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Any errors of fact or analysis are the sole responsibility of the authors.

Benefit-sharing guidance for household energy carbon projects

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Executive Summary

Ensuring the fair distribution of benefits

Household energy carbon projects - which include clean cooking, efficient lighting, and energy access technologies - involve householders as technology users. Carbon credit buyers and project investors are increasingly interested in ensuring that the benefits derived from these projects are equitably shared. However, there is to date limited guidance on good and best practices in benefit-sharing for household energy carbon projects. This report aims to fill this gap.

This report serves as a guide to project developers who wish to improve their approach to benefit sharing, as well as for investors seeking to evaluate this aspect of projects. The aim of this report is to provide guidance to carbon

project developers on who benefits can be shared with, what form these benefit-sharing arrangements can take, and how benefits reach beneficiaries. It can also be used by investors and carbon credit buyers as guidance on what to look for when evaluating whether the household energy projects in which they are seeking to invest implement fair benefit-sharing arrangements. The report addresses key questions about how benefits are distributed in practice. These questions include (1) who benefits, (2) what form the benefits take, (3) the amount and value of benefits provided, and (4) practical aspects of how benefits reach beneficiaries. The report recommends how these questions should be answered by offering high-level guidelines, minimum criteria that should be followed, and best practices for each.

Good and best practices

This report offers good and best practices for benefit sharing in household energy projects, drawing on lessons from other fields. The rules and recommendations adopted by carbon market standards, national regulations, market initiatives, and case studies of project developers all provide input into the guidelines and best practices outlined in this report.

When designing benefit-sharing arrangements, it is essential to identify all stakeholders involved in project implementation and their roles.

Projects encompass a diverse range of stakeholders, such as technology users, communities, project developers, manufacturers, governments, distributors, cooperatives, and local implementers. Identifying the various actors involved, their roles in driving the project's success, and the risks they take by participating is crucial. Additionally, there are other groups that, although not directly involved, contribute to fostering a supportive environment and may benefit from the project, including local communities and government entities. At a minimum, all actors who participate in the project and contribute to its success should receive direct, tangible benefits that are proportionate to the roles they play and the risks they assume.

Benefits delivered can be direct and indirect in nature and take monetary and non-monetary forms. Direct benefits are those that involve a direct transfer of benefits with a tangible value to the beneficiary, whereas indirect benefits are those

that arise as a consequence of the direct benefits provided by a project. For example, a user may receive a direct benefit in the form of a subsidized cookstove, and an indirect benefit in the form of time saved collecting fuel for cooking. Monetary benefits are those that are provided in monetary form (e.g., a cash payment), whereas non-monetary benefits do not involve a monetary transfer to the user (e.g., a lower-than-market-value technology).

Household energy projects can deliver multiple types of benefits. Common benefits include subsidized technologies, maintenance, technology replacement, and technical support. Less widespread benefits include payments to technology users, interest-free loans, community projects, and employment opportunities created by projects. Projects should actively seek feedback from technology users to identify the most valuable benefits, which can support effective design and boost technology adoption. Engaging a sample of users in benefit-sharing arrangements sheds light on local conditions and helps customize practices to meet community needs, enhancing technology uptake and long-term usage while ensuring equitable benefits. Consulting prior to launch enables developers to collect insights, save resources, and efficiently manage expectations.

To determine the value of the benefits provided, the specific context of the project should be considered. Whether benefits are considered fair arguably has less to do with the types of benefits

provided and more to do with the overall monetary value of the benefits package to beneficiaries relative to their role in the project, as well as the amount of carbon revenue a project receives. Different approaches to monetary benefit sharing are available and include:

- The share of revenues generated involves dedicating a share of gross revenues to benefit packages.
- The share of profits generated involves distributing profits.
- The share of net revenues involves sharing revenues minus costs and a reasonable profit.
- Sharing a fixed amount of each carbon credit sold above a defined price benchmark.

At a minimum, technology users should receive a guaranteed level of minimum benefits (e.g., in the form of a subsidized technology or interest-free loan) regardless of the project's revenue or profit.

For impactful benefit sharing, projects should offer additional benefits whenever project finances allow.

After identifying beneficiaries and determining the type and value of benefits, the practical aspects of benefit-sharing arrangements should be considered. Practical aspects of benefit sharing include considering the following:

- How benefits are communicated. This involves providing timely and sufficient information to all stakeholders in a transparent manner. For users, this includes the exact terms and extent of benefits to be shared before a user enters into an agreement with the project developer. Information should also be provided to all actors within a transaction or ideally made public on the carbon credit prices received, the portion of revenues shared with users, and/or the amount of carbon revenues shared with users.
- How benefits are managed and distributed. The allocation of responsibility for the management and distribution of monetary benefits should be transparent and clear to all beneficiaries across the value chain, in addition to being in line with regulatory requirements in the country in which the project operates. The report provides several considerations for different types of benefit-sharing arrangements.

At a minimum, projects should ensure that technology users are consulted on the benefit-sharing approaches to be implemented, that the project is transparent about how revenues are distributed, and that there is a grievance and redress mechanism in place that is clear, accessible, and culturally appropriate.



1. Purpose of this guidance

1.1. Why this guidance is needed

Household energy projects include clean cooking, efficient lighting, and energy access technologies. Carbon credit buyers and investors are increasingly interested in ensuring fairness among all parties involved in generating carbon credits, particularly in terms of the equitable distribution of the benefits derived from these projects. This is in part due to technology users being directly responsible for generating carbon credits – as opposed to a hydropower project where the plant's operators generate the emission reductions – and in part because carbon credit buyers from this type invest in household energy projects out of a desire to support the communities in which these projects take place.

Benefit-sharing arrangements in household energy solutions can be complex. These projects often involve multiple stakeholders and are financially challenging to manage. Project developers must determine who the beneficiaries of any benefit-sharing arrangement are. This could include the technology user, local implementers, cookstove manufacturers, or the broader community. They must also consider the form of benefits, such as whether they should be monetary or non-monetary and whether they should be delivered directly or indirectly. Additionally, project developers must figure out how these benefits will be shared, including the processes and mechanisms needed to ensure effective and fair implementation.

To date, the discussion and analysis that has taken place around benefit sharing in the context of carbon projects has largely focused on forest and land use projects. While experiences and thinking in this context can be informative for household energy projects, the two project types have important differences that influence what may be considered 'fair' when designing benefit-sharing arrangements. For instance, in forest and land use projects, local communities often own the land and are involved in implementing activities that lead to emissions reductions. In contrast, household energy projects involve the voluntary use of clean technologies that benefit the daily lives of users. Participants in household energy projects consent to participate voluntarily, while in land use projects, obtaining consent from every resident is not always possible. Furthermore, in land use projects, communities may be restricted in how they use their land or incentivized to use it differently, while household energy projects simply require the use of the provided technology.

In contrast to land use projects, there is limited guidance on how stakeholders involved in household energy projects should ensure equitable benefit sharing. Only one carbon standard – the Fairtrade Climate Standard – has requirements for benefit sharing with technology end-users in household energy projects. A small number of African countries have also recently developed national regulations on benefit sharing with communities, although these frameworks apply only to land use project types. These are presented in the Annex, alongside an overview of the benefit-sharing requirements of a handful of carbon standards that apply to the forest and land use sector.

More promising in guiding household energy projects are several emerging market initiatives that, in part, seek to encourage benefit sharing in clean cooking carbon markets by either providing guidance or requirements for project quality labeling (Annex 1). Examples include the Clean Cooking Alliance's Responsible Carbon Finance for Clean Cooking Initiative, which aims to develop a set of principles addressing fairness in the clean cooking sector; the Fair Environmental Markets Initiative, which aims to promote fair carbon pricing schemes; and the Africa Carbon Markets Initiative, which seeks to ensure fair revenue sharing with local communities. The Integrity Council for Voluntary Carbon Markets is also considering whether to establish requirements on communicating how carbon revenues are used and managed for benefit sharing for the purpose of carbon credit labeling.

1.2. Scope of this guidance

The aim of this report is to provide guidance to carbon project developers on who benefits can be shared with, what form these benefit-sharing arrangements can take, and how benefits reach beneficiaries. It can also be used by investors and carbon credit buyers as guidance on what to look for when evaluating whether the household energy projects in which they are seeking to invest implement fair benefit-sharing arrangements.

The report addresses key questions about how benefits are distributed in practice. These questions include

(1) who benefits, (2) what form the benefits take, (3) the amount and value of benefits provided, and (4) practical aspects of how benefits reach beneficiaries. The report provides guidance on how these questions should be answered by offering high-level guidelines, minimum criteria that should be followed, and best practices for each.

The Appendix provides an overview of relevant initiatives dedicated to ensuring fair benefit-sharing in the clean cooking and land use sector.

In this report, **benefit sharing** is understood to refer to how monetary and non-monetary benefits generated by the project, including project income, are distributed among stakeholders involved in generating carbon credits – in particular technology users and local implementers, as well as the broader community. It is not therefore directly concerned with actors further down the value chain, such as investors and intermediaries, though these are briefly discussed in Section 2.1 below.



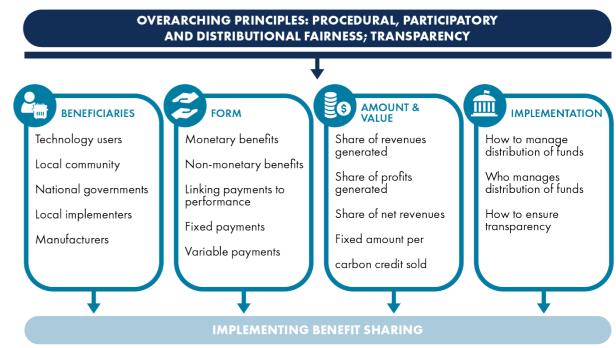


2. Benefit sharing guidance

This benefit-sharing guidance considers the following questions, as summarized in Figure 1:

- Who are the beneficiaries, and what is their role?
- What form will benefit sharing take?
- What is the amount or value of benefits that should be provided?
- What practical aspects of implementation should be considered?

Figure 1. Framework for developing benefit-sharing approaches in household energy carbon projects. Source: Climate Focus.



For each of these questions, this guidance includes:

- Overall guidance: high-level guidelines encompassing overarching concepts and principles that can be adapted to different contexts.
- Minimum criteria that must be met in all cases: specific applicable standards that must be adhered to in every project.
- 3. Best practices that should be applied where possible: the ideal measures to be implemented. Case studies are included that illustrate some of these practices, providing examples for clarity and context.

2.1. Beneficiaries and their roles

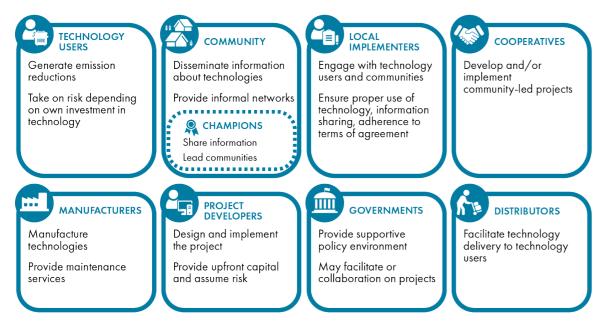
2.1.1. Overview of project beneficiaries

Ensuring fair benefit-sharing arrangements requires that the revenue that is generated by each project is fairly distributed among those who participate in the project. To ensure this, it is important to identify the different actors involved, the role they play in ensuring the project's success, and the risks they assume in participating. There may also be other actors or groups who, while not directly involved in the project,

play relevant roles in ensuring a positive enabling environment and who may also stand to benefit, including local communities and government actors.

The principal beneficiaries of household energy carbon projects are depicted in Figure 2 and described further below.

Figure 2. Stakeholder roles in benefit sharing for household energy carbon projects. Source: Climate Focus.



- Technology users. These are the individuals or organizations that use the technology provided in the carbon project. They are essential participants in household energy carbon projects as their use of the technology(s) generates emission reductions.
- The community. The role of the local community in household energy projects lies in disseminating information and knowledge about the technologies provided through informal networks and providing a supportive enabling environment for the project, in addition to the role of community leaders as a point of contact. Even when the community does not play a direct role in generating carbon credits, providing benefits to the broader community can increase participants' positive perceptions of the project. Defining the 'community' in household energy projects can, however, be challenging, particularly where there is no clear geographic delineation for their activities. Project boundaries can overlap, and some households may have more than one climate-friendly technology.
- Local implementers. Many project developers rely on local partners to support implementation on the ground. These partners contribute to the household energy project through their engagement with technology users and communities, including the sale or distribution of technology units, as well as their activities to disseminate information on technologies and to demonstrate their proper use. They also have an essential role in ensuring technology users understand the terms of the agreement when purchasing or being given a green technology. Some projects may also hire technology 'champions' – often local women who have a good understanding of the technology and can help promote it locally and support other technology users in understanding and operating it.
- Cooperatives. In some cases, local cooperatives
 may play a role in implementing or even developing
 projects. These cooperatives may be composed of
 technology users. In this way, they can play a hybrid
 role that combines aspects of local implementers,
 project developers, and technology users (see Box 1).

BOX 1. CASE STUDY ON THE ROLE OF COOPERATIVES: COOKSTOVES FOR COFFEE FARMERS IN ETHIOPIA

In 2015, FairClimateFund entered into a partnership with the Oromia Coffee Farmers' Cooperative Union (OCFCU) to establish a Fairtrade Carbon Partnership. OCFCU, the largest coffee federation in Ethiopia, represents 400,000 farming families across 400 cooperatives. The primary goal of this collaboration is to support these farmers in combating climate change by distributing 40,000 cleaner cookstoves, designed to reduce wood consumption and carbon emissions.

Through the cookstove program, farming families receive locally made cookstoves, contributing to employment opportunities within the coffee community. Local cooperatives receive these cookstoves on credit, take ownership over the carbon credits, and pay the amount back through carbon credit revenues. Credits are sold to buyers such as coffee importers, coffee roasters, or supermarkets committed to emission reductions throughout the coffee supply chain. The Fairtrade Carbon Credits are sold at a Fairtrade minimum price, and revenues from the sales cover the overall project costs.

Additionally, funds generated from the preestablished Fairtrade premium contribute to the so-called Climate Academy, providing farmers with training in sustainable agricultural practices. The revenue also supports expanding the initiative to other coffee-growing communities and projects focusing on the social, economic, and environmental conditions of these communities.

- Manufacturers. The contributions of manufacturers differ depending on the operational structure of the project. Some projects import technologies from abroad, some manufacture technologies locally at a centralized production facility, and others construct the technology directly at the premises in which it is to be used, often training and hiring specialized technicians to do so or training the users themselves to do this. It is the role of manufacturers to ensure the quality of the product delivered, including, in some cases, providing operational instructions. Sometimes, they are also responsible for ensuring that faulty products can be replaced or repaired.
- Project developers. They play a key role in designing and implementing the project, often contributing significant upfront capital and taking associated risks. Therefore, they are among the primary beneficiaries of the project.

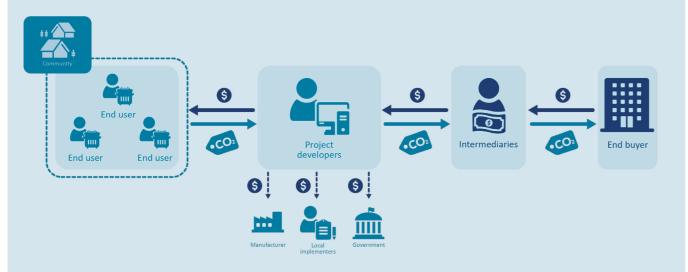
- National and local governments. In some countries, national governments require that a share of proceeds from carbon projects be paid. In some cases, national and local governments also facilitate projects or collaborate with project developers on implementation, which may also entitle them to share in project revenues.
- Distributors. Distributors play a crucial role in ensuring that the products reach technology users, particularly in underserved areas. However, distribution and logistics can face significant challenges due to infrastructure limitations and the remote locations of many technology users. These obstacles require planning and considerable effort to navigate, ensuring that the product is delivered efficiently and effectively to all technology users.

¹ An example of this is provided by the role of 'technicians' or 'masons' in fixed dome domestic biogas projects, where the project developer trains local technicians on how to construct biogas digesters at farms, with the farmer providing basic materials to do so.

BOX 2. INVESTORS AND INTERMEDIARIES

While these guidelines are primarily concerned with upstream actors such as technology users, communities, and local implementers and therefore does not consider investors and intermediaries as 'beneficiaries', their role in the process is important to acknowledge. This category of actors includes aggregators, brokers, retailers, trading companies, exchanges, trading desks, and investment funds – any organization that stands between the project developer and end buyers. Due to the services provided and to certain risks that these actors also assume, it is reasonable that they earn margins and commissions on the carbon credits sold. However, intermediaries should be compensated proportionately to the value they add and the risk they take on.

Figure 3. Depiction of revenue flows in cookstove carbon project.

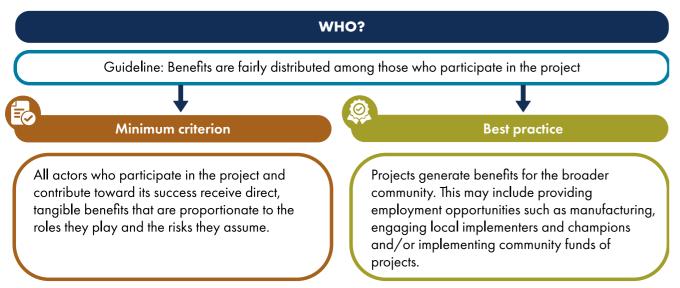


Source: Clean Cooking Alliance, Climate Focus and Stockholm Environment Institute (2023) A Call to Action: Delivering Responsible

2.1.2. Guidance on identifying with whom benefits should be shared

Carbon Finance.

Figure 4. Beneficiaries: Minimum Criterion and Best Practice. The minimum criteria must be met in all cases, representing specific applicable standards that must be adhered to in every project. Best practices should be applied where possible, representing the ideal measures to implement. Source: Climate Focus.



who participate in the project.

This guideline underscores the importance of equitable distribution of project-generated revenue to those who contribute to generating carbon credits. All stakeholders who have contributed to the project implementation should, therefore, be identified and their contribution recognized when designing benefit-sharing arrangements. In the context of household energy projects, in addition to the project developers themselves, key stakeholders that should be considered when designing benefit-sharing mechanisms are technology users, local implementers (where used), technology manufacturers, and the broader community. The aim is to ensure that all participants in the project receive a fair share of the benefits commensurate with their contribution and the risks they assume.



Minimum criterion

All actors who participate in the project and contribute to its success receive direct, tangible benefits proportionate to their roles and the risks they assume.

This criterion recognizes the diverse roles played by different actors. While projects will involve different actors, technology users, and project developers will always be important beneficiaries. Projects provide direct, tangible benefits to technology users in recognition of their role in generating emission reductions.

Technology users directly engage in carbon credit generation through the use of the technology and are therefore entitled to receive concrete benefits in return for their participation and the transfer of their claim to carbon rights to project developers. These benefits include access to the technology itself, which is essential for their participation.

Individuals or entities conducting activities leading to emission reductions and/or those that own the technologies that generate emission reductions are usually considered the legitimate primary owners of the emission reductions and the resulting carbon credits. In the context of household energy projects, both project developers - who typically provide the technology and develop the project - and technology

Guideline: Benefits are fairly distributed among those users – whose use of the technology generates carbon credits – have legitimate claims to carbon rights. In cases where technology users transfer their carbon rights to project developers, as is the norm, they should receive a share of project benefits in return. Sections 2.2 and 2.3 provide guidance on the form that benefits sharing can take, as well as determining the amount and value of benefits to be shared.

> Local implementers engage with technology users and communities to ensure the transparent sharing of information, proper technology usage, and dissemination of benefits. Manufacturers, national governments, and local communities should also benefit to the extent that they have played a role in the project and contributed to generating carbon



Best practie

Projects generate benefits for the broader community.

Where practical, projects should seek to generate benefits for local economies by contracting local organizations or employing local people to support project implementation. Where local manufacturing capabilities meet technology quality standards, local manufacturing and implementing partnerships should be prioritized. Collaborating with local entities, such as organizations, businesses, or community groups, and/or establishing manufacturing facilities within host countries ensures that household energy production occurs directly within the local community or project region. While this approach can have several advantages, including creating local job opportunities, supporting the local economy, and potentially reducing transportation costs, it may not always be feasible due to local circumstances.

Projects can also seek to generate benefits for communities, including those not directly involved in generating emissions reductions. For instance, in household-level programs where projects prioritize the delivery of benefits to households, they may also consider providing additional benefits to the broader community. This may include providing employment opportunities such as manufacturing, engaging local implementers and champions (Box 3), and/or implementing community funds or projects (see section

BOX 3. CASE STUDY ON THE INVOLVEMENT OF LOCAL IMPLEMENTERS: THE CAMBODIAN NEW LAO STOVE (NLS) PROJECT

The Cambodian NLS project ran from 2003 to 2013, and was managed by a French non-governmental organization, Groupe Energies Renouvelables, Environement et Solidarites (Geres). It provides an example of community involvement in a cookstove project.

The project utilized a low-cost improved biomass cookstove – the New Laos Stove (NLS) – that was produced in locally. Carbon finance was used to fund the costs of technological research and development, training local artisans to execute the cookstove design, marketing, quality control and assurance, as well as product standardization. With the help of the project, 31 locally owned production centres were established in Kampong Ch'nang and other Khmer provinces and a total of two million stoves were distributed during the project period. In addition to contributing to gainful employment of local communities (as entrepreneurs, distributors, and producers), the project led to the establishment of a long-term national industry of improved cookstoves and local supply chain.

2.2. Form of benefits provided

2.2.1. Overview of types of benefits in household energy carbon projects

Benefits from household energy projects may be direct and indirect.

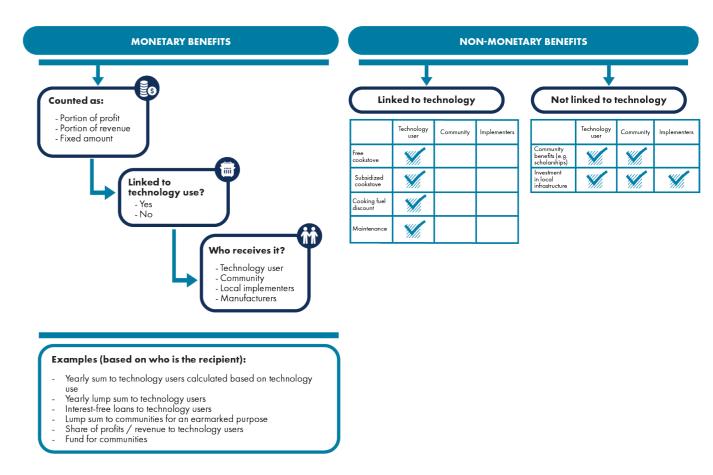
- Direct benefits are those that involve a direct transfer of benefits with a tangible value to the beneficiary.
 Examples of direct benefits include subsidized technologies or fuels, payments, maintenance services, and employment.
- Indirect benefits are those that arise as a consequence of direct benefits provided by the project. Examples from the clean cooking sector include improved air quality and the decreased incidence of smoke-related illnesses, as well as time savings due to reduced time needed to collect firewood and quicker cooking times.

Indirect benefits delivered are important outcomes of a project. However, they are harder to control and quantify than direct benefits, and attributing them to the project is sometimes challenging. This guidance, therefore, focuses primarily on direct benefits. Direct benefits can take monetary and non-monetary forms:

- Monetary benefits are those that are provided in monetary form, for example, cash payments, payments into community funds, and loans.
- Non-monetary benefits are those that are not provided in monetary form to the user, such as free or subsidized technologies (although these come at a cost to the provider), market access, capacity building, maintenance, etc.

Projects often deliver a mix of monetary and non-monetary benefits, depending on their circumstances and the actors involved. Local implementers and manufacturers will typically be paid through monetary means, but it is rare that technology users receive cash payments. Figure 5 provides an overview of possible monetary and non-monetary arrangements provided in household energy projects.

Figure 5. Overview of direct monetary and non-monetary benefits in household energy carbon projects. Source: Climate Focus.



The following outlines the principal forms of monetary and non-monetary benefit-sharing used in household energy carbon projects.

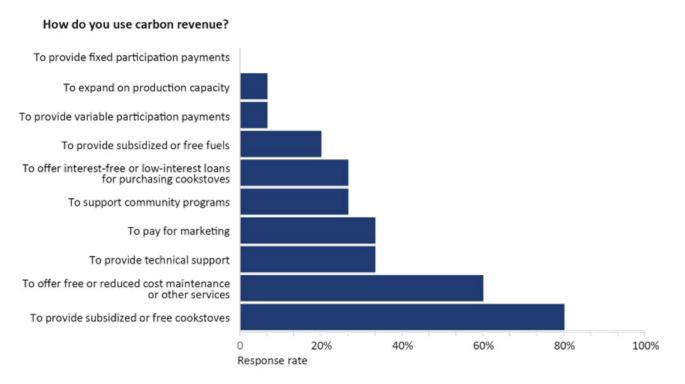
Subsidized technologies or fuels

Beneficiary: Technology users

Projects most commonly provide subsidized or free project technologies, with some also offering free or reduced-cost maintenance and technical support and/or subsidized fuels (Figure 6). Some projects also provide free labor and specialist parts for the construction of project devices at the user's premises. For example, in domestic biogas projects, the developer may ask the user to provide basic materials like cement and bricks to build the digester. In exchange, the project developer will provide the expertise and labor needed to construct the digester on site, along with any specialist materials required for its functioning, such as the biogas stove. In this way, households receive the non-monetary benefit of having a stove they would otherwise be unable to afford.

Subsidies are usually determined as a percentage of the purchase price or as a fixed amount.

Figure 6. How project developers report using carbon revenue in clean and improved cooking carbon projects. Based on 15 responses from project developers in an online survey. Source: Clean Cooking Alliance, "A Call to Action: Delivering Responsible Carbon Finance", p. 55, Figure 7.



Subsidized technologies and fuels have the advantage of enabling the target group to access household energy technologies that would otherwise be unobtainable. As a benefit-sharing mechanism, subsidies are also relatively easy to implement. However, careful consideration should be given to providing fully subsidized (i.e., free) technologies as this can lead to users valuing and using the technologies less frequently than they might have done had they made a (low) financial contribution towards purchasing the technology. It may also result in technology users making less informed decisions about accepting the technology, as paying for it prompts a commercial consideration.

Maintenance, technology replacement, and technical support

Beneficiary: Technology users

Technology users may be provided with free or reduced-cost maintenance services. This is one way in which carbon revenues may be shared indirectly with technology users. Similarly, replacements for faulty technology and technical support may also be offered. Technical support may take various forms – for instance, providing users with the contact details of responsible parties or offering technical support over the phone to technology users participating in the carbon project.

Payments to technology users

Beneficiary: Technology users

While payments to technology users remain uncommon, some projects have begun to experiment with providing direct payments to technology users (Box 4). These payments may be fixed, linked to carbon profits or revenues, linked to how much the technology is used, or a combination of these.

Payments reward technology users for their instrumental role in generating carbon credits. They may also incentivize users to continue using the relevant technology, although care should be taken to avoid generating a perverse incentive to use the technology more than needed, thereby either inflating the baseline and over-crediting (where carbon methodologies back-calculate emission reductions based on a project's performance) or wasting resources (e.g., power or fuel). It also requires reliable data on the usage of each unit, usually through inbuilt monitoring technology, which can add a significant cost to projects.

However, payments-for-use also pose challenges. For example, project revenue may vary from year to year, which means the share of revenue going to technology users may also vary. This increases the risk of setting expectations that may not be met (in the case of variable payments paid via variable carbon income) or of the project developer having to bear the risk exposure (in the case of fixed payments paid via variable carbon income). Additionally, carbon projects are rarely profitable from the beginning, and there may

be long lead times for revenue to be generated and then shared.

Logistically, providing payments for use will generally be more feasible in areas where technology users can access mobile payments. Where this is not the case, it may be prohibitively expensive and logistically complex to distribute the payments to all users on a regular basis.

BOX 4. IS THERE A TREND TOWARD CASH PAYMENTS TO TECHNOLOGY USERS?

In recent years, several project developers have begun to experiment with providing direct payments to technology users, usually as an additional way of sharing benefits beyond providing subsidised technologies. While sharing benefits in this way remains the exception, it has been generating attention. Some consider it the fairest way to reward technology users for their role in generating carbon credits and some buyers have indicated they would be willing to pay more for credits from projects where revenue is shared with technology users.^{iv}

However, there is not yet consensus on whether direct payments should be favoured over other benefit sharing approaches. While more project developers are exploring this approach, others remain sceptical. Project developers interviewed by the team developing these guidelines pointed to challenges in terms of practicalities, such as payment feasibility and high transaction costs, and in terms of efficacy, with some considering this approach inefficient compared to providing larger subsidies or reinvesting revenues in expanding production capacities or distribution, particularly where project revenues are limited. Some also raised concerns regarding long lead times for payments to reach users and the challenge of managing expectations.

It is therefore still too early to discern a clear trend towards direct payments becoming a common benefit sharing modality. However, if we see carbon credit prices increase alongside technological advancements and more widespread access to mobile money, it is likely that more projects will start to integrate direct payments as part of their benefit sharing packages.

Community projects and funds

Beneficiary: Communities, technology users (indirectly)

Some projects also direct finance toward community funds or provide funding for community projects or programs. For example, C-Quest Capital is currently providing fixed payments to communities based on the sale of carbon credits. This tends to be logistically more straightforward and incurs lower transaction costs than making individual payments to a large number of users. However, it is a less targeted way of rewarding the technology user for their participation in the program.

In some cases, this approach can raise challenges in defining the 'community' that should benefit from carbon revenues. One developer we spoke to reported finding it too challenging to determine a meaningful unit of 'local community' in the areas they work, and they, therefore, prefer to direct money from projects into funds that finance projects across the national territory. Another developer we interviewed, in contrast, was easily able to define the community based on traditional governance structures and, in this way, directed a portion of profits from credits generated in that community back to it. Defining communities may be easier in rural settings with clear delineations based on traditional structures. However, even here, challenges can arise where multiple projects operate in the same area.

Projects that dedicate revenue to community funds often engage community representatives or local experts to help determine how the funds should be spent. Managing the process is considered important here to ensure that community expectations remain realistic.

Interest-free loans

Beneficiary: Technology users

Projects that involve the provision of higher-cost technologies, such as biodigesters, may also provide interest-free loans to technology users to help them pay for the non-subsidized share of the purchase price. These strategies are designed to address financial obstacles that could impede the widespread adoption of clean cooking technologies. A purchase loan will typically entail providing financial aid to obtain the technology through a loan agreement, often facilitated by financial entities like community-based financial groups or microfinance institutions. In this setup, households receive a lump sum and gradually repay the loan, usually in cash, over time.

Employment opportunities

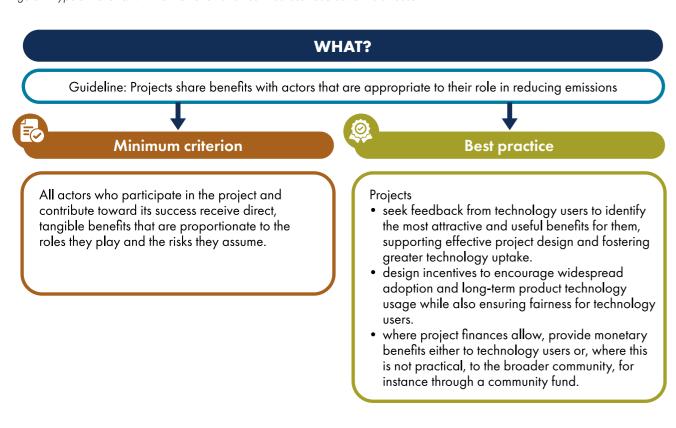
Beneficiaries: Members of a community, local implementers

Projects can create employment opportunities for local communities through local manufacturing, contracting local organizations as implementers, or employing local 'champions' that can lead local user engagement and training. Employing locals can also provide additional benefits, such as empowering women and girls with new skills. It is essential to note that the involvement of local individuals not only benefits the community but also serves as a valuable referral system for project developers. As these individuals engage directly with technology users and are part of

communities, they can effectively promote the project's goals and encourage the adoption of household energy technology. While some instances demonstrate that these activities result in paid positions, it remains unclear if this is consistently the case across all projects.

2.2.2. Guidance on the form of benefits provided

Figure 7. Type of Benefits: Minimum Criterion and Best Practices. Source: Climate Focus.



Guideline: Projects share benefits with actors that are appropriate to their role in reducing emissions.

This guideline underscores the importance of compensating actors proportional to the role they play in generating carbon credits. For instance, technology users directly engaged in emission reductions through the use of household energy technologies should be entitled to receive tangible benefits. The appropriate benchmark for these benefits will depend on factors such as the project location, technology costs, and the specific project model (see the following paragraph on minimum criterion).



Minimum criterion

All actors who participate in the project and contribute toward its success receive direct, tangible benefits that are proportionate to the roles they play and the risks they assume.

This criterion is most relevant for technology users and local implementers/champions. Benefits received by these actors should align with their contributions to the project and their role in generating carbon revenues.

Technology users should receive direct, tangible benefits in recognition of their role in generating emission reductions. This ensures a minimum level of benefits reaches technology users independently of credit prices or how much revenue is generated. Benefits can be distributed either as a single benefit or a combination of monetary and non-monetary

benefits, including subsidized technologies or fuels (Box 5), interest-free loans, free maintenance and warranty services, technology replacements, and/or direct payments. The choice (and amount) of benefits depends on factors such as project location, technology, and business models. For this reason, different case scenarios are likely to result in the adoption of distinct benefit-sharing practices. For instance:

- The characteristics and challenges of the region where a project is located have a significant impact on the feasibility of benefit-sharing practices.
 Factors influencing these practices may include the availability of local infrastructure, such as support for mobile payment systems, as well as the geographical distribution and remoteness of technology users, which may affect the delivery of regular maintenance services.
- The cost of household energy technologies is crucial in shaping benefit-sharing practices. Projects offering significant subsidies on high-cost technologies may not be able to offer additional benefits due to the high expenditure on subsidies.

• The project's distribution model also impacts the types of benefits that are suitable. For instance, where technology is constructed at households through partnerships with organizations providing this service, such as biogas masons or local technicians specialized in stove construction, benefits transferred may include skills and training, as well as subsidized work (i.e., the project developer covers a portion of the labor cost to construct the stove, with the user paying the remaining portion). Direct sales by local staff or implementers also generate local employment opportunities and facilitate the provision of better maintenance services. In contrast, distributing stoves through kiosks may support local businesses but will not typically lead to direct employment opportunities.

Local implementers and champions should receive direct benefits, ideally monetary payments. This includes fair contracts and compensation mechanisms, aligning with industry standards, local living wage benchmarks, the scope and impact of contributions, and the duration and nature of engagement. This approach ensures that local implementers and champions receive equitable payments, wages, and benefits commensurate with the services they provide. Monetary payments serve as a tangible exchange for their contributions to the implementation and promotion of initiatives within their communities.

BOX 5. CASE STUDY: AFRICAN CLEAN ENERGY (ACE) ON FUEL SUBSIDIES

African Clean Energy (ACE) is a specialized enterprise manufacturing and distributing improved cookstoves to rural households in Sub-Saharan Africa and Southeast Asia. At the heart of their offering is a hybrid solar-biomass smokeless stove that utilizes wood pellets to generate clean energy for users. This stove is equipped with an integrated microprocessor that monitors usage data whenever smartphones are connected to it.

Throughout the purchasing process, ACE's sales teams engage with households, informing them that the cookstoves can be acquired with a 25 percent down payment and subsequent interest-free monthly instalments. While technology users pay the full price for the stove over time, the payments are kept low to ensure affordability. Additionally, ACE produces sustainable fuel sources such as pellets and briquettes, using carbon revenues to provide households a cash back on each purchase via their mobile payment systems. To maintain transparency and bolster their selling strategy, ACE tracks the subsidies provided to each customer and shares the data with carbon buyers.



Best practie

Projects seek feedback from technology users to identify the most attractive and useful benefits for them, supporting effective project design and fostering greater technology uptake.

Consulting a sample of technology users on the design of benefit-sharing arrangements can result in the adoption of practices better suited to local needs. This can ultimately increase technology adoption as well as the chances of ensuring fair and equitable benefits. Opting for a sample consultation approach, rather than engaging with each user individually, allows project developers to gather valuable insights while

conserving resources and managing expectations more effectively.

Project developers can conduct a needs assessment to understand technology users' expectations, needs, and preferred allocation of benefits. Similar to the Gold Standard's stakeholder consultation requirements, vi this assessment should include in-person consultations with technology users in their native language. This process may also involve community meetings and engagement with local NGOs, leaders, or implementation partners. The needs assessment should take place early in the project development process and may be integrated into existing stakeholder consultation processes.

To manage expectations effectively, project developers the target population can also encourage adoption, as should have clear options established before consultations take place so that only realistic choices are presented. These options should include the type of benefit-sharing envisaged, allowing consultation attendees to provide feedback on which options resonate most with their needs and preferences. Project developers should also communicate details such as the process of needs assessment and the project implementation lead time. This ensures clarity for stakeholders, technology users, and communities regarding what is feasible and what actions will be taken by the project developer.

Projects design incentives to encourage adoption and long-term technology usage.

Project developers should consider using community engagement, education, and awareness programs to ensure that technologies are widely adopted. Users need to understand how to correctly use the technologies and the direct benefits to their health and safety, and project developers should aim to provide technologies that are suited to the needs of the target population and are truly desirable. While technological subsidization is one measure to encourage adoption, it is not the only tool available. Measures such as providing a well-functioning, desirable product tailored to the needs and wants of well as investing in customer outreach and marketing.

Long-term technology usage can be encouraged by providing customer services such as repairs and maintenance, as well as establishing regular customer contact to proactively engage with them and be open to feedback.

Where project finances allow, projects provide monetary benefits either to technology users or, where this is not practical, to the broader community, for instance, through a community fund. In recognition of the role technology users play in reducing emissions, where carbon revenues allow, projects should prioritize delivering direct monetary benefits to them, thereby proportionately compensating them for their contributions. Emerging carbon credit revenue-sharing programs highlight the potential of innovative technology to strengthen fairness in the clean and improved cooking sector by providing direct payments to technology users (Box 6). When this mechanism is impractical, projects should consider delivering benefits to the broader community. Through establishing community funds, projects can facilitate investments in local development initiatives, such as education and healthcare. In this scenario, technology users may benefit indirectly from the initiative.

BOX 6. CASE STUDY: THE COOK TO EARN PROGRAMMEVII

In August 2023, ATEC, FairClimateFund and MECS joined forces to pilot an innovative carbon credit revenue-sharing initiative based on verifiable usage data in Bangladesh and Cambodia. ATEC's Internet of Things (IoT) stoves facilitate a pay-per-use model, enabling carbon credit micropayments directly into the mobile money accounts of participating households. With FairClimateFund facilitating the sale of these carbon credits, the project aims to encourage the sector to value households for their efforts as frontline contributors to greenhouse gas emissions reduction.

Key to this initiative are the pre-established minimum price and target price agreed upon between the FairClimateFund and ATEC to enable 70 percent of the purchase price to directly reach the users as a mobile payment while the remaining is set to cover credit generation costs incurred by ATÉC. This initiative addresses challenges inherent in cookstove markets, where delivering modern, sustainable technology to base-of-the-pyramid users affordably is a challenging task due to high costs and tight margins.

2.3. Amount and value of benefits provided

2.3.1. How many benefits should be provided to different actors?

Whether benefits are considered fair arguably has less to do with the types of benefits provided and more to do with the overall monetary value of the benefits package to beneficiaries relative to their role in the project, as well as the amount of carbon revenue a project receives. At the same time, comparing benefit packages is challenging since there are often many

factors at play, including how many beneficiaries there are, the types of benefits offered, and the value of each. It is, therefore, important to consider the specific context of each project. For instance, a 50 percent subsidy on a biodigester with a value of USD 1,000 may be worth more than a 100 percent subsidy on a low-end cookstove model combined with a direct payment based on a share of carbon credit revenues.

Some project developers have committed to, or are exploring, dedicating a given share of overall revenues or profits to benefit-sharing packages. This could take a number of forms, for instance:

- Share of revenues generated: This approach involves dedicating a share of gross revenues to benefit packages. In this case, the project developer takes on more risk, as benefits are calculated before costs are taken into account.
- Share of profits generated: This approach only distributes profits. The benefit is that it provides a buffer to project developers, not having to share benefits until the project is established and profitable. However, projects should at least provide some benefit to technology users independently of profits, as is usually done through providing subsidized technology or fuel.
- Share of net revenues (i.e., revenues minus costs and reasonable profit): In this approach, in principle, the interests of both the project developer and technology users are met – it is ensured that the project developer can cover its costs and earn a reasonable profit (see following section on guidance on the value of benefits), while technology users also receive benefits. In this case, transparency regarding financial flows and costs is necessary to ensure that the costs claimed are reasonable and directly linked to the project.
- Fixed amount of each carbon credit sold above a defined price benchmark: This approach also provides a certain buffer for the project developer when not applying to carbon credits sold below the benchmark. Similarly to the share of profits, it

should be combined with other approaches to benefit sharing, such as providing subsidized technologies.

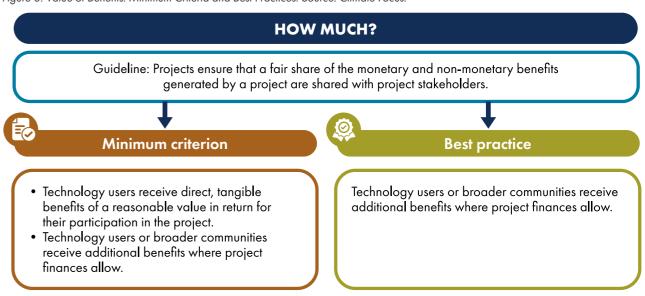
The above shares could be directed towards the benefit-sharing package as a whole or to specific benefits. For instance, a project may decide to provide subsidized technologies as a standard and also dedicate a share of profits or carbon credit sales to fund payments to communities or to technology users. However, these shares would usually not include payments to service providers such as local implementers or manufacturers, which are best considered as project costs.

There are also specific questions related to the amount or value of benefits that arise in the context of specific benefit-sharing forms, for example:

- How meaningful a technology subsidy is will often depend on the quality or sophistication of the technology and how much it would have cost without the subsidy. For instance, biodigesters or integrated solar electricity and cooking solutions will tend to cost significantly more than efficient cookstoves.
- Whether it makes sense to provide monetary benefits will depend on the amount to be shared and the method of distributing this to technology users. Depending on the project's performance in a given year, the monetary benefits may not be substantial.

2.3.2. Guidance on the value of benefits to be provided

Figure 8. Value of Benefits: Minimum Criteria and Best Practices. Source: Climate Focus.



Guideline: Projects ensure that a fair share of the monetary and non-monetary benefits generated by a project are shared with project stakeholders.

This guideline underscores the importance of compensating actors proportionately to the role they play in generating carbon credits. For instance,

technology users directly engaged in emission reductions through the use of household energy technologies should be entitled to receive tangible benefits.



Minimum criterion

Technology users receive direct, tangible benefits of a reasonable value in return for their participation in the project.

A minimum level of benefits should be delivered to technology users independent of the project's generated revenue or profit. In most cases, this will take the form of a subsidized technology and/or interest-free loan. By offering upfront benefits, project developers mitigate the risk for technology users, ensuring that they are not exposed to uncertainties regarding project implementation or performance.

When project developers provide benefits in the form of subsidized technology, they must ensure that users receive a good-quality product that is effective, durable, and safe to use. The subsidy amount can be proportional to the cost or value of the product.

When technology users purchase a full (or close to full) price product, projects must provide alternative benefits that are provided independently of project performance. These may include subsidized fuels, direct payments, ownership of credits by technology users, community funds, free technology replacements or repairs, or other means. In all cases, benefits should represent reasonable compensation to technology users in exchange for their participation in the project, particularly where this involves signing over rights to carbon credits.



Best practie

Technology users or broader communities receive additional benefits where project finances allow.

In addition to providing a base level of benefits that are not linked to project performance, projects can

also offer additional benefits to technology users or broader communities where project finances allow. The value of these additional benefits can be calculated based on a share of net revenues, calculated by considering revenues minus project costs (including financing costs) and a reasonable return on investment/profit.

Additional benefits can be provided through direct payments, community funds, free technology replacements or repairs, or other means.

It is important to emphasize that additional benefits are not required where they are not feasible due to low carbon credit prices and high costs since this could strain the financial viability of the project. However, in scenarios with favorable carbon credit prices and manageable project costs, it becomes more feasible to extend benefits beyond subsidized technologies and maintenance, fostering a more impactful benefit-sharing approach.

More expensive cooking solutions require larger subsidies, which can reduce room for additional benefits. For instance, the high price point for domestic biodigesters means that a 50 percent subsidy will already represent a major cost for project developers. Higher technology costs also mean that maximizing device discounts may be a more effective benefit-sharing approach as they help drive the adoption of an otherwise unaffordable technology. In such cases, where project revenues increase, project developers may decide to invest additional revenues in increasing technology subsidies or providing free replacements.

In cases where project developers make significant investments in technologies, they may argue for a larger share of the profits. Similarly, when households invest more of their capital in a product, they are likely to receive a higher-quality product than those who contribute less, but they also bear a certain level of risk. Therefore, they are reasonably entitled to claim a larger share of the revenue than users who contribute less. It is important to consider the respective risks assumed and benefits gained by the project developer and technology user when determining the fairness of a benefit-sharing arrangement.

2.4. Practical aspects of implementation

2.4.1 What are the key practical questions relevant to implementing benefit sharing?

Transparency in carbon markets is essential to ensuring the fair distribution of benefits among actors

and properly valuing the benefits being claimed. The Responsible Carbon Finance for Clean Cooking Initiative (RCFCCI) has, for instance, recommended that more transparency be implemented in how revenue is distributed along the value chain of a carbon credit transaction. Implementing equitable

benefit-sharing approaches, therefore, requires that projects are open and transparent about how benefits are shared with stakeholders.

Projects also need to follow fair procedures. When stakeholders are engaged in extensive and inclusive consultations, they can meaningfully contribute to the decision-making process and the subsequent implementation of the project. Conversely, risks arise when benefit-sharing arrangements are developed without the involvement of technology users and, therefore, risk not reflecting their specific needs or priorities.

How benefits are communicated

In practice, transparency first translates to timely and sufficient stakeholder consultations (before project implementation). It is best practice to have participatory decision-making arrangements with beneficiaries (technology users, local communities, community leaders, implementers) – participating in the design of the project and its benefit-sharing arrangements helps ensure that they receive relevant and appropriate benefits. The exact terms and extent of benefits should be communicated to the beneficiaries before they enter into an agreement with the project developer.

Second, transparency implies that a certain degree of information should be provided with respect to carbon credit prices received, the portion of revenues shared with users, and/or the amount of carbon revenues shared with users. Ideally, this information is made publicly available. However, where this information is commercially sensitive, making it available to all actors involved in the carbon credit transaction is sufficient.

In addition, communicating with host country governments in jurisdictions that have established specific guidelines for the allocation of carbon credit revenues and the reinvestment of benefits into communities is essential. Integrating these guidelines early in the project's benefit-sharing framework is crucial for ensuring compliance and maximizing effectiveness.

How benefits are managed and distributed

The allocation of responsibility for the management and distribution of monetary benefits should be transparent and clear to all beneficiaries across the value chain, in addition to being in line with regulatory requirements in the country in which the project operates.

The following aspects should be considered when determining how benefits are to be managed and distributed:

General

 Consider the national and/or regional regulatory requirements and/or recommendations on (community-based) benefit sharing.

For monetary benefits:

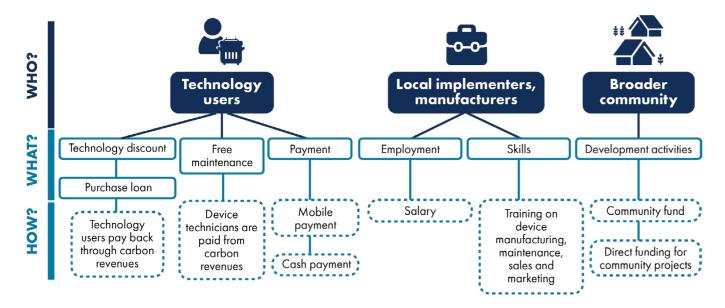
- If there is a fund for distributing benefits, consider
 who will manage it. Is it managed by the community
 directly, by the community leader, by an independent
 foundation, by the government, or by the project
 developer? Direct community management may be
 beneficial for ensuring that the community's priorities
 are addressed. However, an independent foundation
 may be preferred to provide autonomous oversight.
- Consider who will be responsible for the distribution of benefits. This could be local implementers or direct employees of the project developer in the field. Local implementers may be a more cost-effective solution, but direct employees may provide the project developer with more direct oversight.
- Consider who will be responsible for accounting, monitoring, and reporting on the benefits shared. A clear outline of the roles and responsibilities of all parties, along with the creation of a framework for tracking and tracing any delivered benefits, facilitates transparency in benefit-sharing processes. If the local government is to manage the fund(s), agreement should be sought on how a commercial enterprise can monitor and report on the allocation of the funds that it raises.
- Consider the safeguards that should be in place to ensure that benefits are delivered to their intended beneficiaries. Options include random field visits ("spot checks") and providing oversight of local implementers' operations, as well as establishing a system to track and trace the allocation of benefits.
- In the case of direct payments, consider how payments will be made. One option is mobile payments, which can be convenient and have low transaction costs. However, depending on the local context, this may disproportionately benefit wealthier technology users with mobile devices. Alternative options are coupons (e.g., for fuel discounts) or cash payments. However, these involve higher transaction costs and require additional measures (for instance, sign-off and pictures) to minimize corruption risks.

For non-monetary benefits:

- Consider whether the benefit addresses technology users' or the community's needs and/or priorities.
- Consider whether there have been sufficient consultations with technology users and the community.

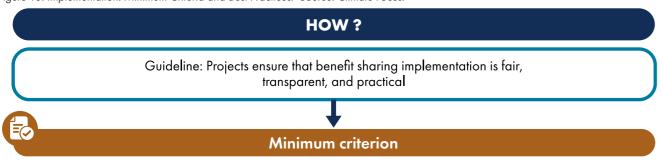
 In the case of a community project or program, consider who will be responsible for carrying it out, the timeline for delivery, and what the terms of engagement with the community are (if relevant). Implementing a transparent process for beneficiaries to lodge complaints and ensuring they are resolved fairly and promptly is a best practice that strengthens stakeholder protection. Additionally, carbon standards mandate that project proponents create a grievance and redress mechanism to handle complaints related to the project, including those concerning benefit sharing.

Figure 9. Examples of benefit sharing: who with, what is shared, and how it is shared? (note: these are examples and do not reflect acomprehensive overview of implementation options). Source: Climate Focus.



2.4.2. Guidance on practical aspects of benefit sharing

Figure 10. Implementation: Minimum Criteria and Best Practices. Source: Climate Focus.



Proiects

- where possible, consult technology users on the benefit sharing approaches to be employed (as part of the stakeholder consultation process). In cases where benefits are allocated to community projects or funds, communities actively participate in decisions on how to allocate and spend those funds.
- ensure transparency in revenue distribution throughout the project's lifetime. Transparency processes should be adapted to benefit sharing structures and local contexts.
- ensure that there is a grievance and redress mechanism that is clear, accessible, easy to understand and culturally appropriate.

Guideline: Projects ensure that benefit-sharing implementation is fair, transparent, and practical.

While distinct implementation approaches exist, it is crucial to ensure that these approaches are equitable, clearly communicated, and efficiently administered. Therefore, stakeholders should have the opportunity for meaningful participation in implementation processes, benefit from transparent benefit allocation, and have the opportunity to engage over the project's lifespan.



Minimum criterion

Where possible, projects consult technology users on the benefit-sharing approaches to be employed (as part of the stakeholder consultation process). In cases where benefits are allocated to community projects or funds, communities actively participate in decisions on how to allocate and spend those funds.

Engaging with technology users to receive their feedback on planned benefit-sharing approaches ensures that benefits are distributed in a manner tailored to user's needs and specificities. Allowing for their direct management of benefits can be advantageous, particularly when communities are direct beneficiaries, promoting widespread participation and addressing the community's priorities.

Projects ensure transparency in revenue distribution throughout the project's lifetime. Transparency processes should be adapted to benefit sharing structures and local contexts.

Market actors should be transparent about their benefit-sharing setup and the portion of carbon revenue that goes to technology users and other beneficiaries. Transparency should be ensured from the project's outset and throughout the project.

Transparency practices may vary depending on the chosen benefit-sharing arrangement and the stakeholders involved. In cases of benefit sharing with technology users, transparency should be ensured before purchasing the technology. This ensures that technology users are fully informed about the benefits package before participating. Where benefits are provided to technology users or communities based on project performance, credit sales, or technology usage, project developers must provide regular updates on these metrics. When establishing a community fund or redirecting revenues to the government or other actors for community project implementation or service delivery, project developers and/or fund managers should disclose the amount distributed to communities.

Information-sharing methods should be appropriate to the local contexts and may include bulletin boards, newsletters, or occasional community meetings. In areas with widespread technology access, digital platforms or text messages may be used for information dissemination.

Projects ensure that there is a grievance and redress mechanism in place that is clear, accessible, easy to understand, and culturally appropriate.

To maintain the continuity of household energy carbon projects, it is essential to implement a system that tracks the flow of benefits, measures their impacts, evaluates beneficiary satisfaction, and addresses grievances from project participants. Consequently, project proponents should develop a process for collecting, managing, and resolving complaints from beneficiaries and other involved entities. Clear communication about the accessibility of this mechanism and the procedure for handling complaints should be provided.

The grievance mechanism does not need to be set up to address benefit sharing only, but benefit sharing issues can be incorporated in the overall grievance mechanism of a carbon project, which is a requirement of many carbon standards.² The grievance mechanism should follow culturally appropriate conflict resolution methods.

² Most carbon standards require project proponents to develop grievance redress mechanisms to address disputes with stakeholders that may arise during project planning and implementation. For instance, Verra's VCS require projects to have a grievance redress procedure to address



3. Conclusions

This report provides a detailed overview of effective and exemplary practices in benefit-sharing for household energy carbon projects within a rapidly changing landscape. It serves as an initial resource for project developers looking to incorporate benefit-sharing strategies into their household energy initiatives.

Many other efforts are underway to enhance benefit-sharing in carbon projects (Annex 1). These include the Clean Cooking Alliance's Responsible Carbon Finance for Clean Cooking initiative, the Africa Carbon Markets Initiative, and the Fair Environmental Markets Initiative. At a broader level, the Integrity Council for the Voluntary Carbon Market and its Core Carbon Principles mandate that benefit-sharing plans be shared with local communities and included in publicly accessible project documentation. Prominent carbon market standards also focus on empowering technology users and communities by ensuring fair social and economic benefits. Notable examples include the Fairtrade Climate Standard, a collaboration between Fairtrade and The Gold Standard Foundation, as well as the Carbon Fairness Standard, currently being developed by Save the Children Global Ventures. Where feasible, synergies and connections among these initiatives should be pursued.

Nevertheless, adhering to the guidelines and best practices presented in this document will demand additional effort from project developers, leading to increased costs. Consequently, carbon credit buyers who prioritize robust benefit-sharing arrangements in the projects from which they acquire credits must be prepared to pay prices reflecting this additional effort.

This poses a substantial challenge in the current carbon market. Voluntary demand for carbon credits has diminished as the market experiences a necessary quality 'shake-up,' likely resulting in a significant decline in both the volume of carbon credits issued and their market values.

Household energy projects offer a dual advantage: they not only achieve emission reductions but also promote a just sustainable transition by channeling mitigation finance from high- to low- and middle-income countries. This distinctive feature of household energy projects can help them navigate the ongoing challenges, allowing households to continue reaping the benefits of results-based climate finance. As the market evolves towards increased social responsibility, sharing insights and best practices will be vital for progress.



4. Annex: Existing initiatives

In the dynamic landscape of carbon markets, concerns regarding benefit sharing have emerged as a pivotal consideration, particularly for buyers and investors. Recognizing the significance of equitable benefit distribution, stakeholders have become increasingly attuned to the potential impact these concerns can have on the credibility of the market. In response to these challenges, various initiatives have sought to develop approaches aimed at ensuring fair benefit sharing.

These initiatives can broadly be categorized as follows:

- Rules adopted by carbon standards
- Internal standards adopted by investors and project developers
- National regulations
- Market initiatives

Questions surrounding what constitutes fair benefit sharing are multifaceted and nuanced. The perception and introduction of fairness varies across different sectors, reflecting the unique dynamics and considerations inherent to each industry.

By examining the initiatives that strive to ensure fair benefit-sharing, this mapping endeavor seeks not only to catalog existing efforts but also, where possible, to shed light on the driving forces behind these initiatives - who is propelling them and what motivations underlie their development. Understanding these dynamics is crucial for comprehending the discussions surrounding equitable benefit distribution within the broader context of carbon markets and, more specifically, for contextualizing these discussions in relation to household energy projects.

Initiatives related to rules adopted by carbon standards and internal standards adopted by investors and project developers are accompanied by a key system that indicates the sector(s) they cover and the benefit-sharing practices they promote (Table 1). The keys are described below:

Sector	Identifies the sector(s) in which the initiative is taking place.
Credit ownership	Indicates whether project participants, such as technology users in the clean cooking sector or communities in the forestry sector, own the credits generated from the project.
Project covered by minimum price	Indicates if the initiative has a predetermined minimum price in place, ensuring projects can cover predetermined costs and beneficiaries financially benefit from carbon finance.
Monetary benefits	Indicates if benefits in monetary form, such as cash payments, contributions to community funds, and loans, are provided to project participants.
Non-monetary benefits	Indicates if benefits provided to project participants are in non-monetary form, such as free or subsidized technologies, market access, capacity building, and maintenance.

Rules adopted by carbon standards

At present, the vast majority of carbon standards do not specifically seek to regulate how benefits generated by projects are distributed. However, there are two exceptions that are relevant to both household energy and land use projects, which are described below.

carbon credits are priced 200 percent higher than credits originating from similar projects that are not FairClimate Standard certified due to the direct allocation of a substantial portion of the selling price to local communities involved in the project. viii

It is worth noting that these standards remain relatively small in terms of carbon credit volume. Fairtrade

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The Fairtrade Climate Standardix

As a joint effort by Fairtrade and The Gold Standard Foundation, the Fairtrade Climate Standard aims to empower smallholders and their communities by securing fair, social, and economic benefits. Projects that are eligible under the Fairtrade Climate Standard include renewable or energy efficiency projects such as clean cooking solution projects, as well as reforestation projects.

One key aspect of the Fairtrade Climate Standard is ownership, ensuring that the credits generated are owned by the household that produced them. By adhering to Gold Standard criteria, Fairtrade Carbon Credit projects prioritize bottom-up development, fair pricing, and benefit sharing. Under the Fairtrade Climate Standard, producers receive a minimum price for the Fairtrade Carbon Credits (FCC), ensuring that all project costs are covered. In addition, the standard requires that producers receive a fair trade premium, paid by the buyer and directed toward financing local economic, social, and environmental development projects in line with their agreed priorities.³

Plan Vivox

The Plan Vivo Standard focuses on sustainable natural resource management for various project types, including afforestation and reforestation. It is designed to assist local communities with a specific focus on fostering climate resilience, enhancing livelihoods, and promoting ecosystem services. Benefits under the Plan Vivo certification are distributed to participating farmers with clear tenure rights. Plan Vivo mandates projects to develop a "benefit-sharing mechanism" that specifies methods, amount, and timing of benefit distribution among project participants.⁴

A fundamental principle of the Plan Vivo Benefit Sharing Mechanism is the allocation of 60 percent of revenues from each carbon credit directly to participants in land-based projects. Examples of costs that may be supported by participant/community income include the development of schools, churches, health clinics, local employment, and procurement of equipment.

Internal standards adopted by investors and project developers

Numerous project developers and investors are actively pursuing strategies to amplify benefit sharing in their projects. These approaches include establishing impact funds dedicated to community support or committing to direct revenue sharing with technology users. While these initiatives reflect efforts to increase transparency and fairness in benefit sharing, many projects lack transparency in disclosing the revenues they receive and the portion allocated to households.

In the forestry sector, a number of benefit-sharing programs are used as an incentive for the adoption and use of new practices of land management (Table 1). Under the World Bank's Forest Carbon Partnership Facility (FCPF) emission reduction programs, benefit-sharing plan arrangements ensure that all stakeholders, including Indigenous peoples and communities, are fairly recognized and rewarded for their role in reducing emissions, including through forest conservation and sustainable forest management.

The Fair Climate Fund^{xi}

The Fair Climate Fund delivers investment opportunities in climate projects in developing countries, focusing on clean cooking solutions and tree planting under fair principles. The core values of this initiative include

local ownership and transparency in financial flows. In the context of clean cooking projects, it promotes fair benefit-sharing by mandating that local cooperatives own the Fairtrade Carbon Credits, using revenues from selling them to pay for their cookstoves.

Revenue generated by selling credits is first used to cover project costs. Depending on the project, either all or a large share of the remaining revenues is retained by the community. Communities can decide how to use the revenues, with many dedicating it to climate adaptation projects. Additionally, the Fairtrade premium, integrated into the carbon credit price, funds adaptation activities like the Climate Academy, where beneficiaries receive training in sustainable agricultural practices, such as efficient land use and income diversification.xiii The initiative is committed to adhering to Fairtrade Principles, with a goal to have 80 percent of projects following these principles by 2025.xiii

Rabobank's Acorn Initiativexiv

Acorn, an initiative of Rabobank, uses a carbon credit model requiring smallholder farmers to receive significant monetary benefits from agroforestry projects. Eighty percent of sales revenue of carbon credits must flow back to the producers, improving their livelihoods and enabling reinvestment in agroforestry

initiatives. The remaining 20 percent is split evenly between Acorn and its local partners, who help coordinate with the local farmers.

Forest Carbon Partnership Facility (FCPF) Mozambique^{xv}

Backed by an emissions reduction payment agreement (ERPA) with the FCPF, Mozambique introduced an integrated benefit-sharing plan. The arrangement designates 70 percent of results-based payments to local communities actively involved in sustainable land use practices aimed at reducing deforestation and associated carbon emissions. Notably, the plan targets balanced distribution, with women and youth expected to comprise at least half of the total beneficiaries.

Table 1. Summary of existing benefit-sharing approaches in carbon standards and initiatives.

	The Fairtrade Climate Standard	Plan Vivo	The Fair Climate Fund	Rabobank's Acorn Initiative	Forest Carbon Partnership Facility (FCPF) Mozambique
Sector		•		•	•
Credit ownership	⊘	Ø	\oslash	\otimes	\bigotimes
Project covered by minimum price	⊘	\otimes	\oslash	\bigcirc	Ø
Monetary benefits	⊘	Ø	\oslash	\bigcirc	\oslash
Non-monetary benefits	Ø	\odot	Ø	Ø	⊘

National regulations

Countries play a significant role in offering guidance and establishing necessary requirements to address the equitable distribution of benefits among stakeholders. These incentives have often been overlooked, contributing to unclear benefit-sharing structures. The growing emphasis on developing a robust legal and regulatory framework underscores the significance placed on fair carbon markets, as illustrated in the examples below. However, navigating the intricate terrain of carbon credit frameworks poses a challenge for nations as they seek to strike a delicate equilibrium between promoting community benefits and sustaining market attractiveness for investors.

Defining the nature and distribution of benefits to be shared with local communities is an evolving and open domain, contingent upon the entire stakeholder chain and diverse interests at play. Initiatives focused on benefit sharing, transparency, and enhanced regulatory engagement signify a shift towards a more comprehensible distribution of tangible positive outcomes from the trading of carbon credits. These efforts show promise that governments recognize that advancing benefit-sharing mechanisms have the potential to stimulate the growth of carbon credit production, fostering additional advantages such as increased employment opportunities and enhanced capacities.

Kenya's Climate Change Act, 2016

In September 2023, the Government of Kenya amended the Climate Change Act by enacting the Climate Change (Amendment) Act. The amendment introduced minimum requirements for the participation of communities and benefit sharing. For instance, the Act stipulates that land-based projects are to be implemented through community development agreements, outlining the relationship and obligations between project proponents and communities on the public land where the project is located.

The legislation further specifies the minimum benefits communities should receive: 40 percent of the "aggregate earnings" of the previous year for land-based projects and 25 percent for non-land-based projects, with "aggregate earnings" referring to a percentage of revenues rather than profits. **x*i* The Act does not specify the type of benefit or delivery mechanism that should be used for distributing benefits. To implement the Act, the Climate Change (Carbon Market) Regulations were adopted in May 2024, which provide more details on benefit-sharing arrangements. The Regulations clarify that private carbon projects on private land will not be required to

³ The minimum price of fairtrade carbon credits for cookstove projects is EUR 8.10/tCO2e + 1 EURO Fairtrade Premium.

⁴ Plan Vivo requires benefits to be distributed between the producers and project manager based on the incurred operational and transaction costs.

disburse the benefit-sharing contribution prescribed in the Act.

Tanzania's Carbon Trading Regulations, 2022, amended in October 2023

Tanzania's Carbon Trading Regulations require project proponents to provide a detailed breakdown of benefit-sharing distribution and have a requirement for minimum benefit-sharing contributions. For instance, in the case of non-REDD+ projects, the owner of the property used to implement a project and the project proponent are entitled to 61% and 31% of the revenues, respectively, although this may be negotiated between the two. The other 8% is paid to the government. REDD+ projects are subject to stricter and more prescriptive formulae for benefit sharing.

These regulations also mandate that carbon trading projects not managed by communities explicitly outline how local communities will benefit. Moreover, there is a requirement to enhance the capacity, awareness, and participation of stakeholders involved in carbon projects. Project proponents must also provide relevant information on their projects to local communities, the property owner, relevant ministries, and regulatory authorities. Local communities should also be involved in the planning, implementation, and monitoring process of carbon projects.xvii

Zimbabwe's Carbon Credit Framework, 2023

Zimbabwe has introduced mandatory regulations to advance community benefits. This was achieved by

requiring a participatory approach in carbon projects, ensuring that communities and other stakeholders effectively participate and are enabled to make informed decisions regarding carbon trading initiatives. The Framework also unveiled a well-defined revenue benefit sharing and distribution model calculated in percentages. Under the initial framework, the government of Zimbabwe was set to claim 50 percent of revenues from carbon projects, with 30 percent designated to foreign investors and the remaining 20 percent allocated to local communities.

However, a significant adjustment took place in September 2023 when the country revised its framework, discarding the initial plan to allocate a portion of the revenue to local communities. This revision, aimed at maintaining competitiveness, allows developers to retain a greater share of the profits.**viii Despite the government's claim of distributing its percentage of revenues at the local level, the Framework operates within a national legal framework that lacks established mechanisms to ensure that the funds or benefits genuinely reach the communities that are vulnerable or in need.**ix

Dutch procurement policies

The Dutch government's demand-side efforts linked to the carbon market aim to encourage revenue sharing with local stakeholders. This is achieved through the implementation of procurement policies that provide incentives to projects that compensate carbon emissions using Fairtrade Carbon Credits or those with Gold Standard or the Climate, Community, and Biodiversity (CCB) Certification.

Market initiatives

There are numerous market initiatives dedicated to advancing responsible carbon finance and fair benefit sharing in carbon projects, as presented below. It is evident that the emphasis extends beyond mere emission reductions and encompasses a demand for reliability in terms of co-benefits for the range of stakeholders along the value chain.

The Responsible Carbon Finance for Clean Cooking Initiative (RCF4CCI)**

Led by the Clean Cooking Alliance, the RCF4CCI unites over 350 stakeholders in the clean cooking and carbon markets. In the pursuit of responsible carbon finance, the initiative has established 12 principles with the goal of fostering a clean cooking market founded on integrity, transparency, fairness, and sustainability. Notable among these 12 principles are three that are relevant to this report:

- Transparency 1: "The monetary and/or non-monetary benefits reaching the project and technology/fuel users are transparent within a given transaction." This principle addresses the opacity surrounding the monetary and/or non-monetary benefits that reach users on the ground. It fosters accountability by requiring that information on these benefits be available to all actors in the carbon value chain of a given transaction or, ideally, made public.
- Fairness 1: "Informed consent precedes each user's participation in a carbon project." The entity generating emission reductions maintains ownership of carbon credits unless technology users sign an agreement to transfer these rights to another entity. This principle directly addresses the potential risk of technology and fuel users lacking a comprehensive understanding of the contracts they enter into, thus mitigating the possibility of uninformed decisions regarding the consequences of their participation in the project.

• Fairness 2: "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 acknowledges that technology users play an essential role in generating carbon credits and advocates for a proportional distribution of revenue based on the level of risk assumed by users and the extent of device subsidy received. Households investing more of their capital in the stove or utilizing it more frequently may reasonably claim a larger share of the revenue compared to others.

By 2026, the Clean Cooking Alliance aspires to gather a diverse group of established, emerging, and new clean cooking project developers who will pledge to adhere to a voluntary code of conduct to implement the principles.

The Fair Environmental Markets Initiative*xi

This initiative was launched during COP26 in Glasgow in 2021 to forge a strategic alliance among regions, governments, organizations, and various stakeholders who share a common vision and interest in safeguarding environmental integrity and ensuring equitable benefit-sharing. This initiative has been highly dynamic from the outset, fostering partnerships with Colombia, the Dominican Republic, Argentina, Ecuador, and West African collaborators. The primary objective is to promote carbon market opportunities through fair carbon pricing schemes.

The initiative actively supports the transfer of clean technology and collaborates with project developers who are committed to integrating fairness in clean cooking projects. By leveraging the experiences and lessons learned from carbon market development, the partnership seeks to encourage technological innovation using digital financial tools for enhanced traceability and project credibility and position carbon markets as a financing mechanism capable of generating resources to support the social and economic development of local communities.*

The Carbon Fairness Standardxxiii

The Carbon Fairness Standard – or Fair Standard – aims to foster fairness in carbon projects by ensuring that Indigenous peoples and other local communities are treated fairly when carbon projects are developed on their land. The standard is being developed by Save the Children.

The first certification under the standard was issued in early 2023 to a project in Australia. Save the Children Global Ventures plans to use the standard for its own internal investments and develop it further for use by the broader carbon market.**

The Africa Carbon Markets Initiative (ACMI)***

Inaugurated at COP27 in Egypt in 2022, the ACMI aims to boost the production of African carbon credits while prioritizing transparency and equity. A fundamental principle of ACMI is to ensure fair revenue sharing with local communities, thereby delivering broader socio-economic co-benefits. The initiative addresses challenges such as the absence of standardized processes for rating/assessing essential carbon credit co-benefits (for example, community impact) and pricing that may not accurately reflect the value of carbon credits and their co-benefits (for example, energy access, livelihood improvement, health and wellness, job creation).

By sending a robust demand signal for carbon credits across all project types, ACMI aspires to contribute significantly to creating new job opportunities for the growing population, bolster the direct flow of finance to 33 million smallholder farmers, and improve the health benefits of the 200 million people in Africa currently using charcoal for cooking fuel.**

The Integrity Council for Voluntary Carbon Markets (ICVCM)

The ICVCM released Core Carbon Principles that require benefit-sharing plans to be shared with local communities and that these plans be included in project documents with outcomes publicly available. Moreover, the next iteration of the Assessment Framework (expected to be released in 2025) may set out requirements for communicating how revenue is used and managed for the purpose of benefit sharing.



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