IMPLEMENTING APPROACHES TO CARBON CREDIT INTEGRITY

How can investors put their policies into practice?

MFF
managed by FMO

IMPLEMENTING APPROACHES TO CARBON CREDIT INTEGRITY

How can investors put their policies into practice?

July 2023

The Mobilising Finance for Forests (MFF) program is managed by FMO and funded by the UK Government.

Palladium and Systemiq have delivered this work as part of the MFF Learning, Convening and Influencing Platform.

FMO Entrepreneurial Development Bank

UK Government

Palladium MAKE IT POSSIBLE

SYSTEMIQ

About this paper

The emergence of the voluntary carbon market as a tool for financing forest and sustainable land use (FSLU) projects presents new risks, as well as opportunities, for investors in this sector. The development of new tools and due diligence approaches is needed to ensure the credibility of climate impacts and to avoid financing credits that get used for 'greenwashing'. This paper explores how impact-focused investors can use their role as financiers of the FSLU sector in the tropical belt to support the growth of a high-integrity market for carbon credits. Much of the existing guidance in the voluntary carbon market is rightly directed at the companies that are either generating or using (retiring) carbon credits. However, the role of financial institutions in supporting the emergence of a high-integrity market, and the practical levers available to play such a role, requires further elucidation. This paper seeks to address this need.

Mobilising Finance for Forests (MFF) is a UK Government funded programme that aims to catalyze private sector investment into business models that address deforestation in the tropical belt. Recognizing the value of tackling these challenges collectively, MFF, through its "Learning, Convening, and Influencing Platform" (LCIP), has developed this learning paper on the potential role that investors can play in supporting the development of high-integrity carbon markets. The paper discusses the practical questions around financing projects generating carbon credits in the FSLU sector in terms of 1) the scope to which investors can apply their chosen integrity principles, 2) the levers available to the investor to implement these principles and 3) the different assessment criteria that investors could use to assess alignment with their principles. While this paper aims to offer valuable insights at a general level, it is important to stress that each project should be assessed individually within its specific context, as different projects may require a customized approach.

This paper consolidates a body of knowledge derived from desk research, expert opinions, and a series of discussions among development finance institutions, including FMO. Like many impact-focused investors, we are actively exploring different approaches to effectively and responsibly finance the FSLU sector, in which carbon credits are playing an increasingly significant role. This paper aims to foster broader discussions on this topic among impact-focused investors and provide a foundational understanding of how investors can translate their chosen integrity policies into practice.

Disclaimer: This project was commissioned as part of the Mobilising Finance for Forests programme's Learning, Convening and Influencing Platform. The views expressed in this report are derived from reflections and insights developed through desktop research, analysis, interviews with experts and practitioners, as well as the valuable input from a diverse group of stakeholders. It is important to note that these views should not, under any circumstances, be considered as reflective of the official position or views of FMO and/or the UK Government.

Unlocking private capital to protect and restore tropical forests across Africa, Asia and Latin America.

Contents

1 Voluntary carbon markets in the forest and land use sector

Voluntary carbon markets in the forest and land use sector

Sustainable land use is key to achieving climate goals

The importance of forests and sustainable land use (FSLU)[1] to achieve the goals of the Paris Agreement is now widely acknowledged – namely to limit global temperature rise to less than 2°C above pre-industrial levels, and as close to 1.5°C as possible.[i] Gross greenhouse gas (GHG) emissions from agriculture, deforestation and other land use changes represent about 22.1 billion metric tonnes of carbon dioxide equivalent ($GtCO_2e$) every year, about 35% of total anthropogenic GHG emissions.[ii] Taken together, the land use system currently accounts for almost half of all anthropogenic GHGs flowing into and out of the atmosphere.[iii] At the same time, forests and soils act as vital carbon sinks, removing emissions equivalent to 15.7 $GtCO_2e$ from the atmosphere each year[iv] as well as offering a host of other critical ecosystem services for people and planet – protecting biodiversity, supporting lives and livelihoods. They can only continue to play this role with the right protection and management. Put simply, the goals of the Paris Agreement – and the broader UN Sustainable Development Goals – cannot be achieved without major investment in actions that reduce emissions from agriculture, halt deforestation and rapidly scale carbon removals through the restoration of degraded ecosystems and other Natural Climate Solutions (NCS).

This will require a major increase in investment for NCS this decade. The UN Environment Program estimates that meeting the goals of the Paris Agreement requires a tripling of financial flows to NCS to US$484 billion by 2030, the majority of which will have to come from private finance.[v] However, NCS has so far struggled to attract investment from the private sector at scale. Of the US$154 billion spent on NCS today, only 17% comes from private sources. Leveraging the action of companies through the voluntary carbon market could help to close this funding gap.

A limited but important role for carbon credits

Carbon credits offer a potentially valuable revenue stream to deliver NCS, providing a pathway for much-needed private investment. This is particularly the case in emerging markets and developing economies (in which the majority of tropical forests are located), where the cost of capital is typically higher and access to finance can be more limited but where the greatest potential for NCS exists. The voluntary carbon market remains small today at approximately $2 billion but is scaling quickly. [vi] Much of this growth has come from NCS projects, underscoring the potential for carbon markets to channel finance to this critical area of climate action.[vii]

Nevertheless, the role of carbon credits in delivering global net-zero remains controversial, particularly where it concerns offsetting. In theory, the use of carbon credits enables actors to support earlier, faster and more cost-effective mitigation than would be possible through action within their own value chains alone. In practice, this is only the case if markets operate with a high degree of integrity. This requires that two conditions hold true:

- First, that actors purchasing and retiring carbon credits use them in addition to meaningful actions to reduce direct business emissions and those within their own value chain, rather than as a replacement for such action. This includes making accurate disclosures and clear public claims about the use of carbon credits acquired, to enable scrutiny from stakeholders like customers and investors, as well as the wider public. These issues are typically characterized as "**demand-side**" integrity issues.
- Second, that the mitigation activity associated with carbon credits genuinely delivers the climate, as well as environmental and social outcomes promised, without creating harm elsewhere. These issues are referred to as "**supply-side**" integrity issues.

In this context, this paper explores the potential role of investors in supporting the development of a high-integrity voluntary carbon market in the FSLU sector, and some of the practical questions that need to be considered.

[1] We use "Forest and sustainable land use" in this paper to refer to best practice activities relevant to the management of commercial and natural forests and the agriculture sector. This is broadly synonymous with the Agriculture, Forestry and Other Land Use (AFOLU) category used by the IPCC.

2 The role of investors in supporting high-integrity carbon markets

The role of investors in supporting high-integrity carbon markets

Many investors have generally taken a cautious approach to engaging in carbon markets to date. This reflects high perceived risks, both financial and reputational, for which investors have lacked suitable standards and processes to mitigate. Recent media scrutiny of the voluntary carbon markets – especially carbon projects for NCS – are a reminder of the challenges faced by investors seeking to deliver high-integrity outcomes.[viii,ix] Several initiatives are now working to address these integrity issues by building consensus on the core principles for supply and demand side integrity.[2] Much of the existing guidance is directed at the entities that are either generating or using (retiring) carbon credits. The role of financial institutions in supporting the emergence of a high-integrity market, and the practical levers available to them to play such a role, has so far received less attention.

Three key roles

Investors are not a homogenous group – they comprise a diverse range of mandates, governance arrangements, impact targets, sources of capital, and sectoral and geographic expertise. This paper mainly targets impact-focused investors with a mandate for investing in the FSLU sector in emerging and developing economies. The influence of these investors on a broad range of funds and projects means they are well-placed to support the development of high-integrity FSLU carbon credits. Furthermore, some investors, such as Development Finance Institutions (DFIs), have access to concessional capital, enabling some to take on higher risk and potentially play a greater role in accelerating the carbon market's development.[3] This paper acknowledges different circumstances and limitations faced by individual investors. However, it aims to start a constructive conversation on the potential role for impact-focused investors in accelerating climate impact through scaling high-integrity FSLU carbon markets. Within this context, this paper lays out three interconnected potential roles that investors could play:

1. **Invest in the development of high-integrity carbon projects and their associated enabling conditions.** Impact-focused investors have a critical role in financing project development in markets and sectors where opportunities remain unattractive for commercial investors. This could take the form of direct investments into NCS projects and project developers or via specialist funds. Those with access to concessional funding could also support (through financing, but also partnerships) the technologies, infrastructure and regulatory developments needed to make NCS projects commercially attractive (sometimes known as 'Market Creation').
2. **Catalyze more private investment through signaling effects, blended finance structures, and other de-risking measures.** When reputable impact-focused investors enter a new market, it can send a valuable signal to more commercial investors that investible opportunities exist. In essence, the thorough due diligence (especially on the environmental and social aspects) that precedes such investment, acts as a 'stamp of approval'. Where investors such as DFIs have access to concessional funds, the structuring of blended finance vehicles, use of guarantees and funded technical assistance can improve risk-adjusted returns for other investors, mobilizing further private capital.
3. **Raising the standards and achieving transformational change on ESG (environmental, social and governance) good practice across the sector.** Through active management of their investment portfolio and the early adoption of good international practice, impact-focused investors can help to mainstream emerging standards, guidelines and high-integrity approaches with co-investors, investees and off-takers. Through its demonstration effect, this good practice can become more widely adopted in the market.

Developing robust approaches to assessing carbon credit integrity could be a critical step in unlocking broader commercial investor participation in the voluntary carbon market (VCM). The remainder of this paper now discusses the practical approaches that investors in FSLU projects could take to help mitigate integrity concerns, whatever principles they choose to adopt.

[2] For example, the Science Based Targets Initiative (SBTI), the Voluntary Carbon Markets Integrity Initiative (VCMI), the Integrity Council for the Voluntary Carbon Market (ICVCM), the International Carbon Reduction & Offset Alliance (ICROA), the Nordic Code, and the Oxford Offsetting Principles.

[3] Not all DFIs have the same risk tolerance, indeed some require the same risk-return profile as commercial investors. Investing into pre-commercial stage businesses is only possible for selected DFIs with access to concessional pools of capital. Even with concessional capital, there are only limited risks these selected DFIs can take, and limited de-risking instruments they can deploy.

3 Implementing approaches to carbon credit integrity

Implementing approaches to carbon credit integrity

This chapter sets out the case for impact-focused investors to take an active approach to carbon credit integrity and outlines the emerging consensus within the market on high-integrity principles on both the supply and demand side[4]. The main sections look at the key considerations for investors in putting integrity principles into practice.

It is important at this point to stress that the following provides a generalized approach for further development, and that each project should be assessed individually within its specific context, as different projects may require a customized approach.

Demand-side Integrity

Why it Matters

High-integrity carbon credits purchased by businesses can play an important, but limited, role in supporting the transition to net zero.[x] Climate models are clear that all sectors of the economy will need to achieve deep decarbonization by mid-century, alongside major investments in solutions to restore natural ecosystems and remove carbon dioxide from the atmosphere.[xi] In line with such models, net-zero standards and guidelines require that the purchase of carbon credits should be used in addition to, rather than as a substitute for, business emissions reductions. For example, the Science Based Targets Initiative requires that signatory companies reduce their emissions by at least 90% in most sectors without the use of carbon credits.[xii]

High-integrity standards help companies to remain focused on tackling their own operational and supply chain emissions as a priority. In various sectors, reducing direct business emissions may be significantly more costly than purchasing an equivalent volume of carbon credits. The cost of emissions allowances in the EU Emissions Trading Scheme breached €100/tCO_2 for the first time in February 2022, reflecting the relatively high cost of mitigation in the heavy industry sectors regulated by the scheme.[xiii] By contrast, the average price for nature-based carbon credits on a popular exchange in the VCM has remained between \$5-16/tCO_2.[xiv] Purchasing carbon credits as a substitute for reducing direct business emissions could have the effect of reducing investment into the technologies and business changes required to address these 'hard-to-abate' emissions, delaying the transition to net zero.

Clear and accurate disclosures and claims can ensure the responsible use of carbon credits within a company's climate strategy. Clear disclosure of the governance and management of climate risks, including the role that carbon credits play, enables financial institutions to make capital allocation decisions that accurately reflect risk exposure. Clear and accurate public claims about credits also allow customers to make informed decisions, potentially directing capital toward companies that are taking meaningful action. The recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) do not yet explicitly require that the use of offsets be disclosed and many organizations today do not provide clear information on their current or expected use of carbon credits in climate disclosures.[xv] A growing number of regulatory proposals, such as those under discussion by the US SEC and the UK's disclosure framework, are likely to require greater clarity in this area.[xvi,xvii] Terminology relating to the use of carbon credits and the claims that companies can make continues to evolve. Initiatives such as the Voluntary Carbon Market Integrity (VCMI) Initiative[xviii], the Gold Standard Claims Guidelines[xix], and the Nordic Dialogue[xx] are providing guidance on how companies should make claims associated with their voluntary use and accounting of carbon credits. However, these initiatives do not yet offer a definitive framework for investors to assess the integrity of the (potential) buyers of carbon credits from the projects they finance.

High-Integrity Principles

Voluntary carbon market guidance initiatives have coalesced around several key elements that define demand-side integrity from the perspective of the users of carbon credits. Outlined below is a summary of the emerging consensus on high-integrity demand-side principles, around which investors may choose to develop due diligence and investee engagement approaches for carbon credit projects in the FSLU sector. We present these as descriptive in order to structure the following discussion, and not as normative statements.

[4] Although this paper focuses only on carbon credits generated in the FSLU sector, the demand-side integrity discussion is also relevant for all other types of carbon credits.

1. **Carbon credits should be used as part of an appropriate climate strategy in accordance with a mitigation hierarchy.** (E.g. Box 1) Carbon credits should be used to meet voluntary commitments only where the user is taking credible climate action to reduce their own emissions.
2. **Organizations purchasing carbon credits should make comprehensive disclosures regarding their use and ensure that claims are accurate and clear.** Users of carbon credits should make clear disclosures regarding the use of carbon credits within their climate strategies. This ideally includes reporting on the details of carbon credits purchased, such as the project, program, vintage and whether the credit is associated with a corresponding adjustment.
3. **Organizations purchasing carbon credits should not be engaged in activities that are not aligned with a credible climate strategy.** This could include for example advocating for policies that are not aligned with the Paris Agreement goals[5].

Box 1. SBTI perspective on mitigation hierarchy

TO TRANSITION TO GLOBAL NET-ZERO	BUT BEYOND VALUE CHAIN MITIGATION CAN ACCELERATE THE TRANSITION
• Complete an emission inventory following the GHG Protocol • Set near- and long-term science-based targets to reduce value chain emissions • Implement a strategy to achieve science-based targets • Disclose target progress annually	• **In the near-term**, prioritize securing and enhancing carbon sinks (terrestrial, coastal and marine, etc.) to avoid the emissions that arise from their degradation There is also a critical need for companies to invest in nascent GHG removal technologies (e.g. direct air capture (DAC) and storage). • **In the long-term**, when the net-zero target date is reached, companies must neutralize any residential emissions from the atmosphere. Companies must continue to neutralize any remaining emissions

Source: SBTI Company Net-Zero Standard v1.0

From Principles to Practice

Agreeing on high-level principles of demand-side integrity is the first step, and this is a matter for individual investors to decide based on their own sustainability approaches, risk appetite and regulatory constraints, *inter alia*. The next step is to actually implement these principles into investment decisions, due diligence policies, and investee engagement processes. This will require investors to consider several key design questions:

- **Scope**. Which entities are in scope for these principles?
- **Levers.** How could investors encourage adherence to these principles by organizations within the scope?
- **Assessment criteria**. How could adherence to the principles be assessed and what data is available for that purpose?

Scope

For investors setting demand-side integrity policies, it is important to consider which entities a policy intends to cover. There are two main routes through which carbon credits generated are purchased from an FSLU project:

[5]Such reputational risks are likely to be addressed through existing investor due diligence practices, however, financing carbon credit projects may present a particular reputational risk to investors given the high degree of scrutiny they are exposed to.

1. **Direct offtake** – where an organization purchases the credits directly from a project for the purpose, in most cases, of retiring against a particular climate claim. This can either be through an over-the-counter offtake arrangement with the project developer or through co-investment in the project or fund itself, where (part of) the return is in the form of carbon credits.

2. **Via intermediaries** – alternatively, a project's credits might be purchased by an intermediary with the purpose of onward sale through an exchange or end-buyer. In such situations, the organization retiring and claiming the credit may be more difficult to discern or influence.

Direct offtake agreements with companies looking to retire credits provide the greatest level of transparency for investors, and their investees, to assess demand-side integrity risk. Investors may wish to encourage investees to utilize such arrangements where possible. However, there may be times when fiduciary duty or liquidity needs require that carbon credits be sold via intermediaries. Indeed, for carbon markets to achieve significant scale, market architecture and greater standardization of sales contracts will likely be needed.

Where carbon credits are sold via intermediaries or exchanges, investors (and/or their investees) may wish to seek to engage with the relevant organizations in the carbon credits trading sector to encourage them to address issues of demand-side integrity. This could include a requirement that the selling organization receives accreditation under the International Carbon Reduction & Offset Alliance (ICROA) or an equivalent program. ICROA-accredited organizations commit to actively advance the responsible use of carbon credits by their clients.[xxi] Alternatively, it could involve engagement around know-your-client policies to restrict buyers to those taking credible climate action within their value chains as well.

Levers

Related to the question of scope, there are various levers available to enact demand-side integrity policies. Investors often have the most influence over the actions of investees prior to investment, where due diligence can be conducted and contract stipulations negotiated. Below, we consider three levers which each include strengths and weaknesses. Investors may choose to deploy more than one such lever to create an enforceable policy.

Due diligence on co-investors and known off-takers

In situations where the credit off-taker or co-investor is known at the time of investment, some level of due diligence may be conducted on the off-taker to assess their demand-side integrity. This could be through a risk-based approach where off-takers are assessed against a set of criteria (see Table 1 for suggestions of such criteria). The advantages of this approach are that it could be incorporated into existing due diligence processes (albeit an expansion of scope from investee to the investee's carbon credit purchasers) and would allow the investor to manage potential reputational or climate risks directly. Disadvantages might include the increased administrative burden of undertaking additional due diligence and the possibility that entities may invest in or secure offtake contracts after due diligence has been conducted. This approach may be most relevant to consider in the case where co-investors in a fund will be the recipients of carbon credits generated by the fund's investments.

Contract stipulations with investee setting out requirements for future carbon credit sales

Investors could also seek to include stipulations in lending or investment terms that require that any future offtake agreements be subject to certain restrictions or to investor or board approval. Such agreements could potentially reduce the integrity risks that arise after an investor has made an investment decision, though the degree to which investees may be willing to accept such terms remains to be tested. Alternatively, a veto on each carbon sale may be agreed upon; however, if the investee has a well-developed and pre-approved carbon integrity policy in place, reporting to the investors on carbon sales should be sufficient.

Require investees to have or develop and enforce a demand-side integrity policy

Investors may require investees to either already have or to develop and enforce their own carbon integrity policy. This could include stipulations that the policy aligns with the high-level principles of the investor. Such an approach has advantages in terms of flexibility for investees to develop tailored approaches that suit their particular context, as well as reducing the administrative burden faced by the investor. However, care would need to be taken to ensure that investees have the capabilities to develop effective policies and the incentives to adequately enforce

them. Investors may also consider asking their investees to adopt and implement an 'off the shelf' carbon integrity policy, in the event they do not have one or lack the required expertise to develop one in-house. This could be a policy developed by the investor or by an expert independent third party.

Assessment Criteria

Adopting a demand-side integrity policy places additional due diligence requirements on investors (and on their investees, depending on the levers used). Given the already high transaction costs associated with investments in FSLU, it is important that approaches remain pragmatic, with clear criteria for assessing principles that make use of readily available data wherever possible. The below table provides suggestions for how high integrity principles could be assessed, including possible sources of information to refer to.

Table 1: Risk-based assessment criteria for demand-side integrity

1. Carbon credits should be used as part of an appropriate climate strategy in accordance with a mitigation hierarchy		
Sub-principle	***Possible assessment criteria***	***Source of assessment***
1.1 Commitment to net-zero by 2050	• Membership of relevant climate initiative • Public commitment from the company	Relevant climate initiatives for net-zero commitments could include **SBTi, GFANZ** and **RaceToZero,** amongst others.
1.2 Industry / sector best practice emission reduction targets (including science-based targets)	• Set long-term and near-term (science-based) targets in line with Paris Agreement, verified by a credible standard • Adequate scope of emissions covered by target • Preferable to include an absolute emissions reduction target (in addition to an intensity target, if relevant)	Targets should be ideally validated by a relevant target-setting organization (such as SBTi), and the mitigation hierarchy should be a guidepost for prioritizing their actions. Given the necessity of near-term emissions reductions to align with the goals of the Paris Agreement, companies purchasing carbon credits should ideally also set near-term emissions reduction targets The **SBTi Net Zero Standard** is one of the current market-leading target-setting standards. SBTi has not yet developed sector-specific guidance for oil & gas and is not currently validating targets set by companies in this sector. Assessments of company emissions reduction targets, including for the oil and gas sector, are available via the **CA100+ Net Zero Benchmark** and the **World Benchmarking Alliance Climate and Energy Benchmark**. Relevant guidance is also provided for financial institutions specifically by the **Net Zero Banking Alliance.**
1.3 Published climate strategy (based on a mitigation hierarchy)	• Published a climate action plan • Capital expenditure allocated to decarbonization and away from high-emissions activities • Robust governance structures for managing climate risk	Various initiatives have begun assessing the adequacy of published decarbonization strategies. **CA100+ Net Zero Benchmark** provides assessments of the adequacy of decarbonization strategies for over 150 companies in strategically important sectors, including assessing whether actions address the main sources of emissions and are sufficiently detailed. CA100+ also provides third-

		party analysis of capital allocation alignment, which can indicate whether a strategy is reflected in decision-making on the ground. **Net Zero Tracker** also provides an assessment of climate plans for 2000 of the largest public companies. Alternatively, investors could undertake direct engagement with companies to assess the robustness of their climate action plans.
1.4 On track to achieve interim targets without the use of offsets	• Direct business emissions reductions achieved compared to interim target reductions	**SBT**i provides a progress dashboard that includes the percentage of target achieved and the percentage of time elapsed to achieve the target. However, SBTi plans to create a more robust progress framework by COP28 to overcome concerns regarding the transparency and standardization of company progress disclosures. **VCMI** claims code is also expected to include a validation process. **World Benchmarking Alliance** climate and energy benchmark – assesses companies' emissions against the IEA Net Zero Emissions by 2050 scenario. Benchmarks are available for Transport, automotive, electric utilities and oil & gas. **Transition Pathway Initiative** also assesses a range of companies against derived sector pathways. This is likely to become increasingly relevant as more companies set SBTs and deadlines for near-term SBTs approach.
2. Organizations purchasing carbon credits should make comprehensive disclosures regarding their use and ensure that claims are accurate and clear		
Sub-principle	***Possible assessment criteria***	***Source of assessment***
2.1 Transparent reporting on types and use of carbon credits	• TCFD recommendations have been implemented regarding climate disclosures • Intention to use credits for neutralizing residual emissions or "mitigation contributions" (otherwise known as "Beyond Value Chain Mitigation" in SBTI terminology) is clearly stated • Disclosure provides sufficient detail on carbon credit purchases – including volume, project type, program, vintage and whether the credit is associated with a corresponding adjustment	**CA100+** provides information on which companies have implemented TCFD requirements. **Net Zero Tracker** also provides information on the stated use of carbon credits and any restrictions placed on their use.

2.2 Making clear, credible claims at enterprise and product level	• Company has not been found to have made misleading claims previously unless these have subsequently been corrected • Company differentiates claims based on whether credits are: a) counterbalancing annual unabated emissions in line with the company's science-based targets b) contributing to a country's or jurisdiction's nationally determined contribution or c) contributing to overall global mitigation	**Gold Standard**'s Claims Guidance provides recommendations for how companies can make clear claims. The **Nordic Code** provides further recommendations on terminology for making clear claims. **VCMI** is also expected to provide further guidance on the claims that companies can make.
3. Organizations purchasing carbon credits should not be engaged in activities that are not aligned with a credible climate strategy.		
Sub-principle	***Possible assessment criteria***	***Source of assessment***
3.1 Climate-aligned policy lobbying	• Advocating for robust climate policies • No history of lobbying against climate action (unless clear change is established).	**CA100+** provides an assessment of climate policy engagement alignment, via Influence Map. **WBA** also provides a policy engagement alignment score for covered sectors.
3.2 Other reputational concerns	• E.g. cases of human rights abuses or significant negative environmental impacts.	Can be assessed via media searches but requires a professional assessment by a well-informed investigator who understands the sector.

Supply-Side Integrity

Why it Matters

Investment in low-quality carbon credit projects carries greater reputational and financial risks and undermines overall carbon market development. The reputational risk of supply-side integrity arises from the potential failure of an investment to deliver on its promised climate impact and other co-benefits. This poses reputational risks of 'greenwashing' accusations for the retiree of the credit making the climate claim, and for the investor if they count the project as financed negative emissions in their own carbon accounting and disclosure. Low-integrity transactions have a negative impact on the market development as a whole, as it hinders the much-needed flow of investment into the sector with its associated climate benefits. Investment in low-quality carbon credits also poses a financial risk, as prices of perceived lower-quality carbon credits may trade at a discount from higher-quality credits. Market standards and norms are still developing, and it remains challenging in some cases to assess and evidence whether carbon credit projects deliver the impacts they claim. This has become evident from assessments by carbon credit rating agencies suggesting that a significant portion of FSLU credits already in the market are not high-quality.

Low-quality carbon credit projects also have the potential to negatively impact local communities and the environment. Beyond the climate impact, there are also concerns that some crediting methodologies do not pay sufficient attention to wider social impact or properly address issues around carbon rights and benefit sharing. In the worst-case scenario, the projects may have unintended negative social or environmental impacts. That being said, carbon credit standard bodies (e.g. VERRA and Gold Standard) are continuously revising and enhancing their methodologies to incorporate these broader considerations and adopt the most effective practices in project evaluation.

High-integrity principles

As with demand-side integrity, voluntary guidance and initiatives have coalesced around several key elements that define supply-side integrity from the perspective of carbon credit project development. However, as with the demand side, these initiatives do not offer a definitive framework for investors to manage supply-side integrity risks across their portfolio.

The IC-VCM has developed its Core Carbon Principles (CCP), the final version of which was released in March 2023, which aims to codify the emerging alignment on good practice regarding supply-side integrity.[xxii] These principles can help direct investors towards high integrity standards and project types. The CCP **ten principles** address:

Governance:

1. Effective Governance
2. Tracking
3. Transparency
4. Robust independent third-party validation and verification

Emissions Impact:

5. Additionality[6]
6. Permanence[7]
7. Robust quantification of emission reductions and removals[8]
8. No double counting

Sustainable Development:

9. Sustainable development benefits and safeguards
10. Contribution to net zero transition

[6] Activity linked to the carbon credit would not have taken place if the project had not been implemented
[7] Evidence that greenhouse gas is permanently sequestered in the sink specified and risk of future release is mitigated over a suitably long period.
[8] The stated emissions avoidance or removal has taken place and can be robustly demonstrated.

The IC-VCM intends to assess both carbon-crediting programs (certification level, e.g. VCS) and carbon credit 'types'. These credit 'types' are made up of the carbon crediting program, the type of mitigation activity, the quantification methodology(ies) applied, and other relevant criteria such as the scale of activity or country in which it takes place.

The ultimate purpose of the CCPs Assessment Framework is to provide a credible, rigorous, and readily accessible means of identifying high-quality carbon credits that create real, additional and verifiable climate impact with high environmental and social integrity.

The CPPs outlined above are summarized for our purposes into five high-integrity principles for the supply-side. Again, we present these principles as descriptive in order to structure the following discussion, and not as a normative statement on supply-side integrity.

1. **Projects are certified by carbon credit certification standards that are well-governed and make use of independent validation and verification**.
2. **Projects are able to demonstrate a high likelihood of additionality and conservative quantification of emissions avoidance or removals, and adequate mitigation of leakage and non-permanence risks at the project level.**
3. **Projects should at a minimum do no harm, and ideally make a positive contribution to social and non-carbon environmental impacts, and apply adequate safeguards.**
4. **Projects are aligned with national accounting, including nesting into jurisdictional baselines where applicable and available.**
5. **Projects are developed by entities that can demonstrate a high-integrity approach**

From Principles to Practice

As with the demand side, after deciding on its supply-side integrity principles, investors need to incorporate these principles into the investment process. This will require investors to consider the same three design questions from the supply-side perspective:

- **Scope**. Which entities are in scope for these principles?
- **Levers.** How could investors encourage adherence to these principles by organizations within the scope?
- **Assessment criteria**. How could adherence to the principles be assessed and what data is available for that purpose?

Scope

There are three main routes through which an investor may fund carbon credit-generating projects, directly or indirectly, and investors must decide when and how their chosen policy will apply for each one:

1. **Direct Investments** – investment into the entity with ultimate responsibility for the carbon credit generating project and/or ownership of the carbon asset

2. **Fund Investments** – investment into a fund in which the current or future portfolio companies generate carbon credits

3. **Investments in Carbon Project Developers / Accelerators –** investment into an entity which develops carbon credit projects on behalf of others

A related question is whether the policy should apply only when the direct use of funds is for the development of the carbon project, or for any investment in an entity that is generating carbon credits, even if the carbon project itself is not related to the use of funds.

Levers

For direct investments in active carbon projects, due diligence can be conducted directly on the project, including the key elements of supply-side integrity. The outcome of this assessment could result in;

a) The decision not to invest

b) The decision to invest but with actions to improve integrity required (for example as part of an Environmental and Social Action Plan (ESAP))

c) The decision to invest with no further action needed on integrity

However, investors may also face a more complicated situation where a direct investee decides to develop a carbon credit project post-investment decision. Similarly, when investing in funds, investment decisions are highly likely to precede any project-level investment by the fund. In these situations, two options can be considered:

1. **Rely on funds or investees to follow a supply-side integrity policy** – Investees can be asked, at the point of investment or at the point at which a carbon credit project is initiated, to develop their own supply-side integrity policy. Fund Managers can be required to hold their portfolio investees to the same integrity standards contained in their own policy, which can be assessed by the investor during the fund-level due diligence. Investees can be required to monitor and report on their integrity policy compliance to the investor as part of their contractual requirements.

2. **Direct due diligence of projects by investors** – At the point where a new carbon project is invested in or initiated, the investor may decide to conduct its own due diligence on the supply-side integrity of the project. This is likely to involve consultants or service providers such as carbon credit rating agencies.

For existing investments, the likely actions that could result from the integrity assessment are less clear and depend upon the contractual arrangements between the parties and the assessment of the level of risk involved.

Assessment Criteria

Depending on whether the investor conducts due diligence themselves, relies on external consultants, or delegates responsibility for project-level integrity to fund managers, they may need to develop an assessment framework to assess whether a project adheres to high-integrity principles. This might also include minimum criteria that carbon credit projects will have to satisfy, such as having certified co-benefits (such as the VERRA Community, Climate & Biodiversity label) or satisfying a minimum risk rating through an independent rating agency like Sylvera or BeZero.

Instead of a pass-fail approach, a risk-based approach can be considered. This may be advisable because understanding the risks allows investors to anticipate quality considerations following the investment approval during project implementation. As in the demand-side integrity sections, the following table provides suggestions for a risk-based assessment of the supply-side high-integrity principles outlined above:

Table 2: Risk-based assessment criteria for supply-side integrity

1. Projects are certified by carbon credit certification standards that are well-governed and make use of independent validation and verification.		
Sub-principle	***Possible assessment criteria***	***Source of assessment***
1.1 Governance	• Independently designed and managed • Inclusive development process • Disclosure commitments	Various tools and initiatives exist for assessing certification standard quality, such as: • **CORSIA** • **ICVCM** • **ICROA** • **CCQI** • **TFCI**
1.2 Tracking and Transparency	• Open Registry • Quality of data and level of detail provided	

1.3 Third-party validation and verification	• Quality of process • Level of oversight from certification standard	

2. Projects are able to demonstrate a high likelihood of additionality and conservative quantification of emissions avoidance or removals, and adequate mitigation of leakage and non-permanence risks at the project level

Sub-principle	*Possible assessment criteria*	*Source of assessment*
2.1 Additionality	• Financial additionality • Validation of BAU scenario and barriers test • Legal additionality	Assessment of these principles will rely mainly on carbon **project documentation**. Relevant project documentation must be made publicly available on an open **registry** as part of the credit certification process for high-quality certification standards. Assessment of these documents requires technical understanding and may be undertaken by the investor or by a **third-party expert** as part of their due diligence. Assessments for existing projects may also be available from **carbon credit rating agencies.**
2.2 Robust quantification & verification	• Choice of credible and reputable methodology • Use of plausible, verifiable and conservative assumptions to model estimations and monitoring period • Appropriate determination of leakage potential • Accurate use of context-specific, peer-reviewed literature for assumptions • Collection of in-field data during the monitoring period vs interpolation approach	
2.3 Permanence	• Probability and impact of expected natural reversal risks • Appropriate accounting for reversal risks in a risk buffer • Alignment of project land tenure/project duration against the length of the crediting period • Presence of arrangements to ensure protection beyond the project period. • Appropriate revenue split to optimize implementation success • Effective community engagement and evidence of project acceptance	

3. Projects should, at a minimum do no harm, and ideally make positive contributions to social and non-carbon environmental impacts, and apply adequate safeguards

Sub-principle	*Possible assessment criteria*	*Source of assessment*
3.1 Environmental and biodiversity impacts	• Project-specific measures to enhance HCV areas and protected species • The project protects or restores natural ecosystems • Quality of monitoring regime • Adhere to relevant IFC performance standards such as IFC PS 5, 6, and 7. • In the case of projects involving timber harvest, FSC or PEFC certification	Assessments in relation to these principles will normally take place as part of **investor due diligence** for impact-focused investors, regardless of the carbon credit element of the project.

3.2 Social and community benefit sharing	• Correct identification of affected communities and evidence of project acceptance • Evidence communities are fairly benefiting from project (carbon) activities and revenues • Free and Prior Informed Consent (FPIC) from relevant community stakeholders on pricing and benefit sharing approach where appropriate • Implementation of project activities that positively benefit affected communities – particularly key for avoiding leakage. • Good tracking of KPIs	
4. Projects are aligned with national accounting, including nesting into jurisdictional baselines where applicable and available.		
Sub-principle	***Possible assessment criteria***	***Source of assessment***
4.1 Policy and jurisdictional nesting considerations – the project has required government permissions and supports national accounting approaches	• Clarity on the project's alignment with jurisdictional nesting and its role in meeting national-level climate targets • Where nesting is not yet possible, can / should the project take a "Landscape approach"[9]? • Letters or support / no objection obtained from relevant jurisdictional authorities	Evidence to ensure projects are operating with the permission/support of the government may be in the form of: • Existing legislation or contracts that determine carbon rights and benefits • Non-objection letters from the government • Nesting of a REDD+ project within a jurisdictional baseline
5. Projects are developed by entities who can demonstrate a high-integrity approach		
Sub-principle	***Possible assessment criteria***	***Source of assessment***
5.1 Organizational expertise and stability	• Integrity policy of project developer • Technical background • Level of sophistication with MRV methodologies & technology • Financial stability of organization	Investors are currently likely to need to make their own assessment of the project developer as part of their due diligence.
5.2 Past performance	• Track record in delivering projects with this methodology • Past projects on track to or have already delivered planned performance	
5.3 Reputational risks	• Review of media, disputes, etc.	

[9] A "Landscape approach" means that the project and its activities are part of a broader strategy for the landscape, and activities aim to create positive social and environmental impacts across the entire area. This could include:
- Collaboration with stakeholders for the identification of conservation, restoration and production zones
- Using a broad lens to see what interventions can be designed for the socio-economic and environmental development of the region
- Landscape governance with local stakeholders (for instance landscape governance boards)

4 Areas for further collaboration & concluding remarks

Areas for further collaboration & concluding remarks

Areas for Further Collaboration

While the approaches listed above provide suggestions for how impact-focused investors can begin to apply demand and supply-side integrity principles in their own investment processes, there are various areas where greater collaboration between actors across the carbon market ecosystem could help to reduce the challenge.

Transparency of carbon credit beneficiaries

When a company uses carbon credits to make a climate claim – such as achieving net-zero emissions – they are asserting ownership over the climate benefits generated by carbon offset projects. Companies can buy and hold carbon credits issued by these projects, but to claim the underlying climate benefits the credit must be retired and taken out of circulation. Unfortunately, registry databases do not provide a complete picture of who ultimately claims a credits' climate benefits. As a result, an investor seeking to assess a company's net-zero transition plan has no consistent way of knowing which credits a company has retired[xxiii].

One solution could be for registries to require that beneficiaries of credits are listed. Currently, only approximately 54% of VERRA registry entries contain clear information on the entity benefitting from the retirement of a credit. This challenge is likely to become more acute with the emergence of new intermediaries who retire credits on behalf of clients.

Company-level disclosure of use

A second approach that could improve investors' ability to understand carbon credit usage is via company disclosures. Developing standardized templates for corporate disclosure of carbon credit use (as has been done by TCFD for other areas of climate disclosure), or greater regulatory oversight of disclosures could reduce the time it takes for investors to understand a company's use of carbon credits. For example, the EU Commission's proposed Directive on Green Claims would require clearer disclosure of offset use, including project, whether removals or reductions, the methodologies used, and what share of total emissions have been compensated via offsets.[xxiv]

Investor engagement in shaping market norms

Investors can support the market to grow sustainably through active engagement and partnerships with those shaping the emerging market norms for the voluntary carbon market. These include the likes of certification bodies (VERRA, Gold Standard, etc.), standards bodies (ICVCM, VCMI, etc.), and rating agencies. This should include providing investor feedback to public consultations of new standard assessment frameworks, good practice guides, etc. Impact-focused investors have an important role to play in shaping these market norms alongside more commercial investors and project developers to support the continuous improvement of carbon credit methodologies.

Concluding Remarks

The aim of this paper is to stimulate critical thinking, encourage meaningful discussions, and promote the development of strategies for establishing a high-integrity carbon market from the perspective of investors. It is important to note that the content presented is not rigid and may evolve rapidly due to the dynamic nature of the VCM. Nevertheless, our objective is that this paper will contribute to continued research on the subject and support investors in developing their own approaches to fostering integrity within the VCM.

The urgency to protect the most diverse ecosystems and natural resources on our planet is growing each day and the consequences of inaction will only continue to compound. The VCM, as a tool for financing forest and sustainable land use activities, is by no means perfect, but many initiatives and a significant amount of work are going into strengthening the integrity underpinning the market. Investors will have an important role to play if the voluntary carbon market is to scale successfully in terms of both its size and its climate mitigation impact.

Active and engaged investors can help to bring transparency and expertise to a nascent asset class which includes carbon in its business model. Addressing these project-specific risks can also help crowd in additional private capital to FSLU projects. Investors that can practically and efficiently implement carbon credit integrity standards in their investment process can help to foster the sustainable growth and long-term success of the VCM and the intended climate impact.

Invitation to Respond

As a development finance institution, we are committed to collaborating with other impact-focused investors and seeking alignment in our approaches wherever feasible. We are actively researching and exploring various pathways while striving to develop our own set of integrity principles that will enable us to contribute to the overall integrity of the voluntary carbon market. To this end, we invite you to share your experiences with implementing approaches to carbon credit integrity to provide your valuable perspective on this topic. You can do so by signing up for our community platform Future-minded, where you can also access further information regarding sustainable forestry investments and sign up for MFF's community of practice.

Disclaimer: This project was commissioned as part of the Mobilising Finance for Forests programme Learning, Convening and Influencing Platform. The views expressed in this report are derived from reflections and insights developed through desktop research, analysis, interviews with experts and practitioners, as well as the valuable input from a diverse group of stakeholders. It is important to note that these views should not, under any circumstances, be considered as reflective of the official position or views of FMO and/or the UK Government.

[i] "IPCC Special Reports: Land Use, Land-Use Change and Forestry," http://www.ipcc.ch/ipccreports/sres/land_use/index.php?idp=33

[ii] The Food and Land Use Coalition, "Why nature? Why now? How nature is key to achieving a 1.5C world," 2021.

[iii] The Food and Land Use Coalition, "Why nature? Why now? How nature is key to achieving a 1.5C world," 2021.

[iv] Friedlingstein et al., "Global Carbon Budget 2020.," *Earth Syst. Sci. Data.* https://doi.org/10.5194/essd-12-3269-2020.

[v] UN Environment Programme, "State of Finance for Nature. Time to act: Doubling investment by 2025 and eliminating nature-negative finance flows," 2022.

[vi] Roe et al., "Land-based measures to mitigate climate change: Potential and feasibility by country," Global Change Biology, Vol 27, Issue 23, 2021 https://doi.org/10.1111/gcb.15873

[vii] Ecosystem Marketplace, "The State of the Voluntary Carbon Market 2021," 2022.

[viii] Bloomberg, "Faulty credits tarnish billion-dollar carbon offset seller," 24 March 2023.

[ix] The Guardian, "Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows," 18 January 2023.

[x] UK Climate Change Committee, "Voluntary carbon markets and offsetting," 2022.

[xi] Energy Transitions Commission, "Mind the gap: Limiting global warming to 1.5C," 2022.

[xii] Science Based Targets Initiative, "SBTI corporate net-zero standard v1.0," October 2021.

[xiii] Reuters, "EU carbon hits 100 euros taking cost of polluting to record high," February 21, 2023.

[xiv] CBL N-GEO future contract, "Daily settlement price between January 2022 and April 2023".

[xv] Net Zero Tracker, https://zerotracker.net/. [Accessed 09 03 2023].

[xvi] Transition Plan Taskforce, "The Transition Plan Taskforce Disclosure Framework consultation," November 2022.

[xvii] Securities and Exchange Commission, "The Enhancement and Standardization of Climate-Related Disclosures for Investors," March 2022.

[xviii] Voluntary Carbon Markets Integrity Initiative, https://vcmintegrity.org/

[xix] The Gold Standard, "Claims Guidelines v2.0," 2022.

[xx] The Nordic Dialogue, "Harnessing voluntary carbon markets for climate ambition: An action plan for Nordic cooperation," 2022.

[xxi] International Carbon Reduction & Offset Alliance, "ICROA Code of Best Practice," 2022.

[xxii] The Integrity Council for the Voluntary Carbon Market, https://icvcm.org/about-the-integrity-council/.

[xxiii] Carbon Plan, "Why carbon offset disclosure matters," 8 February 2022.

[xxiv] European Commission, "Proposal for a Directive on substantiation and communication of explicit environmental claims (Green Claims Directive)," 2023.