Buyer's Guide to HIGH-QUALITY COOKSTOVE CARBON CREDITS

Supporting Responsible Sourcing and Meaningful Climate Impact

FEBRUARY 2025

CLEAN COOKING ALLIANCE

in collaboration with:

Abatable · AlliedOffsets · burn life · saving · stoves · Climate Impact Partners · Climate Impact X · Fair Climate Fund

Gold Standard · ICE · IEA · IETA · SPARK+ AFRICA Investing in Modern Cooking · VCMI Voluntary Carbon Markets Integrity Initiative · VERRA

ACKNOWLEDGMENTS: PARTNERING FOR A COMMON PURPOSE

The *Buyer's Guide to High-Quality Cookstove Carbon Credits* is part of the **Responsible Carbon Finance for Clean Cooking Initiative**.

The Initiative seeks to elevate market norms, foster confidence in cookstove carbon credits, boost buyer demand, and drive investment in high-quality cookstove carbon projects and project developers.

The Initiative was introduced by the Clean Cooking Alliance (CCA) and was developed in collaboration with a broad range of stakeholders from clean cookstove and carbon markets through their participation in Technical Working Groups and the Advisory Council.

This guide is one of several products prepared by the Initiative. Others include the Principles for Responsible Carbon Finance in Clean Cooking (Annex 1) and the Responsible Codes of Conduct for Cookstove Project Developers (Annex 2).

The guide is also an output of the **Clean Cooking Carbon Credit Demand Task Force**, coordinated by the International Energy Agency (IEA) and supported by the Clean Cooking Alliance, Gold Standard, and International Emissions Trading Association (IETA).

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CONTENTS

TABLES

FIGURES

GLOSSARY

Additionality	The principle ensuring that a carbon project's emission reductions would not have occurred in the absence of support from carbon markets.
Baseline emissions	The estimated level of greenhouse gas emissions (GHGs) that would occur in the absence of the carbon project.
Beyond Value Chain Mitigation (BVCM)	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.
Carbon neutrality	The concept of balancing the total greenhouse gas emissions produced by an entity or activity with an equivalent amount of emission reduction or removal.
Clean Development Mechanism (CDM)	A carbon offset scheme under the Kyoto Protocol allowing developed economies to fund and earn credits from emission-reduction projects in developing economies.
Co-benefits	Social, economic, or environmental advantages beyond greenhouse gas emission reductions generated by carbon market projects, such as improved health, enhanced energy access, gender equity, biodiversity protection, and local economic development.
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation.
Corresponding adjustments	A mechanism under Article 6 of the Paris Agreement ensuring that emission reductions are counted only once, either by the project's host country or the buyer.
Emission reduction purchase agreement (ERPA)	A contract between a seller and a buyer to deliver verified emission reductions, specifying price, volume, timelines, and other terms.
GHG emissions	Gaseous constituent of the atmosphere, natural or anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds.
Gold Standard	A voluntary carbon standard emphasizing sustainable development and high environmental integrity for carbon credits.
Integrity Council for the Voluntary Carbon Market (ICVCM)	An independent governance body that sets and maintains a global standard for high integrity in the voluntary carbon market.
Leakage	The displacement of emissions from the project area to another location, undermining the overall impact of emission reductions.
Monitoring, reporting, and verification (MRV)	The system used to ensure that carbon credits are based on accurate and reliable data on emission reductions.
Net-zero GHG	Condition in which human-caused residual GHG emissions are balanced by human-led removals over a specified period and within specified boundaries.

Paris Agreement, Article 6	This section of the 2015 climate agreement enables countries to cooperate on achieving their climate targets by transferring Internationally Transferred Mitigation Outcomes (ITMOs). All transfers require robust accounting and "corresponding adjustments" to ensure transparency and avoid double counting.
Paris Agreement, Article 6.2	This subsection specifies cooperative approaches for countries to transfer ITMOs toward their climate targets, using robust accounting and corresponding adjustments to ensure transparency and prevent double counting.
Paris Agreement, Article 6.4	This subsection establishes a centralized global carbon market mechanism to reduce emissions and support sustainable development. ■ **Units with corresponding adjustment**: Authorized by the host country for use toward another country's climate target or international purposes, requiring adjustments to the host country's emissions inventory. ■ **Units without corresponding adjustment**: Used for voluntary purposes, without requiring inventory adjustments by the host country. This subsection also provides a framework for nonmarket approaches to support climate and development goals through collaboration, capacity building, and technology transfer, without involving ITMO transfers or corresponding adjustments.
Residual GHG emissions	Greenhouse gas emissions that remain in the atmosphere after all feasible mitigation measures have been implemented within a system or sector. These emissions are challenging to eliminate entirely and often require balancing through carbon dioxide removal to achieve net-zero targets.
Science Based Targets initiative (SBTi)	A framework that guides organizations in setting emission reduction targets aligned with limiting global warming to 1.5°C above preindustrial levels.
Sustainable Development Goals (SDGs)	A set of 17 global goals adopted by the United Nations in 2015 to promote environmental sustainability, social inclusion, and economic prosperity by 2030.
Traceable credits	Carbon credits where data, including the issuing project and crediting period, can be tracked and verified from issuance to retirement.
Unabated GHG emissions	Greenhouse gas emissions released into the atmosphere without any measures to reduce or capture them, such as deploying carbon capture and storage or other mitigation technologies. These emissions often represent the baseline before abatement efforts are applied.
Verified Carbon Standard (VCS)	A global standard managed by Verra for certifying the credibility of carbon projects and credits.
Voluntary carbon markets (VCMs)	Markets where entities voluntarily purchase carbon credits to recognize a financial cost for the negative externality of their physical emissions and demonstrate climate action outside of regulatory requirements.
Voluntary Carbon Markets Integrity (VCMI)	An initiative providing guidance on claims involving carbon credits to ensure credibility and alignment with global net-zero goals.

PREFACE

The journey toward a net-zero future demands urgent and innovative action. Carbon credits, particularly those from the clean cookstove sector, play a critical role in addressing emissions that cannot yet be eliminated. By supporting high-quality projects, buyers can drive measurable climate impacts while delivering co-benefits that improve lives and protect ecosystems.

The carbon market plays a crucial role in our collective journey to net zero by helping organizations internalize the cost of their emissions while financing immediate climate action. Whether operating through voluntary markets, Article 6 mechanisms of the Paris Agreement, or CORSIA for the aviation sector, buyers can support crucial emission reductions today while preparing for their own net-zero transitions. Clean cookstove projects deliver significant emission reductions — potentially over a billion tonnes annually[1] — making the eventual balancing of residual emissions more achievable. By creating demand signals through carbon credit purchases, buyers not only support these crucial projects but also accelerate emission reductions within their own value chains by establishing an internal price on carbon.

While carbon markets are evolving with distinct frameworks and requirements, the fundamental principles of quality, integrity, and impact remain constant. This guide provides corporate buyers with the insights needed to navigate all major market mechanisms. As specific rules and interactions between these markets continue to develop, the guidance provided here will help buyers make informed decisions regardless of which mechanism they choose to engage with.

Achieving these outcomes, however, requires buyers to navigate a complex market while acting with integrity, transparency, and a commitment to excellence. Experience has shown that organizations that engage in this market often accelerate emission reductions across their value chains, as the process of valuing carbon creates additional incentives for operational improvements.

This guide was created to empower buyers with the tools and insights they need to responsibly engage in the cookstove carbon market. It recognizes that buyers vary widely in their experience and capacity, from seasoned organizations with established practices to organizations that are taking their first steps into this space. The guidance within reflects best practices, emerging standards, and the collective wisdom of market leaders, while remaining accessible to buyers at every stage of their journey.

We believe that the quality of credits matters as much as the quantity. High-quality projects not only ensure genuine emission reductions but also drive transformational change in communities by addressing energy poverty, reducing indoor air pollution, and advancing the Sustainable Development Goals. This guide underscores that investing in such projects requires both financial resources and a commitment to rigorous assessment, transparent reporting, and long-term engagement.

The cookstove sector, with its unique ability to deliver both global climate benefits and immediate local impacts, offers a powerful opportunity for buyers to contribute to a more equitable and sustainable future. By aligning their actions with the principles and practices outlined in this guide, buyers can play a pivotal role in advancing a market that prioritizes integrity, impact, and equity.

Whether you are an experienced buyer seeking to refine your approach or a new entrant contemplating your first investment, this guide is for you. We hope it serves as a valuable resource for navigating the complexities of the cookstove carbon market and helps you to maximize the impact of your climate contributions.

Thank you for your commitment to driving meaningful change.

Members of the Responsible Carbon Finance Advisory Council

The Responsible Carbon Finance Advisory Council is a panel of senior stakeholders convened by the Clean Cooking Alliance and representing the many players in the clean cooking and carbon finance sectors.

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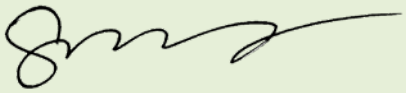

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Clean cooking is one of the most pressing energy challenges of our time, with profound implications for health, economic development, gender equality, deforestation, and climate change. In 2024, the International Energy Agency (IEA), the Governments of Tanzania and Norway, and the African Development Bank co-hosted the largest-ever, leaders-level Summit on Clean Cooking in Africa.

The summit raised $2.2 billion in public and private financing commitments to support clean cooking in Africa. It also established the Clean Cooking Carbon Credit Task Force with our partners at CCA, Gold Standard, and IETA, along with 45 other organizations. Carbon credits can play an important role in providing clean cooking solutions at affordable prices to the most vulnerable households. An IEA analysis shows that reaching universal access to clean cooking could reduce annual greenhouse gas emissions by 1.5 gigatons of CO_2e by 2030 — more than the carbon dioxide emissions from all planes and ships in the world today. The environmental integrity of carbon credits, however, has not always been at an acceptable standard.

Potential buyers of high-quality clean cooking carbon credits often face additional challenges in the procurement process. This *Buyer's Guide to High-Quality Cookstove Carbon Credits* is a timely resource aimed at these companies and organizations. It provides practical steps for sourcing credits while guarding against potential risks, ensuring that buyers' purchases deliver measurable environmental and social benefits. Scaling carbon credits can help deliver financial flows to the developing world that are required to achieve energy access for all as well as global climate objectives.

Dirk Forrister

President and CEO, International Emissions Trading Association

I remember attending a UN Africa Climate Week event well over a decade ago. A local developer and his European business partner presented a clean cooking project, hoping to attract investment from the voluntary carbon market. They showed that while one tiny cookstove improvement doesn't sound like it would do much against the enormous challenge of global warming, a project deploying thousands of them can deliver huge benefits.

It was amazing to learn of the extent of the need for clean cooking in many developing countries and the magnitude of community benefits and climate protection they can provide. These projects reduce carbon emissions while improving women's and children's health, nature protection, water quality, biodiversity, and sometimes even more.

The voluntary carbon market is a powerful tool for mobilizing investment into projects that deliver both climate and development outcomes. Yet, ensuring the

integrity and credibility of these markets is paramount, particularly as scrutiny grows over the quality of carbon credits and the claims they support.

Cookstove projects represent a unique intersection of environmental and social impact. By reducing greenhouse gas emissions and improving livelihoods, these projects exemplify the high standards that the International Emissions Trading Association (IETA) promotes through its Guidelines for High Integrity Use of Carbon Credits.

The *Buyer's Guide to High-Quality Cookstove Carbon Credits* provides organizations with actionable insights to source and integrate credits responsibly, reinforcing confidence in the market. This work complements the Clean Cooking Alliance's efforts to drive investment in high-quality projects that align with the Paris Agreement and the Sustainable Development Goals.

As buyers navigate evolving standards, including ISO Net Zero for Corporates, the Oxford Offsetting Principles, VCMI, and other frameworks, this guide serves as a trusted companion for aligning corporate strategies with best practices. Together, we can foster a carbon market that not only mitigates climate change, but also uplifts communities around the world.

Dymphna van der Lans

CEO, Clean Cooking Alliance

For more than 2 billion people, the daily act of cooking carries immense costs: health risks, environmental harm, and the loss of countless hours collecting fuel. Despite these profound challenges, clean cooking remains one of the least prioritized aspects of the global energy transition.

The Clean Cooking Alliance (CCA) is committed to shifting this narrative. By building trust, mobilizing investment, and championing innovative solutions, we aim to ensure that clean cooking becomes a cornerstone of both climate action and sustainable development. High-quality cookstove carbon credits are at the heart of this effort, offering a unique bridge between global climate goals and tangible local benefits.

The *Buyer's Guide to High-Quality Cookstove Carbon Credits* provides the tools and insights needed to turn this commitment into action. It empowers buyers to prioritize integrity, transparency, fairness, and sustainability in their sourcing strategies, ensuring that their investments deliver genuine climate and development benefits.

As the world races to meet climate and development targets, buyers must recognize that high-quality credits come at a cost. Fair pricing reflects the value of projects and ensures they can sustain long-term impact. Avoiding a "race to the bottom" in pricing is essential to maintain the environmental and social integrity of these credits. By supporting capacity building and committing to long-term impact, buyers can lead the way in aligning commercial objectives with the need for high-integrity solutions.

This guide is more than a resource — it is a call to action. Whether you are new to carbon markets or an experienced participant, I urge you to embrace the principles outlined here. By committing to quality, we can scale clean cooking solutions, drive meaningful change, and build a future where clean cooking is no longer a privilege but a universal reality.

ACCELERATING CLIMATE ACTION WITH CLEAN COOKSTOVE CARBON CREDITS

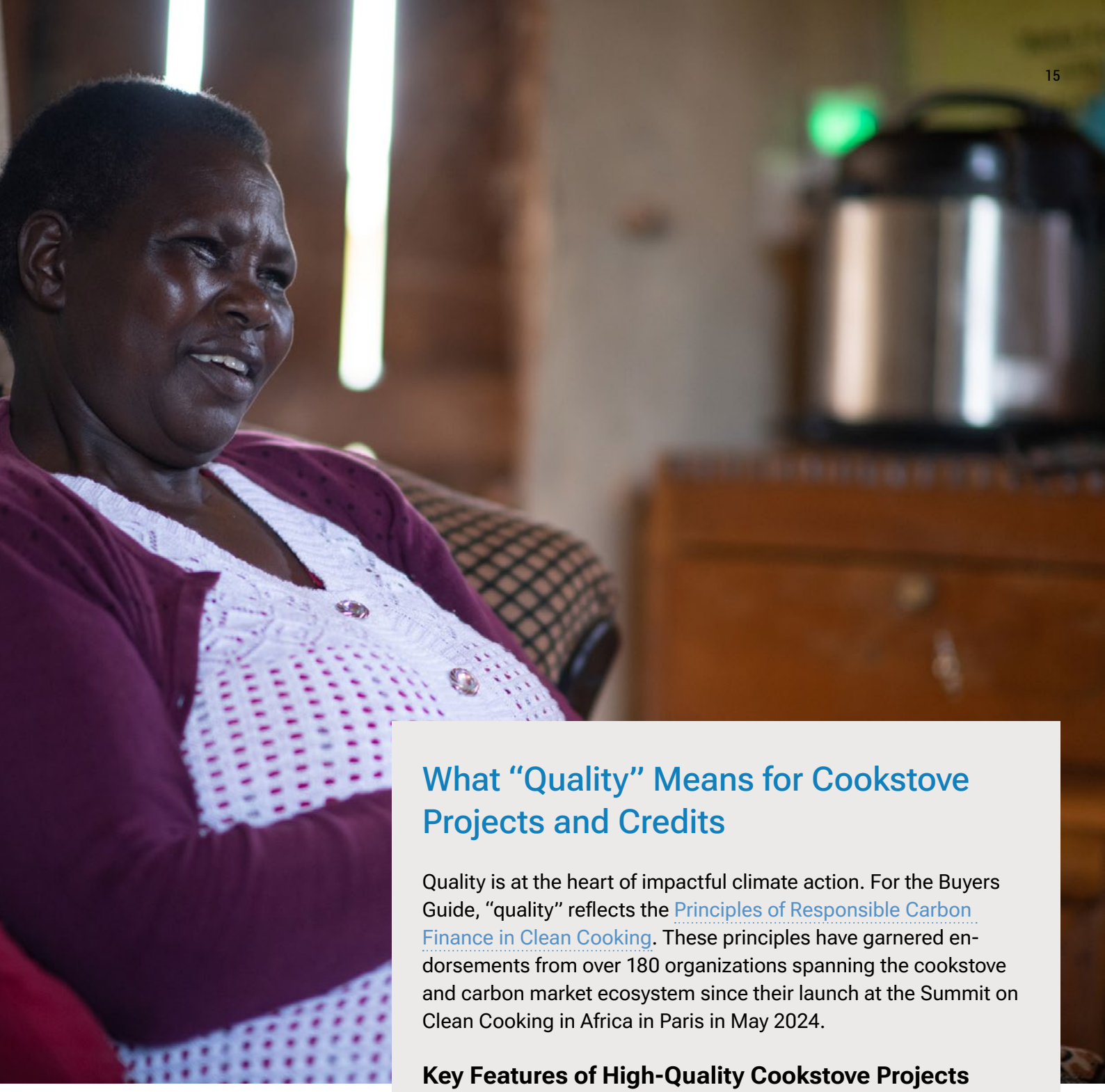
The clean cookstove sector addresses one of the most urgent and multifaceted challenges in global development. Over 2 billion people[2] rely on traditional cooking methods that contribute significantly to greenhouse gas emissions and lead to forest degradation, energy poverty, and severe health risks. Traditional cooking practices are responsible for 3.7 million premature deaths annually, with women and children bearing the brunt of the impact due to prolonged exposure to indoor air pollution.[3]

Clean cookstove projects provide buyers with a unique opportunity to align their climate investments with both environmental integrity and transformative social impact. By supporting these projects, buyers can achieve verified emission reductions while addressing pressing challenges such as energy access, public health, and gender inequality. These projects may also comply with global climate standards, including Article 6 of the Paris Agreement and the Integrity Council for the Voluntary Carbon Market's (ICVCM) Core Carbon Principles (CCPs).[4]

Why Quality in the Clean Cookstove Sector Matters

The business case for investing in high-quality clean cookstove projects is built on three pillars.

- **Immediate emission reductions:** Cookstove projects are particularly valuable for addressing near-term emissions in hard-to-abate sectors.
- **Strong co-benefits:** These projects improve public health by reducing household air pollution, promote gender equity by alleviating the burden of fuel collection, and contribute to economic empowerment through job creation and cost savings.
- **Enhanced portfolio credibility:** These projects adhere to rigorous international standards, ensuring environmental integrity and fostering trust among stakeholders.



What "Quality" Means for Cookstove Projects and Credits

Quality is at the heart of impactful climate action. For the Buyers Guide, "quality" reflects the Principles of Responsible Carbon Finance in Clean Cooking. These principles have garnered endorsements from over 180 organizations spanning the cookstove and carbon market ecosystem since their launch at the Summit on Clean Cooking in Africa in Paris in May 2024.

Key Features of High-Quality Cookstove Projects

1 **Robust methodologies:** Projects use advanced monitoring, reporting, and verification (MRV) systems to ensure emission reductions are real, additional, and verifiable.

2 **Transparency:** Buyers benefit from clear reporting on project impacts, financial flows, and compliance with recognized standards.

3 **Fairness and equity:** Projects prioritize informed consent and equitable revenue sharing.

4 **Sustainable practices:** Projects uplift communities while avoiding excessive market distortions.

Investing in high-quality projects enhances a buyer's portfolio credibility while also contributing to positive systemic change in communities and ecosystems.

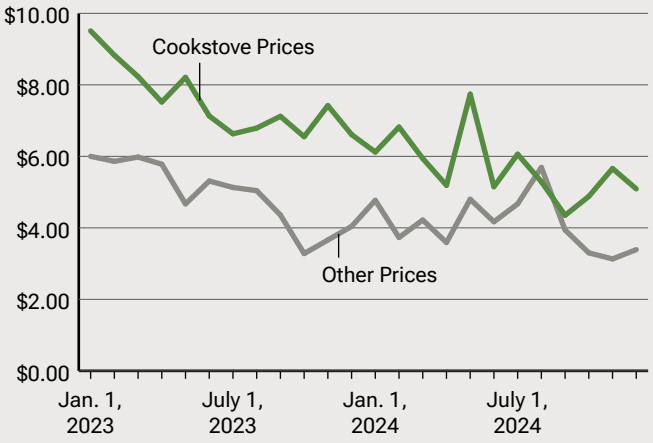
This commitment to quality ensures that cookstove projects and credits contribute meaningfully to **climate goals**, foster **local development**, and uphold **responsibility and fairness** throughout the value chain.

Data Snapshot of Cookstove Carbon Credit Markets

FIGURE ES.1

Cookstove Prices Compared with Other Prices

The weighted average price of cookstove credits has consistently been above that of other credits. After quality concerns were raised in the summer of 2024, cookstove credit prices dipped below others in the market, then rebounded toward the end of the year.



Source for all charts is AlliedOffsets except as noted.

FIGURE ES.2

Cumulative Issued Credits (Gold Standard and Verra)

The total number of issued credits from cookstove projects in the market (representing emission reductions in the atmosphere) has grown to over 150 million tonnes of carbon dioxide equivalent (tCO_2e) since 2009.

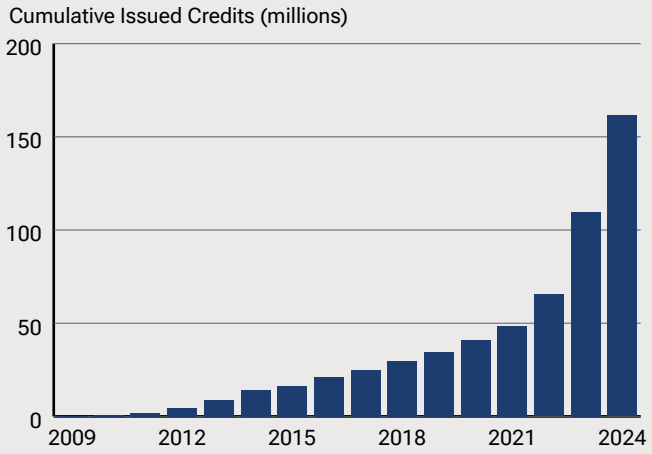


FIGURE ES.3

Retirements by Buyer Sector

Energy, professional services, and financial sector firms have been the largest buyers of clean cookstove credits.

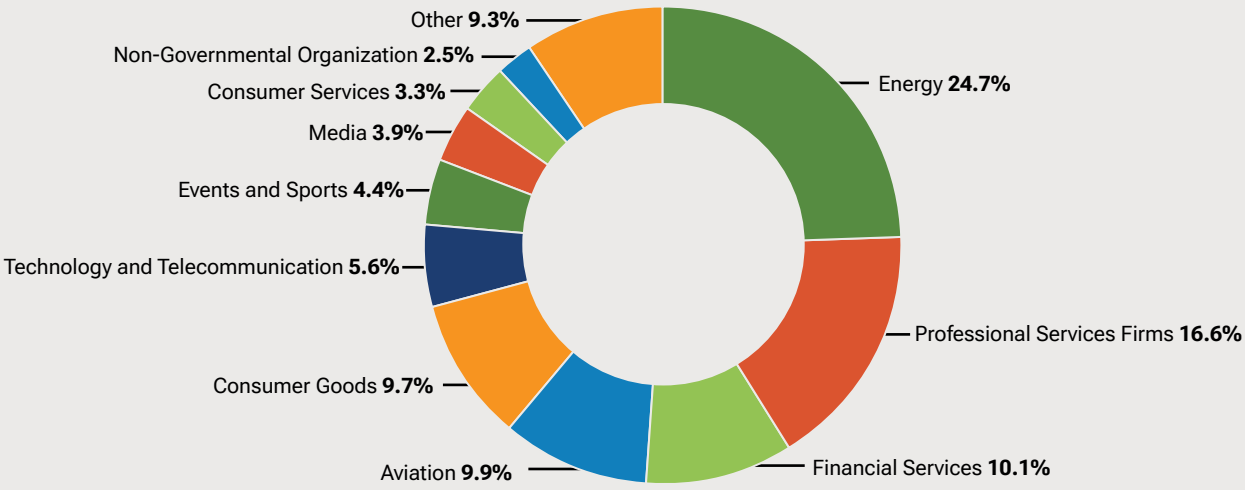


FIGURE ES.4

Value of Credits Retired in the Global South

Although the price of credits was lower, on average, than in 2023, more than twice the number of credits was retired in 2024 than in 2023. This means the overall value of credit retirements has increased to over $100 million.

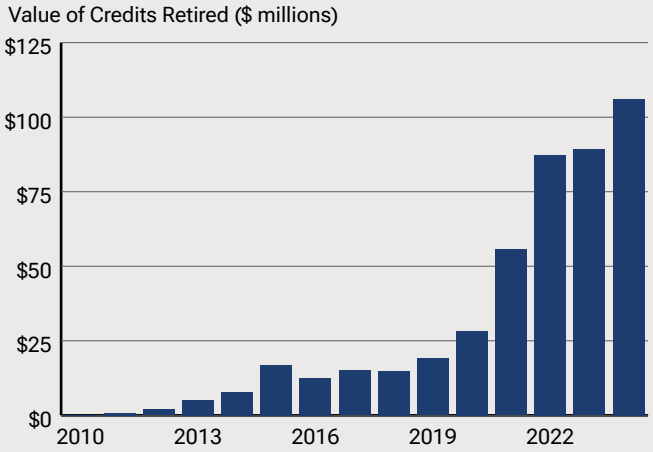


FIGURE ES.5

Cookstove Issuances and Retirements

As activity in the voluntary carbon market has increased, record numbers of credits have been issued to cookstove projects. Retirements have also increased to record highs, with more than 17 million credits in 2024.

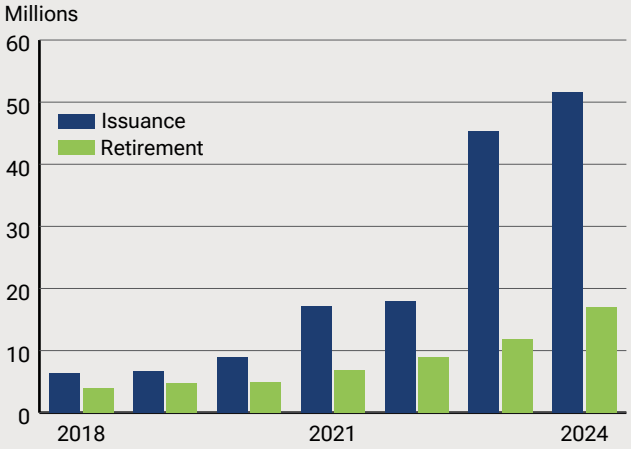
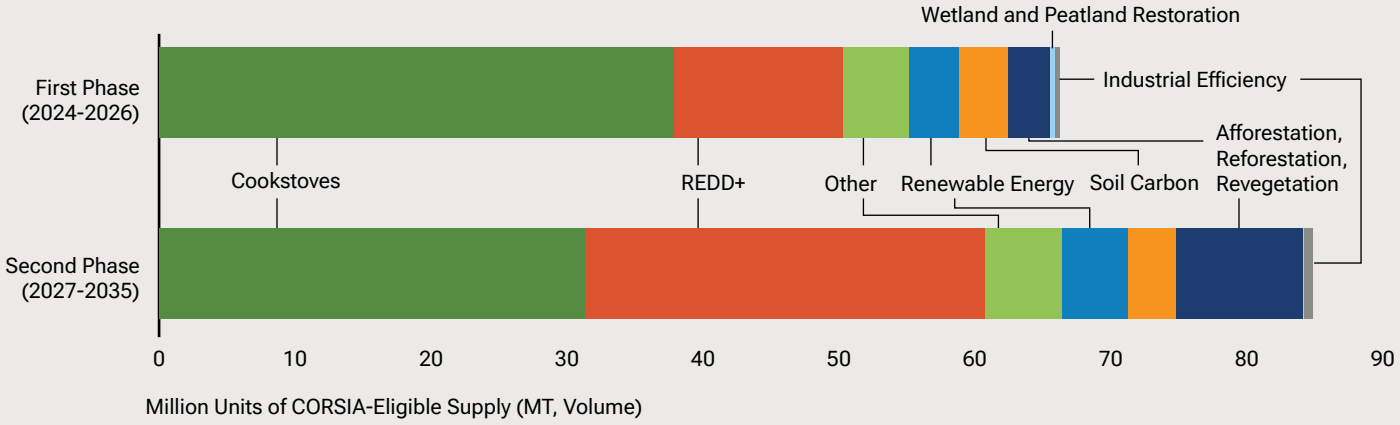


FIGURE ES.6

Potential CORSIA-Aligned Supply, by Project Type

Cookstove projects could represent a major source of supply under CORSIA's requirements for airlines, providing opportunities for project developers to reposition their distribution efforts toward this large demand driver. During the first phase (2024 - 2026), with obligations to report until the beginning of 2028, cookstove projects could contribute 57% of the CORSIA-aligned supply. Relative to other project types, cookstoves represents a cost-effective entry point for airlines.



Source: Abatable. Analysis as of December 2024. This realistic scenario estimates that projects eligible for the CORSIA pipeline will issue their estimated, annual, average volumes in the coming years. This scenario does not consider additional supply but rather what is registered and listed under the existing registry data.

A Structured Approach to Engaging with Cookstove Credits

This guide outlines a detailed five-step framework to help buyers make informed, impactful, and responsible investments in high-quality cookstove carbon credits. Each step is tailored to ensure alignment with global standards, maximize impact, and maintain transparency.

FIGURE ES.7
Overview of Decision-Making Framework

Step 1

DEVELOP A CLIMATE STRATEGY

- **Set clear objectives:** Begin by identifying the role of cookstove carbon credits within your broader sustainability and net-zero commitments. Are you aiming to address unavoidable emissions, support Beyond Value Chain Mitigation (BVCM), or meet compliance obligations?
- **Prioritize internal reductions:** Ensure cookstove credits are used as a complement to, not a substitute for, internal emission reduction efforts. This aligns with principles such as the Science Based Targets initiative (SBTi) and Oxford Offsetting Principles.
- Engage stakeholders: Secure internal buy-in from leadership and sustainability teams by clearly articulating cookstove credits' dual benefits of climate action and social impact.
- **Integrate cookstove credits strategically:** Use these credits to address specific areas such as scope 3 emissions, where internal abatement may be limited, and to advance Beyond Value Chain Mitigation initiatives.

Step 2

DEFINE A PROCUREMENT STRATEGY

- **Understand your buyer archetype:** Determine whether your organization falls into categories such as large corporate buyers, impact-driven investors, or smaller philanthropic organizations. Each archetype will have distinct procurement priorities.
- **Select purchasing modalities:** Decide whether to engage directly with project developers, use aggregators or exchanges, or issue requests for proposals (RFPs) for bespoke projects. For instance, large corporates might benefit from long-term emission reduction purchase agreements (ERPAs), while nongovernmental organizations may prefer project-specific, fixed-price contracts.
- **Allocate budgets thoughtfully:** Establish an internal carbon price and determine whether your focus is cost efficiency (e.g., tonne-for-tonne approaches) or maximizing impact (e.g.,

investments in high-quality projects with co-benefits).

- **Mitigate risks:** Incorporate safeguards into contracts, such as milestone-based payments, indexed price adjustments, or performance guarantees, to manage delivery and pricing risks.

Step 3

DEFINE PROJECT ELIGIBILITY CRITERIA

- **Adopt established frameworks:** Use trusted standards such as the ICVCM CCPs, the Responsible Carbon Finance (RCF) Code of Conduct, or Article 6 guidelines under the Paris Agreement to define baseline eligibility criteria.
- **Focus on environmental integrity:** Ensure projects demonstrate additionality, robust monitoring, and credible baseline assumptions. Evaluate methodologies to confirm alignment with the latest science and best practices.
- **Prioritize social co-benefits:** Select projects that deliver verifiable contributions to public health, gender equity, and local economic development, ensuring alignment with the Sustainable Development Goals.
- **Consider regional and sectoral alignment:** Tailor eligibility criteria to regional needs and the specific goals of your organization, focusing on technologies and practices best suited to target communities.

Step 4

ASSESS QUALITY OF COOKSTOVE CREDITS

- **Evaluate methodologies and assumptions:** Scrutinize project baselines, monitoring systems, and methodologies (e.g., Verra VMR0050, Gold Standard MMECD, or CLEAR) to ensure emission reductions are real, additional, and verifiable.
- **Verify MRV systems:** Assess the robustness of monitoring, reporting, and verification systems, such as stove use monitors and fuel consumption tracking. Advanced MRV systems enhance transparency and accuracy.
- **Conduct due diligence:** Review project developer track records, financial stability, and past performance. If capacity allows, conduct site visits or independent audits for added assurance.
- **Leverage ratings and certifications:** Use independent ratings (e.g., Sylvera, BeZero Carbon) and certifications (e.g., Gold Standard, Verra) as quality proxies, especially for early-stage or complex projects.

Step 5

REPORT USE AND KEEP CLAIMS CREDIBLE

- **Align with global standards:** Adhere to frameworks such as the VCMI Claims Code of Practice or the European Union's emerging Green Claims Directive to ensure transparency and credibility.
- **Communicate impact effectively:** Clearly articulate the environmental and social benefits of your purchases, providing detailed data on emission reductions, community impacts, and project sustainability.
- **Maintain transparency:** Ensure public access to nonsensitive project information, including methodologies, financial flows, and third-party verification reports.
- **Avoid over-claiming:** Be cautious with claims to prevent reputational risks. For example, distinguish between contributions to net-zero goals and voluntary action outside your value chain.

Driving Market Leadership by Investing in Quality

High-quality clean cookstove projects represent a strategic opportunity to strengthen market leadership in carbon finance. These projects deliver immediate, measurable climate benefits while addressing critical social challenges, such as health, energy access, and gender equity. By investing in quality, companies enhance their ESG (environmental, social, and governance) performance, build stakeholder trust, and demonstrate leadership in sustainability.

Quality is not just a commitment to integrity; it's a smart investment that ensures verifiable results, strengthens supply chains, and reinforces credibility in a competitive market.

Investing in high-quality projects means recognizing the full value of what they deliver and ensuring the conditions for their success. This includes:

- **Accounting for true costs:** Quality projects demand robust systems and sustained investments in several areas.
  - *Advanced monitoring systems:* Technologies to ensure accurate, real-time data collection for emission reductions you can trust.
  - *Community engagement:* Programs that build long-term buy-in and participation, ensuring success on the ground.
  - *Capacity building:* Training local users and technicians to ensure the durability and reliability of the solution.
  - *Efficient resource use:* Transitioning households to cleaner fuels reduces reliance on traditional biomass, which in turn supports environmental and social resilience.
- **Supporting market-driven pricing:** Fair pricing reflects the true value of high-quality projects, enabling developers to maintain rigorous standards, invest in innovation, and expand impact. This approach ensures long-term supply chain sustainability and project integrity.
- **Avoiding undervaluation risks:** Pursuing cost-cutting at the expense of quality risks undermining both project outcomes and the reputation of the broader carbon market. Companies that prioritize quality safeguard their investments and contribute to a market built on trust and high standards.

This guide provides the insights and frameworks to ensure that investments are impactful and credible and that they contribute to a sustainable and equitable future.

WHO THIS GUIDE IS FOR

This guide is designed to meet the needs of a diverse spectrum of buyers engaging in clean cookstove carbon markets, ranging from experienced organizations with significant capacity to organizations new to this sector or seeking to expand their engagement.

While **highly experienced buyers** with robust internal systems may already follow much of the detailed processes outlined here, this guide provides an opportunity to align practices and deepen their commitment to best-in-class procurement strategies. For these buyers, the guide serves as a reference for aligning with emerging standards, refining existing approaches, and contributing to broader market leadership.

For organizations relatively new to clean cooking carbon markets, this guide offers practical, actionable steps to build confidence and ensure integrity when sourcing cookstove credits. These buyers are typically:

- **Moderately experienced buyers.** Organizations with established sustainability commitments but limited experience or capacity in carbon markets. The guide helps these buyers navigate critical decisions, from developing climate strategies to evaluating project quality and structuring contracts.

- **New buyers.** Organizations taking their first steps into the carbon market or seeking to expand their activities. The guide simplifies complex processes and provides clear, accessible frameworks to build capacity and credibility in sourcing high-quality cookstove credits.

How This Guide Helps Buyers

The guide equips all buyers—regardless of their starting point—with the tools and insights needed to achieve impactful and responsible investments in cookstove carbon credits.

- **Practical frameworks:** Step-by-step guidance on aligning with ICVCM CCPs, Article 6 of the Paris Agreement, CORSIA, and other global standards.

- **Tailored recommendations:** Actionable steps for buyers of different capacities, ensuring meaningful participation in the cookstove carbon market.

- **Best practices:** Guidance on fostering long-term partnerships, avoiding reputational risks, and aligning with industry-leading practices.

- **Resources and tools:** Access to case studies, checklists, and links to global standards to enhance decision-making and reporting.

The Business Case for High-Quality Cookstove Credits

The business rationale for acquiring cookstove credits is anchored in three primary pillars:

- Immediate emission reductions that complement internal abatement efforts in hard-to-abate sectors.
- Strong co-benefits that align with corporate sustainability and ESG objectives.
- Enhanced credibility through supporting high-quality cookstove projects.

These credits deliver verified emission reductions while addressing urgent health, social, and economic challenges in underserved communities. To ensure credible use of these credits, buyers should evaluate alignment with key frameworks and select those most relevant to their specific context and goals. Options include market mechanism frameworks such as the ICVCM Core Carbon Principles (CCPs), Article 6 of the Paris Agreement, and CORSIA, as well as corporate frameworks such as the ISO Net Zero Standard for Corporates, Science Based Targets initiative (SBTi), IETA Guidelines for High Integrity Use of Carbon Credits, and Oxford Offsetting Principles. For further guidance on ensuring credible claims and aligning with these frameworks, refer to Step 5 in this guide: Report Use and Keep Claims Credible.

What Is a Cookstove Credit?

Burning wood, charcoal, and fossil fuels emits carbon and other greenhouse gases into the atmosphere. Around the world, 2.1 billion people cook on traditional stoves every day, releasing roughly the same annual emissions as the global aviation sector.

Cookstove projects are avoidance carbon projects that fall into two categories.

- **Fuel Efficiency:** Projects that offer families more efficient stoves, leading to a reduction in fuel consumption.
- **Fuel Switch:** Projects that help families switch to fuels with a lower carbon intensity (e.g., from cooking with charcoal to cooking with electricity).

At their core, all cookstove carbon methodologies comprise three key components (outlined below). How each component is calculated depends on the methodology type, with a key difference being between methodologies that **measure** fuel savings and methodologies that **estimate** fuel savings using an efficiency ratio.

FUEL SAVINGS

Either the difference between baseline and project fuel consumption, measured using Kitchen Performance Tests, or an estimated fuel savings calculated through an efficiency ratio.

STOVES IN USE

Calculated as the number of households (or stoves), multiplied by the number of days within the monitoring period, multiplied by the level of uptake (%), measured with usage surveys.

CARBON INTENSITY

This includes fuel emission factors, the energy produced from burning a fuel, and the fraction of non-renewable biomass.

PILLAR 1. LARGE AND IMMEDIATE EMISSION REDUCTIONS

High-quality cookstove carbon credits represent a practical mechanism for addressing a significant source of global greenhouse gas emissions. Traditional biomass-dependent cooking methods, which predominantly rely on solid fuels such as wood and charcoal, are estimated to produce 1 gigatonne of CO_2e annually,[5] accounting for 2% of global emissions. This is nearly equivalent to the emissions of the global aviation or shipping sectors, underscoring the potential for targeted interventions in this area to contribute to global mitigation efforts.

As of the time of publication, verified cookstove projects have collectively reduced an estimated 150 million tonnes of CO_2 equivalent (tCO_2e).[6] This impact is calculated based on documented improvements in stove efficiency, reduced fuel consumption, and lower emissions than with traditional cooking practices. The emissions reduced by these projects are equivalent to removing approximately 32.6 million passenger vehicles from the road for one year, based on the Environmental Protection Agency (EPA) Greenhouse Gas Equivalencies Calculator and estimate of 4.6 metric tonnes of CO_2 per vehicle per year.

In addition to reducing carbon dioxide, cookstove projects contribute to the reduction of short-lived climate pollutants, including black carbon, methane, and carbon monoxide. Black carbon, a major contributor to near-term warming, has been reduced by 50–90% in projects using advanced cooking solutions.[7] Carbon monoxide, another pollutant, is also reduced, with additional benefits for both climate and air quality.

High-quality cookstove carbon credits deliver immediate and verifiable emission reductions, often realized within a single reporting cycle or within two years of stove distribution. This rapid mobilization distinguishes cookstove credits from long-term sequestration projects, such as forestry initiatives, where emission reductions may take 10–15 years to materialize as trees grow. For investors and buyers seeking near-term climate impact, cookstove projects provide a fast and tangible pathway to achieving emission reduction goals. Moreover, cookstove credits offer the advantage of representing reductions that have already been realized (ex post), which ensure measurable and reliable climate benefits. These attributes make cookstove credits a practical and viable option for buyers seeking tangible contributions to climate targets, whether for voluntary or compliance market obligations.

Importantly, investing in cost-effective emission reductions today through cookstove projects helps organizations optimize their pathway to net-zero emissions. By achieving substantial reductions now at relatively lower costs, organizations can reduce their future dependence on more expensive carbon removal technologies that will be needed to balance residual emissions. This strategic approach not only delivers immediate climate benefits but also helps manage long-term costs associated with achieving net-zero targets.

By targeting a sector that has historically been underrepresented in climate action frameworks, cookstove credits establish a technically sound and measurable pathway for addressing global emissions.

PILLAR 2. STRONG CO-BENEFITS FOR PEOPLE AND NATURE

Clean cooking projects offer broad impacts that extend beyond reducing carbon emissions by addressing critical social, environmental, and equity challenges. These initiatives bring the promise of climate justice by facilitating access to clean energy solutions for underserved communities while delivering substantial co-benefits aligned with global sustainable development priorities.

Some 2.1 billion people — around a quarter of the global population — lack access to modern cooking services. Instead, they rely on open fires or inefficient stoves fueled by kerosene or biomass (wood, animal dung, and crop waste). These traditional cooking practices come with devastating consequences:

- Indoor air pollution from solid fuel use causes over 3.7 million premature deaths annually.[8]
- Women and children, who are most exposed to smoky cooking environments, suffer disproportionately from respiratory illnesses and related health risks.
- Household solid fuel burning accounts for up to 43% of global black carbon emissions, a potent climate pollutant contributing to both global warming and localized environmental degradation.[9]
- Time spent collecting wood fuel—estimated at up to 34 minutes per day in many low-income households—and time spent cooking on slow and inefficient stoves reduce opportunities for education, paid work, and other activities, further entrenching gender and economic inequalities.[10]

Clean cookstove projects directly contribute to climate justice by:

- Providing marginalized communities with access to clean cooking technologies, addressing energy poverty and promoting social equity.
- Improving public health by replacing traditional stoves with clean, efficient technologies, significantly reducing indoor air pollution and mitigating health risks for women and children.
- Empowering women by alleviating the burden of fuel collection, freeing up time to spend on education, income-generating activities or leisure.

These projects also support several Sustainable Development Goals, producing interconnected benefits. Chief among them are:

- SDG 3 (Good Health and Well-Being). Reduced household

air pollution lowers the risk of respiratory illnesses and premature deaths.

- SDG 5 (Gender Equality). Time and labor savings empower women to engage in more productive and fulfilling activities.
- SDG 13 (Climate Action). Significant reductions in black carbon and CO2 emissions directly combat climate change impacts.

In addition to these social and climate justice impacts, clean cooking projects play a critical role in protecting natural ecosystems. Traditional cooking methods, which rely on wood fuel and charcoal, contribute significantly to forest degradation. It is estimated that 2 billion cubic meters of wood were used globally as fuel each year[11]—enough to fill some 800,000 Olympic-sized swimming pools. The impact is particularly severe in East and Southern Africa and other regions where large populations depend on these dwindling forest resources.

Clean cookstoves are designed to be more efficient than traditional cooking practices because they use less fuel to produce the same amount of heat. This efficiency reduces the need for wood fuel, thereby decreasing the rate at which trees are harvested. Over time, this reduction in wood consumption can lead to significant preservation of forests, allowing them to continue providing biodiversity, carbon sequestration, water regulation, soil stabilization, and other essential ecosystem services.

By reducing the pressure on forests for wood fuel, clean cookstove projects create an opportunity for reforestation and natural regeneration. When communities no longer need to harvest trees for cooking fuel, previously deforested areas can begin to recover. Additionally, some clean cookstove initiatives are integrated with reforestation programs, where trees are planted to restore degraded lands. These efforts help in reforestation efforts as well as in biodiversity, improving soil health, and contributing to the overall resilience of ecosystems.

Through their wide-ranging benefits for people and nature, clean cooking projects serve as a cornerstone for achieving global sustainability goals, advancing climate justice, and fostering ecological restoration.

For corporations seeking to enhance their ESG profiles, high-quality cookstove credits provide a credible opportunity to internalize the cost of their emissions while investing in projects with broad, measurable impacts. By creating an internal price signal that incentivizes emission reductions, while simultaneously addressing public health, gender equity, energy poverty, and other critical global challenges, these investments deliver multiple strategic benefits. By supporting clean cooking projects, companies can align their investments with sustainability goals while demonstrating tangible progress in advancing climate action, social equity, and ecosystem preservation. This multifaceted impact resonates with stakeholders that value evidence-based sustainability and meaningful contributions to global development priorities.

TABLE 1.1

Impacts of Achieving Clean Cooking Access for All by 2030

Impact Area	
Emission reductions	1.5 gigatonnes CO_2e by 2030[1] Equivalent to removing over 350 million passenger vehicles from the road[2]
Forest degradation avoided	225 million hectares of forest saved by 2030[3] Equivalent to the size of the Democratic Republic of Congo.

1 International Energy Agency (July 2023). A Vision for Clean Cooking Access for All.
2 EPA Greenhouse Gas Equivalencies Calculator
3 International Energy Agency (July 2023). A Vision for Clean Cooking Access for All.

Simoshi: Small-scale, School-based, Deep in Development in the Heart of Uganda

Nearly 90% of the total primary energy consumption in Uganda is generated through biomass: wood fuel (78.6%), charcoal (5.6%), and crop residues (4.7%). Every year 19,700 Ugandans die because of the use of three-stone open fires for their daily cooking activities. These traditional stoves have been associated with extremely low efficiency, as 93% of the energy generated is lost during cooking. Currently, about 90,000 hectares (equal to 900 square kilometers) of forest cover are lost annually, which causes a scarcity of wood fuel in rural areas and raises the price of charcoal and wood fuel.

In response, Simoshi, a Uganda-based social enterprise, was founded to provide improved cooking solutions to schools through carbon finance. To ensure the effective adoption and sustained use of institutional improved cookstoves (IICSs), Simoshi implements a robust monitoring and verification system. Since 2016, it conducts a census approach, visiting and monitoring all 115 schools participating in the project. Institutional improved cookstove use and the kitchen environment are monitored at least six times during the school year, ensuring that traditional stoves replaced by IICSs have been dismantled and are no longer in use. Baseline fuel usage surveys are conducted, followed by ongoing monitoring of specific wood fuel consumption three times per school year, and free IICSs annual maintenance for a 10-year period, ensuring all participating schools achieve at least 50% savings.

Project annual impacts and benefits:

- 13,467 tCO_2e emissions reduced per year.
- 83,131 children benefit every year from not being exposed to indoor and outdoor air pollution at school.
- 16,260 tonnes of wood fuel saved every year.

- Over $70,000 saved by all 115 schools on wood fuel purchases per year.
- 451 institutional improved cookstoves (from 30 to 450 liters capacity) disseminated and maintained every year.
- 139 women trained on the benefits of improved cookstoves.
- 62,437,000 Ugandan shillings (equivalent to $17,100) spent on institutional improved cookstove free repairs.
- 814 kitchen training sessions conducted and 400 cooks trained.

Source: Simoshi and Gold Standard (ID: GS4364)

PILLAR 3. ENHANCED CREDIBILITY OF COOKSTOVE PROJECTS

The credibility and robustness of cookstove carbon credits have been significantly strengthened by advancements in methodologies, monitoring technologies, and global governance frameworks. These developments have established cookstove projects as a trusted and impactful mechanism for achieving measurable climate benefits while contributing to goals for sustainable development.

Technological innovations are at the forefront of this progress. Smart sensors, digital monitoring systems, direct measurement techniques (e.g., stove use monitors and fuel weight sensors), and other tools provide precise, real-time tracking of stove usage and fuel consumption. These technologies ensure that emission reductions are accurately calculated, reflecting real-world usage patterns and supporting high levels of transparency and confidence in reported outcomes.

Monitoring, reporting, and verification protocols have evolved to incorporate rigorous field-based procedures such as Kitchen Performance Tests (KPTs) and detailed guidance on representative sampling and measurement. Methodologies like the Comprehensive Lowered Emissions Assessment and Reporting (CLEAR) Methodology for Cooking Energy Transitions represent the latest thinking on monitoring best practices, offering greater safeguards and cross-checks to enhance credibility. Additionally, new statistical modeling tools, such as the Modeling Fuelwood Savings Scenarios (MoFuSS) tool, provide improved calculations of the fraction of non-renewable biomass (fNRB) using region-specific data, further enhancing the precision of crediting. These methodological refinements reflect a commitment to scientific rigor, ensuring that cookstove credits align with ecological and project-level realities.

Governance measures have further reinforced the credibility of cookstove projects. Leading carbon

Kitchen Performance Tests

KPTs are a standardized, field-based procedure designed to evaluate household fuel consumption and the real-world impact of improved cookstoves. The test combines quantitative and qualitative methods to assess stove performance and user behavior.

Applications: Used to quantify baseline fuel use, evaluate seasonal variations, and validate emission reductions claims in carbon credit methodologies.

Key methods:

- **Fuel consumption measurement.** Direct measurement of the weight or volume of fuel used by households over a defined period (typically three to seven days).
- **Household surveys.** Collection of qualitative data on stove performance, user satisfaction, and cooking habits.
- **Comparison approaches.** Paired-sample studies within the same household (before and after stove adoption) or cross-sectional comparisons between user groups.

Fraction of Non-Renewable Biomass

The fNRB is a critical parameter for calculating emission reductions in cookstove projects. It quantifies the percentage of wood that is harvested beyond the landscape's natural rate of regeneration, meaning that the wood is not a carbon-neutral fuel.

Significance: Higher fNRB values indicate that a greater fraction of the biomass used for cooking is non-renewable, i.e., not naturally regenerated by the landscape.

Calculation:

- Methodologies such as the United Nations Framework Convention on Climate Change's TOOL30 assess biomass regeneration rates and consumption patterns in specific regions. TOOL30 has historically allowed for wide variability in fNRB calculations and unrealistically high values, so values generated by using this tool should be carefully evaluated.
- Real-world data, such as deforestation rates, population density, and energy demand, feed into calculations to produce accurate, region-specific fNRB values using the MoFuSS model.
- Default values may be used where site-specific data is unavailable, though these values are less precise.

standards, including Gold Standard and Verra, have introduced stringent protocols and independent third-party audits to uphold the quality and transparency of credits. Additionally, international initiatives such as the Responsible Carbon Finance for Clean Cooking Initiative and oversight from the Integrity Council for the Voluntary Carbon Market (ICVCM) have established robust benchmarks, ensuring that cookstove projects deliver both verifiable climate outcomes and tangible benefits for communities.

Recent progress under Article 6.4 of the Paris Agreement, solidified at the UN Climate Change Conference (COP 29) in Baku, Azerbaijan, in November 2024, has set the stage for a global framework that supports international cooperation in carbon markets. While the operationalization of Article 6 mechanisms will take time, the voluntary carbon market is rapidly aligning with these developments. Buyers can now rely, with increasing confidence, on the voluntary market knowing that it is integrating the same high standards as Article 6 for transparency, accountability, and integrity.

By leveraging these advancements, cookstove projects now offer corporate and institutional buyers a forward-looking opportunity to align with rigorous sustainability standards and global climate frameworks. These credits represent more than emission reductions; they serve as a bridge between immediate action to climate change impact and long-term sustainable development. They thus ensure measurable outcomes that benefit both the environment and local communities.

In this evolving landscape, cookstove credits exemplify high-quality, high-impact solutions that address global emissions challenges while creating value for buyers and stakeholders. As climate markets continue to advance, the credibility and impact of cookstove projects make them an essential component of any forward-thinking climate strategy. These projects help organizations reduce their climate impact today, while they work toward their longer-term net-zero goals through internal abatement and future investment in removals.

Core Carbon Principles (CCPs)

The ICVCM's Core Carbon Principles (CCPs) establish a global benchmark for high-quality carbon credits. The CCPs form the basis of the ICVCM's Assessment Framework, which lays out the criteria to evaluate whether or not carbon credits and carbon crediting programs reach the ICVCM's threshold for quality and integrity. The CCPs aim to create a transparent, credible, and trusted voluntary carbon market by identifying credits that meet rigorous quality criteria. Cookstove projects issuing such credits allow buyers access to high-quality credits that meet global expectations for integrity and accountability.

Key criteria:

- **Governance.** Carbon crediting programs must ensure that projects allow for the public disclosure of methodologies, monitoring data, and independent, third-party verification reports.
- **Emissions impact.** Projects must demonstrate additionality, accurate baselines, and robust monitoring to ensure genuine emission reductions.
- **Sustainable development.** Projects must deliver co-benefits aligned with the Sustainable Development Goals while avoiding harm to communities and ecosystems.

Responsible Carbon Finance Initiative and Codes of Conduct for Clean Cookstove Project Developers

The Responsible Carbon Finance (RCF) for Clean Cooking Initiative, including its proposed Code of Conduct, sets a benchmark for transparent and equitable clean cooking carbon projects. It aims to establish industry best practices, enhance buyer confidence, and ensure meaningful climate and community benefits.

The RCF Code of Conduct is designed to:

- Promote responsible development of clean cooking carbon markets.
- Ensure that projects meet high standards of environmental integrity and social equity.
- Foster trust among buyers, project developers, and communities.

Key features:

- **Core actions and developmental actions.** Project developers must fulfill all core actions to achieve compliance with the Code of Conduct. Developmental actions demonstrate progress toward core compliance, enabling continuous improvement.
- **Auditing and verification.** Annual operational audits are conducted by preapproved third-party auditors, using standardized templates and evidence submission. Audits ensure alignment with Code of Conduct principles and transparency.
- **Public disclosure.** Verified projects are listed in a centralized database, which, along with audit reports and supporting evidence, is accessible to buyers, rating agencies, and other stakeholders.
- **Continuous improvement.** The Code of Conduct evolves every two years to incorporate emerging best practices and standards, requiring project developers to update their compliance evidence regularly.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EcoSafi: Pioneering Rigorous Carbon Finance Methods for Clean Cooking

In May 2024, Kenya-based EcoSafi issued Africa's first carbon credits under Gold Standard's Metered and Measured Energy Cooking Devices (MECD) methodology.

EcoSafi's sustainable and unit-profitable business model integrates several key elements:

- For a nominal service fee, customers receive a "BetterStove," the cleanest and most efficient biomass stove in production. With performance comparable to a gas stove, the BetterStove can avoid up to 3.5 tonnes of carbon emissions per customer annually.
- Customers commit to purchasing biomass fuel pellets produced from Kenyan sugarcane waste. These pellets generate 90% fewer emissions than charcoal and cost up to 40% less, without subsidies.
- Carbon credits help finance EcoSafi's capital and growth-related operating costs, including stove and pellet manufacturing as well as fuel distribution.
- Carbon emission reductions are precisely quantified using fuel sales tracked to individual customers, with the company's new BetterStoves containing monitors that yield real-time data on stove use.

Besides meeting the rigorous MECD methodology requirements, EcoSafi also earned an "A" rating from BeZero, becoming the first project globally to receive this distinction.

EcoSafi successfully sold its first issuance of cookstove credits, as well as substantial volumes of future vintages, at USD $35 each, demonstrating that high-quality credits can command premium prices. The company is now developing a multinational, multi-million carbon credit program under the MECD methodology and has reached the due diligence or negotiation stage with several other buyers for additional future offtake agreements at the same price.

Source: EcoSafi and Gold Standard (Project 11352)

KEY TAKEAWAYS

Immediate climate impact

High-quality clean cookstove credits provide measurable reductions in greenhouse gas emissions by addressing both reduction and avoidance of CO_2 and methane emissions.

Cost-effective and scalable

Cookstove carbon credits deliver immediate, verifiable emission reductions, often within two years, at a fraction of the cost of reforestation and removal credits, providing a faster, more affordable, and practical climate solution for regions reliant on biomass cookstoves.

Social co-benefits supporting Sustainable Development Goals

- Improve public health by reducing indoor air pollution and risk of associated respiratory illnesses. Supports SDG 3 (Good Health and Well-Being) and SDG 13 (Climate Action).
- Empower women by alleviating the burden of fuel collection and creating opportunities for education, economic activities, and leisure. Supports SDG 5 (Gender Equality).
- Address energy poverty, promoting equitable access to clean cooking technologies.

Environmental benefits

Reduced reliance on wood fuel and charcoal helps mitigate forest degradation and protects natural ecosystems, fostering biodiversity and carbon sequestration.

Enhanced credibility

- Backed by advancements in monitoring technologies (e.g., smart sensors, fuel usage tracking).
- Governed by rigorous standards (e.g., ICVCM's Core Carbon Principles, Responsible Carbon Finance for Clean Cooking Initiative).
- Supported by transparent reporting and independent third-party verification that ensure reliability and trust.

Corporate alignment

A valuable tool for organizations to take immediate climate action, internalize the cost of their emissions, and demonstrate commitment to sustainability and climate justice, while working toward their net-zero goals through internal abatement and investment in removals.

How to Source High-Quality Cookstove Credits

Integrating high-quality cookstove credits into a broader carbon credit portfolio can provide organizations with an effective means to address unavoidable emissions while contributing to critical social and environmental goals. To maximize their impact and credibility, buyers must adopt a structured and strategic approach to sourcing these credits. This ensures not only that climate goals are met but also that the credits deliver real, measurable benefits for communities and ecosystems.

This section outlines a five-step framework to guide buyers through the process of sourcing high-quality cookstove credits that are aligned with industry best practices and global standards. Each step is designed to address a specific aspect of the procurement process, from establishing a solid climate foundation to ensuring transparency in claims. By following these steps, buyers can navigate the complexity of carbon markets while maintaining integrity and maximizing impact.

FIGURE 2.1
Overview of Decision-Making Framework

Step 1

DEVELOP A CLIMATE STRATEGY

The foundation of responsible carbon market engagement is a strong climate strategy. Start by assessing your emissions using such tools as the Greenhouse Gas Protocol and set ambitious reduction targets. While prioritizing internal emission reductions, it is important to address unavoidable residual emissions today, as the mitigation hierarchy does not have to be strictly sequential. This approach aligns with guidance from frameworks like the VCMI Claims Code of Practice and SBTi, as well as principles such as those outlined in the Oxford Offsetting Principles, which emphasize the importance of immediate action on unabated emissions. Use cookstove credits as part of a Beyond Value Chain Mitigation (BVCM) approach to complement your overall strategy.

Step 2

DEFINE A PROCUREMENT STRATEGY

Design a procurement strategy that aligns with your budget, capacity, and objectives. Decide whether to manage the sourcing process internally or work with third-party intermediaries to access expertise and resources. A clear, well-structured approach ensures efficiency and effectiveness in sourcing high-quality credits.

Step 3

DEFINE PROJECT ELIGIBILITY CRITERIA

Identify the criteria for selecting impactful projects. Leverage recognized quality standards such as ICVCM's CCPs and other frameworks such as the RCF's Code of Conduct and Article 6 of the Paris Agreement to ensure environmental and social integrity. These criteria help you evaluate projects that align with your organizational values and deliver measurable benefits.

Step 4

ASSESS QUALITY OF COOKSTOVE CREDITS

Choose the best engagement option — whether through direct purchases, credit rating agencies, or intermediaries — for your needs. Conduct due diligence to assess project risks, including technological, regulatory, and reputational factors. Structuring contracts thoughtfully ensures long-term success and sustained impact.

Step 5

REPORT USE AND KEEP CLAIMS CREDIBLE

Transparency is key to maintaining trust and demonstrating impact. Report your use of cookstove credits clearly and credibly, aligning with recognized standards such as VCMI's Claims Code of Practice. Communicate the environmental and social benefits of your credits to reinforce your commitment to sustainability.

STEP 1.
DEVELOP A CLIMATE STRATEGY

A strong climate strategy is the foundation of any credible engagement with carbon markets. Alongside purchasing carbon credits, organizations need to demonstrate clear commitment to reducing their own emissions. This approach ensures that carbon markets are used responsibly and helps address widespread concerns about greenwashing, where companies promote their environmental credentials without substantiating these claims with meaningful decarbonization or climate action.

To align with best practices, organizations should prioritize reducing their emissions wherever possible and use carbon credits only to address unavoidable residual emissions or to support BVCM. By following this pathway, businesses can align with global standards such as the Science Based Targets initiative (SBTi) or the Voluntary Carbon Markets Integrity Initiative (VCMI), ensuring transparency, accountability, and meaningful impact.

A structured approach to developing a climate strategy includes the following steps:

1 **Establishing an emissions profile.** Accurately assess and document the organization's greenhouse gas emissions across scope 1, scope 2, and scope 3, using such frameworks as the Greenhouse Gas Protocol. This forms the baseline for action.

2 **Setting reduction targets.** Commit to ambitious, science-aligned reduction targets consistent with limiting global warming to 1.5°C above preindustrial levels. The SBTi offers guidance on setting credible targets and aligning actions with the Paris Agreement.

3 **Implementing emission reduction measures.** Focus on actions that directly reduce emissions within your operations and value chain. Examples include transitioning to renewable energy, improving energy efficiency, and adopting low-carbon technologies.

4 **Using carbon credits responsibly.** Carbon credits are not a substitute for emission reductions. Instead, they should complement reductions by addressing unavoidable emissions or supporting BVCM efforts. As the VCMI highlights, credits can play a valuable role when integrated responsibly, ensuring they contribute to meaningful climate action and broader social benefits.

High-quality clean cookstove credits are well suited to this strategy. They deliver measurable, immediate emission reductions while addressing critical social and environmental challenges. By adhering to these principles, organizations can demonstrate leadership and integrity in their climate commitments.

Frameworks for Building Climate Strategies

To align with global best practices, organizations should consider the following frameworks when developing their climate strategies.

- **VCMI's Claims Code of Practice**: Supports accurate, high-integrity claims in voluntary markets, helping organizations align with standards of transparency and credibility.
- **ISO Net Zero Standard for Corporates** (currently in development): Establishes a global benchmark for corporate net-zero strategies, offering clarity on how offsets fit within broader decarbonization efforts.
- **Oxford Offsetting Principles**: Emphasizes a hierarchy of actions, prioritizing emission reductions and durable removals, while supporting responsible use of high-quality credits.
- **Greenhouse Gas Protocol (GHG Protocol)**: Provides a standardized framework for measuring and managing greenhouse gas emissions.
- **Science Based Targets initiative (SBTi)**: Focuses on integrating near-term emission reductions into corporate climate strategies, particularly for hard-to-abate sectors.
- **IETA Guidelines for High Integrity Use of Carbon Credits**: Sets out the steps corporates should take to develop and implement a net-zero, science-aligned pathway and explains how to use carbon credits to help achieve climate goals and raise ambition.

STEP 2. DEFINE A PROCUREMENT STRATEGY

Defining a procurement strategy is essential for sourcing high-quality cookstove credits that align with an organization's goals, capacity, and operational context. Buyers should tailor their approach based on their archetype, which reflects their objectives, risk tolerance, budget, and typical volume of credits purchased. A robust strategy ensures efficiency, impact, and alignment with long-term sustainability goals.

The following sub-steps outline how different buyer archetypes — sequenced by typical credit volumes — can effectively navigate the procurement process by addressing purpose, timing, purchasing modalities, capacity needs, and contract structures.

A. Define your purpose

Understanding why you are buying carbon credits is foundational to crafting an effective procurement strategy. Buyers may purchase carbon credits for several reasons, including:

- **Compliance:** Meeting regulatory requirements in carbon markets.
- **Voluntary climate action:** Achieving corporate sustainability goals, such as carbon neutrality or net-zero commitments.
- **Impact objectives:** Supporting projects with measurable environmental and social benefits.

Defining your purpose helps align procurement decisions with organizational priorities, ensuring that purchases deliver meaningful outcomes.

Frameworks for Structuring Procurement

Procurement strategies benefit from aligning with frameworks that ensure credibility and impact.

- ICVCM Core Carbon Principles: Provide a benchmark for ensuring environmental and social integrity in carbon projects.
- GHG Management Institute Procurement Guidelines: Detail best practices for procuring high-impact carbon credits.
- OECD Due Diligence Guidance: Ensures ethical and sustainable supply chain practices.

B. Budget effectively

Budgeting effectively for carbon credits is critical to aligning financial resources with organizational goals. Three common approaches can guide budget allocation.

- **Tonne-for-Tonne:** Calculate the budget based on the number of emissions to be offset. This approach ties spending directly to emission reduction needs.
- **Money-for-Tonne:** Set a budget cap and maximize the volume of credits purchased within that limit, focusing on cost efficiency.
- **Money-for-Money:** Allocate a fixed budget for investments in high-impact projects, prioritizing impact over volume.

Organizations should also establish an internal carbon price, reflecting the cost of emission reduction and incentivizing broader sustainability initiatives.

C. Identify your buyer archetype

Buyer archetypes vary in the volume of credits purchased, organizational goals, and procurement preferences. These archetypes guide decisions on timing, modality, and contracts.

- **Large corporate buyers:** Focused on cost efficiency, they typically purchase large volumes of pre-issuance credits, leveraging milestone-based fixed prepayments and direct engagement with developers for cost efficiency.
- **Corporate sustainability buyers:** Purchase significant ongoing volumes of post-issuance credits, often through aggregators or brokers to minimize any administrative burden.
- **Financial institutions:** With ESG goals, they focus on moderate volumes of post-issuance credits, often purchased through exchanges to ensure pricing flexibility.
- **Impact investors:** Engage in smaller, periodic purchases of pre- or post-issuance credits, usually preferring direct engagement with developers or milestone-based prepayments to influence project outcomes.
- **Nongovernmental organizations (NGOs) or philanthropic buyers:** Purchase smaller volumes tied to specific projects or impact objectives, favoring performance-based or fixed-price, pre-issuance contracts.

D. Establish the type and frequency of purchases

A thoughtful approach to the type, frequency, and management of credit purchases is essential for ensuring that cookstove credits align with an organization's sustainability goals, operational capacity, and risk tolerance. These decisions play a pivotal role in determining the cost effectiveness, administrative complexity, and impact of the credits purchased. By tailoring these elements to their specific needs, buyers can enhance the efficiency and credibility of their procurement strategy.

Decision 1: What type of cookstove credits to purchase. When deciding on the type of purchases, buyers have two primary options: **pre-issuance credits** and **post-issuance credits**, each with distinct benefits and challenges.

- **Pre-issuance credits:** Purchased before credits are officially verified and issued, these credits often come at a lower cost and allow buyers to directly support project initiation, including providing upfront financial support. A buyer's willingness to invest at an early stage can also attract additional funding. This approach carries greater risk, however, because credit delivery depends on project performance, which can be influenced by unforeseen delays or non-delivery. Buyers choosing this option must also be prepared for a long-term commitment, including providing upfront financial support. Pre-issuance credits are particularly well suited for buyers with higher risk tolerance, such as **large corporates focused on cost efficiency** or **impact investors** looking to shape project outcomes.

- **Post-issuance credits:** Purchased only after verification, these credits emphasize a buyer's preference for certainty and reliability, ensuring that credits are delivered as promised. This signals to the market a focus on accountability and risk mitigation, encouraging developers to prioritize robust monitoring and verification practices. While these credits come at a higher cost, they significantly reduce risk and offer greater certainty, making them ideal for buyers that prioritize stability, such as **corporate sustainability buyers** or **financial institutions with ESG goals**.

Decision 2: Frequency of purchases. The frequency of credit purchases reflects an organization's long-term sustainability goals and its capacity for ongoing engagement.

- **Ongoing purchases** are well suited to buyers aiming for consistent progress toward carbon neutrality or net-zero commitments. This approach requires regular planning, budget allocation, and administrative oversight but ensures a steady supply of credits. **Large corporate buyers** and **financial institutions** often favor this model, as it aligns with their continuous sustainability efforts.

- **One-time purchases** are designed for organizations with project-specific goals or limited capacity for regular engagement. While simpler to manage, this approach may not support broader, long-term objectives. It is best suited to **NGOs**, **philanthropic organizations**, or smaller-scale **impact investors** focusing on specific projects.

E. Select the credit management approach

Managing the sourcing, registration, and retirement of credits is a critical component of the procurement process. Buyers must decide whether to manage these activities internally or outsource them to intermediaries.

- **Internal management** allows buyers to retain control over the entire process, from selecting projects to retiring credits. This approach ensures alignment with organizational goals and provides greater transparency. However, it requires significant in-house capacity and expertise in carbon accounting, project evaluation, compliance, and other areas. **Large corporates** or **financial institutions** that have established teams often prefer this approach.
- **Outsourced management** simplifies the process by delegating responsibilities to brokers, aggregators, or consultants. This option is ideal for **corporate sustainability buyers** or **NGOs** with limited administrative resources that benefit from external expertise but may have less direct oversight of credit selection and reporting.

The table below summarizes how different buyer archetypes align with timing, frequency, and management preferences, helping buyers identify strategies that suit their specific needs.

TABLE 2.1

Type, Frequency, and Management Approaches for Cookstove Credit Procurement by Buyer Archetype

Buyer Archetype	Type of Purchases	Frequency of Purchases	Management Approach
Large corporate buyers focused on cost efficiency	Pre-issuance (cost-effective, long-term commitment)	Ongoing (steady supply)	Internal (greater control)
Corporate sustainability buyers	Post-issuance (lower risk, verified)	Ongoing (sustained progress)	Outsourced (minimized administrative burden)
Financial institutions with ESG goals	Post-issuance (flexible, reliable)	Ongoing (aligned with ESG goals)	Mixed (internal control with external support)
NGOs or philanthropic buyers	Pre-issuance (project-driven, supportive)	One-time (impact-focused)	Outsourced (streamlined process)

F. Choose the right purchasing modality

Selecting the most suitable purchasing modality is a key step in sourcing high-quality cookstove credits. Different modalities offer varying levels of control, complexity, and alignment with organizational goals. Buyers need to consider their capacity, priorities, and risk tolerance to determine which approach best meets their needs.

TABLE 2.2

Procurement Modalities for High-Quality Cookstove Credits

Modality	Best for	Key Considerations
Direct purchase from developers	Buyers with the internal expertise to manage due diligence and project monitoring, such as large corporates focused on cost efficiency or impact investors aiming to influence project outcomes	Offers maximum control and transparency but requires significant capacity and familiarity with carbon markets to evaluate developers, negotiate contracts, and ensure project performance.
Purchase via aggregators	Buyers seeking ease of access and reduced administrative effort, such as corporate sustainability buyers	Simplifies the process and diversifies risk but limits control over project selection. Buyers should ensure that aggregators adhere to high-quality standards.
Secondary markets and brokers	Buyers prioritizing flexibility and verified credits, such as financial institutions or corporate buyers with time-sensitive needs	Offers efficiency and flexibility but limits project-specific engagement and long-term sustainability partnerships.
Exchange-based purchases	Financial institutions and large corporates seeking reliable, market-aligned solutions without extensive administrative demands	Provides cost efficiency and competitive pricing through standardized contracts. Exchanges enable spot purchases or futures trading, making them suitable for organizations focused on market trends. Exchanges often provide limited project-specific engagement.
Auctions	Buyers seeking price discovery	Promote transparency and competitive pricing by allowing buyers to bid on specific project credits. Auctions encourage fair market value but require robust oversight and a clear bidding strategy.
Request for proposals (RFPs)	Buyers with clear, project-driven objectives, such as NGOs or philanthropic organizations focused on achieving measurable impacts	Allow for highly customized project engagement by inviting developers to submit proposals. This approach enables buyers to align purchases with specific sustainability goals but requires significant time and effort to evaluate proposals and oversee implementation.

G. Structure contracts for long-term success

Establishing the right contract structure is essential for buyers to ensure stability, transparency, and long-term success when procuring cookstove credits. Contracts define the relationship between buyers and project developers by balancing risks, commitments, and benefits while supporting mutual goals. Selecting an appropriate contract type depends on the buyer's objectives, risk tolerance, and capacity to manage contractual obligations. The right structure can foster long-term partnerships and maximize the impact of clean cooking projects.

TABLE 2.3

Contracting Options for High-Quality Cookstove Credits

Contract Type	Best for	Key Considerations
Fixed-price, pre-issuance contracts	Large corporate buyers seeking cost efficiency and impact investors providing upfront capital for project initiation	Provides predictability in budgeting but exposes buyers to market fluctuations if prices fall. These also carry risks of project performance and nondelivery. Safeguards such as caps or indexed adjustments can mitigate market fluctuation risks, while performance guarantees, collateral arrangements, and other safeguards are essential for project performance risks.
Milestone-based fixed prepayments	Large corporates focused on staged commitments and impact investors seeking progress accountability	Reduces upfront risk but requires active monitoring of milestones, administrative capacity, and clear reporting mechanisms.
Post-issuance forward contracts	Corporate sustainability buyers and financial institutions focused on long-term credit planning	Provides stability and reduces delivery risks by ensuring credits are verified before purchase. While typically higher in cost than pre-issuance options, they provide buyers with certainty in meeting sustainability targets.
Volume-based ERPAs	Financial institutions and large corporates managing recurring credit needs	Ensures predictable costs by locking in volumes but requires accurate forecasting to align volumes with organizational goals.
Indexed price contracts	Corporate sustainability buyers and financial institutions looking for dynamic, market-responsive pricing structures	Aligns with market prices using mechanisms like price reporting agencies, index providers, or futures exchange settlement pricing. Examples include ICE for futures trading, CIX for market transparency, and AlliedOffsets for price benchmarking.
Tiered performance contracts	Impact investors and philanthropic organizations focused on driving high-impact results	Requires clear performance criteria, robust monitoring mechanisms, and administrative oversight. Incentivizes high-quality outcomes but adds complexity.

H. Summary checklist

This checklist summarizes the key sub-steps buyers need to take to define an effective procurement strategy for sourcing high-quality cookstove credits. Buyers following these actions can align their approach with organizational goals, capacity, and market opportunities.

TABLE 2.4

Key Actions to Define a Procurement Strategy

Key Action	Key Considerations	Checklist
Define your purpose	■ Clarify why your organization is buying carbon credits (e.g., compliance, voluntary climate action, impact objectives) ■ Align your procurement strategy with your organization's broader sustainability goals	☑ Identify the primary purpose for purchasing carbon credits (e.g., regulatory compliance, achieving net-zero targets, supporting high-impact projects)
Budget effectively	■ Establish a budget that reflects your goals and purchasing priorities (e.g., cost efficiency vs. high-impact projects) ■ Choose a budgeting approach (e.g., tonne-for-tonne, money-for-tonne, or fixed budget allocation)	☑ Set an internal carbon price to guide budget planning and incentivize sustainability initiatives ☑ Decide on the balance between cost and impact to inform budget allocation
Identify your buyer archetype	■ Determine your organization's buyer archetype (e.g., large corporate, sustainability-focused, impact investor) ■ Align your strategy with typical volumes, risk tolerance, and engagement needs	☑ Identify the buyer archetype that aligns with your organizational goals and typical credit volumes
Establish type and frequency of purchases	■ Decide between pre-issuance credits (lower cost, higher risk) and post-issuance credits (verified, higher cost, lower risk) ■ Determine the frequency: ongoing for long-term commitments or one-time for specific projects	☑ Select the timing of purchases (pre-issuance or post-issuance) ☑ Decide on ongoing or one-time purchases
Select credit management approach	■ Choose internal management for greater control but higher expertise needs ■ Opt for outsourced management for simpler processes but reduced oversight	☑ Decide between internal and outsourced management based on your organization's capacity and goals
Choose the right purchasing modality	■ Evaluate modalities such as direct purchase, aggregator services, secondary markets, exchanges, or RFPs ■ Match the modality to your need for control, risk management, and administrative capacity	☑ Select the purchasing modality that best fits your archetype and project preferences
Structure contracts for long-term success	■ Select contract types balancing cost, risk, and stability (e.g., fixed-price, milestone-based, indexed, volume-based ERPAs) ■ Incorporate caps, index adjustments, performance guarantees, milestone payments, or other safeguards	☑ Choose the contract type that aligns with organizational goals and risk tolerance ☑ Add safeguards to mitigate risks

STEP 3. DEFINE PROJECT ELIGIBILITY CRITERIA

Defining eligibility criteria for cookstove projects is fundamental to ensuring high-quality carbon credits and impactful project outcomes. Buyers need to assess projects across key dimensions, including technology suitability, developer credibility, scalability, community engagement, and alignment with recognized sustainability frameworks. Establishing robust eligibility criteria safeguards buyers against the risks of underperformance, community rejection, and weak project impact. In the dynamic field of clean cooking, where success depends on technology adoption, cultural fit, and emission reductions, defining these criteria helps ensure that investments deliver meaningful outcomes.

Key objectives:

- **Environmental integrity**. Ensure projects meet rigorous standards for emission reductions and sustainability.
- **Community empowerment**. Prioritize projects with participatory approaches and equitable benefit-sharing mechanisms.
- **Scalability and adaptability**. Assess whether projects can expand sustainably while adapting to changing market conditions and regulations.

This structured approach enables buyers to integrate cookstove credits into their portfolios confidently, aligning with both environmental and organizational goals.

Buyers operate at different levels of capacity, which necessitates tailored actions for defining project eligibility. Some may rely on trusted frameworks and ratings for streamlined decisions, while others might engage in detailed project evaluations to create custom eligibility criteria.

TABLE 2.5

Tailored Actions for Defining Eligibility

Buyer Type	Key Actions
New buyers	**Rely on established certifications and ratings as quality proxies.** For new buyers, simplicity is key. By using the ICVCM CCPs, RCF Code of Conduct, or other established frameworks, these buyers can use trusted certifications as surrogates for detailed assessments. Frameworks such as Gold Standard's mandatory SDG monitoring and Verified Carbon Standard's Climate, Community & Biodiversity (CCB) Standards ensure that projects deliver both climate and social benefits. Rating agencies MSCI, BeZero Carbon, Sylvera, and Calyx Global further simplify the process by providing detailed evaluations of project quality, even for pre-issuance credits.
Moderately experienced buyers	**Supplement certifications with targeted evaluations, such as reviewing developer track records and verifying SDG alignment.** Moderately experienced buyers may look beyond certifications, supplementing their reliance on third-party frameworks with targeted evaluations. They might assess cookstove technology against efficiency and durability benchmarks or examine developer credibility using performance histories and third-party endorsements. These buyers often validate scalability and long-term sustainability through developer reports and project documentation, ensuring that projects align with SDG targets, emission reductions, and other specific sustainability priorities.
High-capacity buyers	**Conduct in-depth assessments, develop custom eligibility criteria, and engage developers directly to validate methodologies, scalability, and community co-benefits.** At the highest level, high-capacity buyers conduct comprehensive evaluations. These buyers often define custom eligibility criteria to reflect organizational goals, prioritize specific SDG co-benefits, and focus on regional or demographic impacts. They engage deeply with project methodologies, ensuring alignment with updated standards such as Gold Standard's MMECD, VCS's VMR0050, or the CLEAR methodology. By analyzing technology suitability, assessing scalability in-depth, and conducting field-level evaluations of community benefit sharing, high-capacity buyers exercise significant control over their procurement process.

TABLE 2.6

How ICVCM's Core Carbon Principles and CORSIA Guide Cookstove Credit Selection

Criteria	ICVCM Core Carbon Principles (CCPs)	CORSIA
Purpose	Governance body for voluntary carbon markets, providing a benchmark for environmental integrity, social impact, and transparency	Compliance mechanism for aviation, ensuring credits meet Article 6.2 requirements of the Paris Agreement
Market Focus	Broad applicability across sectors, including generating credits from diverse project types (e.g., cookstove projects) and tailored to buyers from any industry seeking voluntary claims	Focused on generating credits from projects with high relevance to aviation (e.g., cookstove projects) and ensuring their use aligns with the aviation industry's offsetting needs
Alignment with Article 6	Signals alignment with Article 6 principles, including transparency and double counting safeguards, but not explicitly required	Directly aligned with Article 6.2, requiring host country authorization and compliance with Paris Agreement rules
Environmental Integrity	Ensures rigorous monitoring, reporting, and verification (MRV) for emission reductions	Strict MRV requirements with additional compliance safeguards for aviation emissions targets
Social Co-Benefits	Strong emphasis on delivering social and economic co-benefits (e.g., health, livelihoods) in line with sustainable development goals	Secondary to environmental compliance but still recognized as a valuable project attribute
Flexibility	High flexibility for buyers at varying levels of expertise in voluntary markets	Low flexibility due to strict compliance rules and aviation-specific requirements
Applicability	Suitable for diverse project types and sectors, including cookstove projects	Focused on aviation offsets, with limited applicability outside the sector
Host Country Authorization	Not required for voluntary market claims	Mandatory under Article 6.2 to ensure no double issuance or counting
Pro Tips	■ Prioritize ICVCM's "CCP eligible" standards like Gold Standard and Verra VCS ■ Purchase ICVCM "CCP Approved" credits ■ Supplement with developer credibility checks	■ Select credits from CORSIA-approved programs (e.g., ART TREES, Gold Standard), as this is a compliance-related recommendation specific to CORSIA ■ Verify host country authorization, a CORSIA-specific requirement tied to compliance with Article 6.2 ■ Prioritize strong co-benefits where possible, a recommendation relevant to both frameworks but particularly important for CORSIA given its focus on compliance and the added value of co-benefits in regulatory contexts

Key takeaways:

- **ICVCM CCPs.** Best suited for buyers in voluntary markets looking for flexible, high-quality credits with social co-benefits. Ideal when specific compliance with Article 6.2 is not required.
- **CORSIA.** The preferred choice for aviation industry buyers and others needing compliance-grade credits. Ensures strict adherence to international regulations under Article 6.2, making it essential for regulated offsetting needs.

By understanding these distinctions, buyers can select the framework that aligns best with their objectives while supporting impactful cookstove projects.

A. Key focus areas for defining eligibility

This section covers key considerations for defining eligibility, specifically, **technology assessment, project developer credibility, verifying methodologies,** and **community involvement and benefit sharing.**

i. Technology assessment: The choice of cookstove technology can significantly influence project success and community uptake. For example, improved biomass stoves are often affordable and effective for rural areas reliant on traditional fuels, while electric stoves excel in urban settings with stable grid access. Buyers should evaluate efficiency, durability, and cultural fit to ensure that technologies align with local needs and preferences. Maintenance requirements also play a crucial role, as stoves with accessible spare parts and simple repair protocols are more likely to sustain long-term adoption.

Selecting the Right Technology for Impact and Adoption

When assessing cookstove technologies, it is essential to focus on factors that balance efficiency, usability, and sustainability. Each technology has trade-offs, but the right choice ensures long-term adoption and measurable impact.

Key criteria:

- **Efficiency and emission reductions**. Choose technologies that deliver significant reductions in biomass use and greenhouse gas emissions compared with traditional cooking methods. For example, high-quality improved biomass stoves can halve fuel consumption, which directly reduces forest degradation and household carbon footprints.
- **Durability and longevity**. Look for stoves with robust designs and materials, ensuring that they last through their intended life cycle with minimal replacement costs. Durable stoves lower total ownership costs for users and enhance project credibility.
- **Cultural fit and usability**. Prioritize stoves that align with local cooking habits and preferences, as these ensure higher adoption rates. For example, stoves must accommodate local cooking styles, such as flatbreads or stews, to be accepted widely.
- **Maintenance and repair support**. Select technologies with local maintenance networks and accessible spare parts. Projects with trained community technicians or user-friendly maintenance protocols have higher long-term success rates.

Pro tip: Engage with developers that have conducted user trials and collected feedback on usability, ensuring that the technology is designed with the end-user in mind.

TABLE 2.7

Actions by Buyer Type – Technology Assessment

Buyer Type	Key Actions
New buyers	Use developer provider summaries of fuel type and stove material as a proxy for durability and quality, and refer to the Clean Cooking Alliance's Clean Cooking Catalog, an online platform and database that provides comprehensive, standardized information about a wide range of clean cooking technologies and products
Moderately experienced buyers	Request third-party lab tests that show ISO tier ratings
High-capacity buyers	Request verified data on customer pilots, usability trials, and review reports on cultural alignments and technology life-cycle costs

ii. Project developer credibility: The credibility and responsible conduct of a project developer are essential to ensuring the success, transparency, and ethical integrity of cookstove carbon projects. Developers play a central role in implementing projects, engaging communities, and ensuring that carbon credits deliver the intended environmental and social benefits. Evaluating a developer's capacity and track record helps mitigate risks and ensures alignment with the buyer's sustainability goals.

Insurance policies, often required by frameworks such as CORSIA, can provide an additional and valuable stamp of approval for project developers. The ability of a developer to secure insurance coverage indicates the developer's credibility, financial stability, and the robustness of its operational practices. Insurability serves as a data point for assessing a developer's solidity and risk management capacity, giving buyers added confidence in their selection process.

Emerging tools and frameworks promise to make this assessment more systematic. For example, the RCF Code of Conduct, expected to launch in 2025, is highly anticipated for its rigorous standards and emphasis on ethical practices. Combining these frameworks with insights from insurance-backed assessments can create a comprehensive approach to evaluating project developer credibility.

TABLE 2.8

Actions by Buyer Type – Developer Credibility

Buyer Type	Key Actions
New buyers	Use Gold Standard, ICVCM "CCP Approved," the RCF Code of Conduct, or other certifications to validate developer performance
Moderately experienced buyers	Combine certifications with references and independent reviews of developer track records, including quality of corporate governance
High-capacity buyers	Conduct site visits, interviews with stakeholders, and in-depth capacity assessments

iii. Verify methodologies: Robust sustainability frameworks and precise emission accounting methodologies ensure that projects deliver credible climate benefits.

For buyers with limited internal capacity, leveraging certifications and ratings is an efficient way to ensure quality and alignment with sustainability goals. Frameworks such as Gold Standard and Verra's VCS provide rigorous criteria for emission reductions and co-benefits. Gold Standard emphasizes SDG integration, while VCS offers add-ons such as the Climate, Community & Biodiversity (CCB) Standards for projects that deliver community and biodiversity benefits. Rating agencies, such as Sylvera, BeZero Carbon, MSCI, and Calyx Global, further streamline decision-making by providing independent assessments of project quality. These ratings can be especially helpful for existing projects, with some agencies now piloting pre-issuance project ratings for buyers interested in supporting early-stage initiatives.

Buyers with greater capacity should confirm which version of a methodology a project is using, as standards and methodologies evolve over time to reflect the latest science and best practices. Methodology updates can range from minor adjustments to default factors to significant changes in approach, such as Verra's recent replacement of older methodologies with RM0050. Projects typically adhere to the same methodology for a five-year crediting period, but "versioning up" midway through can depend on the significance of the changes. In some cases, updating to a new version might simply require applying a revised leakage factor, while in others, it could necessitate returning to the field for new baseline assessments; rethinking monitoring, reporting, and verification; and fundamentally altering crediting projections and project financials. Buyers should verify that the project's chosen methodology aligns with their expectations and reflects the latest frameworks. Where discrepancies exist, they should encourage or request updates to ensure compatibility with current standards and quality benchmarks.

TABLE 2.9

Actions by Buyer Type – Verify Methodologies

Buyer Type	Key Actions
New buyers	Rely on certifications to validate methodology compliance and MRV systems
Moderately experienced buyers	Review documentation on methodology updates and basic MRV processes
High-capacity buyers	Conduct detailed assessments of MRV systems, including site audits and third-party reviews

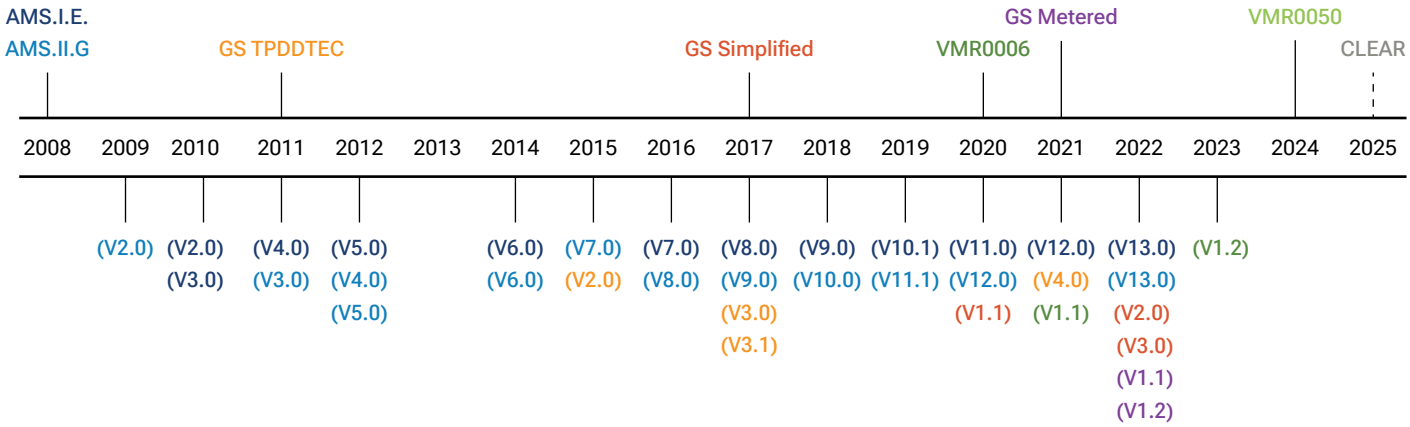
Methodology Evolution and its Impact

Keeping up with methodology updates: Emission accounting methodologies evolve over time, which has an impact on how projects calculate baselines and verify reductions. For instance, VCS recently updated its cookstove methodology to VMR0050, replacing VMR0006 v1.2 and VMR0011 v1.0. These updates enhance accuracy and align with the latest scientific and policy developments but affect project baselines and MRV processes.

Emerging standards: The CLEAR (Comprehensive Lowered Emissions Assessment and Reporting) Methodology incorporates the latest science on key parameters, increasing the requirements for substantiating the input parameters that have the most impact on emission reduction estimates, including mandating direct in-home measurement of fuel consumption. It's gaining traction among developers and buyers as a forward-looking standard aligned with evolving international requirements.

FIGURE 2.2

A Timeline of the Major Cookstove Methodologies with Key Version Updates



Legend:

AMS-I.E – Switch from non-renewable biomass for thermal applications by the user (CDM)

AMS-II.G – Energy efficiency measures in thermal applications of non-renewable biomass (CDM)

CLEAR – Comprehensive Lowered Emissions Assessment and Reporting (CLEAR) Methodology for Cooking Energy Transitions (Clean Cooking and Climate Consortium)

GS Metered – Methodology for metered and measured energy cooking devices (Gold Standard)

GS Simplified – Simplified Methodology for Clean and Efficient Cookstoves (Gold Standard)

GS TPDDTEC – Technologies and practices to displace decentralized thermal energy consumption (Gold Standard)

VMR0006 – Energy efficiency and fuel switch measures in thermal applications (Verra)

VMR0050 – Energy efficiency and fuel switch measures in cookstoves (Verra)

Source: Adapted from BeZero Carbon

Key considerations:

- Projects registered under older methodologies must update before their next crediting period (typically five to seven years on average).
- Buyers should verify the methodology version used during the project's crediting period to ensure it aligns with their requirements.
- If a project's methodology doesn't meet expectations, buyers can request upgrades or re-registration under a preferred standard. However, the feasibility of such changes depends on the project's stage and the significance of the updates required. For instance, applying revised leakage factors and other minor updates may be straightforward. In contrast, significant upgrades might necessitate new baseline assessments, rethinking MRV, and potentially altering crediting projections and financial models. Buyers should carefully assess whether the requested changes align with the project's crediting period and ensure that the updates maintain the project's viability while enhancing its alignment with current standards and quality benchmarks.

Practical tip: Buyers can consult project developers about methodology plans and can monitor emerging standards such as CLEAR for advanced features that better align with modern carbon accounting expectations.

iv. Community involvement and benefit sharing: Community engagement lies at the heart of impactful cookstove projects. Buyers should look for projects designed with participatory methods to ensure that local stakeholders, especially marginalized groups, are involved in planning and implementation. Equitable benefit-sharing models, such as revenue sharing or in-kind benefits like reduced fuel costs, are crucial for building trust and fostering adoption. Projects that use accessible communication methods such as pictorial contracts for users with low literacy demonstrate a commitment to transparency and inclusion.

Community Involvement: A Cornerstone of Responsible Behavior

Engaging communities is critical to the success and sustainability of cookstove projects. Meaningful involvement fosters ownership, ensures alignment with user needs, and drives long-term adoption of clean cooking technologies. Below are essential practices for ensuring impactful community engagement and equitable benefit sharing.

Key practices for community engagement:

- **Participatory planning**. Successful projects actively engage communities from the outset. Surveys, workshops, and focus groups ensure that project design reflects local needs, values, and cooking habits. Involving marginalized groups and local organizations enhances inclusivity and project effectiveness.
- **Transparent communication**. Maintaining transparency builds trust and supports sustained community engagement. Projects should provide clear, consistent updates on cookstove usage, maintenance, benefits, and grievance mechanisms. Open communication channels improve adoption rates and ensure long-term use.
- **Accessible contracts**. Comprehensive, user-friendly contracts outline carbon credit rights, user rewards, responsibilities, and other key project elements. Visual aids and simple language help participants, particularly those with low literacy and rural populations, understand terms clearly. For example, India's Clean Energy for All project used pictorial contracts to engage rural women, leading to higher participation and commitment.

Equitable benefit-sharing mechanisms ensure the success and fairness of cookstove projects. Mechanisms include:

- **Monetary revenue sharing**. A share of carbon credit income supports stove subsidies, fuel cost reductions, direct financial incentives, or other community development initiatives. Transparent communication about revenue-sharing builds trust.
- **In-kind benefits**. Projects can offer time savings for women, better health outcomes, reduced labor for wood fuel collection, and other direct improvements to community well-being. Indirect benefits, such as reduced forest degradation, also improve local agriculture and food security.
- **Employment creation**. Projects can enhance economic value by generating meaningful employment opportunities. Buyers should check for creation of local managerial and carbon jobs, as well as jobs in project delivery (sales agents, local trainers, monitoring). In addition, projects can support local manufacturing and technology transfer through establishing production facilities and training small businesses how to make stove repairs.
- **The impact of community engagement**: Adopting these practices builds trust, drives high adoption rates, and ensures long-term sustainability for cookstove projects. When communities are meaningfully involved, projects achieve greater environmental and social outcomes.

B. Frameworks for evaluating eligibility

Project eligibility is evaluated and strengthened through adherence to recognized frameworks that set rigorous criteria for emission reductions, sustainable development, and ethical conduct.

- **Gold Standard for the Global Goals**: Defines eligibility by requiring measurable contributions to Sustainable Development Goals (SDGs) in addition to verified emission reductions.
- **The Responsible Carbon Finance Code of Conduct (RCF)** (currently in development): Establishes eligibility criteria focused on ethical project implementation, transparency, and active community engagement.
- **Verra's Verified Carbon Standard (VCS)**: Provides comprehensive guidance on technical eligibility, including additionality, baseline establishment, and quantification of emission reductions.
- **The Climate, Community & Biodiversity (CCB) Standards**: Sets eligibility requirements for projects that deliver measurable benefits for communities and biodiversity alongside credible carbon accounting.
- **CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation)**: Defines eligibility through a stringent set of criteria for offset projects used by the aviation sector, ensuring high environmental and technical standards.
- **Article 6 of the Paris Agreement**: Establishes criteria for projects to qualify for international cooperation under carbon markets, focusing on environmental integrity, transparency, and avoidance of double counting.

These frameworks provide clear and enforceable eligibility standards, ensuring projects meet robust technical, social, and environmental criteria.

Scaling Clean Cooking Solutions in Rwanda

In 2022, FairClimateFund collaborated with BioMassters in Rwanda to launch an ambitious initiative to transform cooking practices, reduce carbon emissions, and empower local communities. The program, certified under Gold Standard's Fair Climate Program for Advanced Biomass Cooking Solutions, represents a pioneering effort to integrate environmental and social benefits into clean cooking projects.

This initiative provides households with pellet gasifying stoves that deliver cleaner and more affordable cooking alternatives. The innovative project model ensures that every participant directly benefits from the program's success, fostering a sense of ownership and community commitment. FairClimateFund serves as the coordinating and management entity, while BioMassters acts as the project implementation partner, ensuring local engagement and smooth operations.

Households involved in the project not only gain access to clean cooking technologies but also enjoy direct financial incentives tied to the carbon program. As part of the effort to become Fairtrade-certified under the Fairtrade Climate Standard, the project introduced groundbreaking benefit-sharing mechanisms that are reshaping how clean cooking solutions are implemented.

One of the project's most celebrated features is its direct benefits to households:

- **Cashback on fuel purchases**. For every 100 kilograms of pellets purchased, households receive €2.22 (3,000 Rwandan Francs, or RWF) credited directly to their mobile money accounts. This extra income is entirely flexible, allowing families to allocate funds as they see fit.

- **Stove affordability**. A stove discount of approximately €30 (40,000 RF) over its lifetime ensures that even low- and middle-income households can transition to cleaner cooking solutions. Households actively contribute to the stove's cost, which fosters long-term commitment to its use.

- **Fairtrade premiums**. An additional €1 per carbon credit is funneled into a community-based organization certified under the Fairtrade Climate Standard. These funds are earmarked for collective climate adaptation measures and socioeconomic activities identified by the community.

Practical experience has demonstrated the profound impact of these measures. Many households actively recall why they receive cashbacks and stove discounts, further incentivizing them to advocate for clean cooking solutions among neighbors, friends, and family. These financial benefits, combined with the health and environmental advantages of cleaner cooking, are accelerating the transition from charcoal to pellet-based cooking.

Looking to the future, the FairClimateFund plans to expand the program to schools, hospitals, prisons, and other institutional users. By targeting large-scale users of wood fuel and charcoal, this initiative aims to amplify its environmental impact while setting an example for broader adoption across Rwanda. For these institutions, the project will introduce specialized stoves capable of meeting industrial-scale cooking needs, extending the program's reach, and demonstrating the scalability of its model.

The FairClimateFund and BioMassters partnership exemplifies how carbon projects can deliver tangible benefits to individual households while fostering broader systemic change. Combining financial incentives, community participation, and scalable technology, the project sets a benchmark for integrating social equity and environmental sustainability in clean cooking programs.

Source: FairClimateFund

C. Snapshot of buyer actions by capacity

The following table emphasizes the specific frameworks relevant to eligibility at various buyer capacity levels.

TABLE 2.10

Relevant Frameworks: A Question of Buyer Capacity

Eligibility Action	New Buyers	Moderately Experienced Buyers	High-Capacity Buyers
Adopt standards	Use **Gold Standard**, **VCS**, **RCF** (forthcoming), or **CORSIA** frameworks as proxies	Validate alignment with frameworks (e.g., Gold Standard, VCS, CCB Standards, CORSIA) to ensure consistency with goals	Use frameworks (e.g., Article 6 of the Paris Agreement, CORSIA, CCB Standards) as a baseline but apply custom criteria aligned with organizational priorities
Use rating agencies	Fully rely on ratings (e.g., BeZero Carbon, Calyx Global, Sylvera, MSCI)	Supplement frameworks with insights from rating agencies	Use ratings to support but complement with in-depth project evaluations
Evaluate technology	Use developer provider summaries of fuel type and stove material as a proxy for durability and quality, and refer to Clean Cooking Alliance's Clean Cooking Catalogue	Request third-party lab tests that show ISO tier ratings	Request verified data on customer pilots, usability trials, and review reports on cultural alignments and technology life-cycle costs
Assess developer credibility	Ensure compliance with **RCF** or similar frameworks	Combine developer ratings with endorsements for a more comprehensive view	Conduct in-depth reviews of developer performance, including direct engagement and track record validation
Verify methodologies	Use certified standards (e.g., **Gold Standard**, **VCS**) for methodology assurance and alignment	Validate the methodology's relevance to project goals and eligibility criteria	Evaluate methodology versions, crediting periods, and updates for greater precision and impact
Examine community engagement	Trust certification frameworks (e.g., **Gold Standard**, **CCB Standards**) to ensure equitable benefit sharing	Validate participatory approaches via developer-reported summaries and independent reviews	Conduct field assessments to ensure equitable benefit sharing and active community involvement

STEP 4. ASSESS THE QUALITY OF CARBON CREDITS

Evaluating the underlying quality of cookstove carbon projects and credits is crucial to ensuring credibility, environmental integrity, and alignment with broader climate goals. This step requires buyers to assess the technical, regulatory, and operational foundations of projects to confirm that carbon credits represent real, additional, and verifiable emission reductions.

The evaluation encompasses five key focus areas: **technical integrity, project assumptions, regulatory and market compliance, long-term scalability and impact and community-level impacts.** Each focus area addresses specific elements that determine project quality, from the reliability of emissions accounting to the durability of social co-benefits. Buyers determine their engagement level based on their internal capacity — whether they are relying on established frameworks or conducting in-depth evaluations.

Investing in low-quality credits can undermine a buyer's portfolio credibility, lead to reputational risks, and diminish the actual impact of climate action. For instance, credits based on inflated baseline assumptions or inadequate monitoring systems may fail to represent genuine emission reductions. Conversely, rigorous assessments mitigate these risks and enhance the environmental, social, and economic benefits of investments, solidifying the buyer's reputation as a responsible climate actor.

Key objectives for quality assessment:

- **Credibility** to ensure emission reductions are real, additional, and verified.
- **Sustainability** to support projects that deliver long-term environmental and community benefits.
- **Scalability** to prioritize projects capable of expanding and sustaining impact.

This step also serves to identify red flags — unreliable methodologies, weak monitoring systems, poorly implemented benefit-sharing mechanisms, and the like — that could undermine a project's credibility. By tailoring actions to their capacity, buyers can achieve a balance between due diligence and resource efficiency while safeguarding their investments.

For buyers, the depth of engagement in this step depends heavily on their internal capacity and resources. New buyers often rely on trusted certifications and ratings to verify quality, while moderately experienced and high-capacity

TABLE 2.11
Tailored Actions for Assessing Quality

Buyer Type	Key Actions
New buyers	Rely on trusted certifications (e.g., ICVCM "CCP Approved," Gold Standard) to ensure quality
Moderately experienced buyers	Validate additionality, baseline assumptions, and methodology relevance through developer documentation and project data
High-capacity buyers	Conduct in-depth evaluations of methodologies, field-level data, and MRV systems to ensure integrity and sustainability

buyers adopt more comprehensive approaches to scrutinize project claims and align with their strategic priorities. By tailoring their actions to their capacity, buyers can balance due diligence with resource efficiency, mitigating risks while maximizing impact.

A. Focus areas for assessing quality

i. Technical integrity. Technical integrity ensures that emission reductions are genuine and verifiable. This requires assessing several critical components:

- **Additionality**. Buyers must verify that the project relies on carbon finance to proceed. Projects must demonstrate that they could not have been implemented without revenue from carbon credits. For instance, large-scale cookstove distribution programs often depend entirely on this funding to overcome high upfront costs and market barriers.
- **Baseline assumptions**. The baseline represents the emissions that would occur in the absence of the project. Buyers should ensure that baseline calculations are realistic, evidence-based, and conservative to avoid problems of over-crediting. Projects using outdated or inflated baseline data risk overstating their emission reductions.
- **Monitoring, reporting, and verification**. Robust MRV systems ensure that the claimed emission reductions and co-benefits are real and measurable. Buyers should confirm that MRV methodologies adhere to recognized standards, such as Gold Standard or Verra's Verified Carbon Standard. This includes verifying how data on stove usage, fuel consumption, emissions, and co-benefits is collected and audited.

Deep Dive: Monitoring, Reporting, and Verification

MRV is the backbone of ensuring the credibility, transparency, and reliability of cookstove carbon credits. Below is an exploration of the principles, models, approaches, and additional considerations for buyers.

MRV principles

Monitoring, reporting, and verification processes must adhere to key principles to maintain credibility and deliver high-quality carbon credits.

- **Accuracy**: Data must be as precise as possible to reflect true emission reductions.
- **Relevance**: Data should directly support the project's emission reduction goals.
- **Reliability**: Consistent MRV approaches must be used to ensure dependable results.
- **Transparency**: Data collection approaches and assumptions must be openly disclosed.
- **Conservativeness**: When uncertainty arises, conservative assumptions should prevent overestimations.

Understanding the MRV model

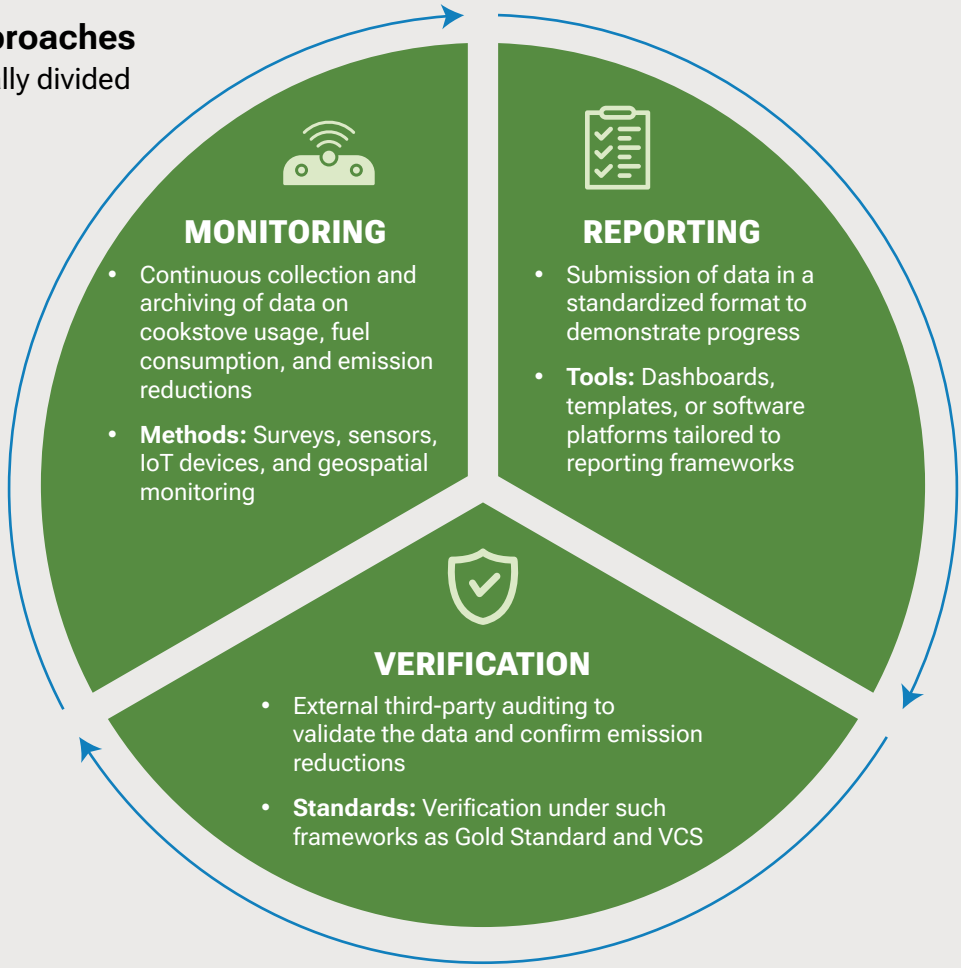
Buyers should familiarize themselves with the MRV model employed by the project developer to assess its suitability for the project's context.

- **National or regional defaults**, sourced from academic literature, host country governments, or approved methodologies, offer a simplified approach, especially for smaller or newer projects. Using defaults or caps is often the easiest, quickest, and most cost-effective way of establishing variables. When these defaults are conservative, they provide a credible and efficient substitute for traditional MRV approaches, making them a practical option in certain scenarios.
- **Traditional MRV** typically relies on manual data collection and periodic audits, which, when based on direct measurements, offer established credibility but that often requires time and financial resources to do well. Traditional MRVs can also rely on self-reported surveys, which are less costly but can lack credibility and reliability due to potential biases and inaccuracies in reporting.
- **Digital MRV (dMRV)** leverages technologies like Internet of Things (IoT) devices, remote sensing, and AI to streamline processes and provide near real-time data. While some dMRV methods require robust connectivity, others, like built-in usage sensors, can function independently in low-connectivity areas, expanding their applicability. These methods may vary in terms of immediacy, functionality, and scalability, highlighting the need to balance practicality with technological sophistication to suit the specific context of the project.

Buyers' Role: Evaluate the developer's MRV model to understand its effectiveness and any trade-offs between traditional and digital approaches.

Overview of MRV approaches

The MRV process is typically divided into three stages.



Additional buyer considerations

To enhance due diligence and support corporate social responsibility reporting, buyers may take additional steps beyond those implemented by project developers.

- **Request granular data**: Engage with developers to access detailed MRV data for deeper analysis and verification of reported emission reductions.
- **Leverage third-party tools**: Use independent platforms to cross-verify MRV claims and assess the credibility of reported outcomes.
- **Monitor adoption of digital MRV (dMRV)**: Encourage projects to adopt digital MRV systems, which offer greater efficiency and transparency. However, note that current MRV practices rely on random sampling with a 90:10 confidence interval, typically requiring approximately 120 surveys for large projects. Buyers should weigh the affordability of limited sampling against the high costs of comprehensive metering or larger sample sizes.
- **Engage in verification audits**: Attend verification site visits or interact directly with auditors to gain a deeper understanding of project performance and ensure adherence to high standards.

Emerging trends in MRV

Digital MRV systems are rapidly evolving, offering improved efficiency, reduced costs, and greater scalability. By adopting technologies such as stove use monitors (SUMs) or remote IoT sensors, projects enhance data accuracy and provide buyers with real-time insights into project impacts. These also cost more.

TABLE 2.12

Key Questions to Ask About Technical Integrity

Component	Key Questions to Ask
Additionality	■ Would the project proceed without carbon finance? ■ Are there financial or technical barriers that carbon credits help overcome?
Baseline assumptions	■ Are the baseline emissions realistic, evidence-based, and conservatively estimated? ■ Are the baselines comparable to projects operating in a similar area and with the same populations? If not, what could be the cause of these differences, e.g., is distribution more targeted? ■ What historical data supports the baseline calculations?
MRV systems	■ Are the MRV methodologies consistent with international such standards as Gold Standard or VCS? ■ How is data collected, verified, and audited? ■ Does the project have independent evidence of impact from a third-party survey or academia?

ii. Project assumptions. The foundational assumptions of a project — spanning user behavior, technology adoption, and program feasibility — are critical to long-term success.

- **Behavioral assumptions**. Buyers should assess whether user behavior aligns with project expectations because failure to account for user behavior may overestimate emission reductions and overall impact. For example, projects must account for such factors as continued use of traditional stoves alongside improved models, which can dilute emission reductions.
- **Technology adoption rates**. The success of cookstove projects depends on high adoption and sustained use. Buyers should evaluate whether assumptions about uptake are grounded in robust market research or historical data because overly optimistic assumptions about adoption rates can lead to unmet emission reduction targets.
- **Quality of distribution.** Ensuring stoves reach people who need them and are likely to use them is essential to project quality. Where a project developer uses local distribution partners or NGOs, they should have robust quality control mechanisms in place to ensure stoves have reached the right people, e.g., distribution of electric stoves to urban charcoal users, rather than households that already have LPG. Project developers should provide quality training on stove use and ongoing user engagement to promote usage.
- **Program feasibility**. Feasibility assessments should include logistics, supply chain robustness, and the capacity of local implementers to deliver stoves at scale. Projects that overestimate their ability to deploy or maintain stoves risk implementation delays or failure, which can adversely affect project credibility.

BURN Targets Distribution to Families Who Need Stoves the Most

Before BURN launches a new project in any market, its team conducts detailed feasibility studies to ensure impacts will be additional. This testing helps to build an understanding of commonly used cooking fuels and stove types; the barriers to adopting better technologies; and how much families can afford to pay for alternatives. BURN then designs projects to get their world-class stoves to low-income families at a cost subsidized by carbon finance.

Carbon sales target customers with specific characteristics – e.g., families who primarily cook with charcoal – to ensure the baseline and project scenarios match, and that stoves go to families who need them most. Field agents visit families in advance of each sale to "prospect" and to ensure they meet the target criteria. This data is then validated by an independent team – before the sale is finalized and the stove delivered. Every customer's home is visited by BURN at least once in the sale process, and every customer signs a carbon waiver. Field agents are remunerated based on the quality of the interaction, rather than the number of sales, to ensure carbon projects are high quality.

For example, in Accra, Ghana, BURN is distributing IoT-enabled electric induction stoves. Through extensive piloting, BURN developed a comprehensive checklist to help field agents identify the most relevant customers for switching from charcoal to electric cooking. This approach, plus ongoing training for customers, has increased kilowatt hour usage by 25 percentage points. Live digital monitoring of all stoves allows for a fast feedback loop and empowers field agents to revisit households with lower usage to address any concerns. Higher customer satisfaction improves project integrity and, ultimately, helps to reduce charcoal use.

Source: BURN

TABLE 2.13

Key Questions to Ask About Project Assumptions

Component	Key Questions to Ask
Behavioral assumptions	■ Have user surveys or pilot studies confirmed expected behavior changes? ■ Is there evidence that users will adopt and consistently use the improved stoves?
Technology adoption rates	■ Are adoption rates based on credible market research or historical data? ■ What strategies are in place to encourage sustained use?
Quality of distribution	■ How robust are the quality control mechanisms in place to verify distribution accuracy? ■ Is distribution targeted? ■ Are you conducting ongoing education and engagement to check on users and validate that they want, need, and are using the stoves?
Program feasibility	■ Are supply chains and logistics well established? ■ Do local implementers have the capacity to deliver and maintain stoves at scale?

iii. Regulatory and market compliance. Regulatory compliance and alignment with market frameworks ensure that projects meet global standards and avoid double counting and other risks.

- **Corresponding adjustments**. Compliance buyers, such as airlines under CORSIA, must prioritize projects offering corresponding adjustments to align with Article 6 of the Paris Agreement. Buyers should confirm, through registries and IETA's Letter of Authorization Tracker, that projects have been issued such authorization (or the equivalent) from host countries and that they include provisions to avoid double counting emission reductions.
- **Certifications and standards**. Projects registered under Gold Standard, VCS, or other standards ensure compatibility with international compliance and voluntary markets. Buyers should verify that these certifications cover both emission reductions and co-benefits, such as SDG impacts.
- **Legal and regulatory risks**. Projects operating in regions with complex or unstable regulatory environments should secure all necessary permits, engage with local authorities, and demonstrate other proactive strategies such as insurance coverage to mitigate these risks. Doing so can minimize the chances of project disruption or invalidation.

TABLE 2.14

Key Questions to Ask About Compliance

Component	Key Questions to Ask
Corresponding adjustments	■ Does the project offer corresponding adjustments to meet compliance standards under Article 6 of the Paris Agreement? ■ How are emission reductions verified to prevent double counting?
Certifications and standards	■ Are the project's certifications (e.g., Gold Standard, VCS) current and comprehensive? ■ Do certifications cover both emission reductions and co-benefits?
Legal and regulatory risks	■ Has the project secured all necessary permits? ■ Are strategies in place to navigate regulatory uncertainties?

iv. Long-term scalability and impact. The scalability of a project determines its ability to sustain and expand its benefits over time. Buyers must consider the following conditions.

- **Distribution networks**. Effective distribution channels ensure that cookstoves reach underserved communities. Buyers should assess whether these networks are well established and capable of scaling to ensure the project's impact and sustainability.
- **Adaptability**. Projects must demonstrate resilience to market or regulatory changes to ensure that projects remain viable and impactful in dynamic environments. The introduction of new cooking technologies or changes in fuel availability, for instance, could affect project viability.
- **Resource availability**. Access to skilled labor, funding, and materials is critical for sustained implementation. Buyers should confirm that projects have secured these resources or have contingency plans in place to ensure that credits are delivered on time and in volumes needed to meet claims plans.

TABLE 2.15
Key Questions to Ask About Impact

Component	Key Questions to Ask
Distribution networks	■ Are distribution channels robust and capable of reaching underserved areas? ■ What mechanisms are in place to monitor distribution efficiency?
Adaptability	■ Can the project adapt to changes in market dynamics or regulatory requirements? ■ Are contingency plans in place for potential disruptions?
Resource availability	■ Does the project have secured funding, materials, and skilled labor? ■ What plans exist to address resource shortages?

v. Community-level impacts. Community engagement and benefit-sharing mechanisms are central to ensuring social equity and fostering trust.

- **Participatory design**. Projects that are designed with input from local communities on cultural practices and that meet user needs are more likely to secure high adoption rates. This involves engaging stakeholders through focus groups, surveys, and workshops.
- **Equitable benefit sharing**. Buyers should ensure that projects include transparent mechanisms for distributing financial and nonfinancial benefits to build trust and foster long-term engagement. This may include revenue sharing models, reduced fuel costs and other in-kind benefits, or time savings for women.
- **Grievance mechanisms**. Clear channels for addressing community concerns build trust and ensure accountability throughout the project's life cycle.

TABLE 2.16

Key Questions to Ask About Community-Level Impacts

Component	Key Questions to Ask
Participatory design	■ Were local communities engaged during project design? ■ How were cultural practices and preferences incorporated?
Equitable benefit sharing	■ Are benefit-sharing mechanisms clearly defined and communicated? ■ Do financial and nonfinancial benefits prioritize marginalized groups?
Grievance mechanisms	■ Are grievance mechanisms accessible and well communicated to all stakeholders? ■ How are community concerns addressed and resolved?

B. Frameworks for quality assessment

Ensuring project quality requires adherence to frameworks that validate emission reductions. Among them:

- **Verra's Verified Carbon Standard (VCS)** provides robust methodologies for baseline and additionality assessments.
- **Gold Standard** offers detailed MRV guidelines to ensure transparency and accuracy.
- **Sylvera Ratings** facilitates third-party evaluations of project risks and quality.
- **BeZero Carbon Ratings** helps assess carbon projects for reliability and impact.
- **Calyx Global Ratings** provides independent ratings for transparency and project quality.
- **MSCI** integrates carbon credit evaluations into ESG impact metrics.
- **CLEAR Cookstove Methodology** *(under development by the Clean Coking and Climate Consortium)* provides a forward-looking standard for life-cycle emissions and co-benefits accounting.

C. Snapshot of buyer actions by capacity

TABLE 2.17
Buyer Actions by Capacity

Focus Area	New Buyers	Moderately Experienced Buyers	High-Capacity Buyers
Technical integrity	Use certifications (e.g., Gold Standard, VCS, CORSIA-approved programs) to confirm additionality, baseline accuracy, and MRV	■ Validate developer-reported claims using certification reports (e.g., methodology updates) ■ Cross-check MRV data with independent reviews from rating agencies such as Sylvera, BeZero Carbon, Calyx Global, and MSCI	■ Conduct audits of MRV systems ■ Request third-party verification of baseline assumptions and leakage strategies ■ Use tools like Verra's project database or Gold Standard's Registry or CORSIA's approved database for documentation
Project assumptions	Rely on developer-provided summaries and pre-assessment reviews for assumptions on adoption and feasibility	■ Verify assumptions using case studies or comparison with similar projects (e.g., ICROA case library) ■ Reference CORSIA methodologies where applicable.	■ Conduct field visits to test adoption assumptions ■ Use survey tools (e.g., KoboToolbox) for direct community feedback on user behavior ■ Consult project feasibility guides from recognized standards like Gold Standard or CORSIA technical guidelines

Focus Area	New Buyers	Moderately Experienced Buyers	High-Capacity Buyers
Regulatory compliance	Ensure projects are certified (e.g., CORSIA, ICVCM "CCP Approved") under frameworks aligned with Article 6 of the Paris Agreement	Validate certifications for compliance with corresponding adjustments (if required)	■ Engage compliance consultants or legal advisors to confirm adherence to Article 6 provisions and national regulations ■ Use the ICVCM webpage or CORSIA's approved program registry to cross-check claims
Scalability	Confirm scalability claims through developer summaries	■ Validate distribution network plans through documentation or developer interviews ■ Refer to scalability considerations in CORSIA project guidance documents	■ Analyze supply chain dependencies using data tools (e.g., ChainPoint) ■ Conduct adaptability assessments for changing market conditions (e.g., new fuels or cooking technologies)
Community impacts	Trust frameworks like Gold Standard, CORSIA sustainable development co-benefits criteria or CCB Standards for community engagement	■ Use developer-provided community feedback reports to verify benefit-sharing mechanisms ■ Reference CORSIA-approved project evaluations for assessing community and sustainable development impacts	■ Conduct stakeholder interviews and field assessments using participatory approaches (e.g., PRA tools) ■ Use grievance mechanism logs to assess transparency and trust ■ Cross-reference with CORSIA program requirements for community impact verification

STEP 5. REPORT USE AND KEEP CLAIMS CREDIBLE

Effective reporting and credible claims are essential components of using carbon credits, as they help demonstrate accountability and build trust with stakeholders. This step focuses on how organizations can transparently communicate their climate actions.

Carbon credits should always form one part of a company's broader climate strategy. Their primary role is to take financial responsibility for unabated emissions that cannot yet be reduced, alongside ongoing efforts to abate value chain emissions toward the achievement of net zero. Carbon credits help companies address emissions that cannot yet be reduced.

When purchasing carbon credits on a voluntary basis — as opposed to within a compliance market — organizations do so to make credible public claims related to their climate responsibilities. In the voluntary market, companies commit to funding emission reductions not because of regulatory obligations but because they acknowledge the need to take responsibility for their environmental impact while striving to align with net-zero goals.

Organizations should approach public claims with caution, ensuring that communications are credible and supportive of genuine climate action. This is crucial, particularly in light of increased scrutiny from regulators, civil society, the media, and even legal bodies. Credible claims must be communicated clearly and transparently to build trust with consumers, investors, peers, and other key stakeholders.

This section offers guidance on how organizations can make credible public claims based on the use of cookstove credits, along with references to relevant resources.

A. Types of claims

Public claims generally fall into two categories:

- **Compensatory claims** indicate that the organization's unabated greenhouse gas emissions have been counterbalanced by the retirement of carbon removal credits. An example of a compensatory claim is "carbon neutrality." With the implementation of the EU Green Claims Directive, any compensatory claim such as carbon neutrality must now be supported by robust evidence, including third-party verification.

- **Contributory claims** express that the organization has contributed to climate mitigation by taking financial responsibility for its unabated emissions. This is achieved through the retirement of carbon credits, which provides a financial incentive for emission reductions. However, these claims do not explicitly assert that all unabated emissions have been fully offset. An example is "Funding Climate Action."

- Historically, many organizations have focused on compensatory claims like "carbon neutral" or "net zero." Recently, contributory claims have become more common, driven by regulation, legal developments, and civil society scrutiny. These claims are often better aligned with the nature of corporate contributions to global net zero.

B. Principles for credible claims

For any public claim, the following principles should be observed to ensure credibility:

- **Measured, accurate, and truthful**. Claims must be clear, logically derived, and free from misleading information.

- **Transparent**. Stakeholders should be able to trace claims to emission inventories, carbon credit retirement records, independent verifications, and other supporting data.

- **Traceable**. Data underlying the claim, including information about the carbon credits retired, must be linked back to their issuance and retirement.

- **Verifiable**. Claims should be verifiable by competent authorities or third-party professionals, following recognized such standards as the Voluntary Carbon Market Integrity (VCMI) Claims Code of Practice.

- **Respect for regulation**. Claims must comply with applicable regulations in the jurisdictions where they are made and the countries where emission reductions occur. For instance, the EU Green Claims Directive mandates that compensatory claims be supported by independently verified evidence.

- **Conservative**. If there is uncertainty in supporting data, conservative estimates should be applied to avoid overstatement.

- **Relevant and not misleading**. Claims must reflect the overall climate impact of the organization, avoiding a narrow focus on one achievement while ignoring other responsibilities.

- **Informative**. Claims should help the target audience understand the nature of the climate action undertaken and should foster awareness.

- **Appropriate incentives**. Claims should encourage positive climate actions and not incentivize negative environmental behaviors.

C. Frameworks for credible claims

Organizations making public claims about their climate actions can align with frameworks that provide robust guidance on transparency, accountability, and integrity. These frameworks ensure that claims are credible, resonate with stakeholders, and reflect the evolving landscape of climate action.

- **Government regulation**. Many jurisdictions have regulations governing public environmental claims. For instance:
  - The **EU Green Claims Directive** requires that any environmental claims, such as "carbon neutrality," be backed by robust evidence, verified by an independent third party.
  - **National-level regulations** in Colombia, India, South Africa, the United States, and elsewhere aim to protect consumers from misleading claims and to ensure transparency.
  - **CORSIA**. The Carbon Offsetting and Reduction Scheme for International Aviation offers a compliance-based framework for emission reductions in the aviation sector. Under CORSIA, claims must be backed by eligible credits meeting stringent criteria, ensuring that emission reductions are additional, permanent, and independently verified. This framework serves as a benchmark for credible claim-making in other sectors as well.
- **Guidance from civil society initiatives.** Civil society frameworks guide organizations in aligning their climate action with standards of credibility and integrity. The following key frameworks provide complementary approaches to making high-quality claims, ensuring that buyers can tailor their strategies to fit operational and stakeholder priorities.
  - **VCMI's Claims Code of Practice**: Supports accurate, high-integrity claims in voluntary markets, helping organizations align with standards of transparency and credibility.
  - **ISO Net Zero Standard for Corporates** (currently in development): Establishes a global benchmark for corporate net-zero strategies, offering clarity on how offsets fit within broader decarbonization efforts.
  - **Oxford Offsetting Principles**: Clarifies that the greenhouse gas mitigation hierarchy is not sequential and highlights the importance of covering all unabated emissions now using high-quality credits. Emphasizes the evolution of offsetting strategies toward permanent and durable removals to balance residual emissions responsibly.
  - **Science Based Targets initiative (SBTi)**: Focuses on integrating near-term emission reductions into corporate climate strategies, particularly for hard-to-abate sectors.
  - **IETA Guidelines for High Integrity Use of Credits**: Sets out the steps corporates should take to develop and implement a net-zero, science-aligned pathway and how to use carbon credits to help achieve climate global and raise ambition.
- **Sector-specific crediting programs**. Frameworks from crediting programs, such as **Gold Standard** and **Verra's VCS**, provide specific guidance for making claims tied to verified emission reductions and sustainable development impacts.

How to Navigate Civil Society Frameworks for Credible Claims

Organizations aiming to integrate carbon credits into their climate strategies face an array of frameworks. These frameworks guide the responsible use of credits, ensure the credibility of claims, and align climate actions with global standards. Here's how to approach these frameworks effectively:

1 **Define your objectives**. Identify your goals — compliance, voluntary market engagement, or long-term, net-zero commitments. Consider frameworks that align with your aims: ISO and IETA focus on responsible integration of offsets, and SBTi emphasizes near-term emission reductions within structured net-zero pathways, while the Oxford Offsetting Principles and VCMI highlight credible claim-making. Across all frameworks, taking financial responsibility for physical emissions through high-quality carbon credits is essential to incentivize abatement and drive meaningful climate action.

2 **Adopt a complementary approach**. Combine frameworks where beneficial. For example, use VCMI for claim integrity, ISO for net-zero alignment, IETA for practical implementation guidance, and SBTi to incorporate emission reductions into science-aligned corporate strategies.

3 **Match to your capacity**. Focus on actionable frameworks like VCMI or ISO, which provide clear benchmarks and practical guidance, if your organization has limited resources. Meanwhile, high-capacity organizations can integrate multiple frameworks simultaneously, enabling a comprehensive approach that balances operational execution with strategic alignment.

4 **Ensure consistency**. Align selected frameworks with your organizational priorities and stakeholder expectations for credibility and transparency.

5 **Focus on transparency**. Share how you apply frameworks to build stakeholder confidence and enhance the integrity of your climate strategy. Transparency is key.

Note: Not all frameworks may align perfectly with every organization's goals. Readers are encouraged to consult relevant experts when designing their strategies.

D. Considerations for credible claims

To support compliance with the principles and frameworks for public claims, organizations should consider the following:

1 **Carbon credits as a complement**. Carbon credits should be used in tandem with — not replace — science-aligned decarbonization. They should address emissions that cannot be abated in the near term while prioritizing ongoing reductions.

2 **Transparency on credit use**. Companies should publicly disclose information about the carbon credits retired, including the crediting program, project ID, and host country. Transparency builds credibility and avoids the risk of greenwashing.

3 **Relationship to national accounting**. Under Article 6 of the Paris Agreement, corresponding adjustments may be needed to avoid double counting. Organizations should verify whether credits are associated with such adjustments and align claims accordingly.

4 **Verification of impact**. Claims must be based on verified impacts. Credits should be retired before being used to substantiate public claims, and reliance on expected or projected credits should be avoided.

5 **Accurate communication of co-benefits**. Organizations should communicate the sustainable development impacts achieved through the purchase of cookstove credits but avoid overstating contributions beyond what has been verified.


Bboxx

Raising the Bar for Quality Carbon Credits

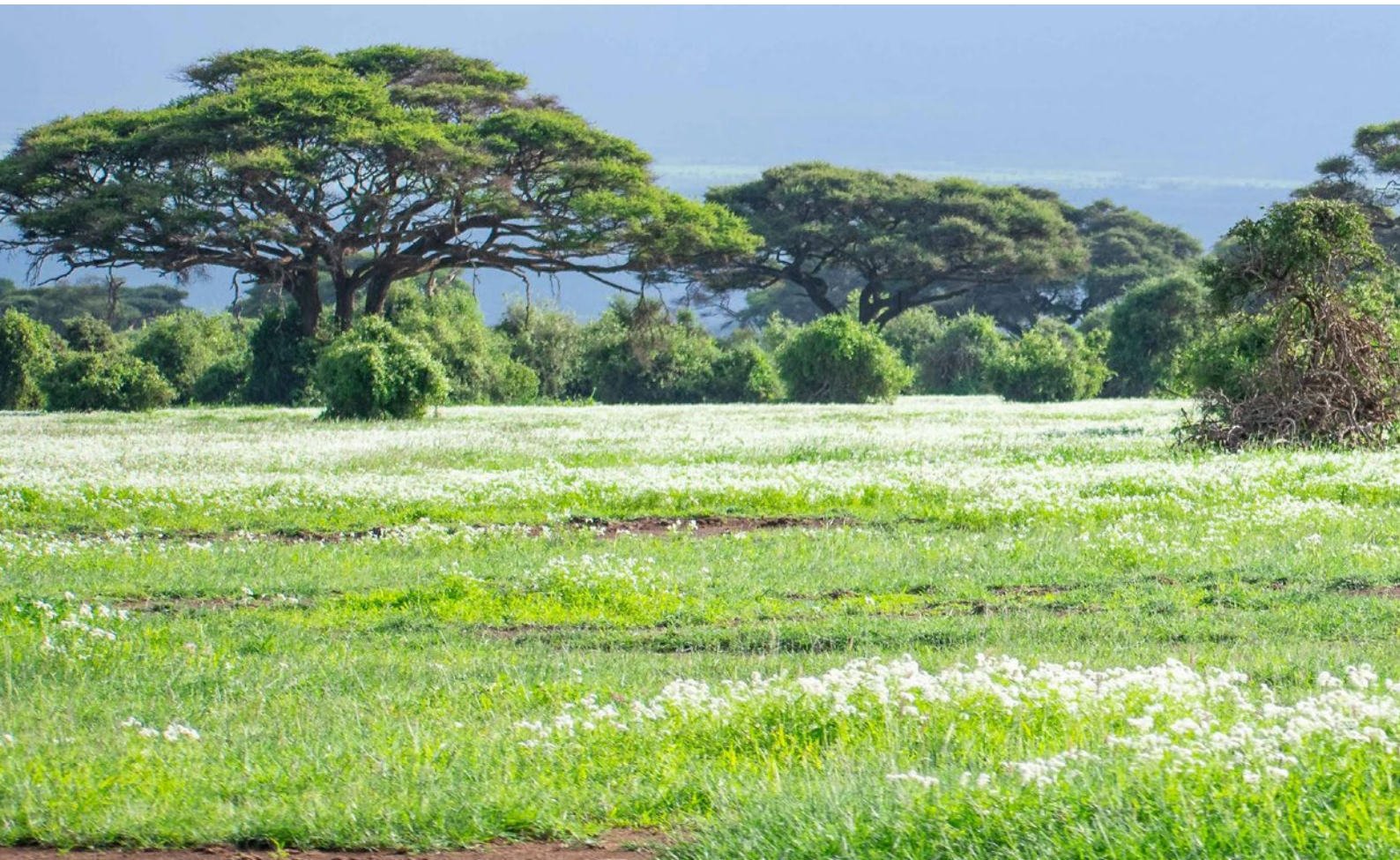
In both voluntary carbon markets and compliance markets under Article 6 of the Paris Agreement, buyers play a pivotal role in upholding and advancing standards for quality and impact. While frameworks such as the Science Based Targets initiative (SBTi), Integrity Council for the Voluntary Carbon Market (ICVCM), and crediting registries establish baseline requirements, and Article 6 mechanisms enforce international compliance rules, leading buyers can go beyond these standards and demonstrate a commitment to excellence, ensuring that their investments deliver genuine, lasting benefits for both the climate and communities.

This section outlines how buyers can raise the bar by prioritizing long-term impact, paying for quality, and adopting practices that ensure both voluntary and Article 6 investments drive robust environmental and social outcomes.

COMMITMENT TO LONG-TERM IMPACT

In both voluntary and Article 6 markets, ensuring long-term impact requires proactive buyer engagement that extends beyond the initial credit purchase. This commitment includes monitoring project performance over time, supporting continuous improvement, and maintaining accountability to stakeholders.

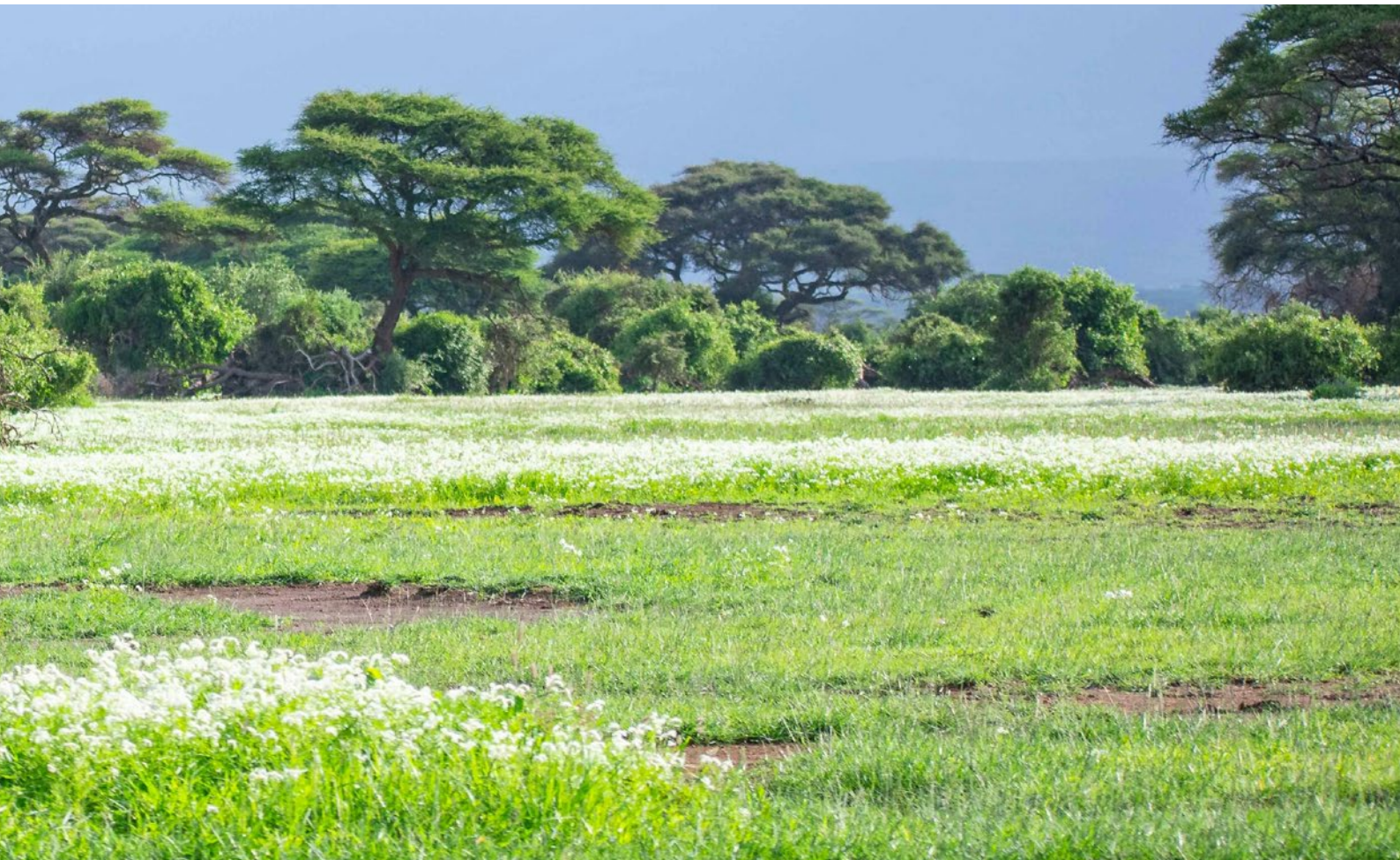
- **Monitoring and engagement**. Buyers should implement systems to track project performance post-credit issuance, ensuring sustained benefits. This is critical in voluntary markets to maintain trust with stakeholders and under Article 6 to meet rigorous reporting obligations. Activities such as periodic reporting, third-party audits, and direct engagement with project developers can provide insights into whether emission reductions and co-benefits persist over time.
- **Adaptive capacity and resilience**. Both markets require projects to adapt to changing regulatory environments, technological shifts, socioeconomic dynamics, and other evolving challenges. Buyers can support these adjustments through flexible contract terms and resources for adaptive project management.
- **Capacity building in host countries**. In Article 6 markets, buyers have an opportunity to invest in host country capacity to implement, monitor, and report on Article 6 activities. Similarly, in voluntary markets, supporting local communities in monitoring and managing projects ensures that benefits are embedded and sustained.



PAYING FOR QUALITY

Whether in voluntary markets or under Article 6, high-quality carbon credits come at a cost. Buyers must recognize that quality projects — those with robust methodologies, transparent monitoring systems, and equitable benefit-sharing mechanisms — require substantial investment to deliver sustainable outcomes.

- **Understanding true costs of quality**. The true cost of delivering verified emission reductions and co-benefits involves significant investments in robust MRV systems, advanced technologies, deep community engagement, and long-term project sustainability. Buyers should work with developers to understand these cost components, including additional requirements under Article 6 such as corresponding adjustments and enhanced MRV systems. Similarly, voluntary market projects with health improvements, time savings, and other co-benefits often require higher upfront funding.
- **Fair pricing to reflect value**. Buyers should align their pricing strategies with the true cost and value of high-quality credits. Fair compensation supports sustainable project operations, ensuring developers have the resources needed to maintain quality, integrity, and long-term impact. Transparent pricing practices also help create price signals that incentivize the development of high-quality projects.
- **Avoiding a race to the bottom**. In both markets, contracts that focus solely on minimizing costs risk undermining the environmental and social integrity of credits. By prioritizing fair terms that balance cost efficiency with quality, buyers can foster a market that rewards high standards and discourages bad practices.



BEST PRACTICES: SETTING THE STANDARD FOR QUALITY

Best-in-class buyers in both voluntary and Article 6 markets set the benchmark for quality and integrity by adopting advanced practices.

- **Prioritizing impact over volume**. Rather than focusing on acquiring large quantities of low-cost credits, these buyers invest in fewer, higher-quality credits that deliver measurable and meaningful outcomes.
- **Selective use of corresponding adjustments (CAs)**. Recognizing the potential impact of widespread CA demands on countries in the Global South, these buyers prioritize credits with CAs only when necessary, such as for compliance under Article 6 or specific sectors like airlines. By supporting voluntary markets without unnecessary CA requests, buyers can avoid undermining national efforts to achieve NDCs and uphold the Paris Agreement's goals.
- **Aligning with corporate goals**. These buyers integrate credit purchases into broader corporate sustainability and social responsibility strategies, linking them to net-zero and specific SDGs.
- **Promoting price transparency to mitigate risks**. Leading buyers advocate for transparent pricing practices, ensuring clarity around the costs of production and project financing. Transparent pricing reduces the risk of adverse selection by enabling buyers to differentiate between high- and low-quality credits while encouraging fair compensation for project developers.
- **Promoting transparency and accountability**. Leading buyers disclose detailed information about the credits they purchase, including project methodologies, MRV processes, and the social and environmental benefits achieved. This is critical in voluntary markets to build consumer trust and in Article 6 markets to comply with stringent reporting requirements.
- **Encouraging innovation**. Paying for quality enables developers to adopt cutting-edge technologies, enable transitions to clean fuels, improve MRV processes, and deliver enhanced co-benefits. This drives both market evolution and the scalability of high-impact solutions.

Call to Action

Whether participating in voluntary or Article 6 markets, buyers have a responsibility to lead by example. By committing to long-term impact, supporting capacity building, and paying for quality, they ensure that carbon markets deliver on their promise of genuine climate mitigation and social equity. Best-in-class buyers set the standard for responsible climate action, demonstrating that it is possible to align commercial objectives with the urgent need for high-integrity solutions.

Annexes

ANNEX 1: PRINCIPLES FOR RESPONSIBLE CARBON FINANCE IN CLEAN COOKING

Integrity

Project claims should be evidence-based, case-specific, and substantiated.

- Baselines are realistic, up-to-date, and geography-specific. Any assumptions made are transparent and substantiated.
- Fuel consumption and stove usage are accurately monitored. Any assumptions made are transparent and substantiated.
- Only sustainable development benefits that are substantiated and can be evidenced are claimed.

Transparency

Noncommercially sensitive information on clean and improved cooking carbon markets should be accessible.

- The monetary and/or nonmonetary benefits reaching the project and technology/fuel users are transparent within a given transaction.

Fairness

Carbon projects solicit informed consent from users and share revenue fairly along clean and improved cooking value chains.

- Informed consent precedes each user's participation in a carbon project.
- Carbon revenue is shared by all stakeholders in a way that is proportionate to the risk they assume and the value they create.

Sustainability

Carbon markets complement other forms of funding and do no long-term harm to local clean and improved cooking markets.

- Carbon finance, official development assistance, and philanthropic capital are complementary.
- The positive effects of carbon finance on clean and improved cooking markets are promoted, while excessive market distortions are avoided.
- National policies facilitate the development of clean and improved cooking carbon markets.

ANNEX 2: RESPONSIBLE CARBON FINANCE FOR CLEAN COOKING—INTERIM CODE OF CONDUCT

Integrity

I1: Baselines are realistic, up-to-date, and geography-specific. Any assumptions made are transparent and substantiated.

This principle addresses the risk of over-crediting due to the overestimation of baseline emissions for clean and improved cooking carbon projects.

The terms included in the principle are defined as follows:

- **Realistic**. Baselines are accurate and true to life. Where direct baseline fuel consumption measurements are not possible, baseline emission estimates are aligned with scientific evidence (i.e. peer reviewed journals) whenever it is available. Where unavailable, baseline data is collected in a manner that is scientifically sound (e.g. statistically sound sampling size and approach, nonbiased data collection approach, non-leading survey questions).
- **Up-to-date**: Baselines are updated at least every 5 years.
- **Geography-specific**. Projects adopt baselines that are specific to their target population and location of implementation, or that are conservative for the given location.
- **Assumptions are transparent**. For baseline parameters that require assumptions, the applied parameter must be based on the best available data, err on the side of caution to ensure that baseline emissions are not overestimated and be clearly and transparently documented.
- **Assumptions are substantiated**. For baseline parameters that require assumptions, publicly available project documentation outlines the rationale and evidence to support the claim in a robust manner. This includes evidencing that the parameter is based on the best available data and errs on the on the side of caution to ensure that baseline emissions are not overestimated.

I2: Fuel consumption or stove usage are accurately monitored. Any assumptions made are transparent and substantiated.

This principle addresses the risk of over-crediting due to the overestimation of project performance.

The terms included in the principle are defined as follows:

- **Fuel consumption and/or stove usage.** Refers to the use of the project and baseline stove/fuel(s) during the project period. Depending on the methodology applied, these parameters include the adoption rate of the project stove (i.e., number of households receiving a program stove), the dropout rate (i.e., households not using the project stove), stove stacking (i.e., the use of the baseline or other stoves alongside the project stove), the portion of time the project stove is used, and the quantity of fuel used in the project scenario. Any monitoring should ensure that the rebound effect – in which a user cooks more due to the new stove – is accounted for.
- **Accurately monitored.** Using monitoring techniques or technologies that measure the parameters of interest with low uncertainty. This includes data loggers and metering for stove use and purchase receipts for fuels. When sampling is applied, a robust sampling approach is applied such as that outlined by the most recent version of the Clean Development Mechanism's Guideline: Sampling and surveys for CDM project activities and programs of activities.

- **Assumptions made are transparent.** When monitoring techniques that accurately quantify the parameters of interest are too expensive or not available for a particular project technology, monitoring assumptions must be based on the best available data, err on the side of caution to ensure that emission reductions are not overestimated, and be clearly and transparently articulated.

- **Assumptions are substantiated.** When monitoring techniques that accurately quantify the parameters of interest are too expensive or not available for a particular project technology, project documentation outlines the rationale and evidence to support the claim in a robust manner. This includes evidencing that any monitoring assumptions are based on the best available data and err on the side of caution to ensure that project emissions are not underestimated.

I3: Only sustainable development benefits that are substantiated and can be evidenced are claimed.

This principle addresses the risk of sustainable development benefits claimed by projects not materializing – either in full or not to the extent that the project claims. The delivery of sustainable development benefits is important in differentiating carbon credits from clean and improved cooking projects from other types of carbon projects, so it is important that claims made are delivered and evidenced.

The terms included in the principle are defined as follows:

- **Sustainable development benefits.** Impacts yielded by a clean and improved cooking program in addition to climate impact. This could mean generating employment, extra income/monetary benefit sharing from carbon generation (SDG 1), improving gender equality, improving health, increasing safety and wellbeing, reducing deforestation and forest degradation, among other things.

- **Substantiated.** Publicly available project documentation outlines the rationale and evidence to support the claim in a robust manner.

- **Evidenced.** All evidence used to support the claim must be available upon request by a buyer or other third party (e.g., a verifier). Peer-reviewed tools shall be used to evidence co-benefits claims (e.g. the Gold Standard's ADALYs methodology, the Gold Standard's SDG Impact Tool, Verra's SD VISta, W+ Standard)

Transparency

T1: The monetary and/or non-monetary benefits reaching the project and technology/fuel users are transparent within a given transaction

Transparency is a prerequisite for determining the fairness of carbon markets for clean and improved cooking. This principle addresses the opacity regarding the monetary and non-monetary benefits that reach projects and technology/fuel users on the ground. It may be reasonable to withhold some sensitive commercial information, but that should not be used as a pretext for avoiding transparency.

The terms included in the principle are defined as follows:

- **Transparent.** Transparency requires that information about the monetary and/or non-monetary benefits reaching the project and technology/fuel users in the carbon value chain of a given transaction is available to actors within that transaction or, ideally, made public.

- **Monetary benefits.** Are benefits that are provided in monetary form e.g. cash payments to technology users, payments into community funds, loans provided for purchases, or prices paid for carbon credits.

- **Non-monetary benefits.** Are benefits that are not provided in monetary form but may still come at a cost to the provider e.g. maintenance and repair services offered, up-skilling/training provided to the workforce, strengthening the local supply chain of technology producers/distributors, or income security and reduced investment risk provided for project developers by offering long-term fixed offtake agreements.

- **The project.** Refers to the carbon project underlying the carbon credits that are being transacted.

- **Technology/fuel users.** Refers to the technology/fuel users that are targeted by the project defined above.

- **Within a given transaction**. Refers to the actors within the value chain of a carbon credit transaction i.e. the actors involved in the transfer of carbon credits including the technology/fuel user, project developer, intermediary and/or final carbon credit buyer. This does not seek public disclosure of monetary and/or non-monetary benefits, nor sharing of information to entities not involved in the transaction under consideration.

Fairness

F1: Informed consent precedes each user's participation in a carbon project

The rights to carbon credits remain with the entity generating an emission reduction unless the users of the technology/fuel sign an agreement to transfer rights to the carbon credits to another entity. This principle addresses the risk that cookstove/fuel users do not fully understand the contracts they sign and that as a result they do not make sufficiently informed decisions to participate.

The terms included in the principle are defined as follows:

- **Informed consent**. Cookstove and fuel users must have a complete understanding of the consequences of their participation in a carbon project. This includes that:
  - They are informed of the purpose of their participation, understand what they are agreeing to, and that they can withdraw their consent.
  - They are aware of the available alternatives if they choose not to transfer their rights to carbon credits, e.g. buying a stove without a subsidy.
  - Consent is freely given without deception, intimidation, or coercion.
  - They thoroughly read and/or understand any legal agreement transferring the rights to carbon credits before signing it. Such agreements consist of clear and simple language that can be expected to be understood by the cookstove/fuel user. Agreements can also be accompanied by visual aids to help explain key concepts and implications for cookstove/fuel users.
- **Participation.** This refers to formal participation in the carbon project, usually through signing an end-user agreement transferring the rights to carbon credits, and also through being employed by the project or taking on some other role. This goes beyond being "engaged," for instance, through consultations.

F2: Carbon revenues are shared by all stakeholders in a way that is proportionate to the risk they assume and the value they create.

This principle addresses the fact that cookstove and fuel users have a key role in generating carbon credits and should therefore directly benefit from them. It also ensures that intermediaries and investors capture shares of carbon revenues that are proportional to the risks they take on and the value they create.

The terms included in the principle are defined as follows:

- **Carbon revenue.** The revenue generated through the sale of carbon credits, as a function of the number of credits issued and the price(s) paid for them.
  - When shared with users, revenues can be shared directly or indirectly through monetary and non-monetary benefits (Table 3).

- When shared with intermediaries (e.g. aggregators/ retailers, brokers, trading companies and trading desks, exchanges) or investors, the fees charged by intermediaries or the margins they retain when buying and selling credits is proportionate to the risk they assume and the value they create.

- **All stakeholders.** Includes all actors involved a single carbon credit transaction that are involved in either transferring carbon credits or payment(s) for them. This includes the technology user (e.g. household), project developer, any intermediaries (e.g. brokers/traders), investors and the final carbon credit buyer. For example, an intermediary should provide information regarding the share of revenues that reach the project developer, who should in turn provide information on the portion of revenue that reaches cookstove users. Information on how revenue is shared may be provided directly to the buyer(s) as part of the broader project information or with other actors within the value chain of a given transaction. It could also be made public, for instance, in marketing materials for the project or in project design documents/monitoring reports. It may be reasonable to withhold some sensitive commercial information, but that should not be used as a pretext for avoiding transparency.

- **Proportionate.** Any fees charged or margins withheld are reasonable in light of the services provided and the risks actors assume. This amount will vary depending on the role stakeholders play, as well as market conditions. For instance, it is reasonable to expect investors that provide upfront finance for project costs or that enter into forward contracts to seek higher margins than brokers that simply facilitate spot transactions, since the former assumes more risks than the latter.

Sustainability

S1: Carbon finance, official development assistance and philanthropic capital are complementary.

There is no core action included for project developers for this Principle as it is dependent upon providers of official development assistance and philanthropic capital to ensure complementarity when structuring financial agreements.

S2: The positive effects of carbon finance on clean and improved cooking markets are promoted, while excessive market distortions are avoided

Carbon finance plays a pivotal role in accelerating the transition to clean and improved cooking solutions by channeling investments into innovative technologies and business models. By incentivizing good practices, such as better customer care that leads to higher usage rates, carbon finance brings positive distortions to many poorly functioning markets.

However, it is crucial to strike a balance between market stimulation and maintaining a level playing field. Excessive market distortions, such as overreliance on subsidies or unbalanced incentives can hinder competition, stifle innovation, and can lead to unintended consequences that undermine sustainability. Therefore, this principle emphasizes the need for responsible carbon financing practices that foster transparency, accountability, and fair competition, ensuring that clean and improved cooking markets can thrive without excessive market distortions.

This principle is not relevant in areas where there is little to no market potential (e.g. areas of extreme poverty) but can occur in emerging markets that are home to a customer base that could afford to pay an amount for the cooking technology offered.

The terms included in the principle are defined as follows:

- **Market distortions.** Market distortions occur when carbon finance impacts the normal operation of a market, creating advantages for participants who have access to carbon finance. This positive market distortion is welcomed as a means of enabling the transition to cleaner cooking solutions.

- **Excessive (market distortions).** Market distortions become excessive when the degree or magnitude of distortion goes beyond what might be considered reasonable or necessary for achieving the UN's goal of universal access to clean or improved cooking technologies by 2030. According to the Donor Committee for Enterprise Development (2018) market distortions from private sector engagement can include that (I) the market power of the individual company [benefiting from carbon finance] is reinforced at the expense of other firms, (ii) barriers to market entry increase [for firms not benefiting from carbon finance] and, (iii) information asymmetries are reinforced. For example, if the level of subsidy provided by carbon finance distorts competition to the extent that it stifles innovation, creates market inefficiencies, or affects consumer choice without proportionate benefits, it would be considered excessive.

Endnotes

1 International Energy Agency (July 2023). A Vision for Clean Cooking Access for All.
2 IEA (2024), Tracking SDG7: The Energy Progress Report, 2024, IEA, IRENA, UNSD, World Bank, WHO, Washington DC.
3 IEA (2024), Tracking SDG7: The Energy Progress Report, 2024, IEA, IRENA, UNSD, World Bank, WHO, Washington DC.
4 At present, cookstove methodologies remain under assessment by ICVCM. The decision that will confirm which methodologies comply with ICVCM's Core Carbon Principles is expected to be announced in early 2025. Ongoing engagement with ICVCM and other standard-setting bodies aims to ensure that high-integrity cookstove credits can meet the highest global benchmarks. Buyers are encouraged to monitor developments, as future recognition under ICVCM could provide additional assurance of quality.
5 Bailis, Robert, Rudi Drigo, Adrian Ghilardi, and Omar Masera. "The Carbon Footprint of Traditional Woodfuels." *Nature Climate Change 5*, no. 3 (2015)
6 Gold Standard (December 2024)
7 Anenberg, S. Clean stoves benefit climate and health (2012). *Nature 490*, 343.
8 International Energy Agency (July 2023). A Vision for Clean Cooking Access for All.
9 Climate and Clean Air Coalition (December 2024). United Nations Environment Program.
10 0. Krishnapriya, P. P., Maya Chandrasekaran, Marc Jeuland, and Subhrendu K. Pattanayak. (2021) "Do Improved Cookstoves Save Time and Improve Gender Outcomes? Evidence from Six Developing Countries." *Energy Economics 102*, no. 105456
11 Thunder Said Energy, based on 2022 data from the United Nations Food and Agricultural Organization. Accessed 16 Jan 2025.

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