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# Addressing agricultural scope 3 emissions: Best-practice principles for Within Value Chain Mitigation

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## 1. Introduction

### 1.1 The challenge at hand

Agriculture is facing a growing set of challenges that threaten the sustainability and resilience of food production systems worldwide. Whilst being critical to feeding human populations and a major source of livelihoods, the food and agriculture sector contributes significantly to greenhouse gas (GHG) emissions and is linked to soil degradation, deforestation, land conversion, and adverse impacts on water resources. In addition to these environmental impacts, agriculture is highly vulnerable to climate change impacts. Shifts in temperature and precipitation, evolving pest and disease patterns, and increasingly frequent extreme weather events are already impacting food production and global food security<sup>1</sup>.

These pressing issues highlight the need for a transition to sustainable land management practices in the agricultural sector. Reducing emissions in the agriculture sector is an essential component of global efforts to limit global warming to 1.5°C compared to pre-industrial levels as outlined in the Paris Agreement (2015). The agricultural sector is also uniquely positioned to deliver carbon removals (also known as carbon sequestration) through improved land and soil management. Agriculture is estimated to be able to deliver approximately 35% of cost-effective land-based mitigation, equating to between 2.8 and 4.8 GtCO<sub>2</sub>e/y<sup>2</sup>. In many countries, including the UK, improving use of agricultural land is a key part of the Net Zero strategy, with a focus on increasing tree planting, peatland restoration, and encouraging low-carbon farming practices such as controlled-release fertilisers and improving livestock health<sup>3</sup>. Such interventions also have potential to support adaptation to climate change and efforts to address the global biodiversity crisis.

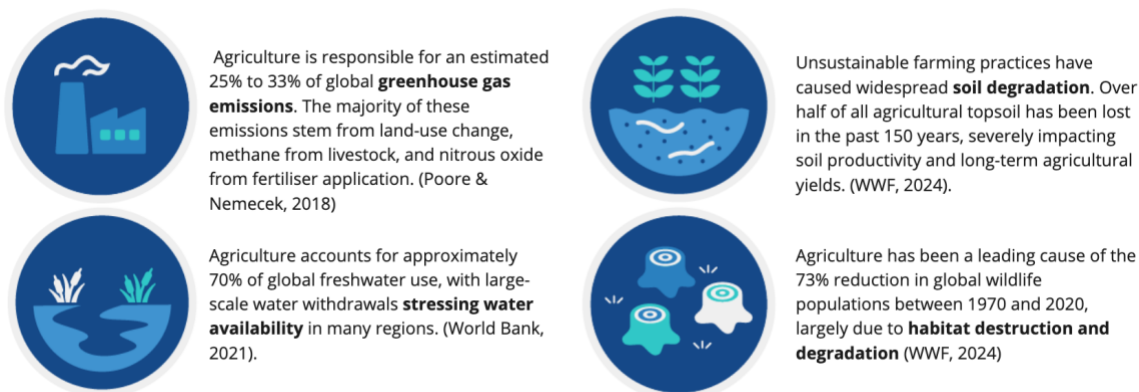


Figure 1: Summary of environmental impacts of agriculture, underscoring the need for sustainable transformation in the sector.

<sup>1</sup> Dokken, D. et al. (2014). Food Security and Food Production Systems. in Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the IPCC. Cambridge University Press.

<sup>2</sup> Roe, S. et al. (2021). Land-based measures to mitigate climate change: Potential and feasibility by country. Global Change Biology. Volume 27, Issue 23, p6025-6058.

<sup>3</sup> Committee on Climate Change (2020). Land use: Policies for a Net Zero UK. [Link](#).

Whilst the benefits can be substantial, making a transition to sustainable agriculture can present multiple challenges for farmers. Sustainable land management practices, such as crop rotation, reduced tillage, and cover cropping, often require upfront investments and may lead to short-term yield reductions before long-term benefits are realised, leading to financial risk for farmers. Additionally, farmers may lack access to the training, specialised knowledge, and resources needed to implement new sustainable methods effectively. Limited financial support and market incentives can further deter farmers, leading to uncertainty about the economic benefits and stability of transitioning away from conventional methods. To address these uncertainties and risks, it is crucial that actions taken by supply chain organisations to meet Net Zero targets in agricultural contexts are co-developed alongside farmers, ensuring that farmers are treated and rewarded fairly.

## 1.2 The potential for Within Value Chain Mitigation (WVCM)

Within Value Chain Mitigation (WVCM), a subset of a wider group of activities commonly referred to as insetting, has gained traction globally as an approach for organisations within the agrifood sector to support a shift to climate and nature-friendly land management practices. Beyond driving investment in agricultural landscapes to deliver climate change mitigation outcomes, WVCM can build resilience to climate change and support positive outcomes for nature, farmers, and rural communities.



Figure 2: Summary of opportunities presented by WVCM for agrifood businesses.

Companies in land-intensive sectors setting targets with the Science-Based Targets initiative (SBTi) are also required to set Forest, Land, and Agriculture (FLAG) targets covering land-based emissions and removals<sup>4</sup>. FLAG targets have provided an incentive for organisations to measure and reduce the land management and land use change emissions associated with the production and rearing of agricultural raw materials, increase carbon sequestration on productive lands, and prove that no deforestation has occurred. Achieving these climate targets requires immediate, ambitious, and sustained action to reduce value chain emissions, reduce environmental impacts, and increase carbon removals.

In line with the mitigation hierarchy, companies should make every reasonable effort to minimise their own impact, and that of supply chain partners, taking ambitious action within value chains consistent with a science-aligned pathway, before using credits in voluntary

<sup>4</sup> Alongside setting FLAG science-based targets, companies in FLAG sectors are required to set a no-deforestation commitment with a target date no later than 2025 in line with the [Accountability Framework initiative \(AFi\)](#).



markets<sup>5</sup>. Increasing scrutiny on organisations to disclose environmental and social impacts, including scopes 1, 2, and 3 greenhouse gas emissions, through reporting standards such as the Corporate Sustainability Reporting Directive (CSRD) and International Sustainability Standards Board (ISSB) Standard 2 has sparked interest in WVCM as a potential solution to meet significant and challenging scope 3 emission targets. On the other hand, offsetting, which involves compensating for emissions by supporting projects outside of a company's value chain, cannot contribute to the achievement of FLAG targets<sup>6</sup>. Value chain traceability to the production landscape is a prerequisite to distinguish WVCM activities from offsetting<sup>7</sup>, with the increasing availability of supply chain traceability data<sup>8</sup> further driving the uptake of WVCM.

Although WVCM initially arose as a mechanism for corporate climate action, there is growing understanding that these activities can lead to co-benefits for nature and biodiversity and deliver positive social impact by supporting local communities and enhancing livelihoods. Additionally, WVCM activities can reduce vulnerability to climate risks, helping to secure a climate-resilient supply of agricultural raw materials. Engaging in WVCM can strengthen relationships with suppliers, building collaborative supply chains and ensuring greater transparency and accountability in corporate sustainability efforts. WVCM provides an opportunity for actors throughout the supply chain - from farmers, through to processors and retailers - to collaborate and co-fund activities that support sustainable land management. This can enable the scale of activities to increase from individual projects to landscape-level WVCM with multiple stakeholders and wider impact. Certain approaches can allow the benefits to be co-reported by actors in the supply chain, further incentivising collaboration. Effective WVCM design can share risk and support farmers to be fairly rewarded as they transition toward sustainable land management. Finally, in the long term, WVCM can support cost efficiencies through improved resource management and sustainable practices, enhancing long-term financial performance<sup>9</sup>.

### **1.3 The UK context for WVCM**

Whilst a number of the drivers for action on WVCM come from global frameworks and guidance such as SBTi FLAG, the market is also evolving rapidly nationally. In the UK there is existing and developing national guidance to support companies in different sectors to set and report on meaningful environmental targets through the UK Government's voluntary Environmental Reporting Guidelines. In addition to the reporting guidelines, the UK government has developed two standards that provide guardrails for organisations to take

<sup>5</sup> Department for Energy Security & Net Zero (2024). Principles for voluntary carbon and nature market integrity. [Link](#).

<sup>6</sup> Offsetting is a form of Beyond Value Chain Mitigation (BVCM) and can be used for BVCM compensation targets or as part of the SBTi pathway through neutralisation of residual emissions.

<sup>7</sup> The Greenhouse Gas Protocol's Land Sector and Removals Guidance outlines the value chain traceability requirements that define WVCM activities, distinguishing activities that can contribute to scope 3 targets (WVCM) from those that cannot (offsetting or beyond value chain mitigation activities).

<sup>8</sup> The upcoming European Union Deforestation Regulation will require companies to verify that purchased products and commodities did not cause deforestation. Compliance with the regulation will be associated with advances in supply chain transparency, enabling organisations to link these advances in traceability to investments in value chain emissions reductions and carbon removals.

<sup>9</sup> Responsible Investor (2024). Big Read: How can investors move the needle on regenerative agriculture? [Link](#).



robust climate action. These include Principles for Voluntary Carbon and Nature Markets (published November 2024), which are significant in signalling that businesses should engage with integrity in voluntary action. In addition, the UK and its devolved governments has launched a flagship programme with the British Standards Institute (BSI) to work with industry, academia, non-profits and expert bodies to deliver a suite of Nature Investment Standards covering the supply of units that create environmental benefits for use or trade for application in the UK. This includes overarching principles for all UK nature markets and market-specific standards that will support nature-based carbon removals, biodiversity uplift, and nutrient mitigation. These guidance documents intend to drive robust and high-quality corporate climate action.

#### **1.4 Research objectives**

This research was funded by the UK Department for Energy Security and Net Zero (DESNZ)'s International Forest Unit (a joint unit with the Foreign, Commonwealth and Development Office) and the Department for Environment, Food, and Rural Affairs (Defra). It was borne out of interest from DESNZ and Defra in the potential for WVCM to support supply chain resilience, provide an additional income stream for farmers, and address emissions from the forestry, land use and agriculture (FLAG) sector, including from deforestation and land conversion. Alongside these factors, this research addresses a shared DESNZ and Defra priority to explore best practice for businesses managing direct and indirect value chain environmental impacts through implementing WVCM. While WVCM can offer significant benefits in relation to the above challenges, the approach is not universally understood or accepted. Ongoing reporting and debate about the impact and effectiveness of carbon credits purchased on the voluntary carbon market<sup>10</sup> hindered trust in the market and reduced the average price of voluntary market credits by 11% in 2023<sup>11</sup>. There are concerns that WVCM, if applied incorrectly, could suffer from similar challenges. Specific concerns include the lack of formal definition for WVCM, complex and continually evolving guidance on requirements for measuring and reporting outcomes, and uncertainty surrounding the financial implications of WVCM.

This research has been designed to explore and exemplify, through a series of principles (Section 3) and scenarios (Section 4), what best practice looks like for WVCM, and the practical implementation steps, challenges and variables that need to be considered. This document does not look to replace existing guidance such as the Greenhouse Gas Protocol (GHGP) Land Sector and Removals Guidance, but rather to consolidate essential resources and offer principles for best practice to support companies to navigate the complex process of WVCM, in alignment with the GHGP.

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<sup>10</sup> Ecosystem Marketplace (2024). 2024 State of the Voluntary Carbon Market (SOVCM). [Link](#).

<sup>11</sup> Statista (2024). Average price of voluntary carbon market (VCM) credits worldwide from 2021 to 2023(in U.S. dollars per metric ton of carbon dioxide equivalents). [Link](#).

**Intended audience**

This research is targeted at Chief Sustainability Officers and decision-makers within organisations in the agriculture and land-use sector that sit downstream from farms, including processors, manufacturers, and retailers. This group was selected as the target audience as these organisations play a pivotal role in shaping agricultural supply chains, have the purchasing power and influence to implement WVCM activities at scale, and are accountable to market and consumer demand for sustainable products. Due to these factors, downstream organisations will typically initiate and develop WVCM activities. Other organisations, such as actors sitting upstream from farms (including agri-input providers) and financial sector actors can play a key role in developing and financing WVCM and can draw useful insights from this work despite not being the primary audience. As research funded by the UK government, this work is focussed on organisations with a presence in the UK and considers the UK policy context, but the majority of the standards and guidance referred to in the principles and recommendations are globally applicable.

Although this work is targeted at downstream organisations, stakeholders from farming backgrounds and from the wider enabling environment were consulted in the preparation of the recommendations to ensure a range of perspectives have been captured (see Appendix 2 for full methodology). Future work can explore socialising the learnings from this work more widely, including communicating findings with farmers.

The main body of this text (Section 1-5) focuses on the principles and recommendations for best practice WVCM, exemplary scenarios, and recommendations for future work, as the key points of interest for corporate decision-makers. In some cases, to apply the recommendations, there is a need for detailed technical understanding of certain aspects of WVCM. Where possible, additional technical information has been included in Section 5 of this document.

Additional technical information covers:

- 5.1 A detailed analysis of the drivers for WVCM activities and the current challenges associated with WVCM
- 5.2 An exploration of farmer perspectives relating to WVCM and actions that can be taken to support farmers in the transition to sustainable agriculture
- 5.3 Detail of how WVCM sits within broader corporate climate action
- 5.4 Detail about defining WVCM activities, particularly surrounding traceability issues
- 5.5 An exploration of existing WVCM methodologies and claims that organisations can make related to WVCM



## 2. Context

### 2.1 Defining Within Value Chain Mitigation (WVCM)

In this report, the term Within Value Chain Mitigation (WVCM) is used to refer to the mechanism of organisations engaging with their value chains to support activities that abate scope 3 FLAG emissions and deliver a range of co-benefits (see Box 1). The use of the term WVCM places clear boundaries around the scope of interventions and limits them to sitting solely within the value chain (and a small sub-set of adjacent and proximate lands, subject to safeguards to be outlined in the final version of the GHGP's Land Sector and Removals Guidance).

#### Box 1: Definition of WVCM

WVCM activities are interventions within a company's value chain that are designed to generate greenhouse gas emission reductions and/or carbon storage, and at the same time create positive impacts and improve the resilience of communities, landscapes and ecosystems (*adapted from [Abatable/International Platform for Insetting, 2023](#)*).

Value chain traceability to the production landscape is a prerequisite to distinguish WVCM activities from offsetting (see Figures 3 and 4).

In contrast to general scope 3 decarbonisation activities, WVCM interventions are typically targeted at the production or rearing stage of agricultural raw materials (**pre-farm gate**) and are largely based on regenerative agriculture and agroforestry practices. This paper constrains the definition of WVCM to solely considering activities that impact pre-farm gate FLAG emissions and removals and does not consider downstream activities including transportation and processing. This is to ensure the principles and recommendations outlined in Section 3 place farmers at the centre of WVCM activities and provide clear and actionable guidance to achieve this.

"Insetting" is a commonly used term for activities that include both WVCM and certain Beyond Value Chain Mitigation (BVCM) activities. There is no globally agreed definition of insetting, with the term used to describe a variety of transaction mechanisms for activities resulting in greenhouse gas emission reductions and removals **within, and surrounding**, corporate value chains. This lack of clarity, particularly around the spatial boundaries, presents several risks that undermine the effectiveness and credibility of insetting, leading to scepticism among stakeholders and reducing trust in corporate sustainability efforts.

The lack of a clear definition of insetting can result in inconsistent implementation across the industry, prompted by varied interpretations of what qualifies as insetting, creating several challenges including:

- Uncertainty surrounding where insetting can take place, and what connection (e.g. in terms of proximity) activities need to have with the value chain for a company to make claims and prove progress against climate targets,

- Risk of greenwashing, in which organisations claim to be engaging in inseting without making genuine, impactful changes,
- Complication of Monitoring, Reporting, and Verification (MRV) of inseting activities, making it challenging to assess the true environmental impact of inseting activities and make robust claims on the impact of inseting,
- Divergence in guidance produced by voluntary frameworks, standard setters, and NGOs, meaning there are no clear guardrails for inseting, resulting in underinvestment and low participation rates, slowing overall progress toward high integrity climate action.

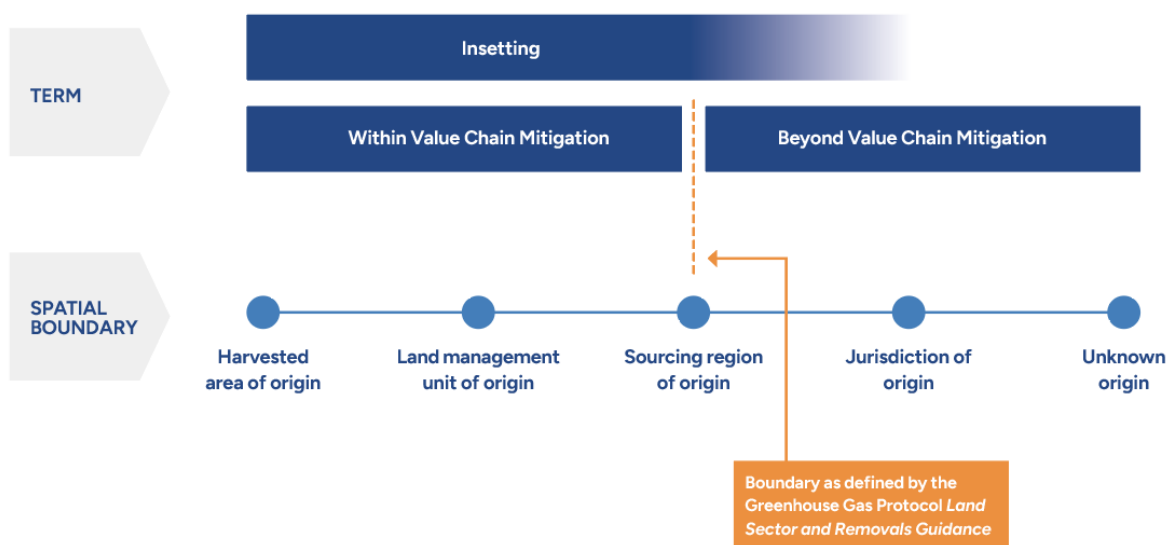


Figure 3. The GHGP states that the ability to accurately account for emissions, removals and other metrics impacted by a company's activities depends on a company's traceability to the relevant lands and activities in their operations or value chain. Companies must have traceability information for the products they purchase, and for the use of products they sell to account for product lifecycle GHG emissions, removals and other metrics. There are a range of spatial boundaries that an organisation may have traceability to (from most to least specific): harvested area, land management unit, sourcing region, jurisdiction, or global origin (see Glossary for definitions of spatial boundaries). This diagram depicts the spatial boundary to which an organisation is required to be able to prove traceability, to account for **carbon removals** within their scope 3 footprint<sup>12</sup>. This boundary differentiates activities classed as Within Value Chain Mitigation from those classed as Beyond Value Chain Mitigation.

Figure 3 depicts the traceability levels required for WVCM, described further in Section 2.3. The term "insetting" does not have firm boundaries and has been used in some cases to include certain BVCM activities. As such, this report focusses solely on WVCM activities that can contribute to scope 3 FLAG targets, as defined in Box 1. There are two key areas of uncertainty when defining WVCM:

- The scope and traceability boundaries of WVCM (see Section 2.2 and 2.3)
- Approaches for accounting for the outcomes of WVCM activities (see Section 5.5.2)

<sup>12</sup> Note that this distinction applies to reporting of carbon removals only. For emission reductions, organisations could engage in WVCM activities at the jurisdictional level, although this would require working with large numbers of producers to reduce the overall jurisdictional emission factor.



## **2.2 Challenges in defining WVCM and establishing traceability boundaries**

The boundaries of activities that are included within the definition of WVCM, and whether WVCM can extend beyond the accounting boundaries of emission reductions and removals within a company's supply chain (scopes 1, 2, and 3), is the subject of much discussion. As outlined in Box 1, WVCM refers to activities that lie within an organisation's value chain. However, there is uncertainty as to the level of traceability required for an organisation to claim that a farm lies within its value chain.

Traceability refers to the ability of a company to identify, track, and collect information on activities in its value chain, across its upstream and downstream processes and products. In the context of WVCM, the term traceability relates to the ability of organisations to trace the provenance of the commodities that they purchase back to the land management unit where the commodity was originally produced.

Traceability is important to ensure that organisations can robustly prove that WVCM activities lie within their value chain, and that the impact of these activities should contribute to the achievement of their organisational value chain (scope 3) targets. In reality, agricultural supply chains can be extremely complex, with multiple levels of processing before a downstream company receives the commodity. This makes traceability extremely challenging as different provenances can be mixed at each stage of processing. Secondly, traceability information is often commercially sensitive, disincentivising processors to share traceability information with supply chain companies. Additionally, in practice, organisational sourcing will vary year-on-year, particularly in rotational crop systems where farm production varies annually. Therefore, the level of traceability required to claim that a farm lies within an organisation's supply chain needs to balance the realities of supply chains with the need for robustness. There is debate over the appropriate balance between these two factors, leading to much of the uncertainty surrounding the implementation of WVCM.

## **2.3 Greenhouse Gas Protocol traceability requirements**

The GHGP requires organisations to prove that farms and WVCM activities accounted for in an organisation's GHG inventory are connected to the organisation's value chain. The way that organisations can prove this is through traceability to the farms that supply them. There are a range of spatial boundaries to which an organisation may have traceability (from most to least specific): harvested area, land management unit, sourcing region, jurisdiction, or global origin (see Glossary for definitions of spatial boundaries). Section 5.4.2 explores which chain of custody models are suitable for proving physical traceability to the spatial boundary. These requirements are necessary to avoid double counting and greenwashing within corporate GHG inventories.

The GHGP draft Land Sector and Removals Guidance defines the spatial boundary to which organisations are required to prove traceability, to account for carbon removals from activities implemented by organisations, as shown in Figure 3. Organisations wishing to report the impact of WVCM activities against science-based targets will need to align with the definitions provided by the GHGP. As reporting against climate targets is one of the key



drivers of the uptake of WVCM, for the purpose of this document, the scope and boundaries of WVCM are aligned with the GHGP requirements for traceability to a spatial boundary.

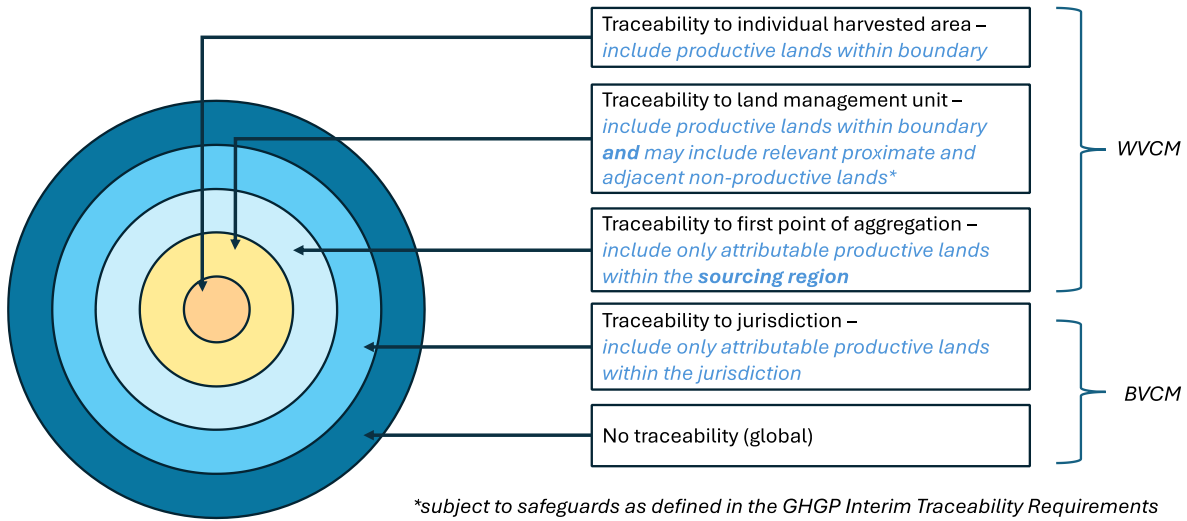


Figure 4: Traceability to spatial boundaries required for organisations to report carbon removals impacts of WVCM activities in corporate greenhouse gas footprints, according to the GHGP draft Land Sector and Removals Guidance and Interim Traceability Requirements.

As shown in Figure 4, to account for and report carbon removals within a value chain, organisations must be able to demonstrate physical traceability to the first point of aggregation (a **sourcing region**<sup>13</sup>). As such, the sourcing region is the minimum spatial boundary required for an organisation to account for carbon removals within a scope 3 inventory and to class activities as WVCM. If these requirements are not satisfied, activities would not meet the GHGP requirements for traceability and, for the purpose of reporting, would be classed as BVCM activities (note that these requirements relate to reporting carbon removals, and that these levels of traceability do not need to be met to report emissions reductions).

The sourcing region is a relatively recent concept and is defined by the GHGP as a predefined, spatially explicit land area that supplies harvested biogenic materials to the first collection point or processing facility in a value chain (the first point of aggregation). Within this land, all farms that are relevant to the commodity of interest are counted as lying within the sourcing region. For example, for a crop such a corn, the sourcing region is defined as all croplands within the defined sourcing region where the crop type (corn) purchased by the reporting company were harvested in the reporting year. The GHGP draft Land Sector and Removals Guidance provides more detail on the safeguards referred to in Figure 4, these are

<sup>13</sup> Alongside the sourcing region concept, the term “supply shed” has also emerged. Organisations use different boundaries when defining the supply shed. Some organisations, such as the Value Change Initiative, have developed a broader definition of the ‘supply shed’, which does not apply in the context of this project. As such, in this report, we will refer to the sourcing region as opposed to the supply shed.



expected to be confirmed when the final guidance is issued (expected Q1 2025 at the time of writing).

This level of traceability balances the need for practicality and robustness by assuming that all relevant farms within the sourcing area of the first point of aggregation are likely to lie within the organisation’s supply chain. Activities that are implemented in supply chains that do not have the required traceability to the first point of aggregation will be considered beyond value chain mitigation (BVCM)<sup>14</sup>.

**2.4 Implementation of WVCM**

The growing interest in the potential of WVCM to deliver benefits across climate mitigation, adaptation, and nature has led to a proliferation of organisations supporting the implementation and scale-up of WVCM activities, including programme developers and monitoring, reporting, and verification (MRV) providers, and the publication of guidance documents, as displayed in Figure 5.

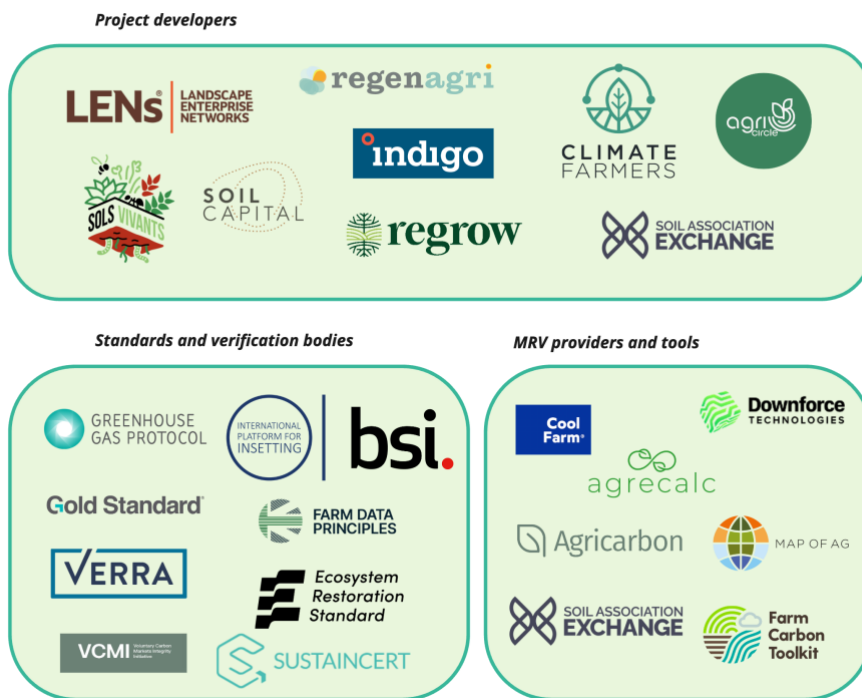


Figure 5: A stakeholder map showing the variety of project developers, verification bodies, MRV providers, and standards organisations involved in the WVCM space. Note that this diagram is not comprehensive and serves to illustrate the diversity of organisations working in the space. See glossary for definitions of project developers, standards and verification bodies, and MRV providers.

<sup>14</sup> This boundary only applies to accounting for carbon removals. If considering emission reductions only, organisations could engage in WVCM activities at the jurisdictional level, although this would require working with large numbers of producers to reduce the overall jurisdictional emission factor.



Despite the growing number of organisations and guidance documents relating to WVCM, there is still significant uncertainty surrounding the approach. Section 5.1 provides an in-depth exploration of the opportunities and challenges associated with WVCM.

This research focuses on WVCM activities, as defined in this section, to offer recommendations and guidance that are actionable and practical for organisations wishing to engage in WVCM. However, alongside WVCM activities, organisations should also consider projects beyond the scope of WVCM to address unabated environmental impacts, including approaches outside of their value chains to drive positive impacts across entire production landscapes. Section 5.3 explores in detail how WVCM sits within a broader corporate climate strategy.

### ***2.5 Farmer engagement***

The activities required to deliver WVCM can present both challenges and opportunities for farmers. While sustainable land management practices may involve upfront investments and occasional short-term yield reductions, many WVCM activities, such as precision feeding, and improved nutrient management, can enhance resource efficiency, lower costs over time, and ensure continued food production in a changing climate. However, implementing these practices often requires adequate training, specialized knowledge, and access to financial support or market incentives, highlighting the importance of collaboration and support from downstream supply chain actors to ensure successful adoption. These challenges can lead to a lack of trust and transparency within the supply chain, reducing farmer appetite for involvement in WVCM. It is crucial that WVCM activities are designed and centred around farmer perspectives, with outcomes that speak clearly to the farmer need as well as the corporate need, to ensure the success and longevity of activities. Explicit attention is needed to address questions of risk and benefit sharing within WVCM initiatives, with activities needing to make business sense to a farmer as well as the supply chain partner. For further detail on farmer perspectives of WVCM and actions that can be taken to support farmers, refer to Section 5.2.

### ***2.6 WVCM process map and stakeholder engagement***

For an organisation that has agriculture and land use in its supply chain, the typical steps involved in developing and implementing WVCM activities are summarised in Figure 6.



Figure 6: A process map depicting the typical implementation steps an organisation implementing WVCM activities.

The process map in Figure 6 above outlines the high-level steps an organisation takes when implementing WVCM. Each of the steps outlined requires collaboration with other actors, including farmers, supply chain organisations, local stakeholders, and NGOs. Figure 7 below summarises the key stakeholders for organisations to engage with at each stage of WVCM design and implementation, as well as providing explanatory text with further detail on the actions required at each step in the process map.



## 2.7 Stakeholder map for WVCM process

Although the process map and accompanying text in Figure 6 provides a starting point for organisations developing and implementing WVCM activities, there is a need for detailed guidance on aspects of best practice implementation of WVCM. These principles and recommendations for best practice are summarised in Section 3. The link between the recommendations and steps of WVCM implementation are summarised in Figure 7 below. Together, the process map and the principles and recommendations provide a step-by-step guide for organisations engaging in WVCM, particularly when considered alongside the scenarios.

Figure 7: A table summarising the key stakeholders involved in each stage of developing and implementing WVCM activities. There is a link to the recommendations (outlined in Section 3.3) to consider at each stage of implementation. The design and implementation of WVCM activities is highly dependent on the selected supply chain (including levels of traceability, relationships with farmers, and geopolitical context). As a result, there are a range of potential approaches organisations may take to address supply chain-specific challenges and important variables, explored in detail in the scenarios (Section 4). Section 5.5 explores the types of claims that organisations can make from WVCM activities, and the impact that project design and approach have on MRV and the types of claims that can be made.

Key: ★: High involvement ☆: Low involvement

Process step	Stakeholders involved in process step							
	FLAG business developing WVCM activities	Farmer	First point of aggregation (cooperative, mill)	Supply chain organisations (processors, manufacturers, retailers)	Implementation partner and project developer	MRV provider	Local stakeholders and NGOs	Reporting and verification team (internal or external)
<p><b>STEP 1: Conduct risk and materiality assessment to select high impact commodities and regions</b></p> <p>Links to: Recommendation 1 (p20)</p>	★			★			★	★
<p><b>IMPLEMENTING STEP 1:</b></p> <p>The first step of engaging in WVCM is for organisations to select suitable supply chains and regions to implement activities. Activities should be targeted to supply chains with the greatest potential impact for climate mitigation and nature and social outcomes. To select focus areas for WVCM, organisations should prioritise carrying out a double materiality assessment, exploring and building traceability, understanding political and enabling environment in key sourcing regions, engaging with farmers, and considering the organisation’s ability to have impact in an area. These assessments will support organisations to select suitable supply chains in which to implement WVCM activities.</p>								



<p><b>STEP 2: Engage stakeholders to co-design activities, MRV, and farmer incentives</b></p> <p>Links to: Recommendation 2, Recommendation 3 (p21)</p>	★	★	★	☆	★	☆	★	☆
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**IMPLEMENTING STEP 2:**

Once a suitable supply chain to implement WVCM has been selected, organisations should engage with a range of stakeholders to co-design the activities to set the foundations for robust, impactful, and fair WVCM implementation. These activities include:

- Consulting with farmers and local actors to ground-truth identified challenges and develop goals, considering multiple outcomes,
- Identifying existing projects in the landscape and partnering with local project developers, suppliers, supply chain actors, and the wider stakeholder ecosystem to integrate WVCM activities into existing landscape land use strategies,
- Engaging with farmers or the first point of aggregation to establish traceability and data sharing systems,
- Develop incentive mechanisms and ensure that WVCM is attractive to farmers, collaborate with other stakeholders to develop co-funding mechanisms, and engage with supply chain organisations to harmonise data collection requirements,
- Engaging with MRV providers to design an MRV system that is aligned with key accounting frameworks, reduces the data burden placed on farmers, is cost and time-effective, and is proportionate to the types of claims the implementing organisation wishes to make,
- Formulating agreements with farmers to support outcome permanence and right to report outcomes for all stakeholders,
- Designing appropriate safeguards for implementation.

<p><b>STEP 3: Co-implement WVCM activities, fairly rewarding farmers</b></p> <p>Links to: Recommendation 4, Recommendation 5 (p 24)</p>	★	★	☆	☆	★	☆	☆	
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**IMPLEMENTING STEP 3:**

Once WVCM activities move into the implementation phase, organisations are likely to partner with a local project developer responsible for day-to-day coordination of the WVCM activities.

It is crucial for the project developer to provide farmers with the necessary support to transition to sustainable land management practices, and fairly distribute the value gained from WVCM with farmers. This includes the training to support farmers to implement the data collection processes required to meet the necessary MRV needs of the WVCM activities. To ensure longevity of WVCM, project developers should establish multi-stakeholder governance mechanisms and adapt management of activities based on successes and challenges.



<p><b>STEP 4: Collect data to robustly and conservatively determine activity impacts</b></p> <p>Links to: Recommendation 6, Recommendation 7 (p 27)</p>	★	★	☆	☆	★	★		☆
<p><b>IMPLEMENTING STEP 4:</b> Prior to the implementation of WVCM activities, MRV providers should carry out a baseline assessment of the sourcing region and farms that will be part of WVCM activities.</p> <p>As the WVCM activities are implemented, progress across several outcome areas (climate change mitigation, adaptation, nature, water, or social outcomes) should be monitored regularly and reported to key participants. This encourages accountability of all partners to ensure WVCM is delivering the anticipated outcomes.</p>								
<p><b>STEP 5: Report outcomes and adaptively manage activities</b></p> <p>Links to: Recommendation 6, Recommendation 7 (p 27)</p>	★	☆	☆	★		★		★
<p><b>IMPLEMENTING STEP 5:</b> MRV providers should support organisations to regularly report on the outcomes of WVCM activities, following the key principles for transparency, conservativeness, and robustness. Project successes and challenges should be regularly reviewed, and management of WVCM activities should be updated based on project progress.</p>								
<p><b>STEP 6: Share learnings to support scaling of WVCM activities</b></p>	★		☆	★	☆		☆	☆
<p><b>IMPLEMENTING STEP 6:</b> Learnings and knowledge from implementation of WVCM projects should be used to support the establishment and scaling of projects in other supply chains. Learnings can also be used to increase the scale of project to support landscape scale/BVCM approaches outside of organisational supply chains.</p>								

## 3. Principles for best-practice implementation of WVCM activities

### 3.1 Methodology

The principles set out in this section, and the guidance contained in the rest of this report, were initially developed through a review of existing literature before being refined through a stakeholder engagement process, as outlined below.

1. Literature review
2. Advisory Group engagement
3. Stakeholder engagement workshops
4. Scenario-specific stakeholder engagement

The literature review focused on the motivations and drivers for engaging in WVCM, the current context of WVCM, and the gaps and opportunities. This allowed the development of an initial set of principles for best practice, which was refined through stakeholder feedback. The full methodology for this work is outlined in Appendix 2.

### 3.2 Principles for best practice WVCM activities

The goal of the three principles outlined in this section is to support decision makers in downstream FLAG businesses in implementing WVCM activities that are impactful, robust, and benefit all stakeholders in the supply chain.

- **Principle 1:** On-the-ground impact of WVCM is maximised through pre-competitive collaboration, with efforts directed toward delivering multiple outcomes in high impact value chains.
- **Principle 2:** WVCM activities support farmers to build resilience in a changing climate and provide value to farmers by sharing risk and ensuring they are fairly rewarded for engagement.
- **Principle 3:** Monitoring, Reporting, and Verification (MRV) systems are sufficiently robust to quantify the outcomes of WVCM activities, whilst taking a balanced, harmonised, and proportionate approach.

To further support organisations to align with these principles, seven recommendations have been developed to aid their practical implementation. The recommendations guide organisations through the process of developing and implementing WVCM activities, although organisations may also wish to work with a formal project development partner to implement projects on the ground. More detailed information on the recommendations is set out in Section 3.3.

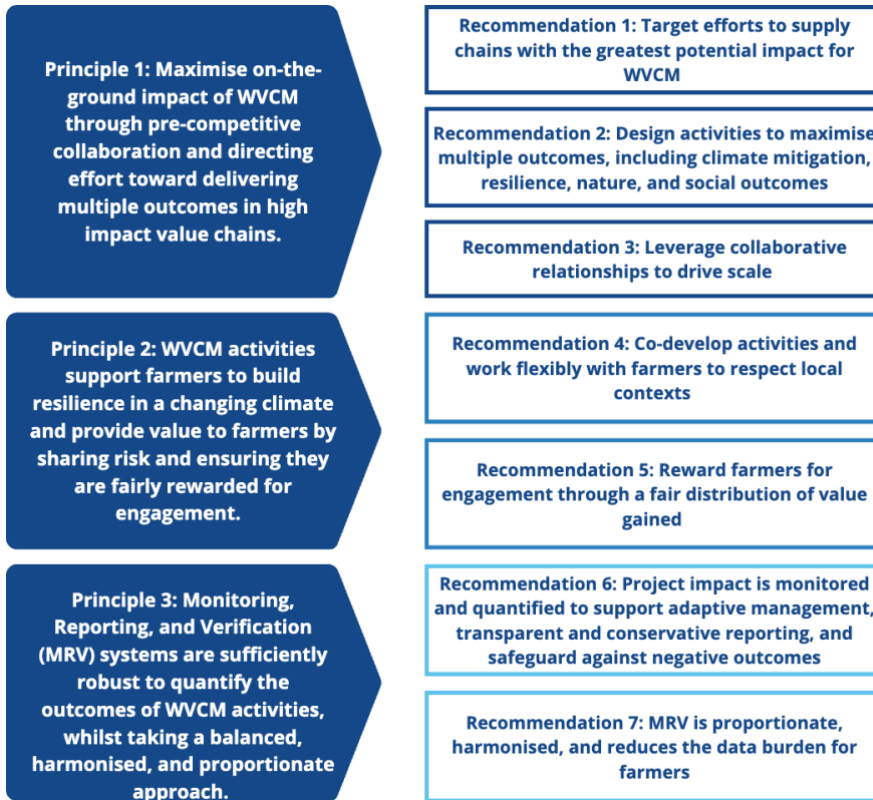


Figure 8: Principles and recommendations for best practice implementation of WVCN activities.

The principles, combined with the practical recommendations, are not intended to be a substitute for a formal project development process but are designed to be practically feasible, in supporting the identification of effective actions to deliver outcomes for climate, nature and people through WVCN activities.



### 3.3 Implementation of best practice principles

#### Recommendations aligned with Principle 1:

Maximise on-the-ground **impact of WVCM** through pre-competitive collaboration and directing effort toward delivering multiple outcomes in high impact value chains.

**Recommendation 1:** WVCM activities are targeted to sourcing regions within an organisation's value chain with the **greatest potential impact** for WVCM – those that are associated with high environmental impact, with sufficient traceability, and of high materiality to the organisation.

#### Applying Recommendation 1:

When selecting a sourcing region in which to implement WVCM activities, organisations should assess potential supply chains across three key factors: i) supply chain risk level, ii) traceability, and iii) materiality. These factors can be used to identify those regions in which there is the greatest potential impact for WVCM<sup>15</sup>. *Note that these factors can provide a useful starting point to identify supply chains with the greatest potential impact for WVCM, but organisations should not be discouraged from acting in other supply chains.*

- i) To identify priority supply chains for implementation of WVCM activities, organisations should assess their supply chains to identify **high risk and high impact sourcing regions** (geographical regions supplying a specific raw agricultural material). High-risk and high impact sourcing regions may be associated with high land-based emissions, detrimental environmental impacts (such as reduced water quality or availability, reduced biodiversity, land degradation, or deforestation), or with low resilience to climate change. This risk assessment should draw on impact assessments organisations may have done, such as an organisational GHG footprint or a double materiality impact assessment (e.g. [Corporate Sustainability Reporting Directive \(CSRD\)](#), [Task Force for Climate-Related Financial Disclosures \(TCFD\)](#), or [Taskforce for Nature-Related Financial Disclosures \(TNFD\)](#)). Organisations may wish to consider additional social and/or governance indicators, including poverty, labour rights, or land rights when selecting priority supply chains for WVCM. Organisations should work to address the environmental impacts and build resilience in the most high-risk sourcing regions identified through the risk assessment process instead of shifting sourcing away from high-risk landscapes.
- ii) Within the identified priority sourcing regions, WVCM activities need to be targeted to supply chains with **sufficient traceability** to the farm – either direct relationships with the farmer or by applying the sourcing region concept (see Section 5.4.1 for further detail on the benefits and drawbacks of the sourcing region model). A common challenge is that highest-risk supply chains are often those with

<sup>15</sup> Evaluation of potential impact of WVCM activities depends on the accounting framework used. For example, under certain accounting frameworks, REDD+ projects or programs may have the greatest impact, based on performance relative to a counterfactual baseline. However, these benefits will not be reflected in a GHG inventory context through tracking land use change emissions. For further discussion of suitable accounting frameworks for WVCM, see Section 5.5.1.

the lowest traceability. Where there is insufficient traceability to the farm, organisations can build traceability by i) engaging with suppliers to develop technical capability through traceability schemes/ digital traceability solutions, ii) build trust and transparency by developing longer-term relationships and contracts with suppliers and farmers, iii) incentivising the sharing of traceability data, or iv) exploring sourcing certification as a means of ensuring traceability (see Section 5.4.2 for discussion on certification as a tool for traceability).

- iii) Finally, organisations should consider targeting WVCM activities to the supply chains that are **most material to their business** – due to volume procured from the region and the irreplaceability of the product sourced. Irreplaceable products may be associated with low sourcing volumes but, if they can't be sourced elsewhere and are central to an organisation's operations, could be a target of WVCM activities. These material sourcing regions are typically where an organisation has the greatest ability to have impact – other important factors to consider include existing relationships with farmers or suppliers, and the existence of pre-existing projects/activities in the area.

**Recommendation 2:** WVCM activities are designed to deliver emissions reductions and/or carbon removals and address **multiple outcomes**, including supporting climate adaptation and building resilience of farmers and local communities, delivering social outcomes, and supporting a net gain in biodiversity.

*Applying Recommendation 2:*

Organisations can ensure WVCM activities deliver multiple outcomes by i) considering outcomes beyond climate mitigation in design, ii) working with farmers to co-develop activities, and iii) implementing appropriate safeguards.

- i. Organisations should consider **climate change mitigation** outcomes alongside broader outcomes including adaptation/resilience, nature, biodiversity, water, soil, communities, and supply chain fairness, when designing and supporting WVCM activities. As a starting point, the risk and materiality assessment conducted under Recommendation 1 can indicate the key concerns within the sourcing region. Project partners may be able to support organisations with scenario modelling to identify activities that deliver the greatest outcomes under expected climate scenarios. Sustainable land management practices can deliver benefits across multiple outcome areas beyond climate change mitigation, including adaptation, nature, soil health and social outcomes if the delivery of co-benefits is prioritised in the project design phase. Prioritising activities that deliver co-benefits for soil health and nature are crucial to reduce the vulnerability of agricultural systems and ensure climate-resilient and long-term project outcomes. The IUCN [Global Standard for Nature-based Solutions](#) provides guidance for projects aiming to deliver multiple outcomes, or organisations could choose to align project

development with a standard such as Verra’s [Climate, Community, and Biodiversity Standards](#) that focus on delivering multiple outcomes.

- ii. By **co-identifying and co-designing WVCM activities alongside farmers**, organisations should consider the wider surrounding landscape and the local context when implementing WVCM activities. This will reduce the risk of leakage of negative outcomes outside the project area. Additionally, this can support the identification of activities that address the root cause of negative environmental and social outcomes, leading to long-lasting impact beyond the geographical focus of the project.
- iii. WVCM activities need to be implemented with **appropriate safeguards** to ensure that activities do not exacerbate negative environmental impacts. Social safeguards including risk assessments, Free, Prior, and Informed Consent (FPIC), and accountability and grievance mechanisms are key for the longevity and success of WVCM activities. Frameworks such as WWF’s [Environmental and Social Safeguards Framework](#) (ESSF) can support organisations or project developers with developing appropriate safeguards.

**Recommendation 3:** Organisations leverage **pre-competitive collaborations** within and beyond the supply chain to design and deliver WVCM activities at scale.

*Applying Recommendation 3:*

To maximise the scale of WVCM activities, organisations should consider collaborating with i) local project developers, ii) other organisations with an interest in the landscape, and iii) with the wider stakeholder ecosystem.

- i. Organisations should **partner with local project developers or suppliers** in the selected sourcing landscapes to ensure consideration of the local context during design and implementation of WVCM and support building on-ground relationships with engaged farmers. Access to local project partners from, or ideally prior to, inception is key to ensure that activities are designed to be context-specific and address key local risks, and to provide practical support to farmers throughout implementation. There is a range of detailed project development guidance available, such as British Standards Institute’s (BSI) upcoming Flex 703 guidance, Verra’s [Scope 3 Standard Program](#), and IPI’s [Insetting Program Standard](#) to support organisations and project partners.
- ii. Organisations should **partner and/or coordinate with other supply chain actors within the sourcing landscape** to maximise the scale and impact of WVCM activities. Collaboration at a landscape level includes actors sourcing different commodities produced from the same farm or production landscape. Working with a neutral third party can be a key mechanism for driving and overseeing pre-competitive collaboration. Pre-competitive collaboration between supply chain actors can support project longevity by ensuring continuity of finance and enabling co-funding, supporting knowledge sharing, and co-investment in MRV. Supply

chain collaboration is supported by the GHGP as a key mechanism for driving change within supply chains.

- iii. Organisations should consider **collaborating with the wider stakeholder ecosystem** including local government bodies, financial institutions, and non-government-organisations (NGOs). The wider stakeholder ecosystem also comprises beyond value chain organisations with commercial interests in the landscape, such as water companies or other production systems in the landscape, Aligning WVCM activities with other initiatives in a landscape can provide expertise, offer alternative sources of funding, create synergies or streamline efforts for farmers and can support scaling the impact of WVCM.

**Recommendations aligned with Principle 2:**

WVCM activities **support farmers** to build resilience in a changing climate and **provide value** to farmers by ensuring they are fairly rewarded for engagement.

**Recommendation 4:** WVCM activities are **co-developed alongside farmers** and implemented with flexibility to ensure that WVCM activities are feasible, share risks and deliver benefits for farmers, and are tailored to the local context.

*Applying Recommendation 4:*

Organisations should ensure that WVCM activities are fair and attractive to farmers by i) engaging with farmers in the project development phase, ii) operating transparently, and iii) offering flexibility.

- i. Organisations and suppliers should prioritise **engaging with farmers** as early as possible in the process of developing WVCM activities (from, or ideally prior to, inception) to ensure that proposed activities reflect local priorities and landscapes and are practically feasible. Activities should be co-developed in collaboration with farmers, utilising farmer expertise where appropriate, and recognising the diversity of farmers operating in the landscape and supply chain. The Foreign Commonwealth & Development Office's [White Paper on International Development \(November 2023\)](#) highlights the importance of a partnership approach to international development, of which global supply chains are a crucial component. Note that farmer engagement methodologies will need to be tailored depending on the context of the sourcing region. Engagement with large, industrialised farms will require different engagement methodologies to engaging with smallholders. Natural England's report [Embedding an evidence-led, best-practice culture of engagement: learning from the evidence](#) provides valuable guidance on engaging with diverse groups of stakeholders.
- ii. WVCM project developers should **operate transparently and build trust** with farmers by reporting regularly about project successes and challenges and providing clear feedback mechanisms for farmers into governance. Effective engagement requires using language, tools, and channels that are appropriate to the local context and culture. Engagement with farmers should strive to be honest about potential risks and rewards from the programme and how these will be shared and managed.
- iii. The implementation of WVCM activities should **provide flexibility** for farmers in implementation, allowing farmers to apply activities across the rotation, or alter activities implemented based on seasonal climatic fluctuations or unexpected events. Activities should allow for the reality that many farmers may be producing on tenanted land; including activities with shorter, repeatable implementation (e.g. cover crops) or those that don't require significant land use change will provide options for all land ownership situations. Additionally, where possible, organisations should align WVCM with existing activities and programs within the landscape, and



sources of public funding, to provide flexibility for farmers in engaging with each program.

**Recommendation 5:** Farmers are **fairly rewarded** for their engagement through a fair distribution of value gained, to ensure WVCM activities provide an attractive mechanism to support farmers transitioning to sustainable growing practices.

*Applying Recommendation 5:*

Organisations should ensure that i) farmers can make well-informed decisions about whether to engage with WVCM activities, ii) those farmers that do engage are fairly rewarded, and iii) they explore mechanisms for reward beyond financial mechanisms.

- i. Farmers should always have the ultimate **decision** on whether they engage with WVCM activities, sharing their data with supply chain organisations, or whether they would prefer to create carbon credits, or choose not to report. Organisations should support farmers to understand the implications of different approaches and make informed decisions about sharing data.
- ii. Organisations should **fairly distribute the value gained** from WVCM with farmers to ensure they are fairly rewarded for their participation in WVCM activities. There are a **wide range of financial incentive models** including short-term payments to support farmers in the transition to sustainable land management, premiums paid for crops produced sustainably, ongoing per-hectare payments for implementation of desired activities, and payments upon delivery of outcomes. As far as possible, engaging with farmers from the outset to co-develop financial incentives that meet local needs will support the successful implementation of WVCM activities. It is key that farmers are equipped to negotiate effectively for suitable financial incentives. Several reports explore innovative financing opportunities for transitioning to sustainable agriculture practices that organisations can consider, including World Economic Forum's [100 Million Farmers: Breakthrough Models for Financing a Sustainability Transition](#), the Rockefeller Foundations' [Financing for Regenerative Agriculture](#) report, Food and Land Use Coalition's [Future Fit Food and Agriculture](#), and World Business Council for Sustainable Development's [Financing mechanisms for land-based action](#).
- iv. Beyond financial incentives, organisations should explore **additional mechanisms** to support farmers and de-risk the transition to sustainable agriculture. Examples include reviewing contract terms to provide stability for farmers, providing support with access to required infrastructure (such as access to storage houses or precision agriculture machinery), supporting farmers to access funding from other sources, and enabling knowledge-sharing between farmers. **Farmers should be provided with the necessary support** to transition to sustainable land management practices by organisations implementing WVCM through collaborations with partners including the financial and public sectors to scale innovative finance models. This could include providing access to an agronomist or



equivalent on-farm advice to support identification of appropriate measures and provide knowledge throughout implementation, enabling farmer-to-farmer knowledge sharing, as well as supporting farmers throughout the MRV process with on-farm advisors to support with data collection.

**Recommendations aligned with Principle 3:**

Monitoring, Reporting, and Verification (MRV) systems for WVCM activities are **sufficiently robust** to quantify the outcomes of WVCM activities, whilst taking a **balanced, harmonised, and proportionate** approach.

**Recommendation 6:** Project impact is monitored and quantified to support adaptive management, project scaling, transparent and conservative reporting, and safeguard against negative outcomes.

*Applying Recommendation 6:*

A successful MRV system for WVCM activities will allow organisations to i) capture the impact of activities, ii) enable adaptive management and safeguarding, and iii) enable transparent and conservative reporting.

- i. **Robust and thorough MRV techniques should be used to model or measure the climate, social, and nature outcomes** of WVCM activities. MRV should be sufficiently detailed to ensure both that activities are implemented on the ground but also that the outcomes of the activity can be appropriately measured. This is crucial to confirm that WVCM activities are delivering the intended outcomes within the sourcing landscape. Where carbon emission reduction or removal is the key driver of an intervention, organisations should still look to undertake MRV across wider outcome areas (climate, nature and people), to facilitate a multi-functional landscape and to ensure that one outcome (e.g. carbon) does not dominate project management or drive negative outcomes in other areas. WBCSD's [Business guidance for deeper regeneration](#) explores key metrics that organisations can consider, to capture wider outcomes of WVCM activities.
- ii. Organisations should **implement clear governance and accountability structures around the annual MRV process** to ensure that MRV feeds into adaptive project management, allowing organisations to learn from progress and adapt to changes in the landscape. This ensures that a project continues to deliver benefits and can support project scaling. In addition, MRV should clearly feed into safeguarding procedures to protect against negative outcomes.
- iii. Organisations should report **transparently and conservatively** on the impact of WVCM activities by aligning with science-based target setting and accounting frameworks and reporting regularly on project challenges and successes. Note that there is currently a gap in detailed accounting guidance for nature and social outcomes of WVCM activities, which can pose challenges for organisations attempting to report these outcomes. The Science-based Targets Network's [Land Hub](#) can provide a useful starting point for organisations for exploring nature impacts. There are a **range of claims** that organisations may wish to make relating to the climate mitigation outcomes of WVCM activities they have funded. All claims require some form of primary data to verify impact, but the specific types of primary data required differ for different types of claims. In addition, claims

require different levels of traceability, with differing requirements for MRV and reporting constraints. Organisations should make informed decisions on the type of claim they wish to make based on the data available to them and their specific needs. Key types of claims include reporting on project involvement/implementation, reporting progress against scope 3 targets, and any claims made on consumer packaging regarding product environmental impact. For certain types of claim, organisations should consider verification and auditing by a third party. The intricacies of each type of claim are discussed in Section 5.5.1.

**Recommendation 7:** MRV is proportionate to reporting requirements, with metrics selected in collaboration with farmers. Action is taken to reduce the data burden for farmers, harmonise methodologies across the sector, ensure fair ownership of data, and deliver value and insights for farmers.

*Applying Recommendation 7:*

MRV can often be a significant part of WVCM budgets for businesses and can pose an administrative burden on farmers. Organisations should consider the following activities to ensure that MRV is proportionate to project requirements: i) balance investment in MRV, ii) design flexible MRV systems, iii) engage farmers in MRV development process, iv) ensure fair data ownership, and v) engage in harmonisation projects.

- i. Measurement and verification of WVCM outcomes should be **balanced with opportunities for impact**, avoiding disproportionate investment in MRV, data, and value chain management. In practice, there are several mechanisms organisations could explore to avoid disproportionate investment in MRV. MRV employed by organisations to measure or model the impact of WVCM activities should reflect the level of detail required by organisations for reporting. For example, in early years organisations may consider a simple MRV system focusing on monitoring the implementation of activities before developing a more complex MRV system capable of determining impacts across multiple outcome areas and/or aligning with stricter reporting requirements, such as FLAG targets. Secondly, for WVCM activities on sufficiently large numbers of farms, statistical sampling methods can be used to sample a subset of farms. Finally, organisations can explore the use of satellite data and remote sensing technologies for reduced burden of MRV where appropriate.
- ii. The MRV sector is fast evolving, with new cost and time-effective solutions continuously developing. Organisations should design MRV systems to be **flexible** to keep up with continuous improvement in the sector.
- iii. Farmers need to be brought into the process of data gathering from the outset and involved in decision-making around what metrics should be used, how data should be collected, and how it is analysed, to ensure the data and analysis meets farmer as well as supply chain organisation needs. Organisations should take action to reduce the data burden falling on farmers, including by providing access to on-farm support with data collection and exploring the use of statistical sampling and

remote sensing technologies to reduce the data collected from farms. Pre-competitive collaboration with supply chain actors can consolidate data asks for farmers by harmonising data requests. **Organisations should ensure the benefit of engaging in MRV is provided to farmers** – either as a mechanism to unlock funding for sustainable practices, or to support farmer understanding of the environmental impact of their business.

- iv. Organisations should carefully consider **ownership of data**, enabling farmers to make decisions about how they use and monetise their data. Engagement with a 3<sup>rd</sup> party data collection and processing organisation can support building trust and transparency in sharing farm-level data, whilst maintaining farm-level anonymity and privacy. Organisations can also inform farmers of the benefits of data collection, and the opportunities this can offer for business improvement beyond the scope of the WVCM activity. [Farm Data Principles](#) is a UK-based non-profit organisation that provides thought leadership, direction and certification for the good governance and management of farm data in the UK.
- v. **Harmonisation** of on-farm data gathering is a fast-evolving and challenging area. Where possible, organisations should support ongoing efforts to standardise MRV methodologies by sharing knowledge and best practice with other organisations and aligning with harmonisation activities. In the UK, two key farm data harmonisation projects to engage with include the [LED4Food project](#) and the Defra-funded paper titled [Harmonisation of Carbon Accounting Tools for Agriculture](#).

## 4. Scenarios

### 4.1 Introduction to scenarios

To support the practical implementation of the process map (Sections 2.6 and 2.7) and the detailed principles and recommendations (Section 3), two illustrative scenarios are presented in this Section 4 to provide further detail on the practical execution of high quality WVCM interventions. The scenarios depict representative supply chains for: i) UK beef and ii) Ghanaian cocoa.

The two scenarios were chosen to explore the implementation of WVCM activities within both a globally traded forest risk commodity (Section 4.3: cocoa) and a UK commodity (Section 4.4: beef), clarifying how the steps outlined in the process map, alongside the principles and recommendations, could be implemented in a specific country and supply chain context. The scenarios highlight differentiating factors between the two supply chains, demonstrating how supply-chain specific factors (such as traceability and the role of the government) impact the implementation of WVCM.

The goal of the scenarios is to support actionability, and to highlight any gaps or strategically important variables ('key considerations') that businesses may wish to consider as they design supply chain interventions. The scenarios also provide suggested solutions to mitigate potential negative impacts.

### 4.2 Applying the scenarios

Each scenario has three elements:

- A visual representation of the supply chain, outlining the most impactful actors in a generic beef value chain in the UK and cocoa value chain in Ghana, acknowledging that although there are numerous permutations within each supply chain, the fundamental stakeholder categories will remain largely the same.
- Global and national context for the commodity, including background information on issues relevant to the supply chain.
- The strategically important variables, or 'key considerations' for each supply chain, based on the actors, commodity type and geopolitical context.

While these case studies are designed to be highly specific to the particular country and commodity of focus, they offer a framework that companies can adapt for other products and regions. For example, companies should consider:

- Mapping the supply chain to identify key stakeholders and flows of goods,
- Considering the possible activities that can be implemented to address the main environmental and social challenges,
- Understanding the role of the government,
- Understanding the country-level and local context (including conducting a materiality and risk assessment in accordance with the steps set out in the process map in Section 2).



Certain aspects of the content may apply to companies pursuing WVCM projects for other commodities in the UK or Ghana, given that the contextual factors are not tied to specific commodities. Nonetheless, conducting detailed research tailored to the particular country and commodity is crucial to maximise the outcomes delivered through WVCM. Conducting a materiality and risk assessment in accordance with the steps set out in the process map in Section 2 is an essential element of this supply chain-specific research.

### 4.3 WVCM Illustrative Scenarios – Cocoa in Ghana

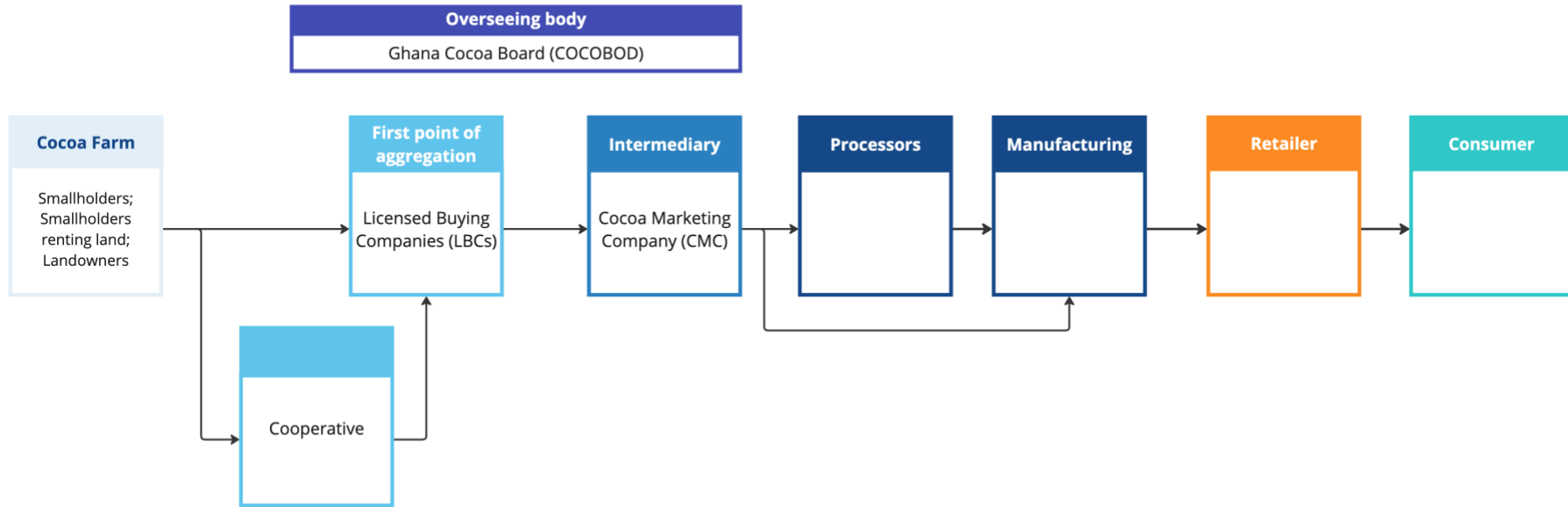


Figure 9: Visual representation of a generic cocoa supply chain in Ghana

#### Introduction and possible WVCM activities

Cocoa in Ghana is primarily grown by smallholder farmers on plots of land that are smaller than two hectares. The process begins with planting cocoa seeds or seedlings, often under the shade of taller trees to protect them from direct sunlight. Farmers maintain their plots by pruning trees, managing pests and diseases, and applying fertilisers. Harvesting occurs twice a year, with the main season from October to February and a minor season from May to August.

Several actions can be taken in cocoa production systems to support positive outcomes for climate, nature, and people, including:



- **Promoting agroforestry and shade-grown cocoa:** Encouraging farmers to integrate cocoa trees with native shade trees can improve soil health and the quality of cocoa produced. This practice also provides habitats for wildlife, supports biodiversity and provides a source of carbon removals.
- **Training farmers in sustainable farming practices:** Providing education on sustainable farming techniques, such as integrated pest management and efficient water use, can reduce the overuse of harmful pesticides and fertilisers, reduce soil degradation, and improve yields, benefiting both the environment and farmer livelihoods. Farmers can also be trained on forest law enforcement and protection to ensure that deforestation is avoided, as well as landscape management.
- **Substituting senile trees with new cocoa trees:** Cocoa trees have a productive lifespan of around 25 years, after which yield reduces and they are no longer commercially viable. To prevent deforestation caused by farmers clearing forested areas and planting new trees, companies can support farmers in two ways: i) by distributing cocoa seedlings, to encourage and enable the replacement of senile cocoa trees once their productive lifespan has been reached, and ii) by providing financial support to bridge the gap in yield and reduced farmer income whilst juvenile trees become commercially productive (around five years). These actions, when applied in tandem, will support farmers to improve yields on existing land without expanding into forests.
- **Reforestation and conservation initiatives:** Supporting reforestation projects and protecting existing forests can provide habitat for wildlife within cocoa plantations. Initiatives such as beekeeping or agroforestry can provide communities with more diversified livelihoods.
- **Enhancing farmer livelihoods through certification schemes:** Ensuring farmers receive fair compensation through certification, direct market access, and improved pricing mechanisms can help reduce poverty and negative environmental impacts.

### ***The role of the Ghanaian government in the cocoa supply chain***

The Ghanaian government, specifically the **Ghana Cocoa Board (COCOBOD)**, plays a central role in regulating, overseeing, and managing the Ghanaian cocoa sector. It sets the minimum guaranteed price for cocoa to protect farmers from market volatility and operates a national traceability and quality control system which then allows beans to be sold on the global market via the Cocoa Marketing Company (CMC). COCOBOD also provides training, agricultural inputs (e.g. fertilisers and seedlings), and research support to farmers to improve yields and quality.

Once cocoa is harvested, fermented, and dried by smallholders, it is collected by private organisations authorised by COCOBOD known as **Licensed Buying Companies (LBCs)**. LBCs can be independent companies, cooperatives, or subsidiaries of multinational organisations. LBCs



purchase cocoa at a fixed price, often through local purchasing clerks or cooperatives. LBCs ensure the cocoa meets the required quality standards and prepare the beans for transport.

After LBCs purchase the cocoa, it is transported to **COCOBOD's warehousing facilities**. Here, the cocoa undergoes further quality inspection to ensure it meets Ghana's standards for export. Any substandard beans are rejected. The cocoa is then stored in COCOBOD-approved warehouses, ready for processing or export. Traders and trader-processors can support companies in purchasing and transporting cocoa from LBCs to the processing/manufacturing stages. This creates the opportunity to enhance traceability through maintaining a segregated supply, traceable back to specific cooperatives and farms, which could otherwise be lost through aggregation within warehouses or at processing facilities.

After quality approval, the cocoa is either sold domestically to processors or prepared for export. COCOBOD sells the beans to international buyers through its subsidiary, the **Cocoa Marketing Company (CMC)**.

### ***Understanding the local context***

Organisations developing WVCN projects in the Ghanaian cocoa sector need to familiarise themselves with the local context and collaborate with local partners and the government, building on activities within broader initiatives to improve the sustainability of cocoa, and applying the extensive research already conducted by local institutions and the government.

As Ghana has an existing REDD+ strategy<sup>16</sup>, including the Cocoa Forest REDD+ scheme, WVCN projects will need to consider the approach outlined by the Ghana Forestry Commission. As part of the Cocoa Forest REDD+ scheme, projects are being implemented on farms that reduce carbon emissions, contributing to the Ghanaian government's Nationally Determined Contribution (NDC). Organisations need to consider the claims that they make from WVCN in the context of Ghana's NDC. Depending on the accounting approach used by the Ghanaian government, organisations may not be able to claim carbon outcomes in the form of credits linked to the farms that form part of the company's supply chain.

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<sup>16</sup> REDD+ is an internationally recognised programme developed by the United Nations Framework Convention on Climate Change (UNFCCC) to support national action to reduce emissions from deforestation. 'REDD' stands for 'Reducing emissions from deforestation and forest degradation in developing countries. The '+' stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stocks.



In addition, the World Cocoa Foundation (WCF) is operating its Cocoa & Forests Initiative (CFI) in Ghana, which acts as an enabling tool for WVCM. The CFI was launched in 2017, is chaired by the governments of Ghana, Côte d'Ivoire, and Colombia, and is facilitated by IDH, the Sustainable Trade Initiative alongside the WCF. Its goal is to support the cocoa supply chain to deliver improved social and environmental outcomes, including tackling deforestation, improving climate resilience and farmer livelihoods.

### **Best practice principles for Ghanaian cocoa value chain WVCM initiatives**

The following table provides further detail on the application of best practice principles for WVCM in the cocoa supply chain in Ghana, by highlighting 'key considerations', including:

1. Traceability of cocoa to the farm/ sourcing region and the influence of COCOBOD, EU Deforestation Regulation (EUDR), and certifications;
2. Consideration of human and land rights in WVCM;
3. Ensuring longevity of removals, reductions and other environmental and social outcomes; and
4. Consideration of adjacent and proximate lands defined in a cocoa system.

These 'key considerations' are linked to other sections of this report, with the 'Links to process map, principles and recommendations' column indicating i) the steps of the process map, ii) the principles and iii) the recommendations to which each key consideration relates.

Key considerations in the context of WVCM	Interaction with WVCM and best practice principles	Links to process map, principles and recommendations
<b>Traceability of cocoa to the farm/sourcing region and the influence of COCOBOD, EUDR, and certifications</b>	The involvement of the Ghanaian government and COCOBOD in the Ghanaian cocoa supply chain has positive implications for WVCM projects, as the government requires that all cocoa is traceable to the farm up to the point of export or the first buyer of beans. This is currently transitioning from a paper-based tracking system, with LBCs, or purchasing clerks acting on behalf of LBCs, registering the bean sales associated with a specific farmer and farm. The	Links to: Step 1 of process map; Principle 1; and Recommendation 1



<p>COCOBOD has an extensive impact in the supply chain of cocoa in Ghana by taking physical possession of all cocoa volumes.</p>	<p>paper-based system has been considered unreliable, with data unverified. The movement to a digital system is ongoing and aims to address a number of these challenges.</p> <p>Cocoa is often aggregated by the first buyer of beans from COCOBOD/CMC, further reducing the traceability of the supply chain as the beans and cocoa products move to downstream customers. Traceability to the first point of aggregation (the farms in a cooperative or supplying a purchasing clerk) is currently a more robust data point, which is still improving, and can provide a well-defined sourcing region of farms for the implementation of WVCM activities where companies are able to connect themselves to these cooperatives.</p> <p>Efforts can be made to enable traceability to the farm for downstream companies outside Ghana, including through certification programmes (e.g. Fairtrade, Rainforest Alliance) that work directly with cooperatives and have digital traceability systems that track certified cocoa through to processing stages. With regards to certification, there are different levels of traceability, including a mass balance approach, segregated, and identity preserved - the latter two will offer sufficient traceability to allow WVCM. Mass balance approaches will also provide sufficient traceability where the volume or proportion of specified characteristics in the product or material entering and leaving the batch, site or group of sites within the same country and sourcing region is known over a defined reconciliation period (i.e. batch-level, site-level, multi-site-level or group-level within the same country and sourcing region). More information on the applicability of these approaches is set out in section 5.4.2 of this report.</p> <p>Each traceability method has different costs associated with it, resulting in companies needing to collaborate with the supply chain and choose the desired type and level of traceability. As of 2024, most of the cocoa supplied via certification schemes to importing markets is via the mass balance chain of custody approach, meaning WVCM may not yet be appropriate for some companies, depending on the type of mass balance sourcing.</p>	
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	<p>Companies may invest in direct sourcing initiatives and work with COCOBOD and/or cocoa traders (most of whom have their own traceability systems) to ensure segregation of directly sourced cocoa through the transport and storage phase to increase their farm-level traceability.</p> <p>The EU Deforestation Regulation (EUDR) came into force in June 2023 and is currently expected to take effect from December 2025. The EUDR requires companies to provide evidence that their supply chain is not linked to deforestation or illegal production. This has driven further investment in traceability as well as greater accessibility of traceability data to downstream organisations. Traceability requirements will require companies to collaborate to make supply chains more traceable. However, the reach of the EUDR is limited, applying only to certain commodities (including cocoa, alongside coffee, palm oil, rubber, timber and others) being imported into the EU.</p> <p>The EUDR requires plot level traceability, while the draft GHGP Land Sector and Removals Guidance currently requires farm level traceability, with the government and companies needing to support farmers with the extra level of traceability to be compliant with the EUDR. The EUDR is therefore an accelerant for the digitisation of COCOBOD’s traceability system, and as this traceability improves cocoa is likely to become an attractive commodity within which to implement WVCN activities.</p>	
<p><b>Consideration of human and land rights in WVCN</b></p> <p>Land and human rights should always be considered when designing and implementing WVCN.</p>	<p>Cocoa production in Ghana is dominated by smallholder production, with around 860,000 smallholder farmers and an average farm size of 2 hectares. Cocoa production in Ghana faces significant human rights risks, including child labour, low wages, poor working conditions, and gender inequality, exacerbated by poverty, lack of access to education, and insecure land rights.</p> <p>Co-designing WVCN activities with smallholders and local communities from the outset, or working with local project partners, is vital to mitigate human rights risks within the project and maximise the potential for beneficial social outcomes. Adequate safeguards should be established to support fair labour practices and project benefits should be equitably shared</p>	<p>Links to: Step 2 and 3 of process map; Principle 1 and 2; and Recommendations 2, 4, and 5</p>



	<p>with smallholders and local communities, such as by providing social amenities (e.g. schools, water supply).</p> <p>Companies carrying out WVCM activities should support farmers to gain the paperwork necessary to have the land and trees recognised by the government, as well as support farmers during transition periods (for example, in the years when the newly planted cocoa trees are unproductive). A stakeholder interviewed as part of this project stated that human rights risks decrease as long-term relationships are built between co-operatives and supply chain actors, indicating the importance of long-term relationships, continuous support and collaborations.</p>	
<p><b>Ensuring longevity of removals, reductions and other environmental and social outcomes</b></p> <p>WVCM projects need to consider the ability of having long term impacts both while the project is being funded and beyond.</p>	<p>Outcomes of WVCM interventions must be long-lasting. The longevity of projects can be facilitated by creating close collaborations with farmers and local organisations, such as NGOs and project implementers, as loyal and long collaborations can improve trust.</p> <p>Engaging farmers, or farmer-representative organisations, early on to ensure farmers are active contributors is important. Transferring skills and knowledge to farmers is key, as well as understanding the local context which might prevent a project from having a long-term positive impact (e.g. negative weather impacts on young trees). Follow-on assessment and ongoing support are also required throughout any WVCM project, working with farmers and/or farmer-representative organisations throughout.</p> <p>Companies carrying out WVCM projects should also support farmers in registering any trees planted with the Ghana Forestry Commission via the national Tree Registration System, to secure farmer ownership.</p> <p>Cocoa trees usually take 4-5 years to grow and have a lifespan of 30 years. As a result, trees need to be replanted regularly to ensure that there is adequate ongoing production of high-quality cocoa.</p>	<p>Links to: Step 1, 2, 3 and 6 of process map; Principle 1 and 2; and Recommendations 2, 3, 4 and 5</p>



	<p>Other important actions that should be considered to increase the longevity of projects include:</p> <ul style="list-style-type: none"> <li>• Considering the risk of the project being able to succeed before going ahead with it.</li> <li>• Ongoing funding: projects need to be funded/ receive support for the appropriate length of time of the specific activity. For example, if WVCM projects are trying to support women to be able to increase their income, companies also need to be able to support them when they are learning to sell their products, not just in making the product.</li> <li>• Having clear grievance management structures, have project steering committee, and have clear governance structure to ensure that people are accountable.</li> <li>• Move discourse and activities beyond seasonality and ensure projects are planned for the appropriate length of time.</li> </ul>	
<p><b>Adjacent and proximate lands defined in a cocoa system</b></p> <p>The Greenhouse Gas Protocol Land Sector and Removals Guidance requires companies to carry out WVCM projects on land owned by farmers as specified in section 5.4.2 of this report.</p>	<p>Ghana has country-level policies to promote the sustainable production of cocoa. The Ghanaian government has strengthened laws to prevent the expansion of cocoa farms into protected areas and primary rainforests and is a signatory to the Cocoa &amp; Forests Initiative (CFI). This includes enforcing bans on deforestation in forest reserves and national parks. Ghana is actively involved in landscape restoration efforts, aiming to rehabilitate degraded lands and restore forest cover. Initiatives including the Green Ghana Project and collaborations with the World Cocoa Foundation (WCF) to promote tree planting in cocoa-growing regions. These programs focus on planting trees <u>in and around cocoa farms</u> to enhance the ecosystem and combat deforestation.</p> <p>When accounting for the impact of WVCM activities surrounding cocoa production, organisations will need to align with the GHGP draft Land Sector and Removals Guidance on accounting for outcomes on "adjacent lands". To allocate outcomes from conservation and restoration activities to cocoa projects, the following conditions must be met:</p> <ul style="list-style-type: none"> <li>• Owned and operated by same farmer as productive land</li> </ul>	<p>Links to: Step 2 and 5 of process map; Principle 1 and 2; and Recommendations 3 and 6</p>



	<ul style="list-style-type: none"> <li>• Be connected bio-physically, ecologically and/or socio-economically to the productive land</li> <li>• Within a defined proximity of the productive lands</li> <li>• Of a proportional size to the productive lands</li> </ul> <p><i>Note - these requirements will be finalised with the publication of the final Greenhouse Gas Protocol Land Sector and Removals Guidance in Q1 2025.</i></p> <p>Although the GHGP draft Land Sector and Removals Guidance requirements currently require WVCM projects to take place on the farm owned and operated by the same farmer, companies must also consider the wider landscape within which they are sourcing cocoa. This is to ensure that the health of forests and land outside of the farm boundaries is maintained, as this will have indirect benefits on the farm's outputs as well as benefit nature, the climate and people. This may impact the extent to which claims can be made by project funders in relation to their FLAG targets but is nevertheless an important consideration when considering reforestation activity in Ghana.</p>	
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#### 4.4 WVCM Illustrative Scenarios – Beef in the UK

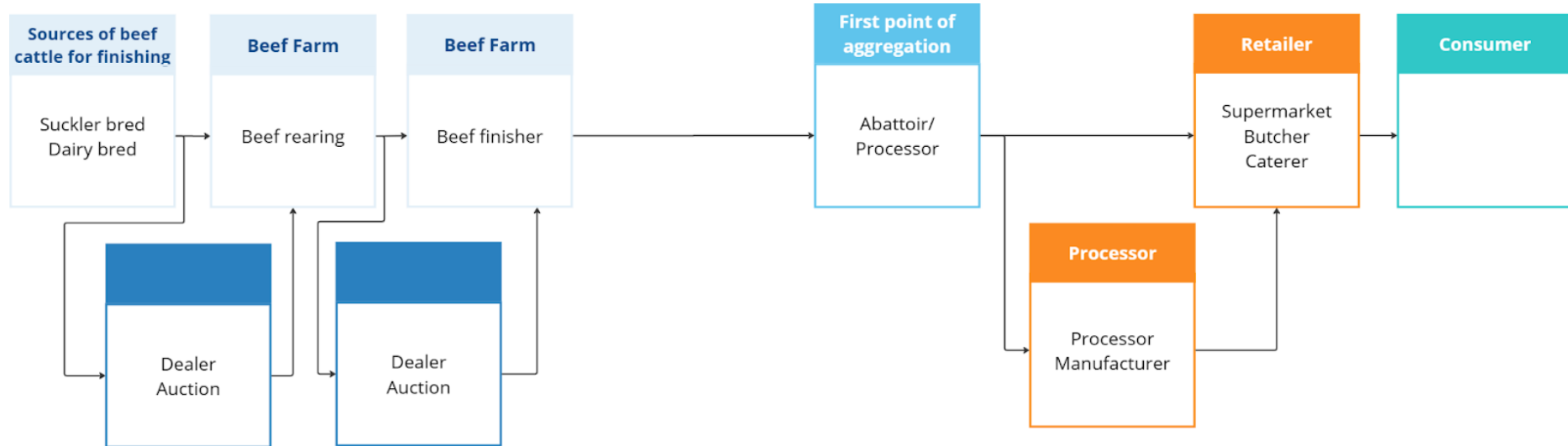


Figure 10: Visual representation of a generic beef supply chain in the UK

#### Introduction and possible WVCM activities

Beef production in the UK primarily operates as an extensive system, where cattle are raised on grassland, grazing outdoors for much of the year. However, increasingly, intensive systems are being used as a preference, particularly in the finishing stages where cattle may be kept indoors, being fed high-energy diets to reach market weight. Where applicable, the extensive nature of beef rearing in the UK provides opportunities for WVCM activities including:

- **Improved grazing management:** Implement rotational grazing and mob grazing techniques that enhance soil health, increase carbon sequestration, and improve pasture productivity while supporting biodiversity.



- **Agroforestry and silvopasture:** Integrate trees and shrubs into grazing systems to enhance carbon capture, provide shelter for cattle, and increase overall ecosystem biodiversity. Agroforestry systems can support farmer livelihoods by providing diversified income streams. Silvopasture and agroforestry can also reduce GHG emissions by improving feed quality that cows have access to.

During intensive stages of beef rearing, WVCM activities can include:

- **Optimised diets:** Use of feed additives to reduce methane emissions from cattle digestion and promote the use of low-carbon feeds (including soy-free feeds). *NB the dietary needs of cattle vary depending on the breed.*
- **Manure management:** Improve manure handling and storage practices to reduce methane and nitrous oxide emissions.

Project design needs to adequately consider trade-offs that can occur in beef systems when developing practices that reduce emissions. The reduction of methane emissions in dairy and beef systems is a key opportunity for reducing the impact of production. However, a broader view of on-farm sustainability is encouraged, ensuring that a focus on methane emissions reductions do not lead to unintended negative impacts on other areas, including animal health, farm productivity, or by increasing emissions in other areas of production.

#### ***Co-products beyond beef and opportunities for supply-chain collaboration***

Cattle carcasses are processed into a variety of co-products beyond beef, utilising almost every part of the carcass, with main co-products including leather, gelatin and collagen, tallow, and pet food. The beef supply chain is broad, interconnected, and involves a diverse set of players and products. This type of supply chain provides opportunity for collaboration and co-funding of WVCM activities, with a multitude of stakeholders interested in the same production landscape.

#### ***The role of the UK government in the beef supply chain***

Unlike the cocoa supply chain in Ghana where the government plays an active role, the beef supply chain in the UK is operated by private sector actors. The government plays an indirect role by creating an enabling environment which facilitate the beef supply chain to improve its environmental and social outcomes through mechanisms such as the Sustainable Farming Incentive.

#### ***Supporting farmers***



Businesses carrying out WVCM projects should engage farmers from, or ideally prior to, project inception to ensure that they have a voice in the activities carried out on the farm. Farmers should also have active decision power throughout the project and be informed and supported with interpreting outcomes.

Farmers can be supported in different ways, including:

- Distributing investments and benefits across the supply chain.
- Knowledge building at farm level to understand the nature of carbon markets, and the options available to farmers once they have reduced or removed carbon in their enterprise.
- Longer contracts to build supply chain confidence.
- Alignment with existing farm audit interactions (rather than adding more audits) so as not to duplicate and overburden farmers with site visits and different carbon calculators.

***Best practice principles for UK beef value chain WVCM initiatives***

The following table provides further detail on the application of best practice principles for WVCM projects in the beef supply chain in the UK, by highlighting ‘key considerations’. These include:

1. Traceability to farm/sourcing region in the UK beef supply chain
2. The extent to which WVCM projects need to be additional to SFI measures
3. Selecting farmers for WVCM activities and rewarding farmers who have already made progress in terms of emission reductions
4. Impact of collaboration on payments and MRV, and allocation of outcomes across multiple funders / co-products

These ‘key considerations’ are linked to other sections of the report, with the ‘Links to process map, principles and recommendations’ column indicating i) the steps of the process map, ii) the principles and iii) the recommendations to which each key consideration relates.



Key considerations in the context of WVCM	Interaction with WVCM and best practice principles	Links to process map, principles and recommendations
<p><b>Traceability to farm/sourcing region in the UK beef supply chain</b></p> <p>Traceability is essential for WVCM projects and needs to be understood for each commodity in a specific geographical location.</p>	<p>The first point of aggregation of beef is typically the abattoir/processor where beef is processed. Generally, abattoirs have a well-defined group of supplier farms, which can provide a clear sourcing region of farms for the implementation of WVCM activities. If farms are part of a cooperative, this can also provide a useful mechanism for managing and governing a WVCM project.</p> <p>In certain cases, retailers have relationships with dedicated supplier farms, and farm-level traceability is possible. Certain beef certification schemes such as Pasture for Life use barcodes on products to demonstrate traceability. However, this approach is not currently feasible at scale for standard UK beef supply chains.</p> <p>It is worth noting that there is often regular movement of cattle throughout the supply chain prior to finishing, adding further complexities to the supply chain. However, there should be traceability to the abattoir for all farms, as farmers are legally required to register all cattle movements (on and off a holding) within three days of leaving the farm.</p>	<p>Links to: Step 1 of process map; Principle 1; and Recommendation 1</p>
<p><b>The extent to which WVCM projects need to be additional to SFI measures</b></p> <p>The Sustainable Farming Incentive (SFI) and the Environmental Land Management Scheme</p>	<p>As the UK government transitions from the EU's Common Agricultural Policy to the Environmental Land Management Schemes (ELMS), incentives such as the Sustainable Farming Incentive (SFI) support farmers to adopt sustainable practices, including improved grazing management, agroforestry, and habitat restoration, aligning payments with environmental outcomes. Additionally, the UK's legally binding commitment to achieve net zero carbon emissions by 2050 is driving policy changes that encourage the reduction of greenhouse gas emissions in agriculture, including measures specifically targeting livestock emissions.</p>	<p>Links to: Step 1, 2 and 5 of process map; Principle 1 and 3; and Recommendations 2, 3 and 6;</p>



<p>(ELMS) in the UK are providing financial support to farmers to transition to more environmentally friendly practices. However, there are some complexities around additionality that should be considered, as well as reporting of WVCM outcomes alongside government-subsidised activities.</p>	<p>This political landscape supports the implementation of WVCM activities, where organisations can build on the activities being funded through the SFI. To maximise the impact of WVCM activities, organisations should select activities that go beyond the activities implemented through the SFI by increasing the quantity of activities on-farm (selecting activities not available through the SFI or applying SFI activities to additional hectares/fields) or the quality of activities (by selecting activities that enhance the activities under the SFI). Businesses investing in WVCM projects therefore need to support activities that would not have otherwise happened.</p> <p>When accounting for the impacts of WVCM activities alongside SFI activities, there is a distinction between credited (intervention) and non-credited (inventory) approaches.</p> <ul style="list-style-type: none"> <li>• Intervention approaches: Carbon credits must be additional and must not be double counted. In practice, this means that if a crediting approach (intervention accounting) is being applied to WVCM activities in the UK, the impact of SFI activities should not be included in the project outcomes. Being able to disaggregate farm-level outcomes between SFI and WVCM activities poses a challenge as it is difficult to prove causality of outcomes in agricultural settings.</li> <li>• Inventory approaches: Inventory (non-credited) accounting systems aim to quantify the environmental impact of a product. This accounting system does not attempt to prove causality of impact, and there are no requirements for outcomes to be additional or avoid double counting. As such, when using inventory approaches, organisations can account for the impact of SFI as well as WVCM activities.</li> </ul> <p>Please see Section 5.3.2 for more information on the need for additionality of WVCM activities, and Section 5.5.2 on intervention and inventory accounting approaches to WVCM.</p>	
<p><b>Selecting farmers for WVCM activities and rewarding farmers who</b></p>	<p>Companies will need to decide, in collaboration with the supply chain, on the scale of the projects and how many farms to involve, which will partly be influenced by the level of</p>	<p>Links to: Step 2 of process map; Principle 1 and 2; and</p>



<p><b>have already made progress in terms of emission reductions</b></p> <p>Considering where to carry out WVCM projects can be a challenge, and companies should consider working closely with local organisations and with farmer representative groups as early on as possible, giving farmers a voice, while also considering how to build on existing knowledge and scaling projects.</p>	<p>interest of farmers, the types of claims companies want to make, the resources available by companies, and where projects can have the largest impact.</p> <p>Farmers who have already been engaged in similar projects to WVCM, which can include regenerative agriculture, agroforestry and much more, should be included in early discussions to ensure that WVCM projects build on existing experiences. Companies should reward farmers who are already making progress on this agenda, by understanding how these farmers can be supported to allow for activities to be carried out long-term and improved further. Farmers could also be rewarded for sharing their expertise and experiences.</p>	<p>Recommendations 3, 4 and 5</p>
<p><b>Impact of collaboration on payments and MRV, and allocation of outcomes across multiple funders / co-products</b></p> <p>It is recommended that companies collaborate on funding WVCM projects, but there are some</p>	<p>If multiple parties buying different end products collaborate to implement WVCM activities, there are challenges with allocating the outcomes of the activities to the different end products, enabling the funding partners to report on the project outcomes.</p> <p>For carbon outcomes, one solution is to create emissions factors for each of the end products that capture the impact of the WVCM activities (this is known as inventory accounting). Outcomes can be allocated to end products using biophysical or economic allocation techniques. Over time, the emissions factor for each product will decrease, enabling organisations to report on the outcomes of WVCM.</p>	<p>Links to: Step 5 of process map; Principle 1 and 3; and Recommendations 3 and 6</p>



challenges with the reporting of outcomes which need to be considered.		
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## 5. Additional technical information

In some cases, to apply the recommendations presented in Section 3, there is a need for detailed technical understanding of certain aspects of WVCM. This chapter provides additional technical information to support the implementation of the best practice guidance.

Additional technical information covers:

- 5.1 A detailed analysis of the drivers for WVCM activities and the current challenges associated with WVCM
- 5.2 An exploration of farmer perspectives relating to WVCM and actions that can be taken to support farmers in the transition to sustainable agriculture
- 5.3 Detail of how WVCM sits within broader corporate climate action
- 5.4 Detail about defining WVCM activities, particularly surrounding traceability issues
- 5.5 An exploration of existing WVCM methodologies and claims that organisations can make related to WVCM

### 5.1 Drivers and challenges associated with WVCM

#### 5.1.1 Motivations and drivers for WVCM

As highlighted in Section 1.2, there are four key motivations and drivers behind the growing implementation of WVCM activities:

- Supporting corporate supply chain climate targets (see Figure 11),
- Supporting corporate social and nature-related goals,
- Building resilience of supply chains and access to supply, and
- Supporting collaborative supply chain relationships.

These motivations were identified through a literature review of key reports (listed in Appendix 2) and through stakeholder engagement work done by Conservation International and 3Keel<sup>17</sup>.

As shown in Figure 11, there is a complex reporting and target-setting landscape relating to climate and nature. There are a range of voluntary mechanisms for businesses to contribute to global targets including the Paris Agreement and the Global Biodiversity Framework. Key mechanisms of corporate climate action include measurement and disclosure of organisational environmental impacts with the Carbon Disclosure Project (CDP),

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<sup>17</sup> Results from online survey sent to a select group of international retailers and international commodity suppliers in the food and agriculture sector. Respondents had varied levels of involvement and interest in WVCM, with the majority currently implementing WVCM through pilots. Survey sent as part of Conservation International project (supported by 3Keel).



International Sustainability Standards Board (ISSB) and the Transition Plan Taskforce (TPT). Once companies have quantified their environmental impacts, impacts can be addressed through developing targets to mitigate impact on climate and nature with organisations such as the Science-based Targets initiative (SBTi), supported by corporate GHG inventory accounting and reporting guidance developed by various initiatives including the GHGP. One of the key motivations for organisations to engage in WVCM activities is that these projects can contribute to the achievement of climate mitigation targets, such as the SBTi's Forest, Land and Agriculture (FLAG) targets which cover land-based emissions and removals.

Alongside climate mitigation, there is growing voluntary and regulatory pressure for organisations to disclose and mitigate their impacts on nature and biodiversity and reduce human rights risks within their supply chains. WVCM actions can lead to co-benefits for nature, biodiversity, and local stakeholders, meaning that WVCM projects can also deliver against nature and social targets, as demonstrated in Figure 11. By investing in projects within their value chains and implementing sustainable land management practices, organisations can improve the resilience of raw material production to growing climate risks and support their suppliers to adapt to the impacts of climate change. Building resilience and engaging closely with suppliers can reinforce collaborative supply chain relationships, ensuring stable procurement of key raw materials into the future

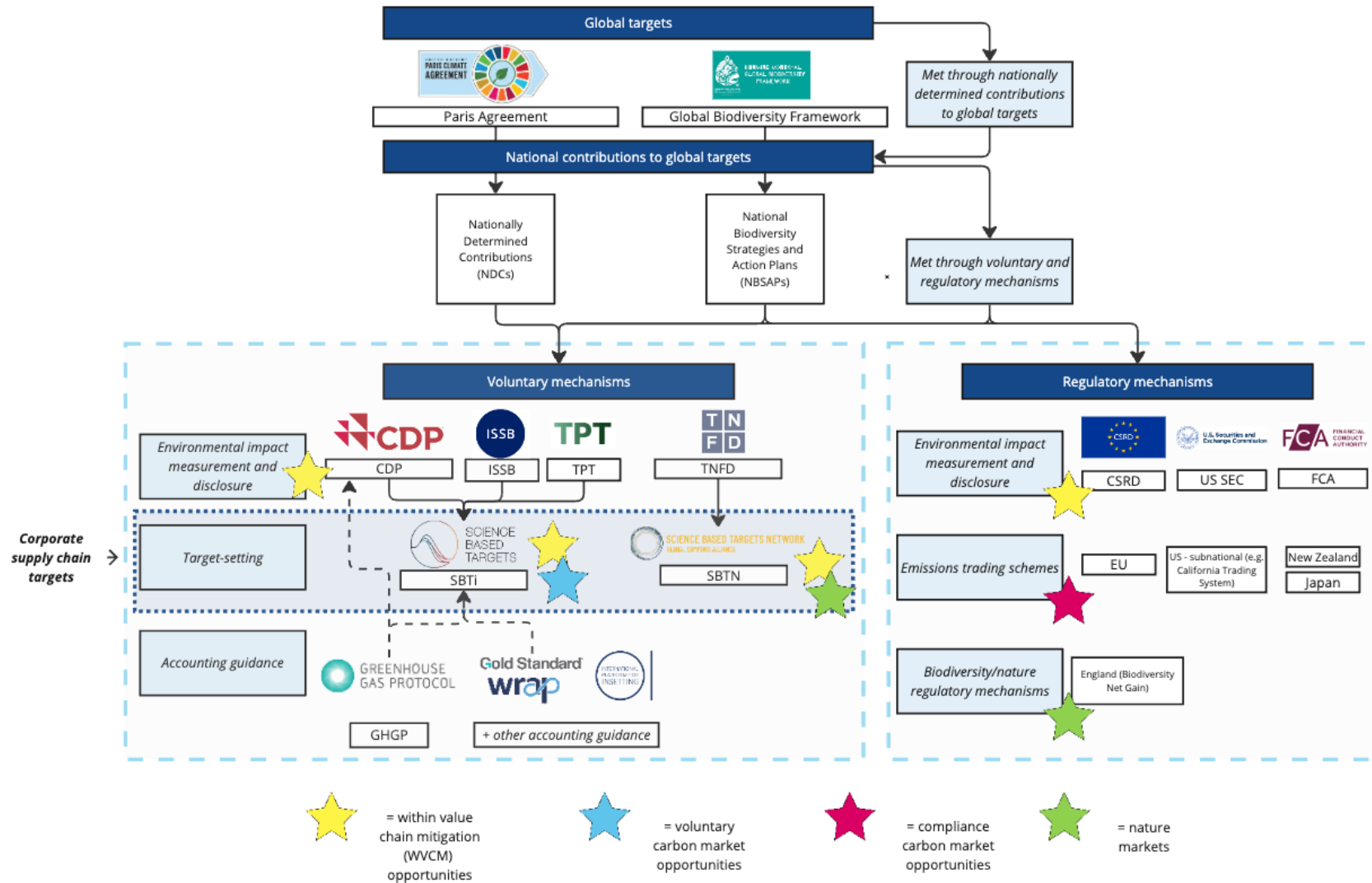


Figure 11: A diagram summarising the voluntary and regulatory landscape relating to corporate climate and nature supply chain target-setting (shown in the dark blue dotted box). The yellow stars represent opportunities for WVCM, the blue star represents the opportunity for voluntary carbon markets, and the pink star represents the opportunity for compliance carbon markets. This report focuses on the yellow stars (WVCM opportunities).



### 5.1.2 Challenges associated with WVCM

Despite the growing number of organisations and guidance documents relating to WVCM, there is still significant uncertainty surrounding the approach. The key areas of uncertainty and current challenges associated with WVCM include:

#### *Selecting suitable supply chains and establishing traceability*

- WVCM activities are defined as activities that lie within an organisation's supply chain. However, there are challenges associated with selecting the most impactful supply chains and establishing the **level of traceability** required for an organisation to implement WVCM. There are varying definitions and interpretations of the supply shed/sourcing region concept, causing uncertainty for organisations in how to apply the concept and the exact level of traceability required to be able to report outcomes against scope 3 targets<sup>18</sup>. Uncertainty on the required level of traceability also creates associated uncertainty on the granularity and requirements for primary data to be collected from the sourcing region.

#### *Engaging with farmers and suppliers*

- Engaging with farmers and suppliers effectively is challenged by a **lack of trust and transparency** within supply chains and a lack of understanding of how WVCM can provide benefits for farmers. This can lead to scepticism from farmers in engaging in WVCM and can also create further issues surrounding the collection of outcome data from farmers and willingness to share farm-level outcome data with the supply chain.

#### *Financial implications of WVCM*

- There is uncertainty about how organisations can fairly distribute the value gained from WVCM with farmers, ensuring that farmers are **rewarded fairly** for participating in WVCM activities. How can WVCM programmes recognise farmers that are already performing well? Should farmers be rewarded for the implementation of activities, or should payments be based on outcomes? What financial and non-financial mechanisms can best support farmers in the transition to sustainable agriculture? In addition, from the agri-food business perspective, the **financial implications** of WVCM, including the costs, return on investment, and long-term economic benefits are a key area of uncertainty.

#### *Delivering outcomes beyond climate change mitigation*

- Balancing **multiple WVCM outcomes**, such as climate, nature, and social goals, requires careful management to avoid unintended consequences and trade-offs. Limited guidance on accounting and reporting the nature and social impacts of WVCM activities means projects risk overlooking these aspects, despite growing interest in holistic environmental and social impact reporting.

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<sup>18</sup> Note that the Greenhouse Gas Protocol aims to resolve much of this uncertainty with the publication of the final Land Sector and Removals Guidance in Q1 2025 and the Interim Traceability Requirements, also expected in Q1 2025. ISEAL is currently working to update their definitions of [chain of custody models](#) to support organisations to define and demonstrate traceability.



### *Monitoring, reporting, and verification*

- At the time of publication of this report, the Land Sector and Removals Guidance is in draft format, leading to uncertainty surrounding several aspects of MRV relating to WVCM. Key challenges include the need to collect primary data at scale, ensure ongoing storage monitoring of carbon removals, and the divergence in methodologies between projects using intervention and inventory accounting mechanisms<sup>19</sup>. The variation in methodologies used to quantify the impact of WVCM activities can lead to i) difficulties in harmonising MRV methodologies, ii) variation in the way that the outcomes of WVCM projects can be reported against corporate targets, and iii) misunderstanding about how WVCM activities can contribute to corporate climate mitigation targets.
- There is uncertainty surrounding how to balance investment in accurate measurement and MRV systems whilst ensuring that the majority of project funding can be channelled toward impact. MRV costs for WVCM projects are currently substantial and can relate to a significant proportion of a project's budget.

### *Reporting outcomes of WVCM*

- Clear guidance on **aligning WVCM with other approaches**, including beyond value chain mitigation, regulatory compliance mechanisms, and national climate targets (including Nationally Determined Contributions (NDCs)) is limited.
- Effective WVCM also involves stakeholder engagement across the supply chain, collaborative funding models, and determining best practices for **allocating outcomes** among co-funders. Allocation and co-claiming mechanisms are a key area of uncertainty for FLAG organisations. Addressing these issues is essential for building support and ensuring fair benefit distribution across stakeholders, including farmers and local communities.

## **5.2 Farmer perspectives**

Where possible, early engagement and close collaboration with farmers, growers and producers can support improved project design, and more effective, long-lasting and diverse outcomes for all organisations involved in WVCM activities throughout the supply chain. Although traceability challenges may make direct engagement impossible, understanding local priorities within a landscape, regardless of the geography or the commodity in question, will significantly improve the likelihood that the activities achieve the intended carbon reductions or removals on an ongoing basis. It will also ensure feasible delivery and successful monitoring over the lifetime of the activity. Where direct engagement is not feasible, local organisations or project developers who are able to accurately reflect and represent the needs of farming communities, and have a mandate to speak on their behalf, should be engaged to bring an understanding of the local context.

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<sup>19</sup> Primary data is required to ensure that the impact of outcomes reported reflect the actual mitigation actions occurring on the ground. Ongoing storage monitoring is needed to ensure long term storage of CO<sub>2</sub> removed from the atmosphere to ensure that WVCM activities have an equivalent impact on the climate as residual GHG emissions.

Direct engagement, or engagement with representative organisations, is a key part of ensuring the effective delivery of all three Principles set out in this research. Local knowledge is at the centre of this approach. It enables i) the design of WVCM activity that can feasibly achieve outcomes for carbon, nature and communities in relation to a particular landscape context, ii) farmers, growers and producers to build the resilience of their own businesses and influence the distribution of incentives for the activity within communities and iii) the selection of MRV data points that are straightforward to collect, which meet the needs of the organisation funding the intervention in terms of its reporting requirements which also serve the farmer by providing actionable insight that adds value to their enterprise.

Organisations need to be able to translate the goals of the WVCM activity into language that speaks to the farmer, producer or grower, and demonstrates increases in efficiency and income which will ultimately benefit the farmer and build trust and transparency. Stakeholder feedback indicates that the trust and transparency point is critical<sup>20</sup>. Four considerations that work towards building this are:

- **Tailored communication, recognising that farmers are not a homogenous group:** Language communicating the nature and purpose of WVCM interventions needs to be tailored to the experience of the target farmer groups.
- **Developing ‘farmer-led proof points’ such as demonstration projects:** Trial projects which can communicate the benefits of WVCM activity and break down some of the barriers to understanding the nature of WVCM projects and their goals, can support communication across the supply chain.
- **Specific consideration of risk and benefit sharing for farmers:** Early farmer engagement can ensure that projects are designed so that benefits are shared appropriately within communities, and that risks are mitigated where possible (e.g. reduced yield in the first years of the project as a result of the switch to more sustainable farming techniques).
- **Providing in-person support for the use of data collection software or technology:** Farmers, growers and producers may be unfamiliar with the data collection tools necessary to provide the funding organisation with the MRV that they need. Where possible, in-person support to use these tools, and to explain how they can be used by the farmer to benefit their own business.

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<sup>20</sup> There is a range of literature that organisations can refer to that explores methodologies for conducting an agricultural extension effectively, as reviewed in [Selecting methods of agricultural extension to support diverse adoption pathways: a review and case studies](#), Nettle, R. (2022). Other resources to support building trust and transparency in the agriculture sector include: [Cultivating more trust and transparency in the agricultural value chain](#), Rikolto (2019), and [“If they don’t tell us what they do with it, why would we trust them?” Trust, transparency and benefit-sharing in Smart Farming](#), Jakku (2018).

## 5.3 Understanding the role of WVCM within corporate climate action

### 5.3.1 Within and beyond value chain mitigation

Corporate climate action has become a focus of many organisations acting to address their environmental impact and contribute to climate change mitigation. The Science Based Targets initiative (SBTi) is a global body that defines best practice for businesses to set ambitious climate targets that are aligned with the latest climate science.

In 2024, the SBTi updated the Corporate Net Zero Standard which provides guidance and recommendations for companies to set long-term climate targets consistent with scenarios that limit global temperature rise to 1.5°C with no or limited overshoot.

The Corporate Standard sets out four key elements, summarised below and in Figure 12:

1. **Near-term science-based targets (SBTs):** Companies are required to set 5–10-year targets to reduce emissions within the company value chain in line with 1.5°C pathways.
2. **Long-term SBTs:** Companies are required to set targets to reduce emissions within the company value chain to a residual level in line with 1.5°C scenarios by no later than 2050.
3. **Neutralisation of any residual emissions at the net-zero target date:** Companies are required to neutralise the climate impact of any residual emissions at the net-zero target year and any GHG emissions released into the atmosphere thereafter through the permanent removal and storage of carbon from the atmosphere.
4. **Beyond value chain mitigation:** Companies are encouraged to take mitigation action or investments that fall outside of a company's value chain. This includes activities that avoid or reduce GHG emissions, and those that remove and store GHGs from the atmosphere.

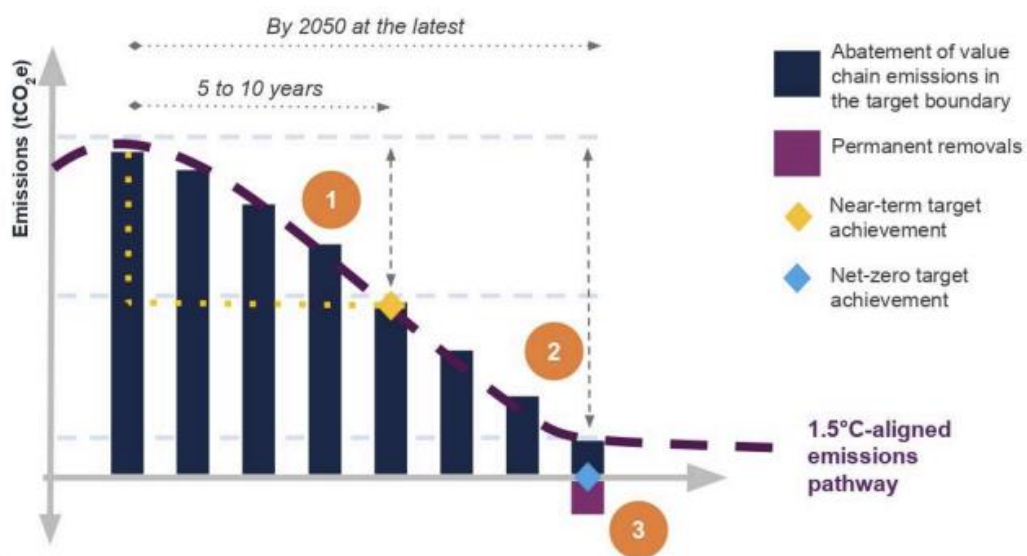


Figure 12: Elements of the SBTi Corporate Net Zero Standard v1.2 (2024). 1) relates to Near-term SBTs, 2) relates to Long-term SBTs, and 3) relates to Neutralisation of residual emissions.

This research project focuses on WVCM activities as defined in Section 2.1 to ensure that the recommendations and guidance provided are actionable and practical for organisations wishing to engage in WVCM. One of the key motivations for organisations to engage in WVCM activities is that these projects can contribute to the achievement of **near-term and long-term SBTs**. Companies in land-intensive sectors setting targets with the SBTi are required to set Forest, Land, and Agriculture (FLAG) targets, that include land-based emission reductions and removals. The implementation of WVCM projects within corporate agricultural supply chains provides opportunities to reduce the emissions associated with the production and rearing of agricultural raw commodities, and increase carbon sequestration on productive lands, contributing to organisational science-based targets, as demonstrated in Figure 11.

The SBTi recommends that, alongside setting net-zero targets, companies should engage in beyond value chain mitigation (BVCM). BVCM involves companies taking action or making investments **outside of their own value chains** to mitigate GHG emissions, especially in projects that generate additional co-benefits for people and nature. BVCM is defined by the SBTi as “mitigation action or investments that fall outside a company’s value chain, including activities that (seek to) avoid or reduce GHG emissions, or remove and store GHGs from the atmosphere”. The SBTi encourages companies to take immediate and consistent action in the form of BVCM to support global efforts to limit global temperature rise. Companies engaging in BVCM above and beyond their science-based targets is important, given that many companies across the world are not yet decarbonising their businesses in line with a 1.5°C pathway, and that there are sources of emissions that sit outside of corporate value chains altogether.

Therefore, alongside WVCM activities, organisations should also consider projects beyond the scope of WVCM to address unabated environmental impacts, including engaging in approaches to drive positive impacts across entire production landscapes.

### **5.3.2 WVCM, Nationally Determined Contributions (NDCs), and sources of public funding**

WVCM activities interact with a range of other mechanisms of incentivising on-farm action to shift to sustainable land management practices, including government subsidies (in the UK, the Environmental Land Management Scheme and the Sustainable Farming Initiative), national-level Net Zero plans, including Nationally Determined Contributions (NDCs), and other schemes in productive landscapes such as certification schemes/deforestation-free programmes.

This interaction causes two key areas of uncertainty:

1. The extent to which WVCM activities need to be additional to activities being supported through other mechanisms,
2. The extent to which WVCM activities can contribute to NDCs,



## 1. Additionality of WVCM activities

The impact of WVCM activities is reported by organisations within their scope 3 corporate GHG footprints and emission abatement targets. This method of reporting outcomes does not require additionality to be proved for climate mitigation accounting, as inventory accounting is used. This method of accounting requires organisations to capture an annual snapshot of the emissions associated with their activities, and, as such does not require the inference of causality for any emission reductions or removals reported. On the other hand, when selling carbon credits on the voluntary carbon market, additionality must be proved to ensure that the carbon credit is associated with a climate mitigation outcome that would not have occurred in the absence of the sale of the credit. To prove additionality, carbon credit generators must prove that projects overcome financial, technological, institutional, ecological, or social factors that would have prevented the mitigation outcome in a business-as-usual scenario.

WVCM is defined in Box 1 of this report. There are two key components of the definition relevant to determining additionality requirements for WVCM.

- *Organisations must partner with supply chain to deliver activities beyond typical production activities:*
  - To claim that organisations are engaging in WVCM, organisations should deliver emission reductions and/or removals that go above and beyond background decarbonisation actions. Organisations can report the impact of background decarbonisation actions in their scope 3 inventories, including the impact of government-subsidised activities or of certification schemes that suppliers are engaged in. However, to label the activity as WVCM, the activities supported by organisations should go above and beyond activities already being funded. Although additionality and causality of outcomes is not required, best practice would be for organisations to ensure that the activities they are delivering are additional through:
    - Increasing the extent of activities
    - Increasing the quality of activities
    - Funding new activities
- *Activities must deliver climate change mitigation outcomes:*
  - As stated in the definition, WVCM activities must deliver emission reductions and/or carbon removals. Deforestation regulations, including the European Union Deforestation Regulation (EUDR) are associated with increasing requirements for organisations to engage with suppliers to prove deforestation-free origin of materials purchased by organisations. Although these regulations support organisations to prove that production is not associated with deforestation, they do not directly lead to emissions reductions or removals. As such, compliance with EUDR or sourcing deforestation-free products does not qualify as WVCM unless additional actions are taken to deliver climate mitigation outcomes.

## 2. Contribution of WVCM activities to NDCs



Corporate climate activities within value chains are typically accounted for using inventory accounting approaches, which have different scopes, methodologies, and boundaries to the methodologies that countries use to calculate national inventories and track progress against NDCs. There is rising interest in the interaction between WVCM activities and NDCs, and the extent to which each can contribute to the other. The interaction of WVCM activities with NDCs will depend on how individual countries include Land Use, Land-Use Change and Forestry (LULUCF) in their NDCs and how they will engage with Article 6.

The way in which WVCM interacts with NDCs in a country will impact the extent to which government-subsidised activities can be accounted for in corporate GHG inventories, and how WVCM activities are designed to supplement government-subsidised activities. However, due to existing uncertainty and country-to-country variation, in-depth exploration of these nuances is out of scope of this report.

## 5.4 Scope and boundaries of WVCM: Traceability

### 5.4.1 Benefits and drawbacks of traceability and spatial boundaries for implementing WVCM

There are three primary spatial boundaries that organisations may explore to implement WVCM activities, of which the benefits and drawbacks are explored below.

Spatial boundary	Benefits	Drawbacks
Land management unit	Ability to include emissions and removals from proximate and adjacent unmanaged lands, increasing the potential for reporting carbon removals.	Reduced flexibility and increased risk for organisations who must continue sourcing from the same land management units to report WVCM outcomes.
Sourcing region	Sourcing region model buffers risk for organisations allowing them to work with a pool of farmers within a region that can shift year-on-year to accommodate for slight variation in sourcing.	Cannot account for emissions and removals from proximate and adjacent unmanaged lands, reducing the potential for reporting carbon removals.
Jurisdiction	Most flexible model for organisations who do not have traceability to a sourcing region or whose sourcing varies year-on-year.	WVCM emissions reductions only, any removals would not meet the requirement for traceability to sourcing region and would be classed as BVCM.

		Organisations would need to work with many farms to impact the jurisdictional emission factor, reducing value for money of WVCM.
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#### **5.4.2 Chain of custody models as a mechanism for proving physical traceability**

The GHGP states that, to account for emissions, removals, and other metrics from their value chain, organisations must demonstrate they have **physical traceability** to relevant lands within their value chain. To demonstrate physical traceability, companies need to implement traceability systems, for example through certification programs or audited internal systems.

The GHGP and the International Social & Environmental Accreditation & Labelling (ISEAL) Alliance have been working to define how chain of custody models can support traceability. Currently, physical traceability can be demonstrated by applying the following chain of custody models:

- Identity preservation
- Segregation
- Controlled blending
- Mass balance approaches in which the volume or proportion of specified characteristics in the product or material entering and leaving the batch, site or group of sites within the same country and sourcing region is known over a defined reconciliation period (i.e. batch-level, site-level, multi-site-level or group-level within the same country and sourcing region); and/or
- Mixes of these approaches

This means that companies cannot demonstrate physical traceability using book-and-claim approaches and mass balance approaches where the volume of outputs with the specified characteristics is not specified, a reconciliation period was not defined (for a site-level, multi-site-level, group-level), or mixing occurred in a group of multiple sites in different countries or sourcing regions.

The implementation of the EUDR and key certification schemes often require identity preserved or segregated chain of custody models. As stated above, these models are sufficient to prove traceability to a defined spatial boundary. As such, EUDR and certification can provide a powerful starting point to demonstrate traceability to a sourcing region, allowing organisations to engage with producers in that region to deliver WVCM activities.

### **5.5 Existing WVCM accounting methodologies**

Ambiguity surrounding definitions of WVCM and the lack of regulation and best-practice guidelines has led to a variety of project approaches, specifically relating to the mechanisms for accounting and reporting project impact. Two accounting methodologies are currently



being used: intervention accounting and inventory accounting. This divergence in methodologies being used has led to uncertainty and complication of MRV of WVCM activities.

### 5.5.1 Claims

There are a range of claims that organisations may wish to make relating to the climate mitigation outcomes of WVCM activities they have funded. Different claims require different levels of MRV and have different reporting constraints. There are three key types of claims that organisations can make about WVCM activities: i) reporting on project involvement/ implementation, ii) reporting progress against scope 3 targets, and iii) on-pack claims.

#### **Reporting on project involvement/ implementation:**

- Organisations may wish to report on involvement in WVCM outside of their scope 3 target – for example, for marketing or as case studies in a sustainability report. These claims are not tightly regulated, but for organisations that wish to report on their contribution to the activities outside of their corporate greenhouse gas footprint, SBTi's [Beyond Value Chain Mitigation reports](#) provide guidance on best-practice for making contribution claims. These types of claims do not contribute to the achievement of scope 3 targets.

#### **Reporting progress against scope 3 targets:**

- If organisations wish to report the impact of WVCM activities as reductions in their corporate greenhouse gas inventory through inventory accounting methods, the GHGP's [Land Sector and Removals Guidance](#) provides guidance on best-practice accounting rules, although there is significant uncertainty in some areas. With this type of claim, supply chain organisations can co-claim the outcomes of WVCM activities, but relevant safeguards must be in place to avoid over claiming carbon outcomes. Emissions reductions and removals should be reported separately.
- Alternatively, organisations may wish to report the impact of WVCM as abatement of their greenhouse gas inventory by incorporating outcomes calculated using intervention accounting. In practice, this can be challenging, and organisations should ensure that additionality is proved, and double counting is avoided. The [Value Change Initiative](#) and [Gold Standard](#) have developed guidance on best practice reporting in this scenario.
- See section 5.5.2 for further discussion of the difference between intervention and inventory accounting approaches.

#### **On-pack claims:**

- On-pack claims are more tightly regulated than other types of claim from WVCM activities. For example, the European Union's Green Claims Directive aims to address greenwashing by setting rules for how companies market their environmental claims. There is little clarity on best practice for organisations wishing to make on-pack claims from WVCM activities.

### 5.5.2 Types of WVCM



### Intervention accounting approaches

Intervention accounting approaches are based on the methodologies used for beyond value chain mitigation and the voluntary carbon market. These projects use the same methodology used to create carbon credits, which is known as *intervention accounting*. Intervention accounting is a method that quantifies systemwide impacts of a specific action or intervention on GHG emissions and removals relative to a counterfactual baseline scenario that represent the conditions most likely to occur in the absence of the action or intervention. This quantifies the project impact, which is used to create a “WVCM unit”, which represents a reduction or removal of one metric tonne of carbon dioxide or its carbon dioxide-equivalent (CO<sub>2</sub>e). There are a range of opportunities and challenges associated with this approach, summarised below.

Opportunities	Challenges
Defined and familiar mechanism for tracking outcomes of climate projects, similar to an offset.	Scope 3 carbon accounting and corporate FLAG targets must use inventory accounting methodologies, as defined by the Greenhouse Gas Protocol. Firstly, the GHGP recommends that WVCM activities are accounted for using inventory accounting methods to reduce the risk of double counting the project impact within the organisation’s scope 3 footprint <sup>21</sup> . Secondly, there is currently no widely accepted methodology for incorporating outcomes calculated using intervention accounting into a corporate inventory - making it difficult to report on the outcomes of WVCM activities.
Reduced administrative burden for organisations as the accounting is outsourced to a 3rd party verification body.	There is a risk of WVCM credits being sold outside the supply chain and used against beyond value chain mitigation / long-term neutralisation targets. This means that supply chain stakeholders lose the ability to report the inset credits.
Reduced risk of double counting as only one party can claim the WVCM credit. To reduce the risk of double counting, a national-level inventory of WVCM activities could be used.	Reduced opportunity for sharing benefits of WVCM activities with other supply chain stakeholders as only one party can claim a WVCM credit.

### Inventory accounting approaches

Inventory accounting approaches align with methodologies typically used to calculate organisational greenhouse gas footprints, known as *inventory accounting* methodologies. Inventory accounting is a methodology to account for GHG emissions and removals over time within a defined inventory boundary relative to a historical base year. In the case of organisational footprints, the inventory boundary is the organisation’s value chain. Intervention approaches typically quantify the impact of WVCM activities and report these as lower emission factors that organisations can use to calculate their scope 3 footprint.

<sup>21</sup> The Greenhouse Gas Protocol allows credits to be used as a methodology for tracking the impact of WVCM projects, although their application to scope 3 corporate greenhouse gas footprints is unclear. Corporate carbon footprints are calculated using inventory accounting methodologies, so there is a fundamental incompatibility between inset credits calculated using intervention accounting, and the corporate footprint, calculated using inventory accounting.



There are a range of opportunities and challenges associated with this approach, summarised below.

Opportunities	Challenges
<p>Uses the same accounting approach as corporate greenhouse gas inventories, so impacts of WVCM can feed directly into scope 3 footprints. This provides an easy mechanism for organisations to prove progress against their climate mitigation targets.</p>	<p>Limited guidance on the practicalities of using an inventory accounting approach, including how to create the emission factors, allocate outcomes to crops in a rotation, and how to allocate outcomes between funders.</p>
<p>Due to the nature of scope 3 carbon accounting, multiple supply chain actors are able to account for the benefits of WVCM activities, including processors and farmers.</p>	<p>Outcomes can be reported by multiple supply chain actors so there is an increased risk of overclaiming project outcomes.</p>
	<p>Less stringent requirements for proving additionality may lead to an increased risk of overclaiming project outcomes.</p>



## 6. Identified gaps and unresolved challenges: recommended future work

### 6.1 Identified gaps and unresolved challenges

The best practice principles and recommendations outlined in this document are designed to support FLAG organisations navigate the complexities of WVCM and address prevailing uncertainties. The research and stakeholder engagement processes revealed key challenges, including ambiguities in regulatory and accounting frameworks, difficulties in measuring and verifying outcomes, and limited financial resources for collaborative supply chain projects. Section 3 provides actionable steps for FLAG businesses to address some of these uncertainties, offering clear guidance for overcoming these issues wherever possible.

Despite these efforts, some significant challenges remain unresolved, slowing the widespread adoption and effective implementation of WVCM activities. Addressing these challenges requires collaboration across the wider sector, as FLAG businesses alone cannot tackle these systemic unresolved challenges. In particular, government bodies, standard setters, and NGOs have a crucial role to play to step in when the agri-food sector encounters uncertainties that stall progress, and provide the necessary frameworks, resources, and guidance that enable widespread adoption of WVCM practices. Additionally, by providing guidance and guardrails for WVCM, governments and NGOs can ensure that WVCM activities deliver meaningful and credible outcomes, fostering trust and driving long-term positive impacts.

### 6.2 Recommended work to address unresolved challenges

This section outlines recommended actions for government bodies, NGOs, standard setters and other relevant actors to address these barriers. By working together, the wider sector can clarify standards, dismantle obstacles, and create an enabling environment for effective WVCM implementation. The recommendations are organised thematically, highlighting priority stakeholders and proposing opportunities for future workstreams to drive meaningful progress.

#### Key:

★: Primary stakeholder for recommended actions

☆: Supporting stakeholders for recommended actions

<b>Recommended action theme 1: Provision of farmer support and guidance on the potential benefits of WVCM</b>	
<b>Theme identified through stakeholder feedback</b>	Stakeholder engagement highlighted the need to place farmers at the centre of WVCM activities, ensuring that farmers have a clear understanding of the benefits or challenges of engaging in WVCM compared to other mechanisms such as offsetting, including:

	<ul style="list-style-type: none"> <li>• Building farmer awareness of how WVCM can benefit farm businesses by providing an additional income stream, improving relationships with customers, and supporting farm resilience,</li> <li>• Developing understanding of the different routes and approaches available to farmers to engage with their customers regarding on-farm emission reductions and carbon removals (e.g. through WVCM or through offsetting mechanisms), and</li> <li>• Support to empower farmers to instigate conversations with their downstream supply chains to ensure WVCM delivers benefits for their businesses as well as for downstream agri-food processors/retailers.</li> </ul>
<b>Opportunity for future work</b>	Targeted farmer engagement and upskilling relating to WVCM is essential for building awareness of how WVCM can directly benefit farmers, providing an additional income stream, sharing risk, and supporting the resilience of their business. This work will support trust and transparency within the supply chain, alongside work to be done to empower farmers to understand and make informed decisions about transitioning to sustainable land management.
<b>Identified stakeholder(s)</b>	<ul style="list-style-type: none"> <li>• NGOs ★</li> <li>• Farmer groups ★</li> <li>• FLAG businesses ☆</li> <li>• Government/policy makers ☆</li> </ul>
<b>Summary action</b>	<ul style="list-style-type: none"> <li>• Preparation and provision of easily accessible, neutral information and materials that can guide farmers in decision making,</li> <li>• Supply chain collaboration to support the development of case studies for farmers to demonstrate involvement in real-world WVCM activities,</li> <li>• Farmer engagement within existing farmer groupings (e.g. farm cluster groups or co-operatives) to understand opportunities as they arise and share experiences of participation in WVCM.</li> </ul>

### Recommended action theme 2: Financial incentives and benefit sharing for farmers

<b>Theme identified through stakeholder feedback</b>	Beyond providing general support on understanding the benefits of WVCM, further guidance is needed for organisations to best support farmers through the transition to sustainable land management, including clarity on: <ul style="list-style-type: none"> <li>• What financial incentives for WVCM interventions for farmers should look like, to support farmers and supply chain actors to co-design payment mechanisms,</li> <li>• A clear definition of equitable benefit sharing, and</li> <li>• Exploration of non-financial mechanisms that support farmers.</li> </ul>
<b>Opportunity for future work</b>	There is significant uncertainty for FLAG businesses surrounding best practice for selecting a financial incentive mechanism to fairly reward farmers for participation in WVCM activities. These mechanisms will vary by region and commodity, so it is important to consider these variables in future work, including the development of guidance on different funding models and exploration of non-financial incentives.
<b>Identified stakeholder(s)</b>	<ul style="list-style-type: none"> <li>• NGOs ★</li> <li>• Financial sector ★</li> </ul>

	<ul style="list-style-type: none"> <li>• Government/policy makers ☆</li> <li>• FLAG businesses ☆</li> <li>• Farmer groups ☆</li> </ul>
<b>Summary action</b>	<ul style="list-style-type: none"> <li>• Preparation of guidance on what different funding models could look like, and the benefits that each opportunity offers to different actors in the supply chain, and</li> <li>• Developing case studies exploring different funding mechanisms by commodity and geography, engaging key actors in the landscape.</li> </ul>

### Recommended action theme 3: Setting out the business case

<b>Theme identified through stakeholder feedback</b>	<p>Stakeholder engagement highlighted the lack of understanding on how to set out the business case for WVCM to drive investment within a corporate context, in relation to:</p> <ul style="list-style-type: none"> <li>• The likely overall cost of WVCM activities,</li> <li>• The ability to clearly articulate and quantify the benefit of the investment,</li> <li>• How WVCM investment align with other sources of funding, such as public funding through government subsidies,</li> <li>• Building the business case for WVCM as a mechanism to meet science-based targets, but also as a mechanism to achieve other goals including supply chain resilience and collaboration.</li> </ul>
<b>Opportunity for future work</b>	<p>There is a lack of understanding of the financial implications associated with WVCM, making it challenging to build a business case for WVCM. Work needs to be done to explore different financial mechanisms for WVCM, co-developed with farmers, for corporate decision-makers to be able to make the case internally for investment in WVCM activities. Additionally, comparison/understanding of the cost of WVCM investment compared to costs of other supply chain resilience options would support building the business case.</p>
<b>Identified stakeholder(s)</b>	<ul style="list-style-type: none"> <li>• Financial sector ★</li> <li>• NGOs ★</li> <li>• Government/policy makers ★</li> <li>• FLAG businesses ☆</li> </ul>
<b>Summary action</b>	<ul style="list-style-type: none"> <li>• Worked examples of WVCM in practice in comparison to alternative options for supply chain decarbonisation and/or actions to increase supply chain resilience, and</li> <li>• Clear guidance on the alignment of WVCM funding with public funding streams.</li> </ul>

### Recommended action theme 4: Pre-competitive collaboration

<b>Theme identified through stakeholder feedback</b>	<p>There is a recognition that pre-competitive cross-supply chain collaboration can support significant change at scale on a landscape level, and a willingness and</p>
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	<p>interest to develop projects of this nature, however there are challenges in identifying:</p> <ul style="list-style-type: none"> <li>• What benefit sharing across a landscape / environment where there are multiple investors might look like in practice from a carbon accounting perspective, and</li> <li>• Potential models for successful pre-competitive collaboration at scale.</li> </ul>
<b>Opportunity for future work</b>	<p>Collaboration is a key mechanism for driving scale of WVCM activities but there are limited examples of what this looks like in practice. Providing examples of successful projects to set a direction for future activity can remove the perceived risk of trying a 'new' collaboration format.</p> <p>Reassurance provided by key frameworks and standards to demonstrate that WVCM can work for multiple parties in a landscape scale would also facilitate investment.</p>
<b>Identified stakeholder(s)</b>	<ul style="list-style-type: none"> <li>• Standard setters ★</li> <li>• FLAG businesses ★</li> <li>• Exiting WVCM project developers ★</li> <li>• Government/policy makers ☆</li> </ul>
<b>Summary action</b>	<ul style="list-style-type: none"> <li>• The development of 'demonstration projects', brought together by actors across the supply chain, facilitated and encouraged by government where possible, and</li> <li>• Transparent communication on the challenges faced by 'demonstration projects', to support the development of learnings for other adopters.</li> </ul>

**Recommended action theme 5: MRV - guidance for social and nature outcomes**

<b>Theme identified through stakeholder feedback</b>	<p>Stakeholder engagement revealed uncertainty from FLAG businesses surrounding MRV for social and nature outcomes, including:</p> <ul style="list-style-type: none"> <li>• A clearer understanding of best practice metrics to capture social and nature impacts of WVCM,</li> <li>• Understanding of accounting approaches to use to quantify and report nature and social outcomes of WVCM activities, and</li> <li>• Better access to scalable and affordable monitoring technologies for social and nature outcomes.</li> </ul>
<b>Opportunity for future work</b>	<p>Although there has been significant work done by the conservation and international development sectors on how to measure social and nature outcomes of programmes, there is a lack of clarity on the extent to which these methodologies are useable and relevant in the context of WVCM. From an organisational perspective, there is a lack of clear accounting guidance for how to account for, and report, the impact of projects organisations are involved in. This poses challenges for organisations wishing to report on the outcomes of WVCM as there is a lack of standardised metrics and methodologies for MRV, increasing the cost and complexity of exploring these outcomes. There is a need for standard setters, NGOs, and government to collaborate to support the development of standardised metrics, accounting methodologies, and ways to report the social and nature impacts of WVCM activities.</p>
<b>Identified stakeholder(s)</b>	<ul style="list-style-type: none"> <li>• Standard setters ★</li> <li>• NGOs ★</li> </ul>

	<ul style="list-style-type: none"> <li>Government/policy makers ☆</li> </ul>
<b>Summary action</b>	<ul style="list-style-type: none"> <li>Collaborate to improve the inter-operability of guidance for nature, social and climate outcomes,</li> <li>Develop detailed accounting and reporting guidance, providing guidance on best practice metrics and methodologies.</li> </ul>

### Recommended action theme 6: MRV - guidance for carbon outcomes

<b>Theme identified through stakeholder feedback</b>	<p>There is significant uncertainty surrounding best practice for MRV of carbon outcomes resulting from the wide range of potential MRV providers and ambiguity from standard-setters. Support is needed throughout the supply chain to understand:</p> <ul style="list-style-type: none"> <li>What level of primary data is required to ensure that MRV is robust and how these requirements vary for emission reductions compared to carbon removals,</li> <li>What tools and datasets are available that enable scaled monitoring and reporting of emission reductions and carbon removals,</li> <li>How to reduce MRV burden for all actors, and ensure that investment in MRV is proportional to the overall project value (including exploring what “proportional” investment in MRV means),</li> <li>The extent to which third-party verification or auditing of outcomes is necessary, and</li> <li>How best-practice MRV varies depending on the accounting methodology used.</li> </ul>
<b>Opportunity for future work</b>	<p>There is varied understanding and interpretation of what robust MRV looks like, which has led to a proliferation of potential approaches and MRV providers in the WVCM space. This causes significant uncertainty for organisations when selecting an MRV approach, with difficulties in discerning which methodologies are robust. Potential solutions to this could be a checklist of MRV requirements in different contexts to provide guidance and manage expectations during the project design phase, worked examples of successful MRV systems, and action by government to harmonise MRV methodologies.</p>
<b>Identified stakeholder(s)</b>	<ul style="list-style-type: none"> <li>NGOs ★</li> <li>Standard setters ★</li> <li>MRV providers ★</li> <li>Government/policy makers ☆</li> <li>FLAG businesses ☆</li> </ul>
<b>Summary action</b>	<ul style="list-style-type: none"> <li>Minimum standard checklist of MRV requirements in different contexts,</li> <li>Efforts to harmonise MRV methodologies to reduce variation and ensure alignment with minimum standard, and</li> <li>Worked examples of successful MRV programmes .</li> </ul>

### Recommended action theme 7: Clearer technical guidance on accounting methodologies and types of claims for corporate decision makers

<b>Theme identified through stakeholder feedback</b>	<p>The GHGP draft Land Sector and Removals Guidance provides guidance for organisations wishing to account for the impact of WVCM activities, but there is significant ambiguity surrounding several practical steps in the process, including:</p> <ul style="list-style-type: none"> <li>• How to account for the impact of non-WVCM activities on farms, such as government-subsidised activities,</li> <li>• How to attribute soil carbon removals and aboveground biomass removals to product footprints, especially in cases where there are multiple products produced on the same farm in a rotation,</li> <li>• How to allocate outcomes between co-funders,</li> <li>• How to allocate outcomes between co-products,</li> <li>• What guardrails need to be put in place to ensure that outcomes are not over-claimed when product footprints are passed down the supply chain,</li> <li>• How accounting needs to be altered if using the sourcing region model,</li> <li>• Detail on which methodologies are most suited to which supply chain context, and</li> <li>• Information on the types of WVCM claim that businesses can make.</li> </ul>
<b>Opportunity for future work</b>	<p>The provision of clear technical guidance to support businesses in breaking down barriers of interpretation regarding commonly used accounting methodologies. The final Land Sector and Removals Guidance is not expected to provide further guidance on most of the above listed points, so there is a role for government, standard setters, and NGOs to collaborate to clarify best practice. Worked examples showing organisations how to do key steps (inventory and intervention accounting, allocation and co-claiming of outcomes). Some of this work is being addressed through the Value Change initiative Food and Agriculture Working Group V and the Carbon Removals Taskforce.</p>
<b>Identified stakeholder(s)</b>	<ul style="list-style-type: none"> <li>• Standard setters ★</li> <li>• Government/policy makers ★</li> <li>• NGOs ☆</li> <li>• FLAG businesses ☆</li> </ul>
<b>Summary action</b>	<ul style="list-style-type: none"> <li>• Provision of easily accessible information, interpreting the GHGP draft Land Sector and Removals Guidance and SBTi FLAG Guidance for use by MRV providers and corporate decision makers,</li> <li>• Worked examples of WVCM in practice in different scenarios, particularly where there are multiple purchasers.</li> </ul>

### Recommended action theme 8: Clearer technical guidance on the traceability boundaries used in accounting methodologies

<b>Theme identified through stakeholder feedback</b>	<p>Lack of clarity on how to define and establish a sourcing region for implementation of WVCM in alignment with the GHGP draft Land Sector and Removals Guidance definitions, particularly regarding complex issues such as:</p> <ul style="list-style-type: none"> <li>• Inter-year variability/crop rotations,</li> <li>• Shifting sourcing patterns,</li> <li>• Proximate/adjacent lands. and</li> <li>• Certification as a proxy for traceability.</li> </ul>
<b>Opportunity for future work</b>	<p>Traceability is a key area of uncertainty - the finalised Land Sector and Removals Guidance will provide clarity on the exact boundaries of sourcing regions and an indication of how certification can support traceability. The next steps could include</p>



	<p>detailed worked examples and practical guidance for organisations on how to define sourcing regions in different supply chains, and practical solutions for improving traceability in high-risk supply chains. There is also a role for government to address any remaining uncertainties and to establish guardrails around the types of claim that can be made based on WVCM activities with varying traceability.</p>
<b>Identified stakeholder(s)</b>	<ul style="list-style-type: none"> <li>● Standard setters ★</li> <li>● NGOs ★</li> <li>● Government/policy makers ☆</li> </ul>
<b>Summary action</b>	<ul style="list-style-type: none"> <li>● Worked examples of WVCM in practice in different scenarios, particularly where levels of traceability differ, and</li> <li>● Provision of easily accessible information, interpreting the GHGP draft Land Sector and Removals Guidance and SBTi FLAG Guidance for use by corporate decision makers.</li> </ul>

## Appendix 1: Glossary

Term	Definition
Beyond value chain mitigation (BVCM)	Beyond value chain mitigation (BVCM) is a mechanism through which companies can accelerate the global net-zero transformation by going above and beyond their science-based targets. BVCM is defined as "mitigation action or investments that fall outside a company's value chain, including activities that avoid or reduce GHG emissions, or remove and store GHGs from the atmosphere." ( <i>SBTi Corporate Net Zero Standard, 2024</i> ).
Carbon credit	Carbon offsetting is a carbon trading mechanism that enables entities to compensate (offset) greenhouse gas emissions by investing in projects that reduce, avoid, or remove emissions elsewhere. One carbon credit represents a reduction, avoidance or removal of one metric tonne of carbon dioxide or its carbon dioxide-equivalent (CO <sub>2</sub> e).
Compliance carbon markets	Compliance carbon markets are regulated by mandatory national, regional, or international carbon reduction frameworks and are usually aimed at high-emitting sectors such as iron and steel producers, oil refineries, power generators, airlines, and processing companies.
Farm gate	The farm gate is a system boundary used in life cycle assessments to include activities relating to the agricultural production phase of agricultural raw material, before these materials are processed and transported to downstream customers. Activities included in the pre-farm gate boundary include production of resources and inputs used on farm, field activities such as field preparation, fertilisation, planting, harvesting, and emissions from livestock.
Harvested area	A spatially explicit area of productive agricultural land that was harvested at a given time to produce the relevant raw material ( <i>GHGP Interim Traceability Requirements</i> ).
High-risk sourcing region	High-risk sourcing regions may be associated with high land-based emissions, detrimental environmental impacts (such as reduced water quality or availability, reduced biodiversity, land degradation, or deforestation), or with low resilience to climate change.
Intervention (project) accounting	Accounting method that quantifies systemwide impacts of a specific action or intervention on GHG emissions and removals relative to a counterfactual baseline scenario that represent the conditions most likely to occur in the absence of the action or intervention ( <i>GHGP draft Land Sector and Removals Guidance part 2, 2022</i> ).
Inventory accounting	Accounting for GHG emissions and removals over time within a defined inventory boundary relative to a historical base year ( <i>GHGP draft Land Sector and Removals Guidance part 2, 2022</i> ).
Jurisdiction	A predefined, spatially explicit area based on a political boundary where biogenic products or raw materials are sourced from. This includes political boundaries based on a subnational jurisdiction (e.g., state or province), country, or political region (e.g., the European Union) of origin ( <i>GHGP Interim Traceability Requirements</i> ).
Land management unit	A predefined, spatially explicit area of a given land use, managed according to a clear set of objectives according to a single land management plan to produce a given raw material or set of raw materials. A LMU may represent spatially explicit areas such as a farm, field, or plot ( <i>GHGP Interim Traceability Requirements</i> ).
Leakage	An increase in emissions or a decrease in removals outside a company's inventory boundary resulting from the company's actions to reduce emissions or increase removals within its inventory boundary. ( <i>GHGP draft Land Sector and Removals Guidance part 2, 2022</i> ).

Monitoring, reporting, and verification (MRV)	Monitoring, reporting, and verification (MRV) is a framework for monitoring and verifying greenhouse gas (GHG) emissions and reduction efforts, often to ensure compliance with regulations or voluntary initiatives ( <a href="#">Validere, 2023</a> ).
MRV providers (see Figure 5)	MRV providers are organisations that specialise in monitoring and verifying GHG emissions and reduction efforts. In a WVCM setting, MRV providers could include organisations that conduct soil carbon testing and measurement, remote sensing of farm practices, farm carbon footprint calculators, or organisations that support farmers with data collection.
Offsetting	Carbon offsetting is a carbon trading mechanism that enables entities to compensate for offset greenhouse gas emissions by investing in projects that reduce, avoid, or remove emissions elsewhere.
Point of aggregation	The first point of aggregation is a location that receives harvested biogenic materials from land management units for processing or distribution further down the supply chain ( <a href="#">GHGP <i>draft Land Sector and Removals Guidance part 1, 2022</i></a> ).
Project developers (see Figure 5)	Project developers are organisations that support farmers or supply chain organisations with the implementation of WVCM activities. Project developers can support with various stages of implementation of WVCM, from identifying and engaging with farmers, selecting suitable activities, providing farmer support during implementation, and overseeing transfer of financial incentives. Some project developers also support with monitoring, reporting, and verification.
Sourcing region	A predefined, spatially explicit land area that supplies a given raw material to the first point of aggregation or first processing facility in the value chain. Sourcing region boundaries may be defined relative to the tier of the value chain that is inclusive of multiple first points of aggregation or first processing facilities with overlapping areas that supply harvested raw materials ( <a href="#">GHGP <i>Interim Traceability Requirements</i></a> ).
Standards and verification bodies (see Figure 5)	Standards are an agreed way of doing something – including making a product, managing a process, delivering a service, or supplying materials. Standards aim to provide a reliable basis for people to share the same expectations about a product or service. ( <a href="#">BSI <i>What is a standard?, 2024</i></a> ).  In the context of WVCM, standards are tools that distil expertise and provide guidance for organisations developing and implementing WVCM activities. Standards in the WVCM space are typically voluntary and may apply to the whole project development and implementation process, or to a subset of activities. Verification bodies are organisations that verify that a project has been carried out in accordance with the requirements of a specific standard.
Supply shed	A supply shed is a concept and approach that caters to situations where a company may not be able to directly trace sourcing to a specific upstream supplier, but it is known (and can be demonstrated) that sourcing comes from a group of suppliers within a “market” from which the company sources. ( <a href="#">SustainCert, 2023</a> ).  Organisations use different boundaries when defining the supply shed. For the purpose of this report, we refer to sourcing region (not supply shed) as defined by the GHGP above.
Traceability	Traceability refers to the ability of a company to identify, track, and collect information on activities in its value chain, across its upstream and downstream processes and products ( <a href="#">GHGP <i>draft Land Sector and Removals Guidance part 2, 2022</i></a> ).
Voluntary carbon market	Voluntary markets, also known as offsetting markets, function outside of compliance markets, therefore they do not currently involve any direct government or regulatory oversight. Voluntary carbon markets are typically associated with beyond value chain mitigation activities.



Within value chain mitigation (WVCM)	WVCM projects are interventions within a company's value chain that are designed to generate greenhouse gas emission reductions and carbon storage, and at the same time create positive impacts and improve resilience of communities, landscapes and ecosystems ( <i>adapted from <a href="#">Abatable/International Platform for Insetting, 2023</a></i> ).  See Box 1 for full definition of WVCM.
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## Appendix 2: Methodology

### Methodology overview

The development of this report was informed by a multi-stage process combining secondary research and a literature review of key resources, stakeholder consultations, and scenario-specific insights to ensure practical and evidence-based recommendations. The process is outlined in detail below:

1. Literature review
2. Advisory Group engagement
3. Stakeholder engagement workshops
4. Scenario-specific stakeholder engagement

### 1. Literature review

This report draws on an initial landscape review of key documents and frameworks as well as building on previous work done by 3Keel in collaboration with Conservation International and other clients. The literature review focused on the motivations and drivers for engaging in WVCM, the current context and the gaps and opportunities associated with WVCM activities. The documents reviewed in the first stage of research are listed below.

Organisation	Document	Document type
Abatable / International Platform for Insetting	<a href="#">Addressing Scope 3 – how insetting can be scaled to tackle supply chain emissions</a>	Key report
World Business Council for Sustainable Development	<a href="#">Tackling Scope 3 emissions in Agricultural &amp; Food value chains</a>	Key report
World Business Council for Sustainable Development	<a href="#">Financing models for land-based investments</a>	Key report
The Food and Land Use Coalition	<a href="#">Future Fit Food and Agriculture: Developments in voluntary frameworks and standards and their influence on legislation for businesses</a>	Key report
Value Change Initiative	<a href="#">Building the case for value chain interventions: enabling credible co-claiming of impact and investments</a>	Key report
Science-Based Targets initiative	<a href="#">Forest, Land and Agriculture Science-Based Target-Setting Guidance</a>	Reporting framework
Science-Based Targets initiative	<a href="#">Above and Beyond: an SBTi Report on the Design and Implementation of Beyond Value Chain Mitigation (BVCM)</a>	Reporting framework
Science-Based Targets Network	<a href="#">Corporate Manual</a>	Reporting framework
Taskforce on Nature-related Financial Disclosures	<a href="#">Taskforce on Nature-related Financial Disclosures (TNFD) Recommendations</a>	Reporting framework
Taskforce on Climate-related Financial Disclosures	<a href="#">Recommendations of the TCFD</a>	Reporting framework

Greenhouse Gas Protocol	<a href="#">Land Sector and Removals Guidance (draft for pilot testing and review)</a>	Accounting standard
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The principles and recommendations for best practice WVCM outlined in this document were developed through the following process:

1. Review of a selection of existing draft principles for WVCM and related activities, including:
  - a. Conservation International, Environmental Defense Fund, IETA, the International Platform for Insetting, Proforest, The Nature Conservancy, Value Change Initiative and World Business Council for Sustainable Development: Call for grounded engagement - Climate Week NYC. [Shared principles for FLAG sector to focus on real impact in climate discussions and decisions](#)
  - b. Conservation International: Principles for insetting projects & programs (draft)
  - c. AIM Platform Criteria: [Draft for Stakeholder Comment](#) (May 2024)
  - d. Integrity Council for the Voluntary Carbon Market (ICVCM): [Core Carbon Principles](#)
2. Building on gaps and opportunities identified in the landscape review portion of the research

## 2. Advisory Group engagement

An Advisory Group was engaged, with 10 actors from the WVCM space including standard setting organisations, NGOs, FLAG processor/retailer companies, and farming representatives. Advisory Group members were selected based on their suitability to fulfil the below selection criteria (when considered both individually and as a collective):

- An even representation of the three stakeholder groups most relevant to this work i) supply side, ii) demand side, iii) enabling environment;
- Appropriate technical knowledge or practical experience (e.g. of implementing WVCM projects in a UK or global context), in the context of the overall function of the Advisory Group and the expertise provided by the other members;
- Availability to attend 5x 1-1.5-hour meetings between Sept-Dec 2024;
- Strong UK or global context (or both);
- Appropriate links with other bodies active in the WVCM sphere or related frameworks/standards;
- Any possible conflicts of interest.

This group met five times between September and December 2024 to discuss progress on the project and ensure alignment with stakeholder priorities, experience, and existing projects. The Advisory Group provided critical feedback on the draft findings, principles, scenario development, and final recommendations.

## 3. Stakeholder engagement workshops

The principles and landscape review were refined in a series of engagement workshops with relevant stakeholders across three groups: i) supply side, ii) demand side, and iii) enabling environment actors. There were approximately 5-7 stakeholders in each workshop.



- **Supply side** actors included farmer representatives, certification bodies, NGOs, as well as social enterprises and non-profit organisations carrying out projects on the ground.
- **Demand side** actors included retailers, commodity traders and food manufacturers who were selected based on their experiences in WVCM and who have a focus on the beef or cocoa supply chain.
- **Enabling environment** actors included standard setting bodies, NGOs, and carbon footprinting platforms.

Each workshop lasted two hours and was conducted online, with stakeholders having the ability to review the draft landscape review document, including the principles, beforehand. The stakeholders were also asked to contribute to the initial scenario development work, with their inputs used to guide the review of key questions that need to be addressed as part of the scenario development.

#### ***4. Scenario specific stakeholder engagement***

To further enhance the accuracy and detail of the beef and cocoa scenario developments, one-on-one one-hour calls were organised with key actors in the respective supply chains. These interviews were conducted online and included farmers, processors, retailers, NGOs, and implementation partners.



### Appendix 3: Alignment of core principles with existing principles

This table represents an alignment of the core principles and recommendations outlined in this report with existing principles guiding high-integrity WVCM and related activities (such as principles for voluntary carbon markets).

	Defra/DESNZ WVCM Principles						
	Principle 1: Maximise on-the-ground impact of WVCM through pre-competitive collaboration and directing effort toward delivering multiple outcomes in high impact value chains.			Principle 2: WVCM activities support farmers to build resilience in a changing climate and provide value to farmers by sharing risk and ensuring they are fairly rewarded for engagement.		Principle 3: Monitoring, Reporting, and Verification (MRV) systems are sufficiently robust to quantify the outcomes of WVCM activities, whilst taking a balanced, harmonised, and proportionate approach.	
	Rec.1: Targeted to supply chains with greatest potential impact	Rec.2: Deliver multiple outcomes	Rec.3: Leverage collaborative relationships	Rec.4: Co-developed with farmers	Rec.5: Fair reward for farmers	Rec.6: MRV is robust, transparent and conservative	Rec.7: MRV is proportionate and fair
Proforest et al. <a href="#">Call for grounded engagement - Climate Week NYC</a> . (September 2024)		★	☆	★	☆		★
Conservation International. Principles for inseting projects & programs (Draft)	★	★	☆	★	★	★	
AIM Platform Criteria. <a href="#">Draft for Stakeholder Comment</a> (May 2024)			☆	☆		★	
Integrity Council for the Voluntary Carbon Market (ICVCM). <a href="#">Core Carbon Principles</a> (January 2024)		★		☆		★	
<b>Key:</b> ★: Full alignment ☆: Partial alignment							



## **Appendix 4: Disclaimer**

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