ACCOUNTING & REPORTING THE CLIMATE IMPACT OF CERTIFIED COMMODITIES: INTRODUCTORY GUIDANCE

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1.0 | INTRODUCTION

1.1 | Introduction and purpose

This document is part of an initiative designed to assist ISEAL members and their stakeholders to design and implement robust climate accounting, reporting and disclosure strategies within their schemes. It is recommended, particularly if not familiar with the climate emergency or carbon accounting, to begin with the 'Introductory Guidance' document, before turning to this document.

By helping to align ISEAL members with a science-based corporate accounting and reporting approach for greenhouse gas disclosure and impacts in the context of the commodities they certify, the aim of this guidance is to:

- Provide guidance for members to develop approaches to credibly, design, implement, continually improve and transparently communicate a reporting system appropriately and in line with the science of the climate emergency in order to:
  - Identify the needs and capacities of stakeholders in order to inform a credible, robust, accessible and equitable system
  - Create accounting approaches that are comprehensive, credible and appropriate to the member's context and sector
  - Attribute emissions qualities to certified goods such that corporates in the appropriate chain of custody and in recognition of traceability and safeguarding issues, including making good use of the definitions and practices of allocation of supply and chain of custody in the ISEAL community
  - Quantify and monitor energy process and land management emissions associated with their certified commodities generally AND
  - Allow 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 document will be bespoke and particular to each ISEAL member scheme and is intended to communicate how their approach to climate disclosure and impact reporting is intended to work.

The GHG-RS is made up of eight key design elements that work together to inform, develop and implement a credible approach. Combined these elements represent a synthesis of existing ideas and new good practices and are designed to be worked through in order as a logical process flow.

No two ISEAL members 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 use this 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 'uncredible' behaviours that members should take care to avoid.

Likewise, no two GHG-RS outputs are likely to be the same, as each member operates in a different context. At their core however, the intent is that each GHG-RS is consistent with key guiding principles and good practices, such that taken as a whole the ISEAL community orients towards good practice in climate disclosure and impact reporting.

In this sense this guidance is loosely analogous to the ISEAL Codes of Good Practice, where principles, criteria and guidance set out, but each member has space to innovate and create the system best suited to their needs. The GHG-RS is perhaps most similar to the Assurance Brief that many members 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 members are free to adopt it as a whole or in part as they see fit.

The overall intention of creating this approach affords several opportunities for the ISEAL community. Whilst each member will have their own reasons for considering this guidance, some key ideas include:

- Meeting commitments to orient 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
- To be able to robustly, clearly and transparently communicate approaches taken
- To improve existing approaches and systems and build a pathway for continuous improvement over time
- To share ISEAL good practices with wider climate efforts and for it to influence others

The guidance provides a blueprint and initial toolbox for creating a robust system for climate disclosure and impact reporting. Some members will have in-house expertise, others may need to hire or partner with experts to deliver some aspects.

1.2 | Context

This document is a 'start here' guide and does not presume any prior engagement with GHG emissions reporting or climate mitigation. It introduces key issues, providing a non-technical entry point to other associated documents that provide more depth in terms of how ideas can be applied.

This suite of documents and the GHG Reporting System they inform is intended to assist ISEAL members to align with the key, pre-eminent civil society reference frameworks, such as the Greenhouse Gas Protocol, the Science Based Targets Initiative and the WWF 'Corporate Blueprint' and the underlying approaches and intent behind them. This is to bring consistency to the community's understanding and approach and to align with good practices.

In effect, the intention of these three related frameworks and approaches is to represent an holistic overview of credible corporate climate practice. They furthermore develop the claims and mechanisms to support these practices in a credible way, with the intent of contributing to decarbonizing the global economy and averting the climate emergency. One of the most critical of these practices, the act of accounting, reporting and disclosing emissions and tracking their abatement against a science-based target is the focus of this document.

Throughout the documents are a series of 'explanation boxes' that focus in on specific terms or ideas and represent a good general starting point. The first below, for example, gives a brief encapsulation of the climate emergency.

Box 1: Overview of the climate emergency as of 2021

In 2018, the Intergovernmental Panel on Climate Change (IPCC, the United Nation's independent climate science group) published a Special Report (SR-15) that sets the foundations for a science-based response to the climate emergency. The report's key findings inform much of the current climate mitigation discourse:

— Human activity has caused an average temperature increase of approximately 1°C compared with pre-industrial average (i.e. 19th Century).

— This will increase beyond 1.5°C between 2032 and 2050 at current global emissions rates.

— While the social and environmental risks of the 1.5°C scenario are high, for example increased storm frequency and intensity and displacement of peoples from desert regions, they become increasingly more extreme as average temperatures rise beyond that level.

— Current government pledges, captured in 'Nationally Determined Contributions' (NDCs) are estimated to lead to a temperature rise of between 3 and 4°C.

— To limit these risks, a reduction in emissions from current levels of 45% is needed by 2030, followed by global 'Net Zero' emissions (a balance between emissions and carbon sequestration, for example, by forests, oceans, soil or technology) by latest 2050.

1.3 | ISEAL members in the context of the climate emergency

Avoiding and reducing emissions and transforming practices in corporate supply chains is critical to averting and becoming more resilient to the climate emergency.

Whereas the Paris Agreement holds countries to account for their sovereign, domestic emissions, corporates are also increasingly held to account for emissions wherever they arise, either through regulation or through consumer and investor demands resulting in voluntary action.

Corporate value chain[1] emissions (i.e. those emissions associated with upstream and downstream activities) represent 70% or more of global emissions according to CDP. It is not only the size of the opportunity that makes this action important. Value chains cross international boundaries and 'crowd in' responsibility for the same emissions across the value chain.

For example, in the cereal crops supply chain, all tiers of the value-chain are responsible for the emissions associated with production and thus for de-carbonizing those processes. This includes the Agri-commodity producers, consumer goods producers, retailer and even consumers.

The majority of ISEAL members and their standards are engaged with the sustainable production and consumption of 'raw' commodities, which means they contribute to the carbon footprint of purchasing companies through purchased goods, the areas they are sourced from and the processing, packaging and transport of those goods to market.

These goods are often produced in developing countries or sensitive environments. On the other end of the value chain, ISEAL member-certified goods are typically bought and sold by corporates seeking to act with integrity, mitigate reputational risk and take advantage of brand benefits to attract and retain consumers.

This link represents an opportunity for companies to accurately disclose emissions for their purchases and to engage in climate action through a preferred purchase of and an active engagement with certified sustainable commodities and their producers.

As such there is great potential in alignment between ISEAL members and science-based inventory reporting. This is particularly important as corporate value chain

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[1] Value chains and supply chains are terms that are often used interchangeably. In the context of this guidance, value chain as a term represents both upstream and downstream emissions, whereas supply chain only upstream. The focus of this guidance is the supply to and purchase of certified goods by corporates, hence supply chain is the term most often applied throughout.

emissions represent a key component of the 'mitigation hierarchy', discussed in the next section.

2.0 | THE CLIMATE MITIGATION HIERARCHY

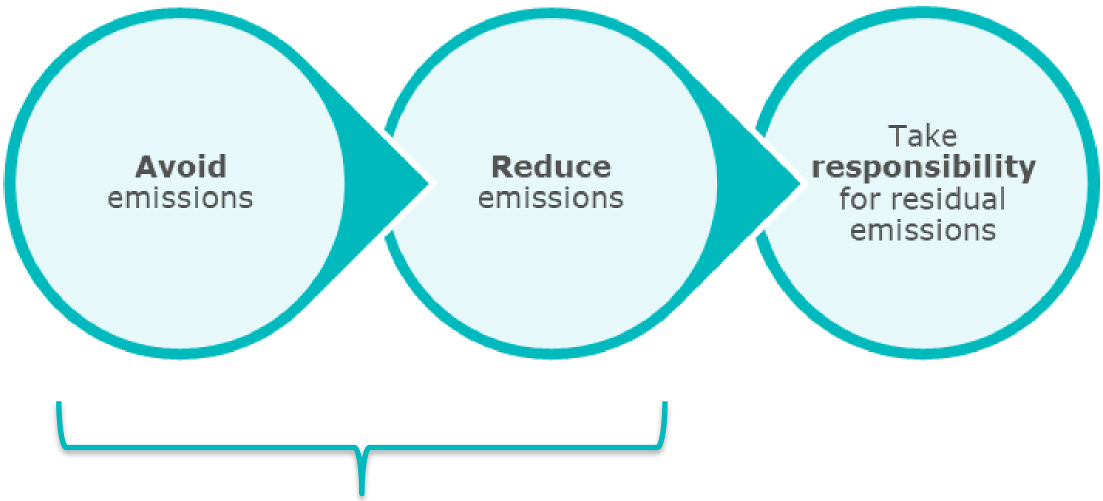
This section explains the role of purchased goods in the 'climate mitigation hierarchy', a cornerstone for how the rest of the guidance is applied.

2.1 | Understanding the 'mitigation hierarchy'

The 'climate mitigation hierarchy' is a key credibility principle of climate strategies. This deceptively simple mantra explains how we should all think about the relative importance and priority of the actions we take.

The climate mitigation hierarchy is to 'avoid, reduce, and take responsibility for residual emissions', for example, by offsetting. Actions to 'avoid' and 'reduce' elements take place within the company boundary. This is why ISEAL members are so well placed: They certify production activities that typically fall into opportunities for avoiding or reducing in-boundary value chain emissions.

Image 1: the climate mitigation hierarchy



Emission sources within a company value chain boundary

The mitigation hierarchy is a simplified representation of good practice to inform climate strategies, where priority is to 1) avoid emissions[2] (i.e. cessation of emitting activities, such as the stopping of loss and conversion events in land-management), 2) reduce emissions (i.e. making emitting activities more efficient and lower emissions intensity, such as more efficient processing and transport networks), and 3) take responsibility for residual emissions (e.g. through offsetting or impact investing, defined later in this document) after avoiding and reducing in line with science. This discourages companies from offsetting INSTEAD of avoiding/reducing, whilst noting that offsetting is an effective way to reduce global emissions and is a good supplemental strategy to science-based, in-boundary reductions.

The mitigation hierarchy is a first principle of this suite of guidance documents (see later section for guiding principles) and aligns with three key reference frameworks (See also table 1 for links to documents):

1. The **Greenhouse Gas Protocol** (GHGP) provides the definition of scope and boundary and approaches for accounting and reporting of emissions (i.e. how to account for the avoid and reduce portions of the mitigation hierarchy).
2. The **Science Based Targets Initiative** (SBTi) provides approaches to set a target that is in line with the science of the climate emergency (see Box 1) to be reported using GHGP accounting (i.e. how to set a science-based avoid/reduce target – referred to as an 'SBT' in this document)
3. The **WWF Blueprint for Corporate Action on Climate and Nature** sets 1 and 2 above into a wider climate strategy that can be used by corporates and includes taking responsibility for residual emissions as well as considerations for conservation and innovation.

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[2] **Avoidance of emissions is focused on activities within the production of certified goods. ISEAL members may wish to consider the avoidance of unnecessary use of commodities by corporates following a circular economy logic, though this will depend on each individual member's viewpoint and is outside the scope of this guidance.*

It should be noted that these are voluntary frameworks (i.e. their application by companies is not commonly mandated by regulation) and that others may exist or emerge in future that similarly refer to or enhance the mitigation hierarchy. Additionally, all these frameworks are dynamic and will certainly be updated, sometimes quite dramatically, over time in line with evolving climate science.

A further relevant framework is CDP (formerly the 'Carbon Disclosure Project’). While not the focus of this guidance, many companies disclose their reported GHG inventories and progress toward SBTs via the CDP platform. CDP also includes supply chain programmes that may provide useful data for inclusion within a GHG Reporting System. The International Standards Organisation (ISO) also has various standards, some of which are referenced for specific elements of the GHG Reporting System.

Table 1: Summary of key reference frameworks/reading links

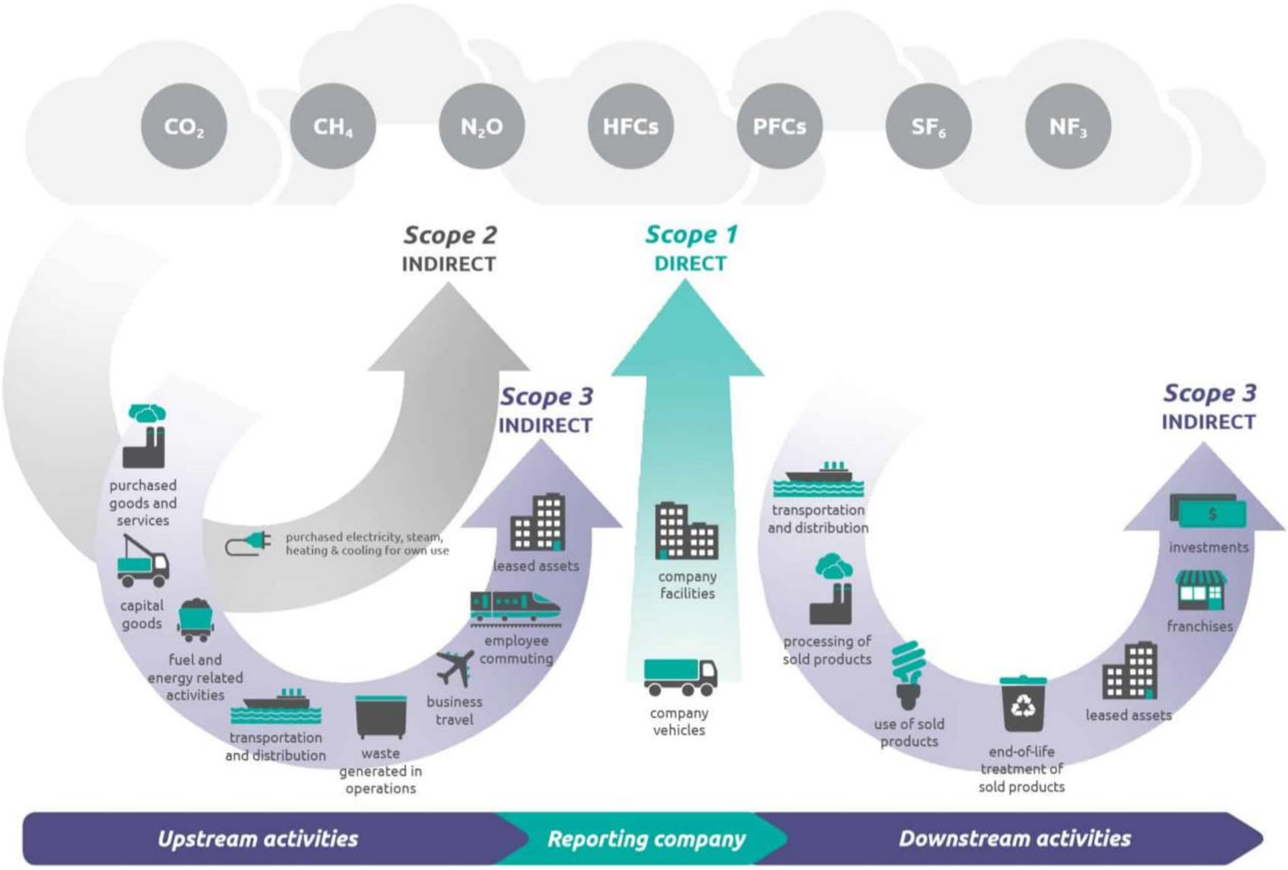
Framework	Role	Recommended introductory reading link
The Greenhouse Gas Protocol (GHGP)	Accounting and reporting standard for corporate greenhouse gas inventory reporting	GHGP is generally user friendly and full of examples. The Scope 3 Standard and Scope 3 guidance are most relevant. Further protocol development is expected in 2021/2022 for land-based emissions associate with carbon stocks, explored later in this document.

The Science Based Targets Initiative (SBTi)	Methodologies to set science-based corporate inventory targets and report progress against them using GHGP	The 'how it works' and 'set a target' sections give a useful overview of how the SBTi system works. ISEAL members may wish to consider engaging with prominent users of certification that also have set SBTs. A list of target-setting companies can be found here.
Blueprint for Corporate Action on Climate and Nature (WWF)	A holistic framework that brings together all targets, including beyond-boundary actions	Further development of ideas, and the addition of relevant tools and claims are likely to take place in coming years, either as an expansion or as part of other initiatives.

2.2 | The role of certified goods in the mitigation hierarchy

The role of certified goods is linked strongly to 'value chain' emissions targets and progress reporting for companies. This is because, per the GHGP, there are three 'scopes' of emissions, covering a company's direct and indirect emissions (i.e. these Scopes are where the 'avoid' and 'reduce' parts of the hierarchy should be carried out). The three scopes and their sub-categories are summarized in image 2.

Image 2: GHGP Scopes (credit: Greenhouse Gas Protocol)



This diagram breaks down the elements of a corporate inventory that are 'in boundary' (i.e. in the scope of the 'avoid and reduce' portion of the mitigation hierarchy). It is then further categorized into direct and indirect emissions and three scopes. Scope 3, category 1 (purchased goods and services) is our focus in this guidance series, though the approaches of individual members may also include others. Purchased goods are in the upstream activities of many corporates, as part of their supply chain. Activities included production, processing, transport and packaging.

Purchased goods and services are the first category of indirect, 'upstream' value-chain emissions for most companies. This means that a company that purchases a commodity of any kind should account, report and disclose the emissions associated with its production, processing, packaging and transport.

For example, a large retailer stocks its shelves with coffee, fish products, and has a clothing line. The production of raw materials in each case, their processing, packaging and transport all generate emissions that should be included in the retailer's emissions reporting and disclosure, as well as the emissions associated with the lighting and heating of the retail space or delivery service through which they are sold to consumers. These emissions represent a 'liability' that, over time will need to be avoided and reduced to comply with a Science Based Target.

Moreover, this information passes through the value chain, meaning that the retailer in this example should be joined by, for example, producers of consumer goods, such as food products or jewelry. Several 'tiers' of the value chain are therefore responsible for the emissions associated with these goods, including the retailer selling the final product as well as the producer and processors between.

This 'crowding in' of responsibility creates an opportunity to collaboratively contribute to resolving the climate emergency. The role of certifying goods can therefore play a critical role in incentivising responsible actions by multiple actors in a value chain.

ISEAL Members have a long history of driving and improving sustainability practices within the production, chain of custody, products and sourcing areas of key commodities. They have pioneered traceability and assurance and the attribution of quality information through license and claim to purchasing companies—all important contributors to robust value chain action and emissions reporting.

In this way, corporate use of certification of goods in terms of their contribution to climate mitigation can:

1. Facilitate clearer, more accurate and more transparent reporting of emissions for certified goods
2. Ensure that emissions qualities are attributed correctly to purchasing companies to facilitate credible company inventory reporting
3. Help to enable incentives to undertake activities to improve emissions profiles amongst producers
4. Potentially drive increased demand to sustainable commodities and to their producers

5. Encourage ISEAL members and certificate holders to further consider climate mitigation in their principles and requirements
6. Influence the quality of practices beyond ISEAL, by leveraging the good practices of the ISEAL community to create guidance that others can use

2.3 | Accounting and reporting of emissions associated with purchased goods

There are two main groups of emissions to consider; energy process emissions and land-based emissions (or marine emissions, as relevant for some members). Energy process emissions are associated with activities related to the production of the goods that directly or indirectly use fossil fuels, for example, for transport, clearing, or processing. Land-based emissions concern carbon stock loss or gain in biogenic carbon stocks, such as soil or woody biomass, or in the ocean. Each of these groups has different approaches.

2.3.1 | Energy process emissions

Energy process emissions reporting is a relatively mature area of accounting and has a great deal of literature and community to support it. It is predicated on the calculation of emissions on a per-activity or per-volume basis (i.e. the emissions associated with each unit of purchased goods).

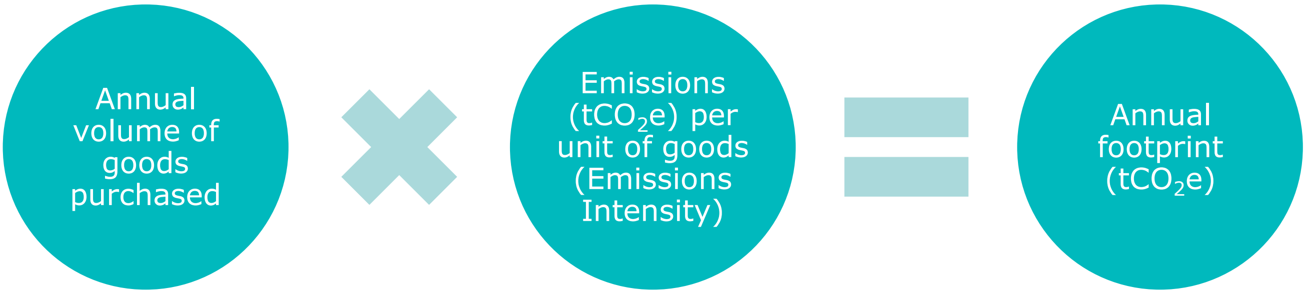
The following notes describe the basics of accounting and reporting for accounting energy process emissions:

Scope and boundary: Companies should set a science-based target for avoiding and reducing emissions that includes all relevant and material activities defined in the Greenhouse Gas Protocol, as shown in Image 2, including emissions associated with purchased goods, and report on the same.

Inventory reporting: Companies report their emissions in an ‘inventory’ format, typically on an annual basis. This means a yearly ‘snapshot’ summation of all the emissions associated with all the categories in Image 2 where they have material activities. They report in tCO_2e emissions (see Box 3, for key metrics), and it is the ongoing reduction in this figure over time that is relevant for reporting against a science-based target.

Purchased goods and services accounting: Companies that purchase goods and services should account for their emissions. To calculate the emissions associated with purchased goods and services, first an 'emissions intensity' is calculated for each unit purchased. Emissions intensity is the sum of emissions associated with all the processes that are involved in production, divided by the yield of production (to realise a per unit based 'Emissions Factor'). Second, this intensity is multiplied by the volume of goods purchased by the company in a given year, as depicted in Image 3.

Image 3: Calculation approach and example, Scope 3 Purchased goods and services



*For example: A large company purchases raw agriculture commodities, such as wheat and wheat byproducts. Every tonne of wheat has an associated 'emissions intensity' (i.e. emissions per unit of production). Hence if the company purchases one thousand tonnes of wheat and the emissions intensity per tonne is 150kg CO2e, then the footprint per annum is 150,000 kg CO2e (i.e., 1000*150)*

For the purposes of this guidance and the development of a GHG Reporting System the focus will be on energy process emissions associated with the steps of production, processing, packaging and transport for raw commodities. Members may include steps beyond these four and as such can infer from this guidance and others on how to build additional areas.

Box 2: Calculating Emissions Factors

The GHG Protocol provides a number of approaches within the Scope 3 standard and associated Guidance, allowing inclusion of companies that may have little resource or access to information through to those that have capacity to engage with much more rigour. This is to ensure that no company is excluded from participation, though those with capacity should aim for higher data quality.

Generally speaking, an 'Emissions Factor' (EF) is drawn from a 'Life Cycle Assessment' (LCA) of the targeted goods, which examines all processes associated with production and ascribes emissions information to them. The summation of these emissions sources, divided by the yield or productivity represents the emissions intensity of a single unit of commodity which, when multiplied by volume of purchase provides an emissions footprint. Emissions intensity on an individual unit of commodity basis is referred to as its Emissions Factor (EF).

The sources of emissions data that make up an LCA are varied. They could come from supplier specific information (i.e. directly measuring emissions by working with a specific supplier) or they could come from industry or national default data, such as those produced by the IPCC. In reality, most LCAs will have a hybrid approach, with various levels of confidence for the different processes.

This LCA data can then be generalised across the purchased volume of goods and input into the equation described above. For example, a company purchasing from 100 suppliers may create a supplier-specific or hybrid approach by measuring with a subset of those suppliers and then conservatively generalising across the whole group.

An LCA is a useful tool for reporting emissions across a group of suppliers, but is less useful for key variables such as inputs and processes that vary materially. For example, inputs such as area, aspect, climate, yield, fertilizer choices and many others can impact the accuracy of an LCA when applied to a specific producer. A more accurate approach is to produce a Lifecycle Inventory (LI). This could take the LCA approach and processes and make them more specifically applicable to individual or groups of producers, whilst also allowing producer inputs to recalculate total emissions.

A company may not need to generalise if supplier specific data is available for the specific suppliers that are traceably supplying the company. In this case, the reporting is not generalised but 'specific'. Whilst this represents good practice, it is not common currently in many sectors due to the dynamic, complex nature of supply chains and the challenges faced by producers in collecting and reporting data.

Companies may also target specific processes within an LCA, for example those that are included in certification requirements or by a targeted series of activities. Whilst a company will still need the whole LCA, they could substitute out those processes that were generalised with more specific information. This 'substitution accounting' requires some care in terms of credibility (as it could lead to cherry picking) and will be explored elsewhere in this guidance series.

The GHG Protocol Scope 3 Calculation Guidance provides greater detail on all options for accounting.

Total reporting: Each Scope 3 category (see Image 2) that make up a company's total activities can be characterised for emissions reporting as a 'bundle' of processes, related to energy use or land-based emissions (the sequestration or of carbon from the atmosphere, for example, by the soil or woody biomass). For example, a retailer purchasing coffee can break down the production, processing, packaging and transport of that coffee into a series of processes that are either sources of emissions or that remove carbon from the atmosphere.

In the context of emissions intensity for goods, we calculate this as a summation of these processes, illustrated in Image 3. Targeting these processes and finding ways to reduce or avoid their emissions ultimately drives decarbonisation.

Image 4: Emissions intensity per unit of goods as a 'bundle' of processes

The emissions intensity of a good is a bundle of many processes that add up together to the total used in reporting.

Box 3: Inventory emissions metrics vs impact metrics

The key metric associated with inventory reporting is the quantity of Emissions (E) associated with company activities in a given period (y).

This is typically expressed as E_y, i.e. 'Emissions in Year n'.

The 'E' metric for emissions actually represents a figure that consolidates the impact of different greenhouse gases on the atmosphere, the most common being carbon dioxide and methane.

Each greenhouse gas has a 'Global Warming Potential' (GWP) figure associated with it that represents the amount of energy that it stores, or does not release from the atmosphere, causing the global warming effect.

The GWP of carbon dioxide is defined as 1, as it is the reference point for all other gases. Methane has a GWP of 28-36, storing 28-36 times the energy stored by carbon dioxide. The IPCC, discussed earlier in this document, is the pre-eminent source for determining GWPs and provides updates to these figures as scientific data and understanding improves.

One may infer that methane is a much 'worse' greenhouse gas than carbon dioxide. While more powerful in its greenhouse effect, methane is also much shorter lived in the atmosphere. Concentrations of carbon dioxide, on the other hand, can build up in the atmosphere and remain there for hundreds or even thousands of years, meaning that while the energy it stores is lower, it stores it for far longer and is harder to eliminate.

A final factor to consider is the relative amounts of greenhouse gas emissions released. For example, nitrous oxide is an extremely harmful gas in terms of energy stored and can survive in the atmosphere for a hundred years. If we released as much nitrous oxide as carbon dioxide, the climate emergency would become uncontrollable very quickly. Whilst it is typically released in very small quantities compared to the other gases, it should be treated very seriously because of thes factors.

The key inventory metric E_y is therefore expressed as 'Tonnes of Carbon Dioxide *equivalent* gases (tCO_2e)', which represents the summation of the volume of each gas, multiplied by its GWP.

A final relevant inventory metric is the application of E_y tCO_2e to a specific commodity. This is known as an Emissions Factor (EF) and is simply the amount (sometimes referred to as an intensity) of emissions associated with the production of a given unit of commodity, for example, a tonne of wheat or cotton. This can be calculated by simply dividing the total emissions associated with all production divided by the yield of that production in a given year. In this way, we can calculate the emissions associated with a given company's purchases, by multiplying the volume of units they purchase by the per unit EF.

Improving an EF can be a function of 1) driving down the emissions associated with its production and/or 2) by sustainably increasing production yield.

The above notes are related to inventory and disclosure accounting which is a snapshot approach to reporting of emissions in any given year. Taken alone they do not tell you whether the result you're seeing is good or bad, merely what it is. This is important as monitoring the reduction of inventories over time is the only way to meaningfully measure and manage global carbon budgets.

To discuss the relative *impact* of a given action, for example to improve the production processes and reduce emissions, we also need to consider 'impact' metrics. Impact metrics are typically calculated on a 'results compared to baseline', counterfactual basis. It is not necessary to do this for an inventory report, as an inventory merely represents a snapshot of emissions in a given year. Impact metrics can be helpful however for explaining results or ascribing benefits to sponsors and buyers, such as in the carbon markets. They are also useful for comparing different investment opportunities that generate different positive climate impacts and rewarding those that contribute most to sustainable development, relevant for governments, philanthropic foundations, individuals and corporates interested in knowing if they are making a positive difference.

Impact metrics for emissions are typically Emissions Reductions or carbon removals (i.e. sequestered in woody biomass or soil), representing a positive climate impact from a baseline scenario (no specific action being taken) to a project scenario (actions taken to reduce emissions). Each scenario reports as tCO_2e in the same way as inventory reporting, but it is the reduction between the two that is of interest in explaining the results of the action.

It should be noted that the term 'impact' here is commonly mis-used and in fact many impact metrics are really 'output' or 'outcome' based. True impact metrics, such as the protection and enhancement of biodiversity or improvement of mortality and morbidity rates typically take many years to measure and required techniques such as randomised control trials. These are rarely available or practical for most practitioners and hence output and outcome metrics are typically used as a proxy for the targeted impact.

Per strict definitions, Emission Reductions are output metrics; lower atmospheric concentration is an outcome metric; and reduced global warming is an impact. It would not be practical or reasonable for producers to attempt to measure atmospheric concentrations of greenhouse gases or to assess the overall temperature impact of their actions, however.

This guidance is primarily focused on inventory reporting and disclosure metrics, but will touch briefly on its relationship with impact metrics throughout, particularly in carbon markets and how they interface with GHG inventory reporting and potential pitfalls around double counting and doubleclaiming.

2.3.2 | Accounting and reporting of land and marine-based emissions associated with purchased goods

Land and marine management is highly relevant to many ISEAL members, given that the goods they certify are typically Agri-commodities or aquaculture and marine environments. This means that emissions associated with carbon stocks held in biogenic sequestration, for example in trees, is especially important. It can either be a net emitter (i.e. if that carbon stock is being lost) or a net remover (if that stock is being increased). Its potential for mitigation is therefore enormous, though it must also be credibly safeguarded to minimise the risk of over-claiming carbon removals and as a result under-estimating the reduction of emissions that is still required.

While Section 2.3.1 described how energy processes are accounted for (which will be relevant to all members), corporates purchasing commodities such as those targeted by this guidance, are also increasingly required to report on land and marine-based emissions where relevant.

These include greenhouse gases stored in oceans, soil or woody biomass and represent both a potential stock and a source of emissions, depending on what is happening to them. If forest is lost to land conversion for agriculture, the carbon stored in woody biomass and soil is likely emitted to the atmosphere and should be reported as a source of emissions by companies in whose value chains this action is occurring.

Conversely, those same forests and soils in the value chain may be managed in equilibrium, representing no emissions to the atmosphere (and this should be reported and disclosed).

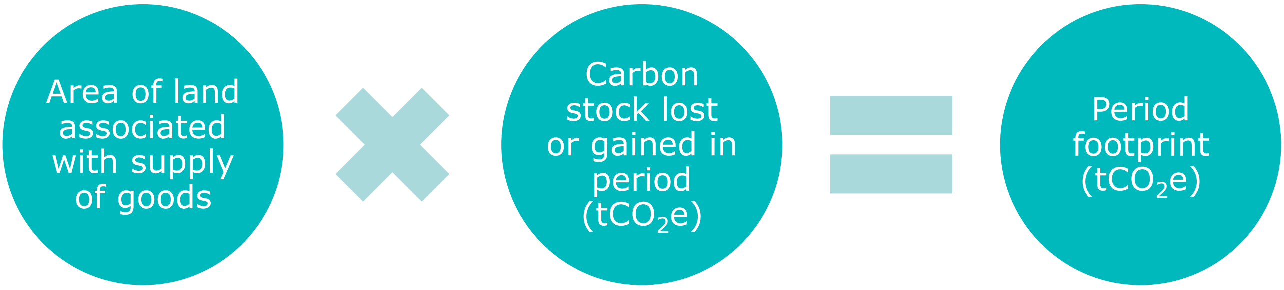
Finally, a company could be engaged in restoration work that results in an increase in carbon stocks stored over time and should be recorded as negative emissions for that period (noting that it is likely at some point to reach equilibrium as is the nature of biogenic sequestration).

This makes land and marine management an especially important component of climate strategies for those companies that have them in their value chains. Even preventing further loss can be a real benefit towards a science-based target, whereas an improvement effectively represents a ‘positive’ in the accounting column.

Currently, carbon removals are simply reported as a separate accounting line to emissions. This is dissatisfactory as they cannot be easily then reported against an SBT and because this method lacks the rigour and credibility needed to properly report complex biogenic processes.

Image 4 represents how land-based emissions are likely to be reported, when the full protocol is released by GHG Protocol. Note that a marine equivalent has not yet been developed.

Image 5: Land-management emissions reporting and disclosure (currently under development and subject to change, see GHG Protocol updates)



Making this calculation requires a definition of area to be ascribed to production which is likely wider than the production unit boundary. This is currently under development at GHG Protocol and will be added as soon as possible.

2.4 | Purchased goods in an ISEAL context

From the perspective of purchasing companies, we can now see that ISEAL member certified commodities **are** purchased goods that could be reported under the GHG Protocol and used toward SBT Scope 3 targets. They can also be reported by producers in their own Scope 1 and 2 inventories, though this is not yet common practice amongst producers, aside from large companies. This means that by attributing GHG Protocol / SBT-aligned emissions data to certified commodities, companies that purchase and have relevant licenses can use this information directly in their climate reporting.

Producers and purchasing companies with SBTs will increasingly need emissions data from their purchases as a result of evolving sustainable finance regulations (e.g. EU Taxonomy, emerging EU, US, Canadian, Chinese sustainable finance disclosure reporting regulation, corporate finance disclosure reporting regulation etc.), in a format that they can use in their own reporting. This makes the way purchasing companies report their emissions relevant as just like ISEAL members, no two companies will be reporting in precisely the same way. Some may have a sophisticated LCA in place for the goods purchased but now seek to make it more specifically reference the actions taken in certification. Others may have less granular approaches that make it hard to distinguish individual processes within their EF. All need to be served by the information produced.

Furthermore, the causal link and attribution of a claim has long been a core tenet of many ISEAL member approaches. This is important as it helps to overcome a core traceability and connectivity issue that has long hampered efforts to decarbonise value chains. Box 5 provides details on the concept of 'supply sheds', which aims to solve this problem.

Combined, these features represent an opportunity to drive demand for sustainable goods and sourcing areas as well as to identify the processes targeted in certification and how they can be decarbonised.

Box 4: Chain of custody traceability vs 'supply sheds'

The intent behind the GHG Protocol is that companies take responsibility for the emissions processes that are physically within their value chains. This means, in an ideal world, that a company purchasing timber, for example, should report the emissions associated with the specific timber it purchases.

This requires traceability, wherein the commodity purchased by a company can be traced back through the supply chain to a specific producer. In doing so the purchasing company can report any beneficial improvements that supplier has made to its emissions profile, or to work directly with them to do so. In a more generalised approach, where traceability is not feasible, this would not be the case as it would lead to reporting beneficial Emissions Factors without any justification that they were associated with supplying the reporting company.

Whilst this makes logical sense in terms of accuracy, it poses technical and logistical challenges that can hamper investment in climate action. Firstly, it would require an immense traceability improvement across global supply chains. This should of course be the aim, but in the short term and in the context of the climate emergency, it should not be a barrier to action.

Strict adherence to full traceability would mean that a company that works with a specific group of suppliers and invests heavily to their mutual benefit could lose all that benefit should the supplier decide to change their clientele. Likewise, if it is impossible to tell specifically which producers are supplying a given company, for example due to traceability, aggregation or even cooperatives that will not share that information, it would not be possible to take advantage of any improvements made towards a science based target.

This could restrict investment as it would be risky and uncertain for a company to act in partnership with its suppliers.

The concept of 'supply-shed' is introduced to overcome this, wherein a company can credibly assume a supplier is supplying its purchased goods, without certainty that this is true. For credibility, this requires safeguards, such as the supplier at least having the economic and physical potential to have supplied the company and to the ability to credibly account for inherent contextual variability such as climate, soil type or production practices. It also requires that the corporate can demonstrate that they caused the improvement to happen, for example through investment or sourcing preference that resulted in change.

In other words, with credible safeguarding, a company may use ISEAL certification to demonstrate causality, thus allowing it to report the beneficial information arising from practices that impact emissions in the production of certified goods.

A first step towards realizing this potential is to align the emissions reporting of certified goods with wider good practices, as included in the GHG Protocol and SBTi. In other words, per Image 2, members should begin the process of developing tools to identify and report the processes associated with the goods they certify, or if tools already exist, look to align with the reporting practices indicated.

A second step is to consider how these processes can be decarbonised. There are many actors involved in the production and consumption of goods and therefore a wide range that can influence practices that can improve the individual energy processes involved. A good starting point to understand options is Gold Standard's 'Best Practices in Scope 3 Greenhouse Gas Management', which breaks down various value chain categories (see Image 2) and recommends a series of effective actions that can be taken to avoid and reduce emissions.

Optional is to compare the emissions associated with certified goods with non-certified. This may not necessarily imply an improvement over non-certified, in some cases it could be 'worse' than non-certified, as a result of the introduction of sustainable practices. This may be something that ISEAL members wish to consider as part of their climate strategy and public communications.

This option can also be challenging due to misalignment of accounting (for example where certified goods come from different regions/use different practices compared to a standardised approach in an industry) or where a majority or 'saturation' of certified goods has been reached, with the result that no meaningful comparison can be made. Where comparisons are made then any assumptions and misalignments should be transparently communicated.

ISEAL members may also have an influence over markets and sourcing areas, with many supporting landscape approaches or large co-operatives of producers. One major challenge with accounting for purchased goods is that it can be difficult to directly connect units of production to a specific buyer. For example, if production is via a large number of small holder farmers it can be impossible to be sure that those who have been supported through corporate action that result in improved practices are precisely those that supply the corporate. It may be that where this level of traceability and allocation is feasible at the smallholder level, it is then lost again in aggregation and shipping where goods from many sources are mixed together. In some instances, such as for example dairy cooperatives, information about specific suppliers may be restricted.

ISEAL members have long dealt with these issues and, as the corporate community begins to deal with such challenges across value chain reporting, this can be a valuable resource.

Finally, like any climate mitigation mechanism, integrity is crucial to both delivering impact and for trust and credibility. You cannot manage what you cannot measure and without integrity in accounting, corporate buyers and their customers quickly lose faith amid criticism that is likely to follow. It is important therefore to reflect the guiding principles in this document to ensure integrity.

2.5 | Who has the responsibility to report and under which standard?

The standards system(s) of each ISEAL member will be particular to their mission, areas of focus and context. What works for one member will not be appropriate for another. Each member may also manage several different types of standard, ranging from production or management unit, product, chain of custody, sourcing area or corporate standards.

Each ISEAL member will have designed their own standards system to suit these factors. This guidance does not presume to align with archetypal approaches, such as production, chain of custody, sourcing area or purchasing standards. Instead members may make use of this guidance in different ways according to their needs. It is not the intent of this guidance series to navigate how to apply the information in each possible standards combination as this would require far more complex documentation. Instead, members should feel empowered to translate the approaches in their GHG Reporting System for use in any of the standards systems they operate.

Furthermore, each member will need to carefully consider who and where in their system is best placed to calculate and report emissions and identify opportunities for further decarbonisation. For example, some systems are better suited to a 'top down' emissions calculation tool (i.e. one tool that all certificate holders should use) while others may prefer to standardise principles such that individual certificate holders put forward their own approaches to calculate emissions. Either approach and many in between can potentially work and this is a decision best determined by those closest to the system.

Finally, and somewhat similarly, each system takes its own approach to defining its assurance and oversight approach. For some systems the Assurance Providers (AP) may be qualified and experienced to assess emissions reporting, for others this may be better centralised/automated such that the AP can simply assess whether a top down tool has been applied properly.

A summary of the possible roles of key stakeholders is provided in Table 2. Each of the key groups (standards, certificate holder/applicants, assurance providers and certificate 'owners' also has their own 'start here guidance' in this series).

Table 2: Summary of key stakeholders and their potential roles

Stakeholder	Key roles
Standards systems	The scheme owner should be the owner and creator of their GHG Reporting System documentation, explaining transparently choices made and how they apply. They should maintain this system over time and integrate it into their M&E systems.
Certificate holders/applicants	Will be the providers of information, under a variety of approaches, that contribute to quantifying and reporting emissions in accordance with the GHG Reporting System. Depending on the respective benefit sharing approaches amongst ISEAL members, they should benefit from enhanced demand and potentially pricing, though this will depend on a number of factors. They are therefore also a 'claimant' of information, in the sense that their impact claims can influence the practices of others.
Assurance Providers and Oversight Bodies	The role of Assurance Providers will depend on the choices made in the GHG Reporting System. For example, if the GHG Reporting System describes a system where individual certificate holders define their own methodology and calculate their own emissions, the Assurance Provider must assure this against whichever standard the scheme provides. Alternatively, if the scheme provides a ‘top down’ tool for all to use, then the role of the Assurance Provider may simply be to check that the tool has been applied correctly. Oversight Bodies may need to reflect the above choices in their accreditations.

Corporate users

Companies are the ultimate end users of the information produced and will use it to report and disclose their inventory emissions. Their role may be simply as a receiver of this information and they should always act with transparency, accuracy and integrity in doing so.

It may also be possible that corporate users directly engage with producers to invest in change and there have a more hands on role with regards to the generation of emissions data.

2.6 | Relationship with other approaches

These efforts to avoid and reduce emissions may relate to other climate mitigation mechanisms and accounting, namely carbon markets, financial reporting and national/international reporting. These are not the aim of this guidance, but stakeholders should make themselves aware of the overall picture in which they operate.

Likewise, the primary data set to be produced under a GHG Reporting System is emissions reporting. Many members also imply impact or outcome based thinking, for example for payments for ecosystem services. Impact and outcome data for climate mitigation typically centres on the Emission Reduction metric, explained in Box 3. This metric cannot be used by companies in the context of GHG inventory reporting, because it is an incompatible form of accounting. This does not make impact or outcome metrics undesirable, it is simply that their intended use must be carefully considered such that it does not undermine inventory reporting or any other external mechanism.

Covering key external or related uses of GHG data in turn:

Carbon markets: This refers to a wide range of market-based instruments that 'unitise' mitigation impact (such as in the form of carbon credits that represent Emissions Reductions or carbon removals) and allow them to be bought, sold and claimed in a variety of voluntary and compliance market applications. What they have in common is the aim to allow multiple stakeholders to participate and to create efficiency through a transactional approach. This is similar to how many consumers purchase food, in the sense that not everyone can grow everything they need and its more efficient to act collectively by purchasing food in super markets.

Carbon markets operate by allowing people to purchase units of climate mitigation, in the form of emissions reductions or carbon removals. These units can be used in a variety of ways, most commonly:

- Transfers between countries, known as 'Internationally Transferred Mitigation Outcomes (ITMOs)' in the Paris Agreement. This is where one country purchases outcomes from another to include them in their achievements (with the country of origin making an adjustment to their achievements having sold them on)
- Voluntary offsetting, wherein a company compensates the atmosphere for their emissions by purchasing and retiring carbon credits. The promise made is that despite emitting, the atmosphere is net no worse off due to the act of offsetting.
- Voluntary climate finance, wherein a company purchases a carbon credit to convey their support and causality of a beneficial impact, but no offsetting claim is made. This is similar to existing approaches for payments for ecosystem services or development impact bonds.
- Compliance schemes, such as the airline sector's 'CORSIA' scheme which requires the purchase and retirement of credits to limit emissions to 'carbon neutral growth' from 2020.

The data generated through the approaches set out in this guidance are not intended for any of the above applications. That said, some of the activities that ISEAL members or their certificate holders may promote could be eligible for use in carbon markets if certain conditions are met. Members are therefore advised to proceed with caution as the sale of carbon credits related to an activity, particularly where offsetting or compliance is the intended use, may be preclude or require an adjustment if also used to report corporate emissions. This is explained elsewhere in the guidance.

Finance disclosure and 'ESG': If companies should be made responsible for their supply chain emissions, then indeed financial institutions must also be held to account for their investments. European regulations, for example, are evolving and financial institutions are being asked to report on their impacts under evolving regulations that include the sustainable finance disclosure regulation, the Green Bonds Standard and the EU Taxonomy. Looking back to Image 2, you can see this intention in the 'investments' category on the far right.

It may be the case that the activities certified against ISEAL member standards are invested in by financial institutions and other funds or investors. In other cases, collective action could be financed by similar entities with the express intention of profiting off the higher demand for more 'climate friendly' commodities.

While there is much still to be done, initiatives that guide financial institutions on how to account for their investment related to emissions are emerging. Unlike carbon markets, where double counting or claiming is inadmissible, it is generally to be encouraged that BOTH the company supply chain and the investor, if there is one, should report the emissions this guidance is intended for. This guidance does not provide guidance for reporting the investment category of Scope 3, however, though this could be further developed based on parts of this work.

National and international accounting: The Paris Agreement provides the framework under which countries set targets and report their progress against agreed climate goals. While many aspects are still in development and early signs suggest that ambition must be urgently raised, it represents the keystone for national and international accounting and reporting.

It works similarly to company accounting, with each country setting national avoidance/reduction targets. One clear difference, however is in value chain emissions. Where companies can and should take responsibility for their upstream and downstream emissions, country targets under Paris are limited to sovereign emissions for political reasons. This does not of course prevent countries considering a ‘voluntary’ approach to setting and achieving value chain targets, for example, for imported goods.

It is inevitable that the emissions accounting and reporting approaches described throughout these guidance documents will result in ‘double claiming’ with the host country of the activities and emissions. This is an acceptable double claim, in the same way as investors and companies is (i.e. it is better to make all parties accountable). Hence, unless carbon market instruments are involved, standards and stakeholders do not generally need to be concerned with their relationship with Paris Agreement accounting, unless the host country itself is setting policy and regulation concerning those activities (as this may influence the types of activities that should be promoted). Most ISEAL members are well versed with interfacing with national policy and this has little bearing on how accounting is carried out.

Payments for ecosystem services, results-based finance and impact-based incentives: It is important that all economic actors account, report and disclose their emissions inventory and track progress against a science-based target. This is because it is the best way to respect the mitigation hierarchy and ultimately the de-carbonisation of the global economy.

That being said, impact- or outcome-based thinking is valuable for financing change. This is because it can directly measure, report and verify the impact or outcome of an activity and thus be used to attract or determine payments. Both forms of accounting are essential components of overall climate strategies and should be considered as potentially credible. The key for correct application of this guidance is that members ensure that the use of impact or outcome based metrics are not intentionally or inadvertently used in GHG reporting by companies and that all users of the information are being transparent concerning their claims.

A good example of this would be the use of ‘Emissions Reductions’ vs reporting in emissions. The latter is standard practice in inventory reporting, the former is an outcome metric and arises from a different form of accounting. Netting Emissions Reductions off an inventory can result in misleading results because of this misalignment and hence is not advised.

It is generally considered, for the purpose of this guidance, that impact/outcome based metrics used to make claims such as 'Company X funded Y action, resulting in Z outcomes' are compatible with a different company claiming the resultant improved

Emissions Factor in their inventory. This is only true however if that impact/outcome based claim is not used against a different target, such as offsetting or compliance uses.

3.0 | SUMMARY AND CONCLUSIONS

3.1 | Putting it all together

We have so far reviewed the key role of certified commodities in the climate mitigation hierarchy and considered its relevance to ISEAL members. In particular, we have focused on how to credibly report emissions for use in corporate reporting of the 'avoid/reduce' portions of the hierarchy, as well as briefly its relationship with other forms of reporting such as carbon markets and national accounting.

We have also briefly appraised the key roles of stakeholders most involved in the methods, data collection, calculation, reporting and claims associated. This final section briefly captures the relative benefits and risks (Table 6) associated with this approach as well as some short advice on what to do next for given stakeholders in ISEAL standards systems.

Having understood the key considerations, we now finally turn to the principles and key elements that need to be built and integrated within a standards system seeking to create a robust GHG Reporting System, outlined in Table 3.

Table 3: Guiding Principles

Principle	In practice
1 – Recognise and prioritise the importance and role of value chains in climate mitigation	— Approaches align with common practices and key frameworks to enable inclusion in corporate reporting

	— Approaches are respectful of the corporate climate mitigation hierarchy and minimise risks of perverse outcomes
2 – Promote credible, conservative and transparent accounting, reporting and claims	— Adhere to good practices in emissions reporting, including that (from GHG Protocol): — Emissions and removals reported are **relevant** to the targeted commodities/standards system — Are **real, accurate and conservative**, as quantified, monitored and reported through credible approaches and **assured** by competent and independent assessment processes — Are **associated** with the purchasing company, respectful of economic and spatial inputs — Are **transparent**ly allocated, tracked and ultimately claimed appropriately — Claims made are **true** and do not mislead consumers or stakeholders
4 – 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 — A consideration of the needs and capacities of users in designing the GHG Reporting System

5 – 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

Bringing together the broader understanding of the issues with the Guiding Principles above, the guidance defines a series of key design elements and choices that inform a robust GHG Reporting System. The choices made and the rationale for them will be unique to each ISEAL member, though all can use this articulation to convey consistency with the Guiding Principles.

A GHG Reporting System is the summation of the choices made under each of the eight elements:

Table 4: GHG Reporting System Design Elements

Design Element	**Description/Example**
1 – Definition of scope and boundary of the GHG Reporting System	This element describes how producers are included, which greenhouse gases included and the energy and land/marine management sources of emissions that are relevant.
	Example: One member includes all gases and process up to farm gate; another also includes an option for transport. Each member stratifies slightly differently, one by variety, the other by climate zone and variety. Each can explain its rationale for why this is appropriate.
2 – Definition and scope of accounting approach	This element describes how supplier information is stratified (for example by variety, practice, country, geography or climate) and how the emissions

	information will be accounted. This could include full LCA or process specific or a hybrid. It also describes the structural approach in terms of who in the system is responsible for quantification and using which tools.
	Example: One member creates a sophisticated, centralised, mandatory digital tool for all certificate holders to use. Another creates clear principles but allows individual certificate holders to bring forward approaches for approval by their Assurance Provider.
3 – Approach to quantifying emissions data	This element describes, in tandem with Element 2, how the actual quantification is calculated in line with good practice.
	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.
4 – Approach to claimant causality and attribution	This element describes how the system ensures that companies correctly report certified commodities that are relevant and associated with their supply, including how their purchases and choices may cause beneficial change.
	Example: One member 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.
5 – Approach to assurance	This element describes how accounting and reporting in Elements 1 to 4 are assured.
	Example: The member that chose a mandatory, central tool only requires its Assurance Providers to check that the tool has been used correctly. The member 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.
6 – Relationship with impact metrics and other mechanisms, including carbon markets	This element describes any other elements of the member's system that relate to impact claim and how this is managed with regards to matters such as double counting, where relevant.
	Example: A member 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. For example, a company may wish to purchase certified commodities and support farmers to restore the wider landscape, with the latter not necessarily falling under their Scope 3 boundary. Another member has a large number of certificate holders issuing credits for carbon offsetting and needs to deduct these from the information being ascribed to companies.

7 – Approach to certificate and license holder claims	This element describes how all the previous elements come together in how claims are managed. *Example: One member creates bespoke claims guidance and advises its corporate community to use them, another refers to ISEAL Good Practice Guides while a third decides to proactively 'police' claims, requiring the removal of any public claims that do not adhere to their policies.*
8 – System M&E and capacity building	This element describes how the member 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. *Example: One member appoints a team to monitor the impact and efficacy of its CRSD whilst another commits to periodic review, working with an expert partner. Both create training and capacity programmes for a variety of stakeholders involved.*

Each member applying this Guidance will be at different stages of maturity. Some will have fully developed systems and could use this guidance to review and update and to start to communicate their systems in a way that is consistent with others in the community. Other members may have no systems in place at all and are only approaching the question for the first time upon picking up the Guidance. In way this can be advantageous, allowing for the 'designing in' of the elements from the start.

In all cases, members should be reassured that this is a complex space and it is not easy to fully comprehend all moving parts at first walk through. Further, members should not fear being transparent on any limitations in their system as it stands today, as continual improvement is essential. It is better to have a system with limitations transparently communicated, than having no system at all (or worse, a system that hides its limitations).

3.2 | Conclusions and next steps

Engaging with credible climate action and reporting can be daunting and technically challenging. This starting guidance document has attempted to navigate stakeholders through key principles as a starting point, but ultimately the best people to integrate these ideas into standards systems are the communities of stakeholders themselves.

The logical next step for ISEAL members is to follow the companion Guidance document that includes each element described in Section 2.5, broken down into greater detail and rationale. This will allow the creation of a credible GHG Reporting System and the associated tools needed to implement it.

TERMS & DEFINITIONS

This document provides a unified set of terminology to both inform the programme development and its future application. Terminology in climate mitigation can be inconsistent and hence a centralised reference point will be important. Where needed, synonyms will be provided to link back to key third party reference points and common ISEAL language. Generally all technical terms align with GHG Protocol definitions from the Corporate and Value Chain standards (key terms from these documents are repeated below for ease of reference):

Accounting: the process of measuring and quantifying the greenhouse gas emissions of an organisation.

Boundary: the definition of which activities and areas and their associated emissions are accounted and reported by an organization as part of their inventory.

Climate mitigation hierarchy: the hierarchy of mitigation priorities including avoidance of emitting activities, reduction of emitting activities and or the emissions associated with them and taking responsibility for residual emissions, for example, by offsetting.

Disclosure: the act of transparently publishing emissions reports, typically via a third-party platform such as CDP.

Emissions: the release of greenhouse gases into the atmosphere.

Emissions Factor: [from Greenhouse Gas Protocol] A factor that converts activity data into GHG emissions data (e.g., kg CO_2 e emitted per liter of fuel consumed, kg CO_2 e emitted per kilometer traveled, etc.).

ESG: Environmental, Social and Governance metrics used to report on and potentially assess the performance of an organization in these areas.

Global Warming Potential (GWP): [from Greenhouse Gas Protocol] A factor describing the radiative forcing impact (degree of harm to the atmosphere) of (GWP) one unit of a given GHG relative to one unit of CO_2.

Greenhouse Gases: [from Greenhouse Gas Protocol] For the purposes of this standard, GHGs are the six gases covered by the UNFCCC: carbon dioxide (CO_2); methane (CH_4); nitrous oxide (N_2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).

Greenhouse Gas Protocol (GHGP): the pre-eminent organisational accounting and reporting standard for emissions.

Impact or outcome metric: a unit of measurement related to an outcome or impact generated by an action, for e.g. Emission Reductions.

Inventory: the summation of an organizations emissions determined through the accounting processes defined by the Greenhouse Gas Protocol.

Purchased Goods and Services: the first category of Scope 3 accounting, relating to activities, areas and emissions associated with the goods and services purchased by an organization. In the context of this guidance activities include production, processing, packaging and transport.

Reporting: the process of reporting of accounted emissions in an inventory format

Science Based Target: an emissions abatement target that is set using a credible methodology, such as those published by the Science Based Targets Initiative.

Scope: categories of emissions defined by GHGP, representing direct and indirect emissions.

Stratification: the process of assessing potential variables that define groups of producers, for example by physical, technological and practice-based approaches.

Tiers: actors in the supply chain, arranged by their relative position to the purchasing company. For example, a Tier One supplier sells goods directly to the reporting company.

tCO_2e: metric used for reporting greenhouse gas emissions, by assessing each individual gas as relative/equivalent to Carbon Dioxide, for ease of reporting.

Value Chain/Supply Chain: Value Chains are the full upstream and downstream emissions associated with a company's activities. Supply Chains are upstream only.