open ended in some areas, avoiding prescription of approaches and a binary pass/fail mentality. That said, the Guidance does point out key pitfalls and non-credible actions that sustainability systems should take care to avoid.

No two GHG-RS outputs are likely to be the same, as each sustainability system operates in a different context. However, the intent is that each GHG-RS is consistent with key guiding principles and good practices, such that the ISEAL community orients towards good practice in emissions reporting. This can act as a response to companies citing that inconsistency of data within sectors is a major stumbling block towards consistent GHG reporting. While matters such as assurance and attribution may vary between sustainability systems in different sectors, the intent is to move towards consistency and ultimately greater credibility.

In this sense, this Guidance is loosely analogous to the ISEAL Codes of Good Practice, where principles, criteria and guidance are set out, but each sustainability system has space to innovate and create the system best suited to their needs. The GHG-RS is perhaps most like the assurance systems that many sustainability systems have in place to explain how certification decisions are made and how they are governed. These are loose analogies, however; the Guidance is not intended to be a formal requirement and sustainability systems are free to adopt it and adapt it as a whole or in part as they see fit.

## **BOX 1: RESOURCES FOR GETTING STARTED**

This Guidance is designed to be as user-friendly as possible, but many ideas require a degree of pre-existing understanding and expertise to support their implementation. It will also require the expenditure of time, energy and resources to comprehensively apply good practices. Accordingly, sustainability systems may wish to consider:

- Appointing a focal point/representative who is literate in carbon accounting to lead the development of the GHG-RS.
- Create a file of key reading material, as referenced throughout this guidance, as well as other material from sector-relevant initiatives and research.
- Establishing a cross-functional internal team (literacy is a benefit but non-essential and unlikely for some functions). Skill sets such as assurance, data science and traceability will be especially relevant.
- Appointing or partnering with third party expert resource to support the development of a GHG-RS and potentially to research/draft some Elements and tools.
- Convening a diverse, representative expert advisory group to oversee the development and its ongoing maintenance. This could be shared between standards operating in a similar space.
- Participating in the ISEAL community forums that are and will be established and connecting with ISEAL members working in similar areas to coordinate.

Expertise that can be helpful would be experience and understanding of the Greenhouse Gas Protocol (GHGP) and corporate reporting, as well as the assurance of corporate inventories (ISO14000 and ISA315 series). Sectoral expertise and knowledge of resources that already exist, such as industry level initiatives and tools is also valuable. These are linked throughout this document.



## 1.2 Guiding Principles for System Design

The following guiding principles are provided to help frame GHG-RS good practice. Note that these principles focus on the design of a good system, rather than principles of accounting and reporting emissions, which is covered by GHGP and highlighted elsewhere in this document. These do not have a formal role in the guidance but inform the approach to the eight Elements. They may also be helpful to sustainability systems when considering a design choice that has equally weighted pros and cons:

**TABLE 1: GUIDING PRINCIPLES**

Principle	In practice
<p>1 – Recognise and prioritise the importance and role of value chains in climate mitigation</p>	<ul style="list-style-type: none"> <li>• Approaches are consistent with common accounting norms, practices and key frameworks to enable inclusion of data in corporate reporting</li> <li>• Approaches are respectful of the corporate climate mitigation hierarchy and minimise risks of perverse outcomes</li> </ul>
<p>2 – Promote credible accounting, reporting and claims</p>	<ul style="list-style-type: none"> <li>• Adhere to good practices in emissions reporting, including that (adapted from GHGP):               <ul style="list-style-type: none"> <li>○ Emissions and removals reported are <b>relevant</b> to the targeted commodities/standards system</li> <li>○ Are <b>real</b> and <b>accurate</b>, as quantified, monitored and reported through credible approaches and <b>assured</b> by competent and independent assessment processes.</li> <li>○ Are associated with the purchasing company, respectful of economic and spatial inputs</li> </ul> </li> </ul>

- Are appropriately **complete** and **comprehensive**, including clarity on any exclusions (and avoidant of 'sins of omission')
- Are **transparently** attributed/allocated, tracked and ultimately claimed appropriately
- Claims made are **true** and do not mislead consumers or stakeholders

3 – Considerate of equitable access and the varying challenges faced by producers

- Flexible enough to allow standards systems to adapt to their unique context, whilst maintaining credibility
- A balance of technical integrity and accessibility/practicality in application, which will mean different things to different stakeholders

4 – Promote sustainability

- Work with and promote the good work of ISEAL members in other areas of sustainability in order to promote this to participating corporates
- Promote social and environmental safeguards, inclusivity and engagement and the consideration of adaptation and resilience to climate change

## 2.0 SCOPE, APPLICABILITY AND EXCLUSIONS

### 2.1 Scope and applicability

This Guidance is not intended or designed to be directly adopted by sustainability systems. Instead, its intent is to guide the development, implementation and review of greenhouse gas emissions and impact reporting in the context of each sustainability system's (and their community's) needs.

It is the *output* of following this Guidance that would typically be expected to be adopted by sustainability systems, however they wish to do so.

The scope of the document is therefore to assist in the development and implementation of a GHG-RS, enabling sustainability systems to effectively design and communicate their approach and to populate and implement that approach with good practice tools.

The intended scope of the Guidance generally is to account for and report 'upstream' (i.e., to the purchasing company and ultimately the consumer) GHG emissions related to raw commodity production, processing, packaging and transport. It does not cover the conversion of products for other uses, such as the use of sugars or oils into consumer products, though sustainability systems may well be able to infer how best to approach this based on this guidance.

#### **BOX 2: 'PERFECT' VS 'GOOD' ACCOUNTING**

As sustainability systems review this Guidance, the expectations of some Elements may initially feel difficult to achieve. One major issue with supply chain accounting and reporting for example, is data quality and data access and as such many organisations are put off tackling these issues.

This is perfectly understandable; we are not yet at the point of being able to trace all commodities to source or to have supplier specific emissions or even good quality

average data for all aspects of our work. We are certainly not at the point where companies are consistently and efficiently reporting good quality data in a way that could enable us to compare their efforts.

None of these issues should discourage sustainability systems from applying this Guidance and the frameworks referred to, or from moving towards a credible system.

Instead, it is better to progress with reporting to what quality is available, while acknowledging challenges and imperfection and transparently communicate limitations, assumptions and caveats that may exist. Ultimately, the data produced is for users to interpret and assimilate into their own reporting and as such they will need to clearly understand the limitations of doing so.

Companies reporting the data also have a duty to account properly and are likely also experienced with dealing with the same challenges. An ongoing conversation, based on transparency, is a good way to get started.

In short, it is better to work imperfectly, with transparency, than not to report at all. The intent of a GHG-RS is to justify the decisions made and the limitations and assumptions included and to have a plan for improving over time, as data access and quality improves. Buying companies should have the expectation that the approach is likely to improve over time and be prepared to adjust their accounting accordingly.

As sustainability systems may associate their brand equity to the data and its use, it is important that a consideration of any 'redlines' is included in the mindset of those creating a GHG-RS. This Guidance doesn't set a minimum bar, but some sustainability systems may wish to include some guard rails on certain Elements, at least in the context of users referring to the system's brand/use of license.

## 2.2 Exclusions

The scope of this Guidance concerns the design and maintenance of a GHG-RS related to raw commodity production, processing, packaging and transport. Its core focus is on emissions reporting and impact/outcomes at the commodity level, within the context of the sustainability system.

This means that the Guidance does not intend to cover a wide range of related topics that may be relevant to how a sustainability system takes forward their approach. These omissions do not mean these are not important topics; it is merely to maintain the focus on the intended brief.

Where some of these areas materially impact GHG-RS design choices they are referred to in the Guidance but are not the focus. The following is a considered but non-exhaustive list of exclusions from the scope of this Guidance:

- The Guidance could provide a way of formally assessing the quality of a GHG-RS, but this is not the core purpose. A third-party assessment of a GHG-RS, for example a formal review by an expert or a peer review by a sustainability standard with expertise, may be helpful to systems, though a pass/fail mentality is not envisaged or recommended (see Box 2).
- The scope of the Guidance is raw commodity production (meaning agricultural, marine and aquaculture crop and animal produce, livestock), processing, packaging and transport. Together these four steps convey the key aspects of the purchased goods category of the GHGP (though systems may wish to limit to only production, for example). This Guidance does not include for further use of the commodities in, for example consumer products, though inferences could be drawn for this purpose and the GHG-RS extended accordingly.
- No climate action should be conducted without proper social and environmental safeguards and without the thoughtful inclusion of affected stakeholders. Climate action should also include a consideration of wider sustainable development and climate adaptation and resilience opportunities. This Guidance fully acknowledges and recommends these provisions be included in all sustainability systems but does not cover how to develop them in specific detail.

- The types of improvement actions that are eligible is left to each sustainability system to decide as they are best placed to know what is appropriate. This Guidance does not provide input into these decisions as the breadth of commodities and actions covered would make this impossible in one document. It may be beneficial for like-minded sustainability systems and communities working in the same sector or on the same commodities to collaborate to create further guidance and exemplars to this effect.
- The oversight and assurance communities have an important role to play in the credibility of climate disclosure and impact data. This Guidance is primarily focused on design Elements that combined make up a credible GHG-RS but does not specifically provide assurance or accreditation checklist information. These could be developed through extrapolation, however.
- There are a variety of incentives available associated with disclosure and impact information. This Guidance primarily focuses on emissions reporting and the general incentives around that. It does further explore this relationship with impact incentives, such as results-based finance and carbon markets. Beyond brief notes, however, this Guidance is not intended to be used to assist with seeking, for example, the issuance of carbon credits under third party standards. This would require further resource and expertise on the part of the certificate holder and the sustainability system.
- The Guidance does not focus on the topic of avoided use of products, i.e., the avoidance or reduction of the use of products, including certified commodities, by a company. For example, the discouragement of the use of materials such as textiles and oils as opposed to making those materials more efficient. This is an important topic but is left to sustainability systems to consider in the context of their own schemes and the advice they give to certificate holders and licensees.

## 2.3 Overview of key design Elements and intended outputs

A robust and comprehensive GHG-RS is made up of eight key Elements. These Elements represent the key moving parts of the system and how they interact with each other is what will ultimately make a system credible.

Each Element proposes that a series of options could be applied, dependent on context and choices made. These options are all potentially credible, but whether they are the right option for a given user will depend on the relative pros and cons of that choice. Likewise, the Guidance does not prescribe whether combinations of options are more or less credible, though some choices naturally dictate options in other Elements in the pursuit of an overall coherence. The Guidance attempts to set out these considerations but does not seek to make them on behalf of the user.

The GHG-RS can be thought of as the document where these choices and the rationale for making them are captured. Users are encouraged to capture their choices and approaches transparently in a published document or web page. As noted previously, this Guidance is not intended to be a binary 'pass/fail' and sustainability systems should not consider that a perfect system is required before implementing any of the tools within. Rather, a better approach would be to use the template to state transparently what is in place and achievable and to communicate where this is not fully in line with latest good practice. From this point a plan can be made to rectify over time. The eight design Elements are shown in **Table 2**, below.

**TABLE 2: EIGHT DESIGN ELEMENTS OF A ROBUST GHG-RS**

Design Element	Description/Example
1 - "Discovery phase" identification of users and their needs to inform the definition of scope and boundary of the GHG-RS	This Element has two key objectives; to understand the users and uses of the GHG-RS related data and to define what is included and excluded from the system. The result of this Element is a robust and comprehensive mapping of the system needs and boundaries and as such it underpins decisions taken in later Elements.

*Example: a sustainability system designs a three-month engagement process that includes producer working groups, interviews with companies and internal capacity building training. The results point to some of the key must and must not have items that the GHG-RS should deliver, as well as identifying any areas that would be difficult or risky to implement in the first roll-out.*

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2 – Definition and scope of accounting approach

This Element builds on the robust mapping of Element 1 and describes how emissions accounting will be carried out, including how supplier strata (for example by variety, practice, country, geography or climate) determine the level of granularity will emissions be calculated and how the emissions information will be accounted and presented in the form of an Emission Factor.

It also describes the structural approach in terms of who in the system is responsible for quantification and using which tools.

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*Example: one sustainability system includes all standards/commodities across all geographies while another is initially focusing on a specific commodity standard in a smaller subset of countries, while capacity is built. Both include all relevant processes and GHGs.*

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3 – Approaches to quantifying emissions data

This Element describes, in tandem with Element 2, how the actual quantification is calculated, in line with good practice.

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*Example: taking the examples given in Element 2, above, the first develops a bespoke tool, using this guidance to inform it. The second provides an open option but also recognises a list of tools and methods over time, as they come forward for approval.*

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4 – Allocation of certificates and credible reporting of emissions

This Element describes how the system ensures that it is appropriate for companies to report emissions associated with certified goods and how to correctly report certified commodities that are relevant and associated with their supply. This is administered through different allocation options, the choice of which is a critical decision for the scheme.

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*Example: one sustainability system uses a fully transparent chain of custody approach and has defined how the purchase of certified commodities from specific suppliers is a causal factor for change. Another takes a mass balance approach and manages an overall attribution system.*

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5 – Assurance

This Element describes how accounting and reporting in Elements 1 to 4 are integrated into a scheme’s assurance approach and how assurance/certification may be carried out.

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*Example: the sustainability system that chose a mandatory, central tool only requires its Assurance Providers to check that the tool has been used correctly. The sustainability system that allows Certificate Holders to decide for themselves requires additional training and*

*possibly accreditation for its Certification Bodies to be able to assess these. To overcome this, the Certification Bodies partner with a centralised expert partner to help review approaches as part of their audit plan.*

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6 – Approach to impact metrics and other mechanisms

This Element describes any other Elements of the sustainability system that relate to impact claims and how these are managed with regards to matters such as double counting, where relevant.

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*Example: a sustainability system includes an ecosystems services impact approach as an optional add on for Certificate Holders. This allows users to pay for additional benefits, meaning that an additional layer of attribution is needed to ensure no double claiming. Another sustainability system has many certificate holders issuing credits for carbon offsetting and needs to deduct these from the information being ascribed to companies.*

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7 – Approach to certificate and license holder GHG related claims

This Element describes how all the previous Elements come together in how claims are managed.

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*Example: one member sustainability system creates bespoke claims guidance and advises its corporate community to use them, another refers to ISEAL Good Practice Guides while a third decides to pro-actively 'police' claims, requiring the removal of any public claims that do not adhere to their policies.*

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8 – Managing data, system capacity and M&E

This Element describes how the sustainability system will maintain and update the system and individual Elements over time, including for correction of past learning where needed. It may also include details of training and capacity building programmes.

This also includes clarity on how data will be managed, particularly where sensitive and personal data will be captured.

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*Example: one sustainability system appoints a team to monitor the impact and efficacy of its GHG-RS whilst another commits to periodic review, working with an expert partner. Both create training and capacity programmes for a variety of stakeholders involved. Each sustainability system takes a centralised training and capacity building approach for conveying the system to its stakeholders, especially users of the standard.*

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Each of these design Elements is further unpacked in the proceeding sections, below. For each the following core information is included:

- A description and rationale for why it is needed in the system
- A list of the principal characteristics needed to create a robust design Element
- Typical outputs that a robust GHG-RS may include, for example in the form of associated outputs, tools, templates etc.
- A criteria checklist that can be used to assess the completeness and robustness of the GHG-RS
- Indicators of higher credibility options and areas of potential concern to avoid
- Guidance for the development of the Element

The Elements are designed to be worked through in order, with each referencing previous choices made, though it is also possible to work on specific areas without working through all Elements. It is likely that users will need to work back through their choices as they put the Elements together and reassess whether the choices made still add up for the intended purpose.

The final Element (8) proposes that the ongoing systems management is somewhat circular, i.e., that Element 1 (a discovery phase) becomes a 'rediscovery' phase on a cyclical basis, to promote continuous improvement. System reviews however are unlikely to be as heavy a lift as the first design and implementation process.

## 2.4 Key Concepts

Prior to engaging with the Guidance there are two concepts to understand, woven throughout the Elements presented. The first concerns how the system supports robust accounting, namely through quantification, attribution and allocation of certified goods to buyers. These three linked accounting concepts together define how the system will enable credible accounting. They also represent the key choices that will be made throughout.

The second concept discussed is that of data quality and the thresholds and expectations for good practices.

### **2.4.1 Accounting – quantification, attribution and allocation of the emissions associated with certified goods**

The aim of good accounting is that the actors involved in each value chain report as accurately and robustly as possible. This, when connected to a reduction target means that ongoing reporting of achievements (i.e., as progress towards an emissions target) can be considered sound. In the context of corporate inventory reporting for purchased goods, as set out in GHGP, this includes three linked concepts:

1. Quantification of emissions data – this covers how different input data, whether collected on site by producers (supplier-specific data), taken from wider data

sets (average data) or a combination (hybrid data), is collated to inform an emissions intensity (Emission Factor) per unit of certified commodity.

2. Attribution of emissions data to certified commodities – this covers how the data is connected to a specific unit of certified commodity. The terminology is somewhat similar, in that each producer could have their own specific Emission Factor (supplier specific) or an average Emission Factor assigned (average data). The decision as to which approach is best for a given scheme will likely depend on the level of traceability available and therefore how certificates are allocated to buyers.
3. Allocation of certified commodities to buyers – this covers how certificates are assigned to a specific buyer and what this means for the use of the attributed emissions data. This is linked to the level of traceability the scheme has available and thus how specific the data can be.

Taken as a whole, the key factors for determining the right combination of quantification, attribution and allocation are likely to be segregation and traceability. In a fully traceable chain of custody system it is possible for supplier-specific data to be attributed to supplier-specific certificates and those certificates allocated to the buyer that can be shown to have purchased them.

In a system where traceability is limited to knowing that certified goods were purchased from a specific country then an average Emissions Factor for that country should be attributed and certificates allocated to buyers accordingly. In a system where no segregation and traceability are possible then per GHGP a global average (for certified and non-certified goods) should be applied.

These conclusions are drawn because GHGP (and good emissions accounting practice) dictates that physical allocation is only possible where goods can be fully traced, in all other cases average-based allocation should be applied at the most granular level of segregation and traceability available. Note, however, that this largely impacts attribution and allocation, it may still be valuable to have supplier-specific emissions data collected, even if that data is then averaged across a group of producers such that it can be allocated.

This likely puts a limit on the level of incentive available under some certification systems and is at odds with methods such as 'mass balance' and 'book and claim' allocation. These systems can be credible for some purposes but are definitionally at odds with the principle of accurate emissions accounting (since they would by definition not necessarily be the buyers' emissions to report). This challenge is being addressed under ongoing workstreams concerning 'market-based allocation', wherein an assumption of segregation and traceability is made to enable investment. This concept is not yet fully legitimised but is expected to emerge in the coming two to three years. It is likely that this model will favour many sustainability systems and hence it is recommended to stay in touch with the development via Gold Standard.

### **2.4.2 Quality**

Data quality and consistency is a challenging topic for Scope 3 inventory accounting. In many value chains the lack of data quality is a major hindrance to action and credible reporting of achievements. As noted in Box 2, it is important that perfect does not get in the way of the good and that schemes use the best available data, acknowledging limitations and omissions, ideally with a plan to improve them over time.

As such there is no one single guidance to point to for data quality thresholds, such as confidence and uncertainty. Schemes are therefore encouraged to consider core accounting guidance within GHGP and relevant industry and regional recommendations such as those put forward by the EU Taxonomy, for example. Schemes should highlight their quality definitions, assumptions, caveats and limitations and their plan for improving on them. Ideally, schemes should transparently declare ranges of uncertainty in reporting.

An exception to this will be where any assumption of allocation is made, pending forthcoming guidance being developed (see 2.4.1). In that instance it is likely, since the intent is to drive finance towards impact, that a degree of data quality is required to be credible. This is explored further in Elements 1-4.

## ELEMENT 1: "DISCOVERY PHASE" IDENTIFICATION OF USERS AND THEIR NEEDS TO INFORM THE DEFINITION OF SCOPE AND BOUNDARY OF THE GHG-RS

**Description and purpose of Element:** This Element has two key objectives; to understand the users and uses of the GHG-RS related data and to define what is included and excluded from the system. The result of this Element is a robust and comprehensive mapping of the system needs and boundaries and as such it underpins decisions taken in later Elements.

Underpinning this Element and indeed all future Elements are a well-considered approach to data governance and use, coupled with a robust stakeholder overview and outreach to define the knowledge, capacity and intended users and uses of the information produced.

The scope of the GHG-RS is the included standards, actors, commodities and processes for and from which stakeholders generate and apply emissions data. This is further broken down into energy and land-based emissions data, accounting boundaries, which greenhouse gases are in scope and how these relate to the certification scope of the sustainability system's standards. This is an important first step as it effectively describes what is included and excluded from accounting and reporting under the GHG-RS and why. These decisions, including any flexibility within the system, will impact especially on **Elements 2, 3 and 4**, where quantification attribution of data and allocation of certificates take place. As such it will be especially important to understand the potential for traceability and segregation in the system now and any changes planned.

The output of this Element may therefore require the production of a multi-section GHG-RS. For example, where a sustainability system includes multiple commodities or differs by geography or jurisdiction then it may be that the subsequent solutions for each differ (i.e., different options taken under subsequent Elements). If so, then a GHG-RS section for each included commodity or geography may be an appropriate way to convey this.

This Element directly links to Element 8, which covers data governance and use. In this way the Elements can be seen as somewhat circular, representing an ongoing process of improvement. Users may wish to consider reading **Element 8** and begin the process of establishing the governance of the GHG-RS, though this isn't required at this stage.

Principles	Recommended outputs
<ol style="list-style-type: none"> <li>1. The GHG-RS should be based on a 'discovery phase', identifying, engaging with and recording the stakeholder mapping and results of any survey and outreach used to make key decisions throughout.</li> <li>2. The GHG-RS should describe which certified commodities and geographies are included in the GHG-RS approach and which standards are applicable.</li> <li>3. The GHG-RS should include research and assessment of third-party tools and initiatives</li> </ol>	<ol style="list-style-type: none"> <li>a. The GHG-RS is recommended to be built on a data-led, well-designed and recorded discovery phase plan</li> <li>b. Stakeholder mapping and identification of intended or expected users and summary of uses of GHG data outputs (summary version for publication)</li> <li>c. A projection of potential allocation methods now and in the short to medium term future should be included as this will later influence how data is attributed and allocated</li> <li>d. An environmental scan of potentially relevant initiatives, data sets and tools that could be referenced (summary for publication, based on final recommendations)</li> <li>e. A description of included and excluded standards, commodities and geographies and a rationale for any material exclusions</li> </ol>
<p><b>Key checklist criteria:</b></p> <ul style="list-style-type: none"> <li>• Does the GHG-RS build on a 'discovery phase' as envisaged in the ISEAL publication <a href="#">'Unlocking the value of your data'</a>? (see also Element 8)</li> <li>• Is there a comprehensive map of stakeholders and their potential roles in the GHG-RS, including an overview of their relative capacities and their intended uses of the GHG data produced?</li> </ul>	<p><b>Credibility indicators:</b></p> <p><b>High credibility:</b> a good GHG-RS is data-led and applies good practices in the collection and use of emissions data, appropriate to the host scheme. The most robust and credible GHG-RS will have conducted a tailored 'discovery phase' (or phases) to develop a clear understanding of its users and uses and incorporate this throughout the design choices made.</p>



- Does the GHG-RS clearly explain and provide rationale for (including linking to the discovery phase outputs) which certified commodities and geographies are to be included and under which standards they are to be certified?
- Has an environmental scan of potentially available data and tools been conducted?
- Are there any excluded commodities, standards, geographies or groups of certificate holders or buyers and does the GHG-RS explain the rationale for same?
- Are current and projected forms of certificate allocation communicated, including how they may evolve over time?

This, along with the guiding principles of this document will ensure that the final GHG-RS is reflective of need and can be fully justified. Sustainability systems should ultimately aim to include all certified commodities and geographies included in the scheme, noting transparently any exclusions. Generally, exclusions should be limited to Elements of the standard and GHG-RS that are in the process of being tested or introduced, with the intent of including them in future (ideally with approximate timelines to be included). Credibility indicators could include:

- Appointment of focal point and support resource to manage the process
- An alignment of the GHG-RS process with the standards setting procedures of the host scheme, given there are likely to be similar needs and tools available
- A discovery phase record/report, ideally published (redacted for sensitive data/feedback as necessary)
- Comprehensive, clear use-case statements and user identification built on inclusive stakeholder engagement that seeks to achieve buy-in of potential user groups
- An environment scan to identify research, thought leadership and critique, tools and data sets that may be relevant, with recommendations for same (along with any partnerships or collaborations announced)
- All certified raw commodities in the scheme are included or intended to be included in future (with outline timelines) in the GHG-RS

- A statement on the scope and applicability of GHG data outputs as related to the standards operated by the sustainability system
- An initial review of ISEAL's data guidance and a consideration of how to integrate these processes into the development of the GHG-RS

**Potential areas of concern:** the key for this Principle is to avoid overstating what is included and 'sins of omission' for what is excluded. These can mislead stakeholders in terms of the ambition of the GHG-RS and how and when they may be able to be involved. Secondly it is important not to design an entire system just for the benefit of larger buyers only. Finally, as schemes move towards next-generation technology and data, it is recommended to build the GHG-RS in conjunction with and from the outputs of a data governance and use approach. This will mean the embedding of good practices and team culture from the outset (though this should not deter schemes from retroactively incorporating where more advanced systems are already in place)

Potentially concerning indicators may include.

- A lack of clarity on roles and responsibilities, particularly in the initial focal point identification
- An unplanned, unstructured discovery phase and a failure to consider good governance and use of data

- A lack of outreach and engagement and a limited understanding of the intended users and uses of the data (as this will lead to poorly informed decisions in later Elements).
- Prioritising the feedback of the largest buyers to the detriment of the overall system design (though noting that large buyers are of course a key stakeholder)
- Risks of duplicative efforts by not properly researching third party initiatives, data sets and tools
- Failure to understand key critique of any existing approaches through peer reviewed literature or thought leadership
- Failures to explain exclusions or wording that implies things are included or in place when in reality they are not
- Absence of timelines for inclusion of further commodities/geographies where they were initially excluded from the system design

### **Guidance:**

Each sustainability system is different, serving different communities and stakeholders, covering different commodities, supply chains, geographies and practices. Some cover multiple products, ranging from coffee to chocolate to sugar (and the various varieties, regions and practices associated within each of these), whilst others focus on a more limited range of certified goods. Some will focus on impacts others on process, some on both. Some are fully traceable, others traceable to a specific sourcing region or allocated at a global level using mass balance methods. In all cases there is also a wide range of geographical coverage which may in turn influence processes that are impacted by spatial and physical inputs, such as soil carbon.

There are five key aspects to consider when beginning the journey towards creating a GHG-RS:

- 1. Who are the intended users of GHG data and what will they use it for?** It is recommended that sustainability systems conduct a robust survey and outreach process to identify existing and potential users to establish their relative capacities for engagement (including capability to produce and report data) and what they intend or do not intend to use the data for. Getting this right can ensure later choices do not over or underestimate potential user capacity or intent and that the GHG-RS is serving those it is intended for. Stakeholders that should be considered as a minimum are producers/certificate holders, assurance and oversight providers, users of the raw commodities (including those incorporating them into consumer products and companies reporting their GHG inventories) and the public (where public-facing labels are intended). It may be worth considering stratification of potential data users by their size or sophistication, to ensure the that overall GHG-RS does not present a system for the largest corporates but is unusable for smaller companies and vice versa. Sustainability systems may also wish to consult with experts and civil society partners in emissions reporting in their sector as well as to identify potential tools that may be available.
- 2. What already exists that can inform or be a part of the GHG-RS?** Many sectors benefit from extensive research, thought leadership, data sets and tools that may be useful in informing lessons learned from past efforts, suggestions for improvement or could be incorporated for use in the GHG-RS. Such information is sometimes freely and publicly available via a simple environment scan research process. This could be conducted in house or by an expert in the field. Its results should be published, perhaps as an annex to the GHG-RS. Some sources and ideas are referenced in Element 3, but search terms such as '[commodity sector] life cycle assessment/inventory/emissions/carbon data sets/initiatives' will very likely highlight key efforts, if they are not already known to the sustainability system. Sustainability systems could also speak with industry peers or publish requests for information via ISEAL and industry channels. It may be especially beneficial for sustainability systems to coordinate where they operate in the same sector.
- 3. Which certified commodities are included in the GHG-RS, which regions or countries are included in your GHG-RS above and, importantly, what has been excluded and why?** In one sense this could be the first question applied by many sustainability systems, though it is recommended that questions 1 and 2 precede it in order to keep an open mind. Addressing this question should naturally require little guidance and bridges the gap between understanding stakeholder needs and the beginnings of how to stratify producers to accurately quantify emissions, covered in a later Element.

Generally, it is recommended that the GHG-RS is applicable to all commodity standards and geographies within a scheme, though if for any reason a commodity or geography is excluded then this should be clearly stated and explained. It may be that in producing the GHG-RS, sustainability systems apply it first to a subset of their scope before applying more broadly as lessons are learned. This is a reasonable way to proceed but should be made clear in the GHG-RS such that stakeholders are fully informed of progress. Ideally sustainability systems should commit to publishing timelines and ongoing findings (see Box 2, earlier in this document for a viewpoint on prioritising getting started over attaining perfection).

Other examples of possible exclusions may include new aspects of the standard that are still in testing and development, or it could be because specific sourcing areas are captured in a regulated scheme that makes participation impossible. There may be many reasons to do this, but sustainability systems are recommended to aim to include all commodities and sourcing geographies and to have clear and transparent rationale where this is not possible. For excluded areas, sustainability systems may wish to further state a timeline, in outline or in detail, for their inclusion.

4. **Which standards are applicable?** The GHG-RS should explain the relationship between the generation of emissions data and the underlying standards against which it might apply. This could be formally stated within the standards, or it could be a simpler case of making a narrative explanation via a 'crib sheet' of how they relate. A recognised tool, for example, could be relevant to multiple standards.
5. **How are certificates currently allocated and how might this evolve?** Sustainability systems employ a range of allocation methods dependent on the level of traceability and segregation available to producers using their schemes. In some cases, sustainability systems have full chain of custody and can accurately allocate the certificates from specific producers to specific buyers. In other cases, it may only be feasible to allocate at a regional or global level. All forms of allocation have their benefits and disbenefits but become problematic for emissions accounting if mismatched with the attribution of emissions data to reporting companies. This will be explored later, but for Element 1 it is simply important to clarify the current model(s) and if any evolution or change is planned to state this clearly. It is generally recommended to allocate as accurately as possible and as appropriate to the capacity of scheme users. This can then be used to inform later decision making.

With this mapping in place, the sustainability system should assess and propose applicability for the GHG-RS as it relates to the sustainability system's standards, including the status and type of document it represents within the system's own definitions and taxonomy. At this stage sustainability system should begin to consider whether the data itself is intended to be certified under one or more of the standards or if it is supplementary or uncertified information (which will have a major impact in later Elements, such as 5 for assurance and 6 and 7 related to claims). This can refer to the mapping of intended users and use cases noted above as through this it should be clear how the data produced will relate to users and uses of the sustainability system's standards.

It is possible at this stage to already consider whether the GHG-RS may need to break down into sub-sections, for example for different commodities, standards or geographies. There is no need to decide this yet and there are no fixed criteria to make the decision, but some variables that may have a major impact on whether a single GHG-RS approach or one that breaks down into multiple segments include:

- Data availability and data quality – for example if data associated with one commodity certified is much weaker than others
- User capacity – for example if a standard includes provisions for vulnerable and remote communities where relative access to technology solutions is lower than elsewhere
- Traceability/allocation – for example if one commodity certified is fully traceable and chain of custody provisions exist vs another where no such provision is available

### **Data governance and management**

Many sustainability systems and indeed many aspects of the global economy are experiencing a 'data revolution', where new technologies and practices are disrupting more 'traditional' practices. This is especially true of climate data and its assurance. It is highly recommended that sustainability systems consider integrating the development of their GHG-RS into a pre-existing data strategy, or if the latter doesn't already exist then to use the GHG-RS to initiate both concurrently.

A good way to approach this, starting with combining this Element with a the establishment of good data practices would be to apply the ISEAL '[Unlocking the value of your data](#)' (2020) guide, which in turn links to several other public and private

guidance that sustainability systems should consider. In the guide a 'discovery phase' is recommended, wherein rounds of user feedback capture are used to create a clear picture of needs and capacities.

This guidance recommends that the definition of 'user' include at least internal team members, certificate holders/applicants, assurance providers and oversight bodies, buyers and reporting companies and if possible, the ultimate receiver of the information (for example, consumers). It is especially recommended to establish:

1 – how would users wish to use the data in the context of third-party reporting schemes and/or markets. For example, the assumption of this guidance is that data will be used in the context of the Greenhouse Gas Protocol and Science Based Targets Initiative, which is an assumption that should be reviewed as part of the discovery phase. Likewise, if producers and/or buyers are seeking to use impact data for other incentives, particularly carbon markets or regulatory systems then it will be important to establish this so that claims and double counting risks can be adequately managed.

2 – what data, if any, are they using now for these purposes and what are the challenges associated with it. Scope 3 reporting remains a relatively immature and poorly served space in terms of data quality. It is likely that many stakeholders do not themselves have clear policies and robust approaches in place and where in use are relying on poor quality data. Understanding this can help clarify the challenges faced. It may not be possible due to commercial sensitivities, but where buyers are willing to share how they are currently reporting, with examples, this can help set the tone for improvements.

More detail on an overall approach to good data governance and management is provided in Element 8, which also builds off the ISEAL guide. The 'discovery phase' of this Element can and should thus be repeated cyclically (i.e., a 'rediscovery phase'), as also detailed in Element 8.

4. The GHG-RS should define:

- a. The physical boundary for estimating emissions data (this guidance focuses on the production unit boundary plus the steps of processing, packaging and transport) though systems may feel confident enough to include further steps if they wish

- 1. A description of the scope and boundary of emissions data estimation as relates to the key steps of production, processing, transport and packaging steps (plus any further that are beyond the scope of this guidance)
- 2. Within the categories of energy process and land management, describe all potential sources and sinks of emissions included as related to 1, above, that could be included (and justification of any excluded).

- b. The energy processes associated with production that are included in the accounting approach
- c. The land-based (or marine) emissions processes that are included in the accounting approach
- d. Any excluded processes from the above that would be reasonably expected to impact energy process or land management emissions associated with production
- e. Any sources or sinks of emission included but that are not associated with the production, processing, packaging or transport of commodities

- This may come from third party data sources, research or initiatives highlighted in Principles 1 and 2, above.
3. List of further activities that may be included that are not part of the energy or land management processes associated with production, processing, transport and packaging (i.e., are 'extra' value chain, for example related to conservation or the domestic situation of producers)

**Key checklist criteria:**

- Were the mapping exercises carried out from scratch or by reference to pre-existing research and data? In each case how were gaps avoided?
- For each included commodity, does the GHG-RS describe all relevant sources and sinks of emissions associated with each category (delineated by energy processes and land/marine/aquaculture management)?
- Are all four recommended steps (production, transport, processing and packaging) included or are any excluded? Is there justification for the exclusion?
- Is there clear justification for the long list of sources and sinks of emissions, for example by reference to third party, peer reviewed data or via the input of an expert (internal or external) in Life Cycle Assessment (LCA)?

**Credibility principles:**

**High credibility:** at this stage sustainability systems are looking to be able to see all aspects that could be potentially included in the GHG-RS. Hence even if some sources and sinks of emissions are to be later excluded or managed using default data, they should still be identified and referenced at this stage. Ideally all four categories noted (production, processing, transport, packaging) should be included though this also depends on the scope of the sustainability system's scheme. This long-listing stage should aim for comprehensive inclusion of all relevant and material sources and sinks of emissions, a first principle of GHG-P.

It should be clear how the list was created and readers should feel confident that it is comprehensive and that any exclusions are transparently communicated.



- Is the information presented in a logical and straightforward to understand fashion?
- Does the mapping make clear which processes are part of the scope of certification and which are not (if necessary)?
- Does the mapping make clear any processes that cannot be assumed to be associated with the value chain of the commodity?
- Does the mapping consider the possibility of a 'segmented' GHG-RS, for example a consideration of whether all processes are included for all applications based on capacity or data availability?

Accordingly, any references to third party studies or the use of experts to create and review the list should be stated. This could also include a reliance on third party mapping, for example through third party tools and guidance. Indicators of high credibility:

1. Identification of boundary and processes included based on expert input and peer reviewed literature to ensure it is comprehensive
2. No potentially significant or material exclusions or errors, as assessed by experts or by comparison to peer reviewed literature

**Potential areas of concern:** at this stage the key is to be able to 'see the edges' of the potential sources and sinks of emissions. Decisions on what to do with them come later, hence exclusions should be limited and clearly justified. The main pitfalls at this point are to inadvertently miss key sources and sinks of emissions and hence this likely requires a degree of expertise and an engagement with the supply chain stakeholders, potentially via a consultation.

Sustainability systems should also take care to delineate between sources/sinks relevant to the Scope 3 boundary and anything else included that does not. It is credible to include both, but not credible to include things for Scope 3 accounting that do not relate to supply chain activities. Indicators of potential concern may include:

- A self-generated list of processes that has not been compared with expert or peer reviewed literature
- Conflation of processes that do not impact production, processing, packaging or transport emissions with those in the Scope 3 boundary

### Guidance:

The intent of this principle is to develop further from the previous (i.e., the list of included commodities, geographies and standards) and create a schedule for each based on supply chain step (production, processing, transport and **packaging**). Next, within each step identify the 'long list' of sources and sinks of emissions potentially associated with those supply chain activities, typically with a management or production unit boundary in mind (i.e., the processes 'on farm' in the context of crop commodities). In effect this mapping gives a complete picture of the **potential** emissions profile of the certified commodities. What will result is a likely quite lengthy table (for which an example template is provided at the end of this section).

Because the aim of this guidance is to align with the GHG-P it is especially important that definitions of scope and boundary also fully align. In this way the information generated can be used confidently for climate disclosure and towards SBT. It is therefore recommended that sustainability systems familiarise themselves with Chapter 6 of the GHG-P [Scope 3 Standard](#) to get a sense of what is within the Scope 3 boundary. Note that this does not mean that processes that would fall outside the Scope 3 boundary, such as emissions associated with producers' domestic situations, have no place in the GHG-RS, it just means that they cannot be reported by companies against their Scope 3 target and should thus be separated.

Sustainability systems will need to carefully consider this step and seek expertise, internally or externally to ensure a comprehensive mapping is produced. It is likely most efficient to draw on existing research and tools identified under Principle 1 or to begin from scratch and have an expert draft and to use identified research to sense check that there are no gaps. There are many such sources of information, including research, guidance and tools (some are referenced later in **Element 3**).

Relying on credible partners can be a good way to make this output more efficient, though responsibility should still be taken in terms of checking completeness (for example by cross checking with experts) as ultimately it is the sustainability system that would be under scrutiny where a glaring omission is made. In most cases it is envisaged that a system should be able to find a starting point mapping via research or tool that is publicly available.

In later Elements, sustainability systems may decide that only a subset of the processes identified are relevant to their certification, but at this stage the intent is to understand the extent of all potential sources and sinks of emissions. It may be beneficial to share this mapping with stakeholders (i.e., those already identified and/or make publicly available), particularly suppliers and buyers who can help to ensure the list is fully realised and is aligned with their experiences. It will also need a process of regular review, in case for example practices or regulations change in each market or geography. In doing so, sustainability systems maximise the options available to them in later Elements of this document.

Purchasing companies (i.e., the buyers of certified goods) are required per GHG-P to report all emissions associated with activities within the Scope 3 boundary of their purchased goods. Within this category of emissions are included all processes associated with the production of purchased goods that represent a source of emissions. For reporting companies purchasing certified goods, the emissions associated with purchased goods includes all energy and land management processes associated with those goods, from cradle to gate.

*"Cradle-to-gate emissions include all emissions that occur in the life cycle of purchased products, up to the point of receipt by the reporting company"*  
*([Greenhouse Gas Protocol, Scope 3 Standard P38](#))*

Thus, a retailer selling consumer goods will account for all emissions associated with those goods as they pass through the supply chain. To them, nearly all emissions are 'upstream', aside from the use of the product by the consumer. The way a company does this is to bring together a wide range of information sources that in summation confirm their total emissions.

Many sustainability systems will not necessarily certify processes throughout the entire supply chain up to the point of receipt, but rather only those associated with certain steps or tiers, such as at the production unit level, processing, transport and packaging. This means that the receiving company may of course be a further intermediary, such as the producer of consumer goods that ultimately sells their product on to retailers. The sustainability system may wish to include these producers in the GHG-RS approach, but the guidance herein is limited to the production, processing, packaging and transport of raw commodities only.

To assist companies to use the information accurately, it is critical to define the boundary of emissions accounting within the sustainability system. In other words, where does the accounting of emissions start and more importantly stop, in order to allow purchasing companies to supplement this with information from outside the sustainability system's GHG-RS for processes that are not included.

There are two parts to this:

**1 – which steps in the supply chain are included and excluded; production, processing, packaging and transport, (or any further that are part of the scope of the sustainability system)**

As with the previous section, it is generally recommended that all steps in the supply chain that are covered by certification should be included in the GHG-RS, though any that are excluded should be transparently explained. This will allow purchasing companies to supplement the information and resolve any gaps. It is recommended though, that as a minimum, sustainability systems include to 'farm gate' (or equivalent in forestry, marine and aquaculture) emissions associated with production and strongly consider including processing, transport and packaging.

Of course, each step included will require the outputs of later Elements in this guidance to cover them. It may therefore be that steps are included over time, as the GHG-RS builds. For example, a sustainability system may begin their GHG-RS focusing on the point of production and add further steps over time. As with Principle 1 it is important that this is transparently communicated, and a timeline and regular updates shared with stakeholders. It is especially important to convey what is being certified and any limitations in this regard to prevent over-claiming.

It is recommended that at a minimum the production unit boundary is included within the GHG-RS. The following steps are recommended:

- 1 – Crop or animal product production (i.e., at the production unit level)
- 2 – Transport (i.e., for processing and retail)
- 3 – Processing (i.e., refining and processing of crop/animal product for consumption)
- 4 – Packaging (i.e., the packaging of goods for further purchase and retail)

It is noted that 2-4 above may not be under the direct control of the producer, further explored in later Elements. They may also not be in the above order and may include repeat steps (for example transport for refining and onward transport for packaging and retail).

**2 – for each included commodity, broken down further by included supply chain step, identify which energy processes and land-based or marine emissions sources/sinks are included and excluded**

For some sustainability systems the production processes themselves are not necessarily the scope of certification of their scheme, but the producer and production unit are. For others the standard applied may be a process-based approach that, as a bundle of processes in summation, lead to sustainable production. In both cases it should not be assumed that the scope of certification naturally captures or mirrors the scope of emissions and indeed, the processes and resultant data may not be certified at all in the case of some systems. Sustainability systems will therefore need to carefully consider what is part of their certification and what is not and transparently communicate this.

This means that information on processes included, for example in the Production Unit, may not exist via certification and hence need to be created for the first time through this process. The long list produced can be marked up transparently to show what is part of certification and what is not, though whether this is necessary is for the individual system to consider.

Responding to these two key questions is complex and may require additional expertise, but there are many sources available for the mapping of energy and land management emissions sources that align with GHGP. An excellent resource to start to unpack these questions is the [World Food LCA Database Methodological Guidance](#) Section 2.4 (Bengoa et al, 2014) which provides guidance for the identification of scope and boundary at production unit level and for transport and infrastructure, summarised as follows (providing a useful guidance for identification of processes to be included):



**IMAGE 1** (excerpt from WFLDB, Bengoa et al 2014): Processes included in crop production (note that animal production and food processing included via link above)

The processes mapped in image 1, above, relate only to production, though similar diagrams within the guidance indicate boundaries for the other steps. They are a good place to start when identifying relevant processes, regardless of the commodities targeted, as they provide a useful framing structure to do so. As previously noted, this also points to the management or production unit boundary as being the appropriate scope for inclusion of processes related to production.

It may be that a sustainability system includes a reporting requirement for processes that are not directly associated with production. For example, assistance to the domestic situation of producers or beyond farm gate conservation are both outside the direct purview of production and cannot be counted towards a Scope 3 inventory. This does not make them irrelevant; it simply means they need to be accounted and claimed separately because they cannot be reported by a purchaser towards their Science Based Target. Such processes should be identified at this stage and a later Element will explore what and how other claims can be made.

It is likely that during this step that energy process and land-based emissions sources are identified that apply to some but not necessarily all producers or suppliers. It may also be that some vary based on various factors, such as geography, variety, climate, environmental factors, technologies or practice. This is inevitable and will be dealt with later. In such cases, it will be helpful make a note that the process is a variable so that it can be returned to it in Elements 2 and 3.

At the end of this section the sustainability system should have a list of included steps and processes for each commodity identified in Principle 1. This represents the inventory scope of the certified goods. Depending on choices made in later Elements it may be that not all processes identified will be included in quantification and claims, see Element 3 for further details.

### **BOX 3: RECOGNISING THIRD PARTY MAPPING AND DATA SETS**

For many commodities it may be possible to work with pre-existing data sets produced by industry bodies, civil society organisations or third-party initiatives. Often these initiatives are intended to accelerate and bring consistency to efforts to track emissions and improve the quality of accounting in each sector or for a commodity or region. The GHGP itself recognises some [data sets](#), though they are not mandatory for use by reporting companies.

The key to using a third-party data set is to assume responsibility for the efficacy of its content. This means satisfying yourself that the processes, gases, geographies etc. are relevant, transparent, complete, material and accurate, in line with the GHGP guiding principles themselves. This could be done in a number of ways, some of which may already have been carried out by the third party themselves:

- Engaging with the third-party provider and asking what they consider to be missing from the system or if any improvements are being considered
- Cross-checking scope with feedback from within the sustainability system's scheme, for example feedback from producers
- Checking that geography, process and included gases are all clearly stated and then investigating whether any are missing by:
  - Reviewing the technical literature of the third-party provider (may require some expertise)
  - Reviewing any similar gap assessment carried out by the provider themselves
  - Checking against other third-party approaches for consistency
  - Using approaches recognised by a credible body, such as GHG-P (though responsibility still rests with the sustainability system)
- Checking that the data sets are maintained regularly and overseen by credible bodies/peers
- Seeking feedback from other users based on their experiences to date
- Conducting a review of any critique, either published or by experts and users who may be happy to provide input

Despite this, using a third-party approach is still likely to be more efficient than self-producing one, especially when you consider the ongoing maintenance of it and where several sustainability systems subscribe to the same approach, bringing greater consistency to a given sector. It may also benefit from a community of practice and opportunities for consultation.

The risk, naturally, is that the approach is not under the direct control of the sustainability system, resulting in reputational risks and complexity should inconsistency arise (though this in turn may be a reputational risk mitigation factor, given the system can point to the third-party source in the event of change). It may be possible for the sustainability system to supplement any concerns with the third party's approach, for example with add-ons or replacement Elements for use in certification.



5. The GHG-RS should describe and explain:
- Which greenhouse gases are included and excluded along with rationale for the choices made
  - How the gases apply to the processes identified in Principle 3, above

- a. List of included and excluded greenhouse gases and rationale for any exclusions
- b. Table detailing the gases relevant to each of the included processes

**Key checklist criteria:**

- Does the mapping include noting which greenhouse gases are relevant to the identified steps and processes? Is this referenced back to credible sources of information?
- For any excluded gases is there a clear rationale?
- Does the GHG-RS consider how different 'strata' of suppliers may generate different emissions data based on their circumstances, context, practices and technologies?
- Is this stratification explained and justified, by reference to the difference in characteristics and how this could influence the emissions profile of suppliers?
- Are there any characteristics that could influence emissions profiles that have been excluded? If so, is the rationale sound?

**Credibility indicators:**

**High credibility:** this should represent a relatively straightforward step, based on publicly available information or input from experts. If using third party research then it is likely that this step will already be taken care of, though this should still be checked. The key for sustainability systems is to capture a comprehensive list and be transparent over any exclusions, especially those that are material/significant emissions.

High credibility indicators include:

- No material exclusions of greenhouse gases
- Reference to latest IPCC Assessment Report (IPCC-AR) and a requirement that latest IPCC-AR is applicable should it change in future
- A thoughtful consideration of the key variables that potentially affect the emissions profiles of producers, based on their feedback, expert input and peer review literature where necessary
- An extrapolation of variables to inform stratification of producers by key variable characteristics

- (while key input variables, such as size of production unit, type of crop can still be including as variables)
- Clarity on the level of traceability exists, ranging from full traceability to regional to global levels. No level of traceability is 'uncredible' unless it is mismatched with the allocation approaches outlined in subsequent Elements
  - Clarity and justification of how the approach to data matches with the level of traceability and justification for any difference in alignment

**Potential areas of concern:** as it is a simple step the main area of concerns to avoid in this principle is inadvertently leaving out relevant gases or failing to adequately explain any exclusions. This will ultimately be harmful to the reputation of the sustainability system and hence care should be taken to be transparent if any exclusions are made. It is particularly important to include (or clearly explain exclusions) for gases that are significant.

### **Guidance:**

We have so far identified the users and uses, targeted commodities and applicable standards, identified the supply chain steps included and the processes representing sources and sinks of emissions within them. This gives us a thorough mapping of activities and processes that make up the scope and boundary of the GHG-RS. This in turn can pave the way towards

completing a Life Cycle Assessment (LCA) and beyond to more detailed Lifecycle Inventories (see Elements 2 and 3) of the certified commodities or to target specific processes for improvement, further explored in Element 3.

To be able to conduct an LCA and enable a more detailed Lifecycle Inventory (LCI) we require a further piece of information, which greenhouse gases are included and how do they apply to each of the steps and processes defined in principle 2, above. Greenhouse gases and their 'Global Warming Potentials' (GWPs) are considered in regular Assessment Reports issued by the Intergovernmental Panel on Climate Change (IPCC). The latest published report at time of writing is [AR5](#) (2014) with [AR6](#) due 2022. GHG-P recommends that organisations mirror the latest IPCC report and provided its [own synthesis](#) that is recommended for use in the context of sustainability systems. Hence, for each step and process identified so far, it is recommended that a list of 'material gases' (i.e., those that are emitted in significant/material volumes) be ascribed to each. This may require some expert assistance, though lists of typically relevant gases are likely to be found in the same environmental scan research undertaken in Principle 1.

If any gases are to be excluded from the GHG-RS this should be transparently noted and explained. There are few, if any, reasons to exclude material/significant gases from this process, however. It is strongly recommended that included/excluded gases are explicitly stated and transparently communicated as part of the commodity certificate. This in turn can assist purchasing companies align reporting and avoids the risk of assumption that all gases are included when in fact some are omitted (which in turn can lead to misreporting by the purchasing company).

After completing this Element, it is likely that the sustainability system has thoughtfully recognised a third-party data set or created a lengthy document or spreadsheet that details, by commodity, which supply chain steps, which processes, sources and sinks of emissions are relevant and which gases are relevant to each. This is the overall picture of the potential emissions profile of the certified goods, though which and how they are further quantified and reported will depend on later Elements.

### **Stratification**

A number of input variables are likely to influence the actual emissions associated with the identified producers, varying from producer to producer. To understand and later to take account of potentially impactful variables and to use these to inform both a stratification of suppliers and identify variables where user input is likely to be needed. This will, over time, help to create a more nuanced and accurate picture. It may be that a commodity is produced in a way that is completely globally

homogenous and hence there is no further need to stratify. This is unlikely in the context of crop and animal produce due to their relationships to land and marine processes.

Stratification can assist with accuracy of accounting because it can take the generic commodities, steps and processes included in Element 1 and further refine them according to characteristics that may influence results. Element 1 indicated that variables are likely to already be identifiable during the mapping, either because they only apply to a subset of producers for example or because they apply to all but vary greatly. The following represent possible strata (non-exhaustive) with which to categorise producers/steps:

1. Traceability: to what level of granularity can certificates be physically allocated to buyers
2. Geographic: Country, sub-national region or landscape
3. Physical: climate, hydrology, soil type, seasonality
4. Variety and rotation of produce
5. Production practices, unit sizes

Sustainability systems should review the commodities included and the steps/processes identified in Element 1 to assess which of the above variables may materially influence emissions. The research conducted in Element 1 may already have identified a number of strata and peer review research is generally a good way to go about this, as is consulting with experts and with producers/suppliers.

In most cases, it is likely that all four strata will have some influence and that combinations of strata, such as geography and variety for example, are material. Therefore, care should be taken over the inter-relationships between strata; for example, soil type may have a major influence and be amplified by climate or hydrology. In later Elements this could mean a different methodological approach for quantification or alternatively a global approach that includes for variables, for example a tool with a drop-down menu that adjusts overall results by characteristic. A good example of this would be the [Cool Farm Tool](#), which allows for user input of key variables to build up a picture of, in this case, a farm emissions profile.

It is noted that the key steps described in Element 1 Principle 2 may be especially influenced by geography. For example, transport to processing or onwards to retail will be influenced by where the goods were produced (as this may influence the distance and modality for transport). Accordingly, it is essential therefore that geography of sourcing is included at the most

granular and specific level feasible. Global approaches will find it difficult to ascribe accurate and credible transport emissions (as well as other emissions that are associated with geography) unless they assume the most conservative (i.e., longest journeys) and apply to all producers.

A simple way to present this could be as follows:

Category of emissions	Included processes	Relevant gases	Input variables for stratification
Commodity (for e.g., coffee, timber, fish) Standard			
Production	Energy process 1	CO <sub>2</sub> , N <sub>2</sub> O	For e.g., farm size, amount of fuel used
	Energy process 2	Etc.	
	Land management process 1	..	For e.g., variety, soil type
	Land management process 2	..	
Processing	Etc.	..	
Transport	..	..	
Packaging	..	..	

**Image 2:** *suggested structure for presentation of emissions*

## ELEMENT 2: DEFINITION AND SCOPE OF ACCOUNTING APPROACH

**Description and purpose of Element:** This Element builds on the robust mapping of **Element 1** and describes how emissions accounting will be carried out, including how supplier strata (for example by variety, practice, country, geography or climate) determine the level of granularity will emissions be calculated and how the emissions information will be accounted and presented in the form of an Emission Factor.

Its focus is to describe the structural options available to sustainability systems, in terms of who in the system is responsible for quantification and using which tools. It begins the process of understanding how to generally account for emissions and how to account for improvements made by individual or groups of producers. This Element is not focused on the act of quantification itself (i.e. methodologically) or on allocations to buyers, but rather on how the system is set up and how decisions were made that lead to quantification approach decisions in **Elements 3 and 4**. That said, there is no 'right' order to answer these questions and hence **Element 2** begins to point to the decisions and considerations that **Elements 3 and 4** cover in more detail. It may be beneficial to review all three Elements together.

Principles	Recommended outputs
1. The GHG-RS should explain which producers can be included, how they are stratified for the purposes of accounting and what level of traceability exists	a. For each commodity included per <b>Element 1</b> : Description of producers included and how they are stratified, along with rationale for same.
<p><b>Key checklist criteria:</b></p> <ul style="list-style-type: none"> <li>Does the GHG-RS state which producers or groups of producers (for example by type or region) are included? And does it state what actions are mandatory or optional (where known)?</li> </ul>	<p><b>Credibility guidance:</b></p> <p><b>High credibility:</b> The main questions considered at this stage are whether producers will provide specific input data and whether each producer will apply their own Emission Factor or whether an average Emission Factor will apply across different batches of producers.</p>

- Does the GHG-RS consider how input data may be collected from specific producers and has this been considered in light of relative capacity and desire to do so?
- Does the specificity of the Emission Factor choice match the level of traceability available?
- Does the GHG-RS describe how the accounting of emissions will occur, based on the mapping conducted to date? In particular, a description of whether Emissions Factors will be conveyed through certification via an average or supplier specific approach or will multiple options be available?
- How does this link to traceability and allocation options available under the scheme?
- Does the GHG-RS allow for improvements to be made to Emissions Factors? If so, is the interventions-based option robustly safeguarded and explicitly linked to the Value Chain Interventions Guidance?
- Does the GHG-RS describe how this is applied across the included commodities and strata, if the approach is not universal?

There are no bad options in this Element, but the most credible choices are those made in consultation with participants as this can better relate to capacity and principles of those involved:

**Areas of potential concern:** the main concerns to avoid in this Element are requirements that are mismatched with the capacity of participants, for example requiring input data that is beyond the capacity of participants to collect. The second is a reporting mismatch between specificity of data and level of traceability. Here the key is to avoid applying Emissions Factors and data that is more specific than the level of traceability that is available. The reverse is also somewhat true, but for reasons outlined this may be a valid choice too.

### Guidance:

The output of Element 1 was to state which commodities are included and to produce a comprehensive mapping of commodities, supply chain steps, processes and gases that could be included in the GHG-RS. This mapping will be an essential component of decision making in later Elements and ultimately assists in reaching a robust and comprehensive GHG-RS. It is though, taken on its own merits, a hypothetical mapping conducted at a global level, likely based on existing research and stakeholder feedback. To make robust GHG estimates it is important that the GHG-RS also considers how that mapping varies due to factors such as location, climate, practice, variety etc.

Otherwise, the ultimately reported figures will not be as accurate as they can be and would be subject to challenge should someone scrutinise specific suppliers, where a potential mismatch may be apparent.

This section describes the main accounting approaches available to sustainability systems and their certificate holders. The choices made in this Element build off previous and will greatly influence later Elements, particularly concerning quantification approaches (Element 3) and assurance (Element 5). The main questions that this section seeks to address are how will emissions data be generated and attributed to certificates and how will those certificates be allocated to buyers?

This section explores concepts that have somewhat overlapping and therefore potentially confusing terminology. This is because the language used for quantifying emissions and the language used for allocating purchased goods for companies overlap slightly. For the purposes of what follows the following definitions are provided:

For the generation and attribution of data to commodity certificates:

- **Average data:** emissions data associated with an emitting process that is generated using an average of data provided by a number of producers. For example, the emissions intensity of processing treatments could be drawn from 100 mills and then averaged to produce a figure reported by buyers.
- **Supplier specific data:** conversely, each mill could produce its own data for the processing treatments and this figure could be reported by companies. Note that average data is really drawn from supplier specific data, but at a larger sample size.
- **Hybrid data:** many data points could involve a combination of average and specific data, for example taking an industry average provided by a sectoral body and calibrating this further using the supplier specific data from certificate holders.

For the allocation of certificates to buyers:



- **Physical allocation:** this is where the goods purchased from specific producers can be allocated to a specific buyer. This is only feasible where traceability exists. Note however, that a physically traceable system may still prefer an average data method for fairness amongst participants or for ease of reporting.
- **Average-based allocation:** this is where the goods purchased cannot be traced to producers and are instead reported at the most granular level of traceability using an average data method. For example, if traceable to a sourcing region, then an average Emission Factor could be created using supplier specific data from producers in that region.
- **Market-based allocation:** this form of allocation is not included in the Greenhouse Gas Protocol and is still at a nascent level of development. It involves making an assumption of supply to allow investment to flow to specific producers, where traceability or other barriers prevent such action. This is unpacked further in box 4, below and in the Accounting for beneficial improvements to Emissions Factors at the producer level section later in this Element. It is expected that further developments in this area will emerge in the near term.

This can be somewhat confusing, due to the average data approach and the average-based allocation. These are two related but separate concepts, however.

It is strongly recommended that the most granular available allocation approach is applied and it is generally encouraged to use physical allocation wherever it is available.

The choices that the scheme will need to make, based on its traceability and capacity characteristics are therefore:

- Will each producer provide their own specific data for all processes, for some or all processes? This will determine whether a supplier-specific, average or hybrid approach is used. It is possible to use industry or global average data, such that only basic input data is provided by producers (for example yield, plot size, crop type etc.), but this is generally less accurate. This question is largely determined by a combination of quality expectations and producer capacity.

- What level of traceability exists and what does this mean for selecting an allocation approach and reporting level? This will determine whether the specific emissions data of specific producers can be allocated to specific buyers, or whether an average approach is needed. This was explored in Element 1 and by now the scheme should already have mapped its current and intended allocation approach.

The answers to these questions leave us with a further question to consider, which speaks to credibility and accuracy of attribution and allocation:

- Does the level of granularity of the data match the traceability (for example supplier-specific data and physical allocation, average data at the regional level) and what are the reasons for any mismatch?

As noted, a mismatch of data specificity and allocation is not necessarily bad. There may be good reasons such as fair competition, consistency of application, capacity of users etc. to have a *lower* level of granularity of data quality than traceability, but this should be made transparent and justified. Generally, however it isn't credible to use *more* granular data than the level of traceability allows, i.e., using regional data when only global traceability is possible would risk a beneficial result for the reporting company than is credibly reportable (an alternative could be to use the most conservative option).

This may create a perverse incentive for schemes where traceability is more challenging. This is because if an average based allocation method at a wide resolution (such as regional or global) is the most that can be achieved, then it is tempting not to collect too much producer specific data as a wide average will be applied. It is generally recommended that supplier specific data *is* collected for practicable aspects of their inventory, even if this can't be specifically allocated to a company. In this way we can begin to improve the quality of data overall and the capacity of producers to understand and contribute wherever possible.

This section will further unpack key considerations in this context. Allocation is further explored in the next Element, though Box 4, below, provides a simple introduction for the purposes of considering this topic.

#### **BOX 4: THE ROLE AND IMPORTANCE OF ALLOCATION**

Allocation is a process through which the purchase of certified commodities can be credibly 'claimed' by a company for the purposes of reporting them. For some this is a direct 'physical;' attribution, where full traceability and chain of custody exists (i.e., it is known for sure that the company's reported goods came from a specific producer).

In many cases full traceability and chain of custody is not available and hence an average-based approach to allocation is applied (where the average Emission Factor at the most granular level of traceability available is used). For example, if allocation can't be determined at lower than a global level, then a global average Emission Factor should be applied. Traceability to a region or sourcing area could allow for an average Emission Factor at that level. Generally, the most specific approach should be used.

Here many ISEAL members have pioneered approaches such as mass balance and book and claim, to effectively make an assumption of supply, subject to other credibility principles being in place.

In these cases, it is a relatively simple data point being attributed; the certification status of the commodity (which is generally a binary yes/no data point). When it comes to also attributing emissions data, this can complicate things because different producers will have different Emissions Factors based on their circumstances. This could mean that it is no longer a simple binary attribution, but one with potentially infinite variables. There are various ways to potentially overcome this, for example if all producers apply the same average Emissions Factor at the most granular level of traceability available.

A further, market-based where producers are batched by range and attributed from batch to producer or where direct supplier approaches are attributed via book and claim models. These concepts are newly emerging as the world of Scope 3 accounting matures. Some care therefore needs to be taken to test the credibility of different attribution approaches, discussed further in Element 4, below.

The question of how to establish accounting methods is closely linked to the attribution of data to purchasing companies. It could be argued that possible models of attribution should be discussed first and prior to considering approaches to Emissions Factors. This is valid and it is recommended that users of this guidance consider this Element and Elements 3 and 4 in a circular way, reverting to this section having read and considered options in the other two.

## Supplier-specific vs average vs hybrid Emission Factors

The key data point for reporting the emissions of a given commodity is called its 'Emission Factor', representing the sum of the emissions associated with each of the processes that make up the whole picture. An Emissions Factor is an intensity measure, i.e., it is the measure of GHG emissions on a per unit of commodity basis, allowing companies to report their total GHG footprint for that commodity by multiplying this by the volume of goods they buy. For example, the emissions associated with a production process, divided by the yield per annum would provide us with the emissions intensity for that process, per unit of commodity. This can then be summed with all other processes that are relevant to the production of the commodity to create an Emission Factor (see previous Element). A reporting company then takes this Emission Factor and multiplies it by the volume of commodities they purchase to provide their GHG inventory for that commodity.

The first questions to address are therefore:

1 – will producers and participants be required to provide some or all emissions data towards the generation of Emission Factors? Alternatively, will this data be collected at a scheme level, for example through sampling or recognition of third-party data?

2 – will the Emission Factor be applied as an average across batches of producers (or as a whole), or will individual producers report an Emission Factor specific to them?

These questions at first glance appear similar because intuition suggests that if supplier specific data is available then supplier specific Emission Factors follow. But it should be noted and will be seen in Element 3 that supplier specific data and supplier specific Emission Factors are not the same thing. The former can still be and commonly is a contribution to an averaged approach (i.e., All producers provide some data, but an average is applied to everyone) whereas the second implies specific data from specific producers is attributed to their certificates.

The output of these two decisions results in the production or recognition of Life Cycle Assessments and Life Cycle Inventories for potentially specific commodities, see Box 5, below. From there the scheme can establish how each producer and their commodity certificates will reflect this.

It is recommended in the first instance that Chapter 7 ('Collecting Data') of the [GHGP Scope 3 Standard](#) and the chapter 'Category 1: Purchased Goods and Services' of the [GHGP Scope 3 Guidance](#) are carefully reviewed and explicitly referenced in the GHG-RS.

### **BOX 5: LCA AND LCI APPLICATION**

The term 'Life Cycle Assessment' refers to the overall act of mapping and modelling emissions, a process an organization can go through to create a 'Life Cycle Inventory'. The latter represents the data collection aspect of an LCA and results in emissions data that can be used to inform credible emissions intensity and ultimately Emissions Factors for use in reporting.

Part of an LCA approach is to model the profile of emissions in a product and how these can vary depending on different characteristics. Some of these variables will be input related, for example type of crop, size of production unit, climate, soil type etc. Others may be practice based, such as method of tillage. It can be difficult to assess how to stratify producers based on variables, but the best way to think about this is to focus on variables which have a fundamental impact on emissions profile and those which further dictate scale. For example, strata based on climate and soil type may be helpful, allowing producers to then input size of plot or practices. The other way around would not work so well as size of plot isn't dependent on climate.

This guidance is based on an LCA process flow with the aim of as accurate as possible LCI outputs. As will be seen later in this document, it is possible to have fully bespoke LCIs that are specific to individual producers or more likely stratified LCIs that are generalised over a population but that still then allow user inputs to be considered.

However, it may not be possible for supplier specific data to be attributed to buyers, dependent on the method of allocation available. It is still important however to consider inputs from suppliers even in a system that averages them across all global producers.

### **Deciding whether to require supplier specific inputs**

The reality for most schemes is that producers can potentially provide input data (farm size, crop variety, soil types) for some variables and processes, but may not be able to for all those mapped in Element 1. It is important to take the output of Element 1 and consider the relative complexity, capacity and usefulness of collecting input data at a producer level. This likely requires some expert help and some consultation with producers, but it should be noted that collecting data from producers may lead to greater buy in and accuracy of reporting and is thus recommended, where capacity and usefulness allows.

### **Deciding whether to use an average or supplier-specific Emission Factor approach**

This choice is likely to be a function of capacity and consistency choices as well as chain of custody and allocation approaches employed. As a general rule, it is not possible to apply a more specific approach than the level of traceability within the scheme allows. For example, if global traceability is all that is available then it is not possible to attribute more geographically specific or supplier specific Emission Factors. Instead, it is generally recommended that the most specific available data is used, for example if regional traceability is available then a regional average Emission Factor should be employed.

Where full traceability exists then supplier-specific Emission Factors may be feasible. Here however it may be decided that an average Emission Factor is still used, for example where more practicable or where fairness and cooperation are a factor. Where this is the case, it is recommended to apply the next most granular average available, for example using a sourcing area average rather than regional or global.

Some questions to consider when making these two critical decisions would be:

For each process identified in the mapping in Element 1 it is recommended to consider:

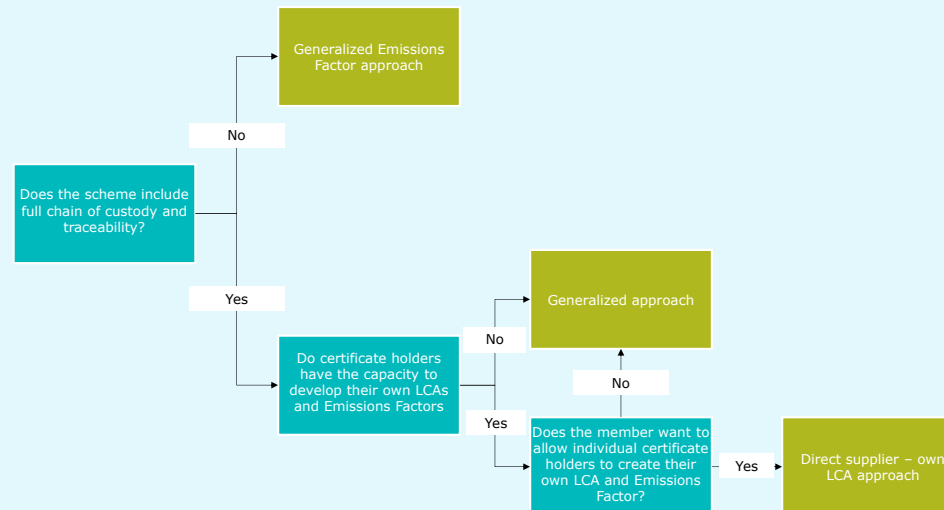
- Will the input data for this process vary from producer to producer (for example, are different fuels used)?
- Are there locally defined processes where physical/spatial factors being essential to reporting (for example soil types for assessing soil sequestration)?
- How complex is the collection and reporting of input data and do producers have the capacity to carry out this task?

- What are the additional costs associated with data collection and can producers bear this burden?
- Does the assurance approach of the scheme and the capacity of oversight bodies and assurance providers allow for the assessment of supplier specific input data for relevant processes?

For deciding whether to report an average or specific Emission Factor:

- Is full traceability (and thus physical allocation) available? If so then supplier specific Emission Factors are feasible, if not then an average based approach should be used.
- Is it appropriate, where full traceability is feasible, for individual producers to report their own Emission Factor? For example, do producers cooperate? Is it fairer to all to use an average? What do producers prefer?
- What is the most granular level of traceability available? This should inform the average approach applied.

These decisions are a clear example of there being no single 'right' way for schemes to act. Instead, these questions should inform the most appropriate approach befitting the level of traceability and capacity of participants. It is of course possible to update the approach as greater traceability emerges and this is recommended in Element 8.



## Accounting for beneficial improvements to Emissions Factors at the producer level

A further, complementary choice to be made is how to account for beneficial improvements made by specific certificate holders. It is likely that companies purchasing goods will seek to work with producers to improve processes that lead to reduced emissions. In the supplier-specific accounting model and where full chain of custody exists, this can be a straightforward case of updating the processes within the overall Emissions Factor and then reporting it accordingly. This is because physical accounting for actual goods purchased is in place and it would be credible to report the lower emissions that result.

However, where an average-based accounting model is employed, this can be more challenging. For example, working with specific suppliers in a system where traceability remains only at the global level means that only the global average could be reported (and thus any beneficial improvements made cannot be to the benefit of reporting companies).

Whilst the physical allocation principle of GHGP, wherein companies should report their actual purchases, is essential to credibility, it may also disincentivise action by effectively making it impossible to report the benefits achieved. This becomes a fine line of credibility vs action, given that full traceability may be five to ten years away and more in some supply chains, meaning action could not be incentivised until it is already too late to mitigate climate breakdown.

There is currently no GHGP recognised solution to this conundrum, though there are nascent efforts to explore the role of 'market-based' allocation methods, that are likely to be familiar to ISEAL members. These include methods such as mass balance and book and claim to allocate beneficial data where traceability is limited. It is expected that this will be further developed during 2022 and 2023 (for example, see the [Value Change Initiative](#)). In the meantime, sustainability systems should be aware that the application of data that is more supplier-specific than the level of traceability allows would fall outside the current definition of credible reporting.



### ELEMENT 3: APPROACHES FOR QUANTIFYING EMISSIONS DATA

**Description and purpose of Element:** This Element describes, in tandem with Elements 1 and 2, how the actual quantification and accounting of emissions is carried out, in line with good practice. Where Elements 1 and 2 describe what is to be accounted for, Element 3 describes how the emissions for that scope will be quantified and reported. In effect it takes on the mapping undertaken in Element 1 and the structural decisions applied in Element 2 and guides sustainability systems towards appropriate approaches to quantify the emissions associated with them.

Quantification for general emissions reporting, in the context of LCA/LCI-based approaches are described, as are more rigorous approaches for the purpose of demonstrating causality of outcome (i.e., where claims to have improved an emissions profile are made).

<b>Principles</b>	<b>Recommended outputs</b>
1. The GHG-RS should describe the methodological approaches and tools used for accounting and quantifying emissions for each of the processes described in Element 1 and structure in Element 2 (including emissions associated with energy process, land management processes and any activities not within the production boundary)	<ul style="list-style-type: none"><li>a. An overall description of the accounting and quantification approaches applied to calculating emissions for energy process, land management and any additional activities not associated with production.</li><li>b. For any accounting approaches that require baseline emissions calculations (see guidance, below and in Element 2) state clearly the baseline definitions or how baseline definitions will be credibly defined.</li><li>c. A table of data sources are to be applied for each of the inputs necessary to calculate emissions</li></ul>

(including baselines, where necessary) for all processes described in Element 1 – 2.c.

d. For each data input a table that describes the data source, frequency, sampling and quality control for monitoring reporting and update (possibly by reference to third parties where appropriate)

e. An approach to calculating and communicating uncertainty in calculations

f. An approach to ongoing monitoring, reporting (MRV) and verification of results

### **Guidance:**

The approach to accounting, quantification and MRV will depend on the choices made in the previous two Elements, particularly in Principles 1-3 as these determine scope, boundary and approach to accounting. This section first describes approaches for the creation or recognition of LCA-based approaches (whether via a centralised tool within the system or through accounting directly by suppliers or a combination of the two) in part or in full. Secondly it goes on to describe how improvements that result in lower emissions should be accounted, quantified and monitored as this is likely to be desirable to many stakeholders. This guidance does not seek to 're-invent the wheel' and thus recommends a list of resources that could be applied to these purposes.

In Element 2, the main options for accounting were explored, namely the choices between a supplier-specific, average data or hybrid approach and whether the resultant Emission Factor would be attributed to certified goods on a supplier-specific basis (i.e., each producer has its own Emission Factor) or on an average basis (i.e., all producers report the same Emission Factor either globally or at the most granular level of traceability available, such as regional).

All these options are therefore built upon a robust LCA/LCI (see Element 2, Box 5), either produced by the sustainability system or by reference to third party tools.

Element 2 also described the use of different approaches to allow certificate holders to make improvements to their Emissions Factor, either by making direct adjustments in the case of chain of custody/traceability being in place or via a market-based allocation approach, nothing the latter remains in development and is not yet fully legitimised. The following provides a brief synthesis of approaches to develop each of these options.

A useful resource for this section is the [GHGP Scope 3 Guidance](#), which describes different approaches to data collection and estimation (namely the supplier specific, average data and hybrid approaches mentioned in Element 2). It is perfectly reasonable to include different sources of data in an overall approach and indeed most will likely be a hybrid of on-site data and third party validated data sets. Generally speaking, it is good practice to include the best available data and to continuously work towards improving data quality, especially for those processes that are most impactful (i.e., make up the majority of the Emission Factor). This may need to be considerate of producer capacity, however.

### **Development of an LCA approach towards an LCI**

LCAs are the pre-eminent method for developing an LCI and ultimately Emissions Factors for commodities. They can be created using centralised tools and approaches and then applied by individual suppliers (i.e., the 'average approaches described in Element 2), or they could be created by individual producers where capacity exists. Based on the mapping created in Element 1, an LCA could be full (i.e., ascribe emissions data to each source or sink of emissions identified) or partial (i.e., ascribe only to processes covered by the scope of certification).

It is recommended that a full LCA be applied such that the resultant LCI and Emissions Factors produced are most credible. This is true even where Emission Factors are averaged across a group of suppliers as the more granular data is likely to be useful as the overall system quality improves and because it can lead to greater understanding and capacity. This is a choice of each individual sustainability system, however, though it is noted that in the case of a partial LCA approach this should be transparently communicated such that users of the information do not overstate the role of the sustainability system or of certification of same. Sustainability systems may wish to consider whether their scope of certification matches the scope of an

LCA, such that the LCA itself becomes part of certification. Alternatively, the scope of certification could simply be to apply the tools available.

This should be considered in light of both energy process emissions and land or marine-based emissions. For energy process the choice can be weighed as follows:

- **Full LCA and LCI output:** most comprehensive and credible and has greatest flexibility of application by purchasing companies. It is also likely more expensive, and time consuming to produce and update. It likely requires expertise to produce, particularly if converting into a tool that allows different variables to be incorporated (or reliance on a third-party tool may be feasible, if comprehensive)
- **Partial LCA for targeted processes:** less comprehensive and relies on the purchaser to complete the picture with their own quantifications for processes not covered. Is likely quicker and cheaper to produce and may be more reflective of the scope of certification, dependent on how the sustainability system's scheme is written. Producing a bespoke approach may require some expertise, though methodological approaches for the quantification of single processes may exist more readily.

In effect this decision is about the extent of the scope of the GHG-RS. This does not influence the scope of what a reporting company should include, hence the less the GHG-RS covers the more the purchasing company will need to supplement with their own information, which in turn may impact how much can be said about the certified status of the data (see **Element 1** – exclusions from the GHG-RS are critical to disclose to avoid misreporting). This can be especially challenging if only relatively few of the processes and emissions are covered in the GHG-RS as, in effect, it means the purchasing company will not be reporting the majority of emissions according to the sustainability system's approach. Hence it is generally recommended to include for as many processes as possible, ideally a full LCA-based approach. Where aspects of the LCA are not covered by certification, this could be reflected in the certificate, effectively providing buyers with a recommended reporting data set for processes that are uncertified, allowing them to make up their own mind (whilst making it clear that those are figures the sustainability system itself does not necessarily fully endorse).

It is also possible to follow a full LCA approach, such that all identified processes are included, but to target specific processes to a greater level of accuracy, for example those that are most material and significant. This can effectively bridge the gap for

sustainability systems that would like to follow a full LCA but are concerned about the cost of assessing all emissions to the same level.

The choice made here will influence the modality of Assurance covered in **Element 5**. Of particular note is that supplier-specific Emission Factors should be subject to direct assurance (i.e., at the producer level), whereas average/hybrid approaches and averaged Factors may not require that level of specificity in assurance and can be assessed at a more global level. This is because a bespoke LCA produced by individual producers could result in a lower overall emissions profile being reported but, it is the accuracy of reporting that has made the difference, rather than there being any great improvement made.

### **Producing an LCA and calculating an LCI and Emissions Factor**

LCA is a mature profession and there are many credible guides for the creation of an LCA and many third-party tools that have pre-populated LCI datasets that could be selected. Hence this guidance does not further detail this aspect. Below is a list of sources that could be applied though it is not intended to be exhaustive nor sector specific. It is recommended that each sustainability system selects the most appropriate for their purposes and context from either the list below or an equivalently identified list. A good way to assess guidance or tools is to compare to the mapping created in **Elements 1 and 2** and against the guiding principles of this document. Key characteristics to also consider are stated adherence to the GHG-P approach, authorship by reputable experts and organisations, peer review of data and how up to date the approach is (and how it is kept up to date of course).

If unsure of the credibility of a third party LCA approach, the sustainability system could put it to stakeholder consultation and expert review.

This guidance is specifically focused on life cycle emissions associated with raw commodity production, processing, packaging and transport, though if sustainability systems include further steps, then the above references should assist. The LCA approach should also reflect the stratification conducted in **Element 2**, which was to identify the key variables that impact the emissions profile in order to produce a robust LCI and Emissions Factor. The following represent an initial list of relevant guidance that could be applied to the creation of an LCA. It is recommended that the GHG-P Product Life Cycle Standard be applied as the base approach, as applied to the steps of production, processing, packaging and transport.

- The Greenhouse Gas Protocol standards and guidance include many references to useful LCA approaches and data sets. Of particular interest are:
  - The [Scope 3 Standard](#)
  - The [Scope 3 Guidance](#) (particularly for Category 1, though other categories such as Transport will have useful Elements to consider)
  - The [Product Life Cycle Standard](#)
  - ['Built-on' Greenhouse Gas Protocol guidance](#) are written by third parties and recognised by GHGP. These often target specific sectors or issues and thus provide inspiration and tools.
  - GHG-P publishes a list of [third party data sets](#) that may be a useful match for specific sustainability systems
  
- Third party guidance and sources recommended to consider include:
  - [World Food Lab Database: Methodological Guidelines for the Lifecycle Inventory of Agricultural Products](#) (Bengoa et al 2014). Represents an excellent resource likely relevant to most sustainability systems or a good structure to follow where the commodity is not agricultural related.
  - [The Higg Index](#). Represents a resource primarily for the apparel sector and its commodities, though its methodological ideas could be extrapolated to other sectors.
  - [The IPCC Emissions Factor Database](#). Provides global and regional default factors for a variety of processes, noting that data quality and applicability is mixed.
  - Country specific databases may be available, for example for the [European Commission](#), [US](#) or [UK](#).
  - [FAO publications](#). FAO publishes life cycle data for a variety of sectors, including [ruminants](#) and [dairy commodities](#). The underlying methodological approaches are listed and may be helpful as a reference point.

The same approach to assessing life cycle emissions generally can be used to assess the variable options according to strata, for example the difference caused by variety or practice. In effect multiple LCAs are produced according to the different variables and combinations. Again, sustainability systems may wish to create or endorse a tool to manage this complexity. For producers conducting their own LCA and creating an LCI and Emissions Factor this is not an issue as the variables are built-in, for example via input data related to the strata variables.

From these LCA approaches and LCI outputs an Emissions Factor can then be calculated by, simplistically, dividing emissions by yield to produce an emissions intensity per unit of commodity. For third party tools this may already have been 'built in' such that an Emissions Factor is presented de facto, likely based on sampling of suppliers. It is generally recommended that this is conducted at the individual supplier level as this will result in the most accurate emissions intensity calculation. For many sustainability systems this should be relatively straightforward since it is the produce itself that is certified, though it may be the case that all not product is certified, and this should be considered. However, because a company's ability to report will depend on chain of custody it may not be possible to carry this information through. In the context of a centralised, generalised Emissions Factor approach, yield may therefore need to be on a sample-basis and applied across a group of suppliers and to commodities, such that each users the same Emissions Factor. The World Food Lab Database contains excellent guidance on such sampling approaches, as do the GHGP documents.

It is recommended that on site audits assess data inputs and data quality for variables identified. It is also recommended that LCIs are constantly monitored for improvement opportunities. There is no minimum timeline for a formal update for an LCI and this decision may be driven by any significant developments or discoveries during the process of administering the GHG-RS. The Paris Agreement represents a five-year reporting cycle, and this is a reasonable minimum time frame for consideration in terms of planned review and update of LCIs and Emissions Factors.

## ELEMENT 4: ALLOCATION OF CERTIFICATES AND CREDIBLE REPORTING OF EMISSIONS

**Description and purpose of Element:** This Element describes how the system ensures that it is appropriate for companies to report emissions associated with certified goods and how to correctly report certified commodities that are relevant and associated with their supply. This is administered through different allocation options, the choice of which is a critical decision for the scheme.

This is necessary because accounting norms, such as those in GHGP recommend against the use of allocation of any form unless necessary (which is the case with purchased goods). Where it is necessary to allocate, then either a physical allocation or average-based method should be applied. Amongst the ISEAL membership there are a number of forms of allocation, ranging from full chain of custody to mass balance and book and claims approaches. Bringing these together with emissions accounting good practice is important to avoid inadvertent misreporting by companies.

This Element also briefly covers emerging 'market-based' allocation discussions, which may point to ways in which sustainability systems could act as market mechanisms for emissions accounting.

Principles	Recommended outputs
<ol style="list-style-type: none"> <li>1. The GHG-RS should explain how purchased goods and their emissions data will be allocated to companies, such that they can credibly report them in their inventory. This could be via physical allocation (direct chain of custody/traceability) or average based.</li> <li>2. The GHG-RS should describe how the information produced will be included by reporting companies.</li> </ol>	<ol style="list-style-type: none"> <li>a. Description of data allocation methods and conditions within system (there may be multiple approaches taken) according to decisions taken in earlier Elements</li> <li>b. Description of tracking system approaches to ensure correct allocation is maintained</li> <li>c. Description of how information will be presented for use by reporting companies</li> <li>d. Description of how the information is ascribed to producers and certificates</li> </ol>



## Key checklist criteria

- Does the system include and describe any credibility preconditions required for reporting companies to be able to use emissions data?
- Does the system reflect any allocation conditions, such as percentages of purchased goods and ingredients?
- Does the allocation system match decisions taken previously and include safeguards against cherry picking?
- Does the GHG-RS clearly outline how emissions data will be presented and whether it supports direct supply, facility and/or process substitution?
- Does the GHG-RS and data presentation make clear recommendations to purchasers on the correct use of the information and to safeguard (or recommend if not feasible) to not cherry pick information?

## Credibility indicators

**High credibility:** the two key aspects for application of this Element is to guide or prescribe ways for potential users of the information towards credible use of it and to ensure allocation is true to the choices made so far. Higher credibility choices will include demands placed on purchasing companies to ensure they have their own credible targets and strategies in place and that allocation is made based on physical purchase or conservative allocation where this is not possible.

There are many ways for a company to absorb the information generated under the GHG-RS. This will depend on the GHG-RS itself (based on choices in previous Elements) and on the starting point and context of the company. What is important is that the company use the information as intended and hence the GHG-RS should make data available transparency and make recommendations for its correct use. If possible, this should include pro-active safeguards. Indicators of credibility may include:

- Principled guidance for pre-conditions and practices that a company should demonstrate before being allowed to report the emissions data
- Approaches to presentation that can be linked back to users and use cases identified in Element 1 and that allow greatest flexibility
- Advice to users on how to apply emissions data credibly and how to avoid cherry picking

**Areas of potential concern:** the first and most egregious misuse of data by reporting companies is linked to making beneficial claims to improvements where they either cannot trace or credibly claim this benefit to their own inventory. The second is that the company can credibly make a beneficial claim but does not have its own house in order in terms of comprehensive and credible, science-based inventory targets.

The main concern with the incorporation of emissions data lies in intentional or accidental misuse. The main issue to avoid is companies selecting processes that represent an improvement over what they were already reporting but excluding those that are worse. This cherry picking is not credible and should be avoided, ideally as part of standards requirements if the scheme operates this way. The main indicators of poor approaches include:

- A lack of clarity and guidance on how emissions data can be used
- A restricted approach to presenting the information that does map to earlier identified user needs
- Allocation at a finer resolution than the emissions data allows

### **Guidance:**

This section considers when it is appropriate to attribute emissions data to a company to report the emissions associated with purchased certified goods. There are three key considerations:

1. pre-conditions for reporting companies
2. correct attribution of data and allocation to companies according to choices made in previous Elements
3. Incorporating emissions information into corporate inventory reports

## Reporting pre-conditions

While not strictly an accounting principle, it is likely important that any reporting company, particularly those claiming beneficial improvement to emissions associated with certified goods, are themselves a credible actor. This means that the reporting company should be aligning their wider climate strategies with good practices such that their claim to emissions information from sustainability systems is nested within an overall credible approach.

This guidance does not seek to prescribe pre-conditions that sustainability systems may wish to adopt or recommend to their corporate stakeholders, only to note that it may be something to consider. Sustainability systems often have, under their own licensing and certification requirements, clear and robust pre-conditions in place. It is generally recommended though that companies commit to achieve a Science Based Target (for all three scopes) and commit to following WWF's '[Blueprint for Corporate Action on Climate and Nature](#)'. Noting that the detailed implementation of this approach remains in development, some key considerations could be:

1. The company should have in place, or a stated aim to follow the Science-Based Targets [Net Zero standard](#) (or a future equivalent that may emerge). To encourage this, sustainability systems may wish to give their corporate community a time-limited window to align.
2. The company should have a zero (not net-zero) deforestation target, for example as envisaged under the [Accountability Framework](#)
3. The company should consider participating in [Science-based Targets for Nature](#), as appropriate to their business

Furthermore, as an optional requirement, sustainability systems may wish to consider a requirement that the company commits to pay its taxes in full. This is because, under the Paris Agreement, countries are committed to providing 100 billion dollars per year in climate finance.

This number has fallen short in the initial years of the Paris Agreement and its funding, through a variety of ways, is likely to rely on taxation to a significant degree. Hence the avoidance of tax is a direct undermining of the goals of the Paris Agreement. It is acknowledged that this is of course a challenging condition to impose and is not likely to be in the mandate of most sustainability systems to control. Hence this could be considered a guidance or pledged principle or perhaps including sanctions where companies are found to have egregiously or illegally avoided tax.

Sustainability systems may wish to prescribe an improvement pathway, wherein companies can participate at whatever stage of maturity their own targets are, with a view to aligning all with good practice over a period of time. Finally, there are many practices that companies should adopt for ethical reasons, including living wages, health and safety and robust gender and anti-discrimination policies. This guidance limits itself to matters related to climate only, however.

## **Reporting emissions**

Producing credible data is only half of the equation when it comes to emissions reporting. The second is to ensure that the data can be and is credibly allocated to companies and included accurately in reports by them. Having established pre-conditions that determine when a company should be allowed to use the data in the reporting, we now turn to how they would do so.

The first consideration is whether a company can report an Emissions Factor associated with either specific producers or a sourcing area. This is really a chain of custody and traceability question. Simply put, if a chain of custody exists then the buyer should report the Emissions Factor associated with the producers that supplied them. If a lower level of traceability exists, then this should be reflected in what is reported and any systems of attribution employed should be credible.

There are two main options for how data can be incorporated, as follows:

- **Physical allocation** – where full chain of custody and traceability is in place, then the Emissions Factor produced can be used by the purchasing company, for that supplier, in part or in full. Any improvements made are naturally captured in reporting and do not require any further provisions, beyond data quality considerations.
- **Average allocation** – where a lower level of traceability exists then an average Emission Factor at the most granular level can be allocated to the reporting companies

In no circumstances should there be more specific data (i.e., an Emission Factor) be used than the level of traceability allows, pending the following further method of allocation that remains in development at the time of writing:

- **Market-based allocation** – to address the barriers to incentives noted in the previous Elements a market-based allocation may become feasible. This involves the use of mass-balance and/or book and claim methods to overcome the lack of traceability, effectively by making an assumption of supply with credibility safeguards. This is not currently an approved allocation method under GHGP, though this may be addressed in the coming years.

### **Incorporating Emissions information into reporting**

Having established what can be reported, it is important now to consider how to incorporate the data into an inventory report. The influence of the choices made in previous principles is critical at this stage in how the information will be presented and used. This is important because buyers are likely to already be reporting purchased goods, but in a way that may not be directly matched to the approaches in the GHG-RS. For example, the GHG-RS may be comprehensive of all steps and processes and include a full LCA-based approach. The buyer, however, may be using global default factors that are not broken down into individual processes and thus cannot be broken down in the same way.

It is the intention of the GHG-RS that the buying company, regardless of their reporting starting point, should be able to include the information generated by the GHG-RS in a credible way, but the way this is conducted will depend on the choices made so far. In the case of a full LCA the buyer could simply switch reporting of their previous approach and start reporting the full LCA. Alternatively, they could go through their own LCA and supplement with any processes in the GHG-RS that they weren't already capturing, or where the information in the GHG-RS is more accurate and credible than their own (and vice versa, if theirs is the more accurate and credible).

If the choice was made to only quantify certain processes, then their use will depend on how the purchasing company was accounting prior. For example, if the company has a full, detailed LCA then it may be possible to substitute out the processes included in the GHG-RS and substitute in the more accurate GHG-RS figures. Of course, it is also possible that the company is purchasing the commodity for the first time, in which case no substitution is necessary, and they could simply apply the facility or processes as part of a newly created line of reporting in their inventory.

- **Facility substitution** – substituting an entire Emission Factor (for each step or as a whole) for the one produced under the GHG-RS. This could be supplier-specific or average-based.
- **Process substitution** – substituting specific processes in an original Emission Factor for the ones produced under the GHG-RS. This could be direct substitution of processes, or an assumption based on baseline.

The choice between these options is somewhat driven by previous choices. For example, a facility substitution model can only really be undertaken with a full LCA, otherwise a company would be substituting out more or less processes than they were reporting in the first place (thus rendering their reporting inaccurate). That said, sustainability systems are recommended to use the most comprehensive option available to them and to recommend that in the case of process substitution that companies use all available processes and not cherry pick the ones that are an improvement on what they were already reporting.

One scenario that relies on process substitution is where the purchasing company was not using a full LCA, but rather reporting a default factor-based Emission Factor that was not broken down into specific processes. In this scenario substitution is more difficult as it would not be clear what to substitute out (though the processes in the GHG-RS could at least confirm the proportion of the original Emission Factor that was related to that process). One option to overcome this is included in 'Intervention' based accounting, detailed in the Gold Standard's Value Chain Initiative Guidance previously referenced.

This approach includes for scenarios where an improvement is made to one or several processes over what was happening prior. In this situation, a 'baseline Emission Factor' for that process could be produced as well as a post-intervention Emission Factor. The baseline could be substituted out from the buyers less granular Emission Factor and the post-intervention substituted back in, thus improving the overall picture. This is only feasible where a/ the purchase of certified goods can be seen to be the causal factor for the improvement and b/ either the supplier is fully traceable or can be reasonably assumed to have supplied the purchasing company (see Elements 3 and 4 for more detail).

Ultimately, whichever choice is made at this stage the most useful thing a sustainability system can provide is transparency. By including all steps and processes, broken down and quantified, then purchasing companies can make best use of the information according to their context and strategy. It cannot be entirely controlled how a buyer incorporates the information and every buyer will likely be starting from a different point. Hence it is important to make recommendations for credible use of information and make that information as transparently available as possible.

To assess whether a company can credibly report emissions information, attention is drawn to ISEAL's 'Claims Guidance'. Generally, it is noted that attribution of claim is in line with this Guidance but that supplier-specific information that is used to claim emissions from a specific supplier should carefully follow the guidance in this section to avoid cherry picking issues.

Finally, where a sustainability system includes for a percentage-based approach to certified goods, for example where a company can claim the use of a sustainability system's brand provided, they buy, say 30% certified goods, then that is the maximum percentage that the company report. The remaining 70% in this example should be reported according to however that is purchased and not use the sustainability system's GHG-RS approaches unless this happens to be the same emissions profile.

## ELEMENT 5: ASSURANCE

**Description and purpose of Element:** This Element describes how accounting and reporting in Elements 1 to 4 are integrated into a scheme’s assurance approach and how assurance/certification may be carried out.

<b>Principles</b>	<b>Recommended outputs</b>
<p>1. The GHG-RS should define the overall oversight and assurance approaches taken, what is in the scope of assurance and who in the scheme is responsible for assessing emissions data.</p>	<p>a. An assurance system approach detailing the emissions accounting approaches that are included within the scope of assurance and how they are assessed. This should include an overview of the approach taken and detail the roles and responsibilities within the system.</p> <p>b. Depending on the route taken in 1.a., above, an assurance checklist of key information to be assessed, though this may also be via a sustainability system’s assurance providers/community.</p> <p>c. A consideration of how oversight will be adapted to ensure the inclusion of any assessment approach and decision making.</p>
<p><b>Key criteria checklist:</b></p> <ul style="list-style-type: none"><li>• Does the scope of assurance refer back to the intended users/uses of the information produced under the GHG-RS?</li></ul>	<p><b>Credibility indicators</b></p> <p><b>High credibility:</b> sustainability systems should be confident in and stand behind the data outputs associated with the producers and commodities they certify, such that the users of that information can report credibly against their own targets.</p>



- Is there a clear statement of what is and is not assured and/or certified under the GHG-RS and in relation to which standards?
- Are any exclusions justified using the decisions taken in Elements 1-4?
- Does the GHG-RS explain who in the system is responsible for assuring both the data and outputs related to emissions?
- Does the GHG-RS explain who in the system is responsible for oversight of this assurance?
- Are any deviations from the sustainability system's common approach to assurance captured, explained and justified?
- Does the GHG-RS explain how this is structurally supported, for example by supplementing existing Assurance Providers with necessary expertise?
- Is the proposed model of assurance and responsibilities for same in keeping with choices previously made in this guidance?
- Does the system assure input data and correct use of methodological tools and approaches or output data (i.e., actual emissions)?
- Are Assurance Providers provided a list of pre-approved scopes of assurance and as a result are clear on their residual responsibilities?
- Does the system make clear how the data, in part or whole is certified?

Likewise, any aspect of the emissions data outputs that are not assured under the sustainability system must be transparently communicated and no claims made that they are endorsed.

Credibility is therefore linked to proper assurance of approach and output, though how this is achieved is perhaps the most varied of all the Elements. Key indicators of credibility will include:

- Assurance brief links directly to the intended users and uses of the information
- Assurance of activities and emissions in line with the GHG-P recommendations
- Recognition of the users and uses of the information in Element 1 informs the design and quality of assurance
- Clarity on what is certified within the system and what is supplemental data, with emphasis on the sustainability system taking responsibility for information
- Assurance is provided on any improvements made by suppliers, either in the direct supply accounting or interventions-based models
- Assurance providers clearly briefed on what is to be assured, to what level of assurance and for whom the data is intended and what it will be used for

**Areas of potential concern:** as with many of the previous Elements this guidance, the most important considerations are truthful, measured and transparent reporting. Hence if any aspect of the GHG-RS is not assured then this should be transparently stated and justified. In particular, it is important that wherever a beneficial action is being taken and assumed to be reportable, for example through an interventions-based approach, then this benefit must be assured.

Key indicators of a poor approach may include:

- A lack of assurance or assurance by unqualified assessors
- A lack of clarity on what is certified or an overstatement of the nature of assurance
- Assurance Providers are unclear about what is inside and outside the scope of their assurance

### **Guidance:**

This section considers how to design assurance systems or to integrate assurance approaches into existing approaches. It does not provide guidance for assurance as this is extensively covered elsewhere, most notably in the [ISO14065 standard](#) for verification of greenhouse gas emissions.

Assurance is a key component of credible reporting and disclosure and is an explicit recommendation of GHG-P (see Chapter 10 of the [Scope 3 Standard](#)). As each sustainability system will have a different model and structure for assurance and because each sustainability system will also have a GHG-RS designed for their specific needs, there is no 'one size fits all' assurance approach for climate disclosure, just as there isn't a one-size-fits-all approach to assurance generally across sustainability systems.

Standard good practice in GHG-P inventory reporting is for verification by an Assurance Provider accredited against ISO14065, by an Oversight Body that is a member of the International Accreditation Forum (IAF). Combined these represent commonly understood good assurance practices for greenhouse gas reporting, though do not necessarily include for matters of overlap with other sustainable development issues. Certification has not generally been common practice in inventory assurance to date however, which is instead more akin to financial reporting wherein an assurance provider verifies against a publicly available protocol and standard.

Certification can bring added quality to the assurance of inventory data, by linking it to more holistic requirements and a generally higher level of assurance quality. It also enables users to refer to it as certified data, so far as possible, providing greater reassurance and credibility. Certification underpins the ability to attribute the data and allocate it to companies via certificates, which is a unique feature of the ISEAL community. Finally, certification allows access to the brand of the sustainability system and thus care should be taken that any data used in the name of the sustainability system is 'approved' for that use.

The first and key decision to be made by the sustainability system is what is actually assured and certified and against which standard. This should be informed by the stakeholder engagement conducted in Element 1, which in turn should have given a clear picture of the potential capacity and competences within the pre-existing assurance system and an initial view on whether this will need to be adapted or supplemented.

It is possible that direct assurance of emissions data inputs and outputs is fully included, or it may be that the sustainability system relies upon a centralised tool and assurance is limited to its proper use only (and hence emissions data as an output is not directly assured). It is most credible that both input and output data is assured and certified, such that the user of the information can claim that. This may not always be feasible **or** may only be feasible in part (for example where third-party data sets are relied upon) as explained in this section. Hence any aspect that is not directly assured should be disclosed and explained and potential users of the information made fully aware.

There are a number of Elements that could be assured under a GHG-RS, ranging from activity inputs to the output emissions data. Some of these can be directly assured, some only indirectly and some are reliant on third party information. Potential scopes of assurance include as follows:

- **Activity-related information:** this could include input information, such as areas, geography, yield, varieties/species, presence of key variable such as shade trees or use of fertilisers etc. In short, anything that relates to on site activities that have emissions associated with them or that can affect emissions.
- **Data sources and data quality:** assessment of the quality of data and data sources per Element 3. This could include supplier specific data, collected on site (for example soil sampling, tree surveys) or third-party data sets where used (see also below regarding generalised approaches).
- **Output data:** assessment of the accuracy of data outputs, essentially the Emissions Factor (part or in whole) related to the commodities. This will be a result of the first two potential scopes above, combined with the correct application of equations and calculations.

In the case of the supplier-specific accounting model, wherein each producer designs their own methodological approaches, collects and collates their own data and presents an Emissions Factor uniquely conveying their own profiles, then all three of the above will be under the direct responsibility of the Assurance Provider. In reality this is unlikely to be the case for many producers given the complexity involved.

Instead, it is more likely that approaches, data sets and methodological tools are pre-approved by the sustainability system for the use of all certificate holders. In this case many of the data sources and data quality assessments may be conducted centrally as part of their design and implementation, meaning that Assurance Providers do not need to re-assess them (i.e., they can assume their efficacy and accuracy based on a centralised assessment by the sustainability system). Using the mapping from Elements 1-3, the scheme should make clear to its Assurance Providers what is already approved for use and as a result which and how much of the three scopes above are included in their responsibilities. Assurance Providers should relay this in their own assessment reports to ensure transparency and consistency.

It should be noted that in the case of pre-approved scopes of assessment, such as where third-party data sources and data sets are used, these could also be assessed centrally to avoid different interpretations by different assurance providers. Typically, an LCA approach is assessed by an ISO 14065 accredited entity. For any centralised Elements (see below) an Assurance Provider is recommended to carry out this assessment on behalf of the scheme and for use by all other Assurance Providers then assessing individual certificate holder applications.

ISEAL members will likely be more used to dealing with standards such as ISO17011 and ISO17065 for their assurance, though not exclusively. Many sustainability systems have traditionally focused on process rather than outputs and hence assuring emissions data may be a new consideration. Fortunately, ISO14065 shares many common Elements with these, from competency, audit planning, quality assurance and transparency, but is tailored to the specific technicalities and taxonomies required for greenhouse gas inventories.

This can represent a challenge for sustainability systems as it is unlikely that many will have built their assurance models with this in mind. Hence it is important to consider options to minimise the cost of additional assurance to make up for this gap (i.e., to avoid a second, ISO14065 accredited Assurance Provider being needed to supplement the existing assurance process). How to do so will depend on previous choices made, particularly whether the system is seeking to promote direct supply/supplier specific data and if improvements are being accounted for. Generally, wherever beneficial improvements to Emissions Factors are being driven then it will be important that these are assured by a provider with the appropriate skills and experience, either through accreditation or supplementing existing teams with the necessary experience to do so.

Each sustainability system, in light of the choices made so far, should design an assurance approach that credibly suits the choices made and is in keeping with their assurance model. There are several ways of doing this, summarised as follows:

**Supplier specific vs average data quantification:** per choices made in **Element 3**, the system may include for assurance of emissions information and outcomes at the supplier/certificate holder level (i.e., assurance of real data 'on site'), assurance of activity inputs and correct application of tools (i.e., assurance that a prescribed quantification tool or approach has been correctly applied) or a combination of the two (i.e. tool applied correctly and output data verified). This choice will depend on earlier answers, for example if the system promotes individual certificate holders providing their own methodological approach vs the system providing a globally applicable tool for all to use.

For each of the quantification approach models given previously the following broad assurance options are available:

- **'Average approach:** in the model where the system creates a top-down methodological approach for all certificate holders to use, the assurance could focus on only on the correct application of the data or tool rather than on the output (provided that the tool itself is credibly designed and governed, see **Element 3**).

In this model, the inputs to the tool become important to assure, i.e., that the correct variables are properly recorded per conditions on site. It may also be beneficial to have the top-down tool created by an experienced and competent LCA specialist and for it to be reviewed by an ISO14065 accredited entity. In some cases, it may be possible to do this once upon creation of the approach and subsequently only when a major update is developed.

- **Supplier specific methods:** in the model where individual certificate holders put forward their own methodological approaches for assessment against standard requirements, assurance could focus on the assessment of the methodological approach and the data inputs used to calculate emissions. This is a more work intensive modality, relying on consistency of requirements and assessment against them, but can also generate the most accurate output data.

**Centralised vs Decentralised assurance:** Based on the above the GHG-RS could alternatively choose to rely on 'centralised' assessments of emissions data (i.e., a review by a central body within the assurance system). This allows expertise to be pooled and shared amongst the community more efficiently and for greater consistency in application, though care should be taken not to embed and repeat mistakes. Alternatively, as suggested in the direct supplier method, individual Assurance Providers can assess this as part of their assessment plan. A combination of the two is also feasible (for example individual Assurance Providers review activity data but output data is assessed centrally).

There are different ways to operate, with the choice depending somewhat on the sustainability system's approach to meeting the ISEAL Assurance Code. For example, a standard that operates using a single certification body may approach this differently and have different options to one that operates with a community of certification bodies. The latter especially has the option to either rely entirely on those certification bodies or to include a centralised assessment for the correct application of climate disclosure that works with those certification bodies, while the former could operate this centrally themselves.

Whichever choice is made, it is important that the system as a whole is focused on the assurance of quality of data. In effect the quantification approach models, top down or bottom up must both ensure that quality is driven throughout. The level of sophistication, competence amongst certification bodies will likely determine the choices made for assurance.

## Levels of assurance

There are three main aspects to the assessment of GHG data:

1. Activity inputs – assessing the activities and variables taking place on site
2. Data sources and data quality – assessing the quality and reliability of data sources and data sets
3. Data outputs – assessing actual results

Generally, it is recommended that activity inputs (i.e., matters such as land area, yield, location, variety, activities) are assessed to a reasonable level of assurance based on verifiable evidence, such as site visits, geo-spatial data and survey. This is because it is clearly possible to assess whether an activity is taking place. Representative sampling of course may be required to achieve this and as such should be in line with the requirements of the sustainability system's standards. Sampling should be statistically relevant and complete.

Data sources and data quality should be assessed against the criteria indicated in Element 3 to a reasonable level of assurance (i.e., that the Assurance Provider asserts that data quality criteria are met). This may be conducted centrally however, for example where a third-party tool is recognised.

Data outputs can be challenging to reasonably assure as measurement of actual atmospheric emissions is not always feasible. Hence it is recommended to seek reasonable levels of assurance wherever possible but to recognise that to reasonably assess the actual emissions due to the complexity involved and hence this may remain a limited level of assurance. Likewise, regarding output data, the summation and calculations for Emissions Factor reporting should be conducted against the criteria indicated in Element 3 and in the GHG-P to a reasonable level of assurance, but the actual emissions can only be limited.

Overall if activity inputs and data sources/quality are assessed to a reasonable level of assurance and calibrated with reasonable data output sampling then the system should be well placed to cope with those aspects of data output that can only be limited assurance. The user of the assured data, believing it to have undergone an assurance exercise, should be openly forewarned of any "limitation of scope" that was agreed in the design of the terms of reference of the assurance assignment (planned to only check a few things) or limitation during the assignment (wanted to do more but was unable to).

Either represent a significant diminishment of the worth of the assurance exercise and accordingly limited assurance approaches are not generally recommended, though may be a useful interim step as a GHG-RS matures.

## Assertions

This guidance does not prescribe the standards to which audit and assurance are held, which is a matter for each scheme to decide in line with the ISEAL Assurance Code. However, for comparative purposes the following definitions of assertions are taken from ISA315 (International Standard for Auditing, 2019) and may be useful to consider when designing an assurance approach, or where assurance providers require further guidance:

Extracted from [ISA315](#) (2019 – P64) with additional commentary in sub-bullets (non-exhaustive, other matters are likely also relevant):

Assertions about account balances and disclosures:

- **(i) Existence—assets, liabilities and equity interests exist.**
  - In relation to emissions data this assertion relates to whether the producer, sources and sinks of emissions and the activities that improve them are real. This can be assessed through a variety of methods, including site visits, records, automated data collection, site photography and remote sensing, as appropriate.
- **(ii) Rights and obligations—the entity holds or controls the rights to assets, and liabilities are the obligations of the entity.**
  - In relation to emissions data this assertion concerns whether the data produced is properly classified (see below) and that it is within the buying companies supply shed and Scope 3 boundary, for example. This may be a matter that falls outside the scope of the scheme but could be checked by reference to company inventory accounting.
- **(iii) Completeness—all assets, liabilities and equity interests that should have been recorded have been recorded, and all related disclosures that should have been included in the financial statements have been included.**



- In relation to emissions data, it is important that the scope and any exclusions are transparently conveyed. This may be conducted at the scheme level (see Elements 1-3), in which case the audit may include to check correct application.
- **(iv) Accuracy, valuation and allocation—assets, liabilities and equity interests have been included in the financial statements at appropriate amounts and any resulting valuation or allocation adjustments have been appropriately recorded, and related disclosures have been appropriately measured and described.**
  - In relation to emissions data this assertion is largely concerned with the proper application of methodological approaches and MRV (see Element 4) and that this carries through to claims being made. It may also relate to claims and double counting and that the latter especially has been properly dealt with (see Element 6)
- **(v) Classification—assets, liabilities and equity interests have been recorded in the proper accounts.**
  - In relation to emissions data this assertion concerns itself with proper linking of emissions data to certified commodities and how that data is classified. Classifications may include Emissions Reductions vs Removals, Scope 3 reportable vs outside Scope 3 boundary (for e.g., for use as an impact) etc. This is an especially important step to get right as incorrect classification could lead to misreporting later in the chain.
- **(vi) Presentation—assets, liabilities and equity interests are appropriately aggregated or disaggregated and clearly described, and related disclosures are relevant and understandable in the context of the requirements of the applicable financial reporting framework.**
  - In relation to emissions data this assertion is concerned with how the data is presented, particularly in relation to classification and use and any exclusions, conditions and caveats. Particularly important is to consider how data might be received and understood by stakeholders. It is important in this sense to clarify the context and scale of an achievement and how it relates to producer and buyer strategies, in order to be credible.

In all the above cases each assertion may form part of a scheme-level approach. Guidance for assurance providers is recommended and could be arranged according to these assertions. Note that assertions concerning use of license/branding are not considered here as they typically form part of the wider claims approach of individual schemes (but it is noted it is important to consider this aspect, including the interface between those guidance and their interface with emissions data and attribution/reporting).

## **Oversight**

This guidance will not focus extensively on the function of Oversight and the role of Oversight Bodies. It is noted however, that whatever brief is provided to Assurance Providers and whatever scope of assurance they are required to conduct should be covered by their accreditation and assessed by their Oversight Body. It is recognised that this may take time to adopt as accreditations are not necessarily flexible. Options such as reliance on centralised, pre-assured/approved approaches, use of experts or the creation of add-on oversight modules to approve Assurance Providers for this purpose are all options to adapt the scheme if needed.

## **Value of an assurance community**

It is recommended that as part of the GHG-RS that a 'community' of experts is convened as a forum to discuss risks, ideas and opportunities for improvement. It is tempting to think of the assurance community as a transactional necessity to inventory reporting, but the value-add can be much greater than only this. A community of practice could be based on individuals from different providers or experts within a single entity model. There are many things that the group could consider, including:

- Regular review of activities, data and outputs and the levels of assurance achievable
- Consistency of generalised approaches with reality on site
- Regular recommendations for system improvement towards greater efficiency and accuracy
- Feedback on users/use cases for the data including the assurance 'duty of care' for those that might be receiving the information
- Safety and privacy of those collecting and reporting data

## ELEMENT 6: APPROACH TO IMPACT METRICS AND OTHER MECHANISMS

**Description and purpose of Element:** This Element describes any other Elements of the sustainability system that relate to impact claims and how these are managed with regards to matters such as double counting, where relevant.

Principles	Recommended outputs
<p>1. The GHG-RS should explain how any impact metrics for and beyond emissions should be used by claimants and how any residual emissions accounting should be adjusted, if necessary.</p> <p>2. The GHG-RS and associated terms and conditions should safeguard against harmful double claiming in relation to carbon markets.</p>	<p>a. Description of impact metrics and how they are attributed to claimants</p> <p>b. Details of how the use of impact data relates to emissions data, for example in terms of multiple attribution and double counting</p> <p>c. Details of how any carbon market certification, either within the scheme or by certificate holders is managed. In particular, details of how double counting is prevented through accounting adjustments.</p>
<p><b>Key checklist criteria:</b></p> <ul style="list-style-type: none"> <li>• Does the GHG-RS include guidance for the quantification of impact metrics?</li> <li>• Does the GHG-RS include guidance for the credible use of impact metrics?</li> </ul>	<p><b>Credibility indicators:</b></p> <p><b>High credibility:</b> Impact or outcome indicators, such as Emissions Reductions, can be a useful tool in monitoring and reporting the consequential results of an action.</p>

- Does the GHG-RS require and include safeguards for the avoidance of using outcome/impact metrics for inventory disclosure purposes?
- Does the GHG-RS require and include safeguards for the avoidance of harmful double counting of all forms?

In turn this can incentivise payments, for example for eco-systems services or via carbon markets. Impact reporting is credible if done well and where it avoids issues of double counting. Indicators of credibility may therefore include:

- Clear definitions of inventory metrics vs income/outcome metrics, with examples
- Clear guidance for users on the use of carbon markets and how safeguards will be applied in relation to the use of carbon offsets

**Areas of potential concern:** There are two main pitfalls with the use of impacts. The first is that impact/outcome metrics and disclosure metrics are not the same and the former cannot typically be used for the latter. Secondly, some uses of impact metrics by companies can lead to harmful double counting, wherein a claim is rendered uncredible. The main example of this would be in carbon offsetting, where the use of an Emissions Reduction outcome benefit precludes the use of that benefit in inventory reporting in the same period. It is important the GHG-RS safeguard these two areas and hence the following indicators should be avoided:

- No safeguarding against double claiming in the carbon markets
- No safeguarding against the use of impact/outcome-based metrics for inventory disclosure
- No guidance for how to use impact/outcome related claims for other purposes

**Guidance:**

In this context, impact is applied as a 'catch all' term for consequential (i.e., related to a comparison of before and after) outcome and impact-based approaches to accounting, typified by a comparison of changed activities to a baseline scenario. This differs from the main mode of accounting envisaged throughout this guidance, which reflects an attributional inventory 'snapshot' based approach (i.e., an amount of emissions in a specific time, but not focused on the change from previous periods). This is illustrated by comparing a report based on an emissions metric (i.e., Emissions in a given year -  $E_y$ ) vs an accounting approach based on emissions reductions or removals (ER). The latter compares emissions in a change scenario to that prior to the change, with the difference between the two reflecting an outcome (reduction of emissions).

An outcome/impact-based approach can be especially helpful in determining the effectiveness of an intervention and for ascribing results-based payments to the proponent of the change, for example. They cannot currently be used in the context of inventory-based accounting however, because the different form of accounting is largely incompatible and would result in misleading accounts.

This section reviews how impact-based and inventory-based accounting can usefully work together and when safeguarding is needed to prevent them undermining each other, for example where double counting may occur. Sustainability systems can and should consider the role of impact-based approaches for different applications, depending on the uses identified in Element 1. Both forms of accounting are useful and are especially effective when considered holistically and robustly together. The foundation of a good GHG-RS will be a strong inventory-based approach, with a further consideration of the use and overlap of impact-based thinking.

The GHG-RS and this guidance document is therefore largely predicated on inventory reporting for disclosure purposes, based on a snapshot of emissions. It is not an impact-based or outcome-based approach, in the sense that it only states an amount, not whether that amount is good or bad or better than prior efforts. For companies this approach is built into a target-setting and progress reporting approach (i.e., SBTi) such that the impact of climate strategies is played out over a long period.

Impact or outcome metrics typically indicate a change (improvement) over a counter-factual baseline. This can be important in assessing the results of an activity and can be used in a wide range of financial incentive schemes.

It is particularly useful where activities that target the improvement of specific processes is undertaken as it can clearly demonstrate the improvement made over time. Typical uses of impact-based approaches are:

- To assess the effectiveness of an intervention that targets the improvement of emitting processes or improvement of carbon stocks. This is especially helpful when considering the credibility of an interventions-based approach in the context of supply-shed level of traceability.
- To facilitate results-based payments, for example in the form of incentives or premiums to producers by partner buyers. Payment for ecosystem services or impact incentives would be typical examples.
- To assess extra-value chain processes, i.e., those that are not included in a Scope 3 boundary (for example domestic arrangements of producers or lands outside the value chain) as these would not be helpfully accounted using an inventory-based approach.
- Subject to safeguarding against double counting and meeting the requirements of credible third-party standards, to access carbon markets and seek carbon finance.
- In future it may be that market-based allocation is realised (see Elements 3 and 4) in which case causality will likely be a key safeguard wherein a consequential accounting approach to supplement attributional may be helpful.

This guidance endorses and supports the use of the [ISEAL Claims Guide](#) and the [ISEAL Impact and Outcome Claims Guidance](#) papers for how to decide whether a user can apply the data for use of emissions data associated with purchased goods. This section of the guidance therefore focuses on the interaction between inventory and impact-based approaches concerning GHG emissions as this has specific nuance that should be carefully considered in the GHG-RS.

### **Avoidance of the use of impact or outcome-based metrics for inventory reporting and disclosure purposes**

The first key safeguard the GHG-RS should include is the avoidance of use of impact or outcome-based metrics, especially Emissions Reductions in the context of GHG-P inventory reporting and towards a science-based target. This is because it is a different form of accounting and taking one from the other will not typically add up because of this. Hence sustainability systems should not allow in the GHG-RS for the use of Emissions Reductions or other impact or outcome-based metrics to be used by reporting companies for the purposes of inventory disclosure. This may be under the direct control of the sustainability system, for example through licensing and claims requirements.

Alternatively, the GHG-RS can safeguard against this by clearly stating this is not allowed and by not ascribing such metrics to certified goods. In short, it is not credible to calculate Emissions Reductions or Removals and 'net' this from the Emissions Factor or from a company inventory report. The GHG-RS should make this explicitly clear and have a process for dealing with misuse should it arrive (this could be by reference to a wider process for dealing with non-conformity, for example). This should be a relatively straightforward safeguard, essentially focusing on ensuring that the metric applied remains in emissions and that the boundaries align with Scope 3. Following the earlier Elements of this guidance should naturally lead to this point, though sustainability systems may wish to explicitly state in any claims guidance by reference to the GHGP.

### **Double counting between impact-based claims and inventories**

There are three main forms of double counting that should be carefully considered, as follows:

- Double use – where two companies use the same certificate for the same purpose. This can be challenging to consider in the context of a GHG-RS as, per earlier sections, the usefulness of Scope 3 is in the shared accountability for the same emission. The key issue with double use in a Scope 3 sense is therefore two companies in the same supply chain tier claiming to have purchased the same goods. This should be avoided, especially if those goods have been improved through interventions, as it would lead to misreporting and an over-estimation of improvements made.
- Double issuance – where two certificates are issued for the same certified goods. This is typically resolved by sustainability systems' own tracking systems and is therefore not covered in more detail here.
- Double claim – where two users report the same benefit for their own purposes, for example one company reports an improvement in their Scope 3 inventory while another (or worse, the same) company claims the same benefit as an offset to make claims such as carbon neutrality. This should be avoided as it renders these claims to be untrue and would undermine credibility of both and of the GHG-RS.

The main concern regarding the interplay with impact and inventory metrics is double claiming, where one company reports inventory and another the impact. This can sometimes be acceptable, but it depends on the nature of the claims being made and whether the claim requires to be unique.

The use of impact-based approaches is also important to consider because impact stories are compelling ways to 'sell' activities and can be used in the context of, for example, carbon markets. A consideration of impacts and outcomes also may unlock the use of an intervention-based accounting approach considered earlier in Element 2. Impact-based approaches carry some risk, however, because they can introduce challenges of double counting, particularly if used in context of claims such as offsetting. This is because in effect two companies may be reporting the benefit, one in their Scope 3 inventory and the other as an offset claim (or worse, the same company makes both claims themselves).

Hence it is important that a GHG-RS details how impact-based approaches are considered and how double counting is safeguarded against. To do so, two types of claims are noted:

1. **Narrative claims:** this type of claim is based on a company that has supported a change making a simple claim to that support. For example, a company purchasing certified timber may also use a narrative of how that purchase drives impacts such as those included in typical ecosystem services approaches. Provided the company is being transparent about how this information is being used and that how this relates to other companies claiming the same for their purchases, then this can be credible.
2. **Status/target claims:** this type of claim more formally 'counts' an impact towards a status or target. A good example would be to count Emission Reductions as carbon offsets and towards a claim of carbon neutrality, or similar. If the underlying emissions information is claimed towards an inventory target, then it is not credible for the same company or a different company to claim it as an offset. This is because offsetting requires a unique claim in order to work, thus rendering the claim untrue.

Generally, the key risks that a GHG-RS should consider in relation to impacts is to include safeguards to manage where impact-based metrics are used for status or target-based claims, namely voluntary or compliance offsetting (though other examples may emerge). In such cases the GHG-RS should include for adjustment of inventory accounting to allow the release of carbon offset credits.

One potential challenge related to this is the prevention of certificate holders from taking advantage of carbon markets may be beyond scope of the sustainability system. It can be challenging to preclude this as it may be unfair and because it may be difficult to check.



For generalised approaches (see **Element 3**) it is likely very difficult to add back to the accounting for carbon credits, as this would need to be averaged across a group of producers, some of whom may not have anything to do with the carbon credit issuance or sale. If this cannot be resolved, then it is recommended that certificate holders are required to disclose during assurance whether they are participating in a carbon offsetting programme and if so, they should decide between this and including emissions data for inventory reporting in their certification for each given year.

For more sophisticated schemes where a direct supplier approach is in place it may be possible for the emissions data to be adjusted upwards for each carbon credit issued, though this is mathematically complex and if undertaken should be supported by expert assessment.

### **Impacts/outcomes outside the Scope 3 boundary**

It is possible that the processes involved in certified goods do not all fall within the Scope 3 boundary, as described in **Elements 1 and 2**. Examples may include improvements to the domestic situation of producers and conservation outside the production boundary. As earlier noted, where these are included in the GHG-RS they should be separately reported from the emissions data associated with GHG-P inventories. This should be straightforward due to the mapping undertaken in earlier Elements.

For these activities and their associated impacts/outcomes, particularly where they are outside the productive economy, there are few issues of double counting to be concerned with, though transparent disclosure is still recommended. It is possible that a certificate holder could be supported in some aspects of their livelihoods through carbon markets and for their business through inventory reporting related incentives.

### **Acceptable double claiming**

It should be noted that while double claiming between impact/outcomes and inventory metrics can be harmful to integrity, there are forms of double claiming within corporate inventory reporting that are acceptable, even to be encouraged. This is because inventory reporting represents the taking of responsibility for an emissions liability for all actors in the supply chain. In this way both the final retailer and all intermediary steps in the supply chain should report the emissions associated with the purchased goods.

Likewise, for the producers the emissions represent a Scope 1 activity (see **Element 1**) while the downstream producer of consumer goods and the retailer will treat them as Scope 3. This double claim is acceptable as it remains accurate and truthful. One form of double claiming to be avoided however, is two companies in the same supply chain tier both reporting the same purchased goods (i.e., the same physical supply). Where traceability exists, this is already safeguarded as it should not be feasible for two or more companies to purchase the same goods.

Where an interventions-based approach is applied there could be a risk that a second company inadvertently reports the same purchased goods and the same improved Emissions Factor as it is not possible to know precisely who purchased them. In such cases it is essential that the GHG-RS safeguards against improvements to untraceable goods be claimed twice. The use of certificates provides the natural opportunity to do this and the use of terms and conditions for certificate holders should prevent the double selling of improved Emissions Factors to non-participating companies.

### **Non-emissions related impacts**

Sustainability systems and their communities are also likely to be interested in other, non-emissions related metrics. These could be based on the Sustainable Development Goals, Ecosystems Services or Environmental, Social, Governance approaches and many more. These metrics are generally used for results-based payments at present, rather than inventory reporting. This is because few other metrics have the level of maturity of accounting and uptake as climate mitigation, though matters such as zero deforestation, water, biodiversity etc. are likely to develop further in the coming years. The consideration of emissions for inventory reporting can work with non-emissions metrics without incurring credibility issues due to double counting.

For example, where producers report emissions intensity (which is lowering over time) and say water or biodiversity metrics, these would be both be 'true', all other factors considered. In other words, it would not make the reportable emissions or the fundable biodiversity claims have less efficacy, though transparency to funders is always important.

Hence this guidance recommends that an open mind be kept regarding the overlap of non-emissions impact metrics with inventory reporting, with the following guiding questions provided:

- a. Are the metrics related and/or formally reportable against a voluntary or compliance target that the buying company may have? If so, then the guidance of the target scheme should be considered.

- b.** Does the consideration of one or more of the impact claims render any other impact or inventory claim untrue? This is likely to be the case mainly in the context of compensatory schemes, such as offsetting, wherein the additionality case could be undermined.

As efforts towards greater private sector responsibility emerge and grow it is likely that instances of potential double counting and misreporting may arise. With the general guidance in this section, it should be feasible to understand the risk, but all the same when considering adding metrics to certification that are to be used in the context of reporting (voluntary or compliance) it is recommended to consider whether there is a potential risk to integrity.

## ELEMENT 7: APPROACH TO CERTIFICATE AND LICENSE HOLDER CLAIMS

**Description and purpose of Element:** This Element describes how all the previous Elements come together in how claims are managed.

Principles	Recommended outputs
<p>1. The GHG-RS should include clear claims guidance for certificate and license holders to include information in reporting and narrative claims.</p>	<p>a. Claims guidance for certificate holders and license holders, including any restrictions and limitations based on the choices made throughout the Elements.</p>
<p><b>Key checklist criteria:</b></p> <ul style="list-style-type: none"> <li>• Does the GHG-RS state that users should adhere to GHG-P requirements and that, hierarchically, this takes precedent in the event of any conflicting requirements?</li> <li>• Does the GHG-RS clarify what to do if data is later proven to be incorrect?</li> <li>• Is a process provided through which conflicts can be resolved, particularly to avoid harming the safety or livelihoods of producers or damage to the environment?</li> <li>• Does the GHG-RS give guidance to certificate holders and data users as relates to the use of the sustainability system’s brand?</li> </ul>	<p><b>Credibility indicators:</b></p> <p><b>High credibility:</b> all claims by reporting companies should be truthful, transparent, measured and assured. In this context, high credibility indicators for the GHG-RS include:</p> <ul style="list-style-type: none"> <li>• Adherence to the ISEAL Claims Guidance and Impact and Outcomes Claims Guidance</li> <li>• A process for correcting errors and dealing with grievances</li> </ul> <p><b>Areas of possible concern:</b> as the core claim intended under this guidance is to report under GHG-P this is already well safeguarded by that alignment.</p>

Where sustainability systems may wish to go further is in how that relates to the use of their brand and any liabilities associated with the date. Indicators of potentially poor or weak approaches in this regard may include:

- Lack of claims guidance and/or lack of reference to GHG-P

### **Guidance:**

This section builds on previous notes regarding the allocation of data and its use. It is primarily concerned with claims made beyond those associated with GHG-P as this already represents a well-used pathway for most reporting companies. It is recommended that the GHG-RS makes clear that, where any conflict arises between the GHG-RS and the GHG-P that the GHG-P requirements take precedence, provided there is no risk to the livelihoods, safety of producers or to the environment (in which case a process for decision-making should exist). A process to resolve this could include review by an expert in greenhouse gas accounting in the context of the producers affected in order to make credible recommendations to all parties.

The same processes could also deal with the situation where data is later found to be incorrect. It is important that the GHG-RS explicitly state who in the system is responsible for such instances to avoid any conflict later. It is generally recommended that no liability for such errors is held by producers themselves as this may dis-incentivise participation and lead to unreasonable and outmatched conflict.

There are a wide range of corporate climate claims that exist in common practice or increasingly as guided by regulation or by civil society. This guidance does not intend to unpack all possible corporate claim options as this is a complex and evolving area. Instead, archetypal claims are considered. It is recommended that sustainability systems keep up to date on developments to realise the [WWF Blueprint for Corporate Action on Climate and Nature](#) and emerging initiatives at Gold Standard and [VCMii](#). Interest in corporate climate claims is also increasing within consumer protection agencies and it is likely that in coming years such claims will be scrutinised in the same way as advertising.

Accordingly, this guidance recommends use of the [ISEAL Claims Guidance](#) and the [ISEAL Impact and Outcome Guidance](#) notes and to supplement these with further key considerations in this section.

### **Developing sustainability system brand-related climate claims**

Aside from adherence to GHGP inventory accounting principles and requirement, it is likely that certificate holders and purchasing companies will also want to make claims about their participation and any benefits derived. This is perfectly reasonable and credible, provided the claims adhere to the ISEAL Claims Guidance and Impact and Outcomes Claims Guidance. It is recommended that sustainability systems develop specific claims guidance in this context that explains:

- How certificate holders and companies can talk about their participation in the scheme
- How they can make claims concerning progress related to their participation in the scheme
- How they can talk about the specific improvements to Emissions Factors made by being certified or purchasing certified goods
- How they can talk about emissions related to certified goods as compared to non-certified

In all of the above it is important that claims are true, measured, accurate and assured. Over stating benefits is a major pitfall of climate action, as is over-ascribing wider outcomes to the purchase of certified goods.

### **Context, scale and relevance**

Users of this guidance should reflect on both the claimant and the receiver of the claim when developing claims guidance. It is likely that schemes that have successfully implemented a GHG-RS to any degree will already be more informed than many members of the public, investors and even governments. Other sections of this guidance have focused on credibility of reporting, but to further this, users may wish to consider guidance that can help receivers of information gauge context, scale and relevance of claims being made.

Claimants should be encouraged to transparently communicate the context, scale and relevance to their strategy in terms of their use of the data.

In some cases, the intent may simply be to support producers, but where claims are made concerning formal reporting (such as SBTs) or around Corporate Social Responsibility and Environmental and Social Governance then it is especially important to be clear and transparent. For example, guiding parameters for example:

- a. Companies could be encouraged to communicate the results achieved compared to your whole company' s emissions/ use/ output on average over a given period and explain how and why it is important that such interventions are pursued
- b. Companies could be encouraged to communicate the results achieved to the sector
- c. Companies could be encouraged to communicate the results to all sources of that emission (to allow the level of “applause” to be matched to the effect it has).

For b and c above, the scheme could provide centralised guidance and tools to enable these comparisons and may be more appropriate to do so than individual companies. If so then participating companies should be encouraged to link to any such centralised information, which in turn should be properly referenced and justifiable in line with the guiding principles and assertions shared in this Element, above.

## ELEMENT 8: GOVERNANCE: MANAGING DATA, SYSTEM CAPACITY BUILDING, CONTINUOUS IMPROVEMENT AND MONITORING AND EVALUATION

**Description and purpose of Element:** This Element describes how the sustainability system will govern and manage the GHG-RS and its data and maintain and update the system and individual Elements over time, including for correction of past learning where needed. It may also include details of training and capacity building programmes.

This also includes recommendations that build upon the ISEAL 'Unlocking the value of your data' (2020) guide, which is a recommended starting point for all users of this guidance. The Element does not attempt to reinvent that core guide, but rather supplements it by adding further considerations for the specific context of emissions data. Element 1 also briefly covers the 'discovery phase' mapping of stakeholders and data use.

Principles	Recommended outputs
<p>1. The GHG-RS should include standard operating procedures for the regular maintenance and update of the system.</p>	<p>a. SoP system update</p>
<p><b>Key checklist criteria:</b></p> <ul style="list-style-type: none"> <li>Does the GHG-RS include details of how the system will be governed, including its work plan, consultation and engagement and decision-making responsibilities?</li> </ul>	<p><b>Credibility indicators:</b></p> <p><b>High credibility:</b> the pressure on supply chains to mitigate greenhouse gas emissions is increasing, as is the complexity and scrutiny on them.</p>



- Does the GHG-RS include for 'rediscovery' phases that supplement the work conducted in Element 1 on a cyclical, continuous improvement basis
- Does the GHG-RS state how it will be maintained over time and how improvements will be made?
- Does the GHG-RS include for the continuous improvement of accuracy and traceability?
- Does the GHG-RS have a policy and procedure for managing data security?

The accounting and reporting approaches in this document and of the companies that will ultimately use the data produced are likely to be dynamic and thus require regular fine tuning.

This aspect of the GHG-RS is more prosaic and in keeping with typical practices at many ISEAL members but is essential to keeping pace with the space in which these matters are applied. It will involve the maintenance and upkeep of the GHG-RS and ensuring that approaches within it are up to date and following latest good practices. It will also include the ongoing and periodic assessment of impact as the GHG-RS calibrates and recalibrates over time. Indicators of credibility therefore include:

- A named point of contact for the GHG-RS, who can keep up with and engage in consultations as they arise from the reference frameworks (i.e., GHGP, SBTI and others)
- A work plan, similar to that required in the standard setting code, that sets out how feedback will be assimilated along with periodic deeper rediscovery reviews
- An explanation of how the system is governed within the scheme's overall quality management approaches and policies
- An open stakeholder feedback and grievance mechanism

**Areas of potential concern:** the main concerns to avoid are that the GHG-RS stagnates after its initial implementation. The world of emissions reporting moves quickly, both in terms of data quality and in terms of reporting approaches and mechanisms. Hence it is essential that the system includes for planned maintenance and improvement. Key indicators of what to avoid may include:

- a. A failure to implement Element 1's discovery phase adequately will lead to gaps in how a management system can be designed
- b. A failure to include a plan for 'rediscovery' phases and regular ongoing feedback could lead to the GHG-RS becoming less relevant or too unwieldy for its users
- c. A lack of ability, for example via a process, to react to breaches of the intent of the use of the data (for example, misreporting by user companies) can lead to brand reputational risks and undermine the trust in the system

**Guidance:**

Most ISEAL members will require little advice in terms of producing procedures for the continuous review and improvement of their standards systems. This is because ISEAL membership entails a level of system management that could naturally be expanded to this end, while many members have a working culture and internal experience that can be tailored. That experience and expertise should be brought to the GHG-RS, which should already include for them at the time of implementation. There are two main areas of maintenance that should be considered:

1. **Is the approach to accounting and reporting up to date?:** how we report, and track progress related to emissions is a fast-evolving space. Hence it is important to constantly track what is happening within the main reference frameworks (i.e., GHGP, SBTi and WWF's Blueprint for Corporate Action on Climate and Nature). This can include at the overall standards level, or in some cases where sector specific guidance and tools are developed. Members should always aim to refer to the latest versions of each reference document and it is recommended that updates are implemented immediately.
  
2. **Is the approach to quantification and attribution of emissions data up to date?:** ultimately the GHG-RS will stand or fall based on the quality of information it provides. The approaches designed in **Elements 1-5** are critical in this regard and should be under constant review, particularly in use of latest and best available data. Members may wish to participate in networks and communities associated with their sector in order to stay on top of this. The process should include for the review and approval of approaches, likely requiring expert and stakeholder review.

As always, members should ensure that the governance and processes for updating and consulting upon the GHG-RS are publicly and transparently available. It is recommended that periodic (every 2-4 years) assessment of the GHG-RS and its impacts is undertaken through a rediscovery phase, akin to Element 1. This should involve consultation amongst users and stakeholders, with recommendations taken forward for its improvement.

Finally, it is recommended that the member appoint a senior representative and owner of the GHG-RS within their system (both an individual and a team where required). It is recommended that this individual be competent in GHG-P inventory reporting, ideally through experience but also through training. Third party training courses are available and relatively inexpensive, including those provided by the GHG-P itself.

2. The GHG-RS should include information and links for how certificate holders can access the scheme (if not embedded as a mandatory approach), how other stakeholders should interact with it and any training and capacity building available to do so.

a. Accessibility information and links to training and capacity building opportunities

### Key checklist criteria:

- Has a capacities assessment been conducted, and training, materials and processes been developed according to this need?
- Is there a web page where users can find comprehensive information about the GHG-RS and how to engage with it?
- Does the GHG-RS have a community of practice and a space to learn from exemplars?

### Credibility indicators

**High credibility:** Emissions reporting is a complex business and while the GHG-RS process is designed accordingly, the real way to ensure its uptake and successful impact is through engagement. There are few ways to change the nature of climate disclosure, but there are many ways to build capacity and improve quality. Hence the most credible systems start and end with a consideration of stakeholders and have accessible information, training, and material for all to participate.

**Areas of potential concern:** the main pitfall to avoid at this stage is an 'if you build it, they will come' mentality. Whilst most people will wish to support climate effort the barriers to entry, mainly cost and complexity, remain high. Hence a system that does not consider how it will grow interest and capacity is likely to lead to poor uptake and results.

### Guidance:

Engaging in emissions reporting can be daunting, particularly for producers who do not typically engage in these complex processes. The first Element of this GHG-RS began with an identification of stakeholders, their likely roles in and uses for the GHG-RS and an assessment of their capacities. This was then used to inform later approaches, meaning that to some extent the GHG-RS is designed to be most useful to its stakeholders.

It is now important to circle back to this initial review as it will be important for members to support their communities in engaging with, understanding and ultimately benefitting from being part of the GHG-RS.

ISEAL members have great experience of inclusivity (and more importantly, avoiding exclusivity) of producers, this can be brought to bear to the benefit of the GHG-RS. There are several things to consider in this regard, ranging from outreach/awareness, initial engagement and capacity building, support to implement the intended practices and the correct use of the information. Ultimately, each stakeholder group engaging with the GHG-RS will need to use the information produced in different ways, but all will need to understand their part in the process.

The first thing to consider then is the list built in Element 1 of the key stakeholders. This list can be further built upon now to create processes and materials to engage with and support them through the process. This guidance cannot provide solutions for each stakeholder and their context, but instead considers the key aspects of the stages noted above and some ideas to consider.

### **Outreach and awareness raising**

All identified stakeholders should be made aware of the GHG-RS, its aims and objectives and the potential benefits available to each stakeholder group by participating. Elsewhere in this series of guidance are generic 'start here' documents both as a whole and for the key stakeholder groups of standards professionals, assurance providers/oversight bodies, certificate holders/applicants and reporting companies. As a minimum these should be made available, though sustainability systems may wish to take them and further contextualise them for their own purpose.

It is recommended that a centralised resource page is established where the GHG-RS is published and updated, alongside 'start here' guidance, promotional material, brand collateral and any media such as introductory videos and brochures are kept. It is recommended that sustainability systems pro-actively and regularly remind the key stakeholders identified of its existence.

Finally, it may be worth considering a 'white book' of good practice examples and a community forum to engender discussions. It is likely that seeing real exemplars and engaging with peers will greatly assist stakeholders to engage.

This same community can also then provide ongoing review and input to the continuous improvement of the GHG-RS.

## Initial engagement and capacity building

Having initially understood the purpose and structure of the GHG-RS and how to engage with it, sustainability systems may find a need to assist with capacity building. An initial briefing and training webinar can assist stakeholders with understanding the approaches and decisions taken, particularly when supplemented with a community forum and a channel for raising and receiving clarifications. Hence these are recommended to sustainability systems as outputs under this Element.

It may be beneficial within the community to build a group of experts from different stakeholders and from outside the standard. These can be called upon to review, comment and advise participants on an ad hoc basis, subject to fees etc. Where any internal approval is given, for example to Assurance Providers or to supporting experts, this should be clearly stated.

Finally, it is recommended that GHG-RS training is developed, likely on a stakeholder group basis and targeted at the needs and capacities identified. This can of course be a resource-intensive affair but the benefits to the community and to the successful roll out of the GHG-RS are immeasurable.

## Implementation

As Certificate Holders, Assurance Providers and companies begin to engage with the process, it is likely that they will have further training needs and requests for clarification. Sustainability systems should keep a space on the GHG-RS site for Frequently Asked Questions and a clear process for clarifications to be resolved.

3. The GHG-RS should be built upon good data governance and use, including privacy and security.

a. GHG-RS refers to and builds upon the ISEAL guide 'Unlocking the value of your data' and associated white books.

b. The scheme has a robust data privacy and security policy (which can be a wider policy) that includes the identification of any specific issues and risks associated with the GHG-RS

c. The scheme has robust procedures to deal with privacy and security breaches

### Key Checklist Criteria

- Does the scheme have the necessary resource in place and/or has commenced the development of a data strategy (recommending the above ISEAL guide as a starting point)?
- Does the data governance and management strategy include the specific considerations associated with the use of emissions data?
- Are key data security and privacy issues identified, particularly for any privately collected data used in the calculation of emissions?
- Is a policy and process for data privacy and security monitoring in place?

### Credibility indicators

**High credibility:** generally speaking, climate data is no more or less a risk than other data within the sustainability system (assuming, in line with other Elements in this guidance, that the data is of sufficient quality for the intended use cases). There may however be particular issues associated with privacy, for example where private data from producers or from buyers is needed to calculate emissions or to report accurately. Likewise, there may be security risks where finance is related to results-based payments based on certificates. Most sustainability systems will already have data security and privacy policies and procedures, including for the identification of new risks and threats. Credibility indicators should therefore include:

- Sustainability standards are encouraged to use the 'Unlocking the value of your data' (2020) guide as a starting point
- Building on the guide, it is recommended to also consider the incorporation of ISEAL Data and Information Management (part of the ISEAL Community platform) and to participate in the ISEAL community on this topic
- A system that takes advantage of data insight to improve the system and to create value for users (see also Element 1)

- The identification of any potentially private or sensitive data sources within the GHG-RS
- The identification of any new risks, threats or weaknesses introduced by the GHG-RS
- Updates or addenda to the sustainability system's data security and privacy policy reflecting the above
- Contact details for raising and dealing with any such threats or failures in the system

**Areas of potential concern:** the GHG-RS introduces a need to work with much more detailed data than process-based standards may be used to. Much of this data is 'benign' and publicly available, but some, particularly activity inputs, will be bespoke. The main concerns at this stage will be the absence of any policy or procedure, or simple references to existing policies that have not considered whether there are any new issues raised by the GHG-RS. Indicators may include:

- Generic references to data security and privacy or defer all to wider scheme policy with no consideration of the particular issues caused by the GHG-RS
- Absence of any contact details for escalation of concern

### **Guidance:**

This section refers to ISEAL guidance concerning the governance, licensing and gathering of insight from data produced by member schemes. It specifically reviews recommended practices and processes and highlights some of the key opportunities and pitfalls associated with climate data. In this sense sustainability systems should refer to ISEAL guidance for general practice and are assumed to have read and understood key documents in order to fully incorporate the guidance below.



It is particularly recommended that users:

- a. Familiarise with/apply the ISEAL guide 'Unlocking the value of your data' (2020) as a starting point
- b. Review the data white books available in the community pages for ISEAL members
- c. Participate in the ISEAL conversation concerning data governance, management and use

The intent of these recommendations is that data becomes THE way of approaching **the GHG-RS and not an output or side** issue to its implementation. In the previous section it was recommended that a senior staff member be responsible for the management of the GHG-RS ongoing, it is further recommended that this person be highly literate in data related issues, or their skills are supplemented by other team members accordingly. This section does not greatly expand on the pre-existing ISEAL guides, which are an excellent starting point and process that can be applied. Instead, this guidance focuses on supplementing that with any specific issues arising concerning emissions data. This is in two parts, first the five-part process indicated in the 'unlocking' guide and second a short list of issues to consider concerning privacy and security.



*excerpt from ISEAL 'Unlocking the value of your data' guide*

This generic process can be usefully integrated into the process to develop a GHG-RS, though this is left to users to consider.

This guidance focuses on a brief consideration of each of the above Elements and cross references to this document and any issues that should be considered, as follows. Attention is also drawn to the guides statement, which is fully endorsed and recommended in this guidance that:

*In addition to steps outlined here, this is a process that requires:*

- 1. trust between the teams that provide information and the decision makers*
- 2. a degree of data literacy beyond the teams that handle the data that outputs are useful, meaningful and provide answers at the speeds and resolutions needed for timely decision making.*

<b>ASPECT OF 'UNLOCKING DATA'</b>	<b>RELEVANT AND RECOMMENDED CONSIDERATIONS IN CONTEXT OF GHG-RS</b>
<p>Step1 - Discovery: "Know your users and audience, discover and define problems"</p>	<p>The discovery phase is well aligned with Element 1 of this document. It is highly recommended to consider commencing on a discovery phase in conjunction with a data-led approach as envisaged in the 'unlocking' guidance and associated documents.</p> <p>In this way the capacity for both the GHG-RS and data governance and management are implemented as one and data is not a separate issue.</p> <p>It is especially important to:</p>

- Know how data will be used and reported in third party compliance and voluntary schemes, particularly the Greenhouse Gas Protocol and Science Based Targets Initiative. A failure to consider this may lead to the misuse of data and a lack of ability to address it at the scheme level.
- Understand the challenges faced by producers in collecting and reporting data and by buyers in reporting against their Scope 3 inventories. This guidance document is nearly one hundred pages long, but the responses to specific challenges can often be simpler and quicker and should not be overlooked by the desire to create a comprehensive system. Short term challenges can and should be addressed where there are simpler fixes.

In designing a discovery phase, it is recommended to already consider how a 'rediscovery' cycle could be operated, i.e., how and how often would this be updated. An open flow of feedback is helpful, it may also be worth considering creating an advisory group of internal and external staff.

Step 2 - Data exploration:  
"Data needs to support design. Do I have the data needed to solve the problems?"

This aspect also links closely to Element 1 with further reflections throughout Elements 2-5. It is likely that a combination of supplier specific and average data will make up the way emissions intensity is assessed. Hence an ability to identify and work with existing in-house and third-party data sets will be important. In some cases, it may be possible to adopt or endorse specific third-party tools in this light.

It is also likely that schemes will require tools that allow for variable inputs, reflective of the strata of certified commodities as identified in Element 2. Elements 2 and 3 provide further detail on how to assess third party and secondary data sources and give examples of third-party data sets and tools.

	<p>Finally, there will always be Elements of primary data required of producers. At one level this can be relatively simple, such as areas, crop types and activities employed. In others it may require direct measurement, for example for soil sampling. At this stage the identification of data to serve the standards, commodities, processes and gases mapping of Element 2 should be coupled with an assessment of capacity (i.e., where does the data likely come from and how does the provider of data have the capacity to do so).</p> <p>This is an important stage for consideration of equitable access, as requiring primary data that is complex to derive can leave some producers behind. This should be avoided, either by providing a level playing field, providing support for those that need it or provide a simplified approach, such as default factors.</p>
<p>Step 3 - Organise/combine data: building relationships between your data</p>	<p>This section of the 'unlocking' guide focuses more on the system level of the sustainability system and specifically how to build data sets and manage them. For the GHG-RS the focus is really on how producers provide data in accordance with norms and how buyers receive and report that data themselves.</p> <p>This guidance does not therefore make any specific recommendation at the system level, but notes that the creation of reporting tools (Elements 3 and 4) is a form of data organisation. In this sense the tool should not be seen as a standalone Element of the scheme but should be used to feed into a wider impacts reporting approach (for example, the ISEAL Impacts Code) and informs ongoing rediscovery.</p>
<p>Step 4 - Analytics: Making sense of the data. What methods do you need in order to best analyse your information?</p>	<p>The use of analytics at the GHG-RS level can be a useful way to continually assess relevance, usefulness and accuracy. There are a number of ways to do this, and this guidance does not prescribe. Some questions that schemes may wish to consider ongoing are:</p>

- a. Are the costs and complexity of data source choices commensurate to their significance and materiality? For example, is collecting specific emissions data on site making any difference to the reported result or could a conservative default factor do the same job more easily. And vice versa, is a default known to be inaccurate or overly conservative, with producers potentially served better by having the option of collecting primary data.
- b. Is the presentation of data in a format that can usefully be applied by buyers in their reporting? It may seem simple enough to incorporate emissions data into reporting, but in reality, the matching of an existing organisational approach with new data can be very challenging, for example due to scope and equivalence issues. Over time the GHG-RS will likely come across a wide variety of integration problems that can lead to improvements in terms of presentation and flexibility. It is especially important to take the time to consider these properly so that the value of the data remains.
- c. Is the data applied, whether primary or secondary, still in line with good practice? Measurement techniques, scientific understanding, data quality etc. can all evolve considerably over time. In putting together the system it is worth considering the risk profile of each choice made and how each can be regularly sense checked for latest good practice. In some cases, change moves slowly, in others a more hands on approach may be needed.
- d. Has anything changed in the context of the referred reporting frameworks required by users? It may be that a data profile designed for a version of say, the Greenhouse Gas Protocol, may not be such a good fit for future iterations. Generally, these frameworks do not change frequently, but change and update is certainly feasible. Being close to these developments and away of how they may influence choices will be important. It is likely that this will be a big job and hence it is recommended to consider an advisory group to help stay on top of new issues and ideas as they arise.

**Step 5 – Visualisation:  
Choosing the right charts  
and visuals for your data  
and audience**

The presentation of data in a format that can support users apply it to their reporting is covered separately. System-level visualisation can help with comparisons between the scheme and other third-party approaches and to use in marketing materials, for example.

One specific area to consider is how to compare the scheme’s approach with other industry efforts. As stated elsewhere in this guidance, it may not always be the case that certified goods are lower emissions than non-certified or it may appear that they are ‘worse’ but in fact they are just quantified with greater integrity. A visual demonstrating the higher credibility of the scheme approach vs other industry standards can be a useful way of highlighting where the differences are and why higher credibility is important.

Storytelling can be a powerful way to help stakeholders understand the intent behind the GHG-RS. It is recommended that exemplars and white books, interviews and thought leadership form part of the system management. It can be especially powerful to have stories from different stakeholder groups, for example assurance providers will likely understand better if they read or hear the stories of other successful assurance processes. Likewise, examples of partnerships between producers and buyers and how the data was reported can be very powerful.

Finally, good data visualisation can help build literacy amongst internal teams and stakeholders, see Step 6, below.

**Step 6 – from insight  
to decision making**

It can be said that the building of a GHG-RS, in line with this guidance document, is the first step to realise an ongoing process. The cyclical review and update of the system and the integration of more Elements is a much longer process.

As outlined in the introduction to this guidance, there is an upfront investment in resource and expertise needed as well as to drive internal and external literacy and understanding.

This can be expensive to staff of course, but there are ways to shortcut:

- Partnerships/alliances and secondments with data and tool providers
- Memberships of organisations such as the Value Change Initiative
- Establishment of advisory groups, that are often be volunteer, to support the oversight of the GHG-RS
- Training courses and internal online resources
- Establishment of internal learning groups, brown bag lunch groups, messaging groups etc.

In addition to the above tips and recommendations, the GHG-RS should also consider potential breaches of credibility, privacy and security. These will be contextually specific and no list can be comprehensive, the following is therefore for inspiration only:

- What would the scheme do should it discover a misuse or breach of the use of data. For example, should a buyer misrepresent achievements to report to Science Based Targets, what would the repercussions be?
- Likewise, what would the scheme do in connection with its buyers to address any errors that are discovered. For example, if the GHG-RS relies on a third-party approach and that approach is proved to be inaccurate how does the scheme and its user group react? It would be beneficial to set this down from the outset, so that the scheme and its users are clear in advance and this risk and responsibility is shared.
- Many primary data sources can be sensitive, for example personal records of producers, commercially sensitive innovation results etc. These cannot all be identified at the system level and so a two-tier approach – a general policy and identification of potentially sensitive data.

## 3.0 CONCLUSIONS

The intent of this guidance is to support ISEAL members in the production, management and continuous improvement of a robust GHG-RS. It is hoped that the Elements provide a logical flow and framework for doing so and that sustainability systems will share their experiences publicly to the benefit of the community of sustainability systems.

As the world of climate reporting and disclosure is continually evolving it is fully expected that this guidance will also need to continually update and improve. It is recommended that sustainability systems check with the authors as to whether an update is pending when commencing new design or improvements to existing GHG-RS'.

This guidance has brought together eight key Elements, representing the building blocks that combined can realise credible climate reporting. It is recommended that sustainability systems use these Elements to create a document and likely also a web page to hold this design information. The format of the GHG-RS should be at each sustainability system's discretion, though a template is included in Appendix A.

This template could be used to design a GHG-RS from scratch or could alternatively be used to map existing approaches in a structured way. It is recommended that an archive of previous iterations is kept in order to demonstrate the continuous improvement and refinement of the GHG-RS over time.

The authors wish sustainability systems every success in developing and implementing their GHG-RS and commend all efforts to avert the climate emergency in an inclusive, principled fashion.