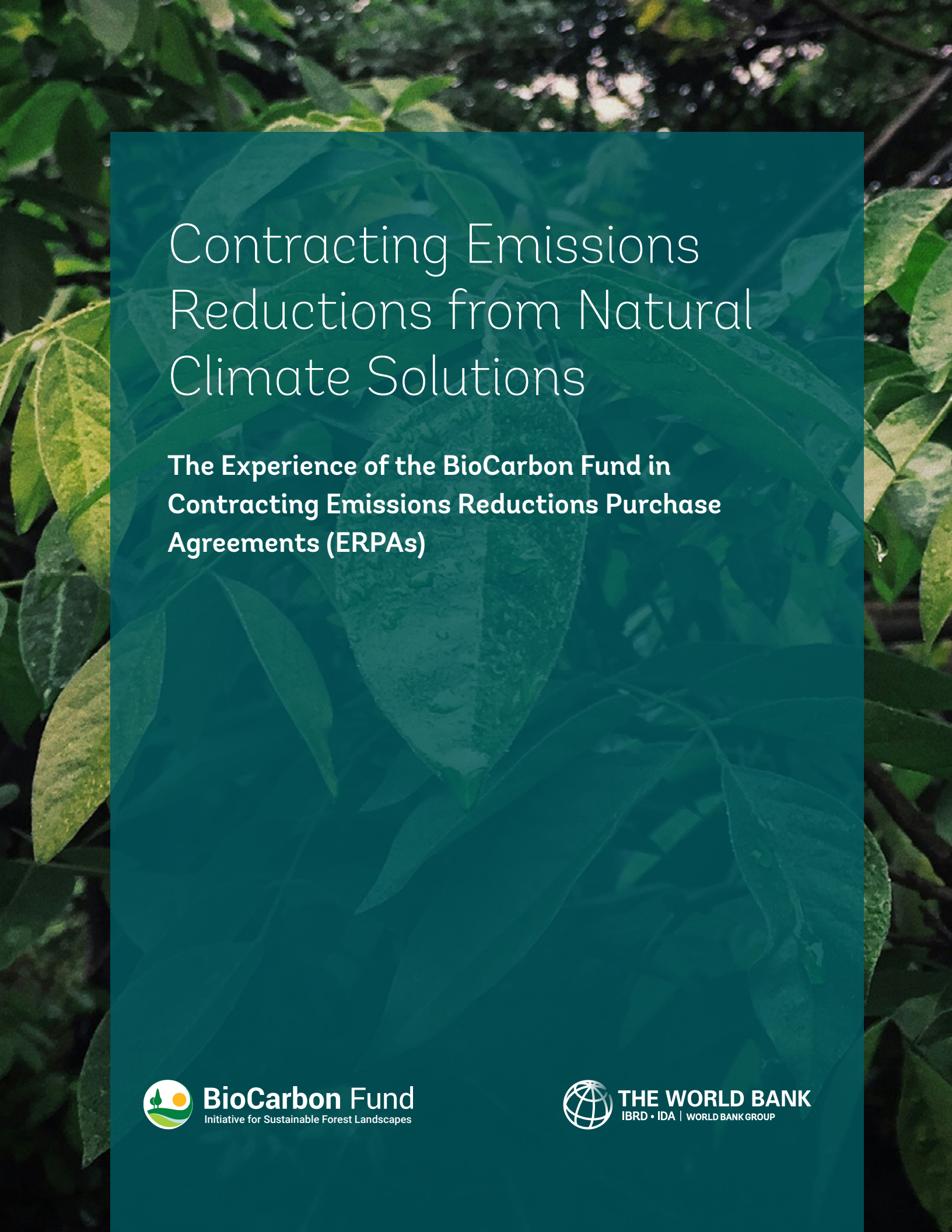

Contracting Emissions Reductions from Natural Climate Solutions

The Experience of the BioCarbon Fund in Contracting Emissions Reductions Purchase Agreements (ERPAs)

BioCarbon Fund
Initiative for Sustainable Forest Landscapes

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ABBREVIATIONS

AFOLU	agriculture, forestry, and other land use
BAU	business as usual
BSP	Benefit Sharing Plan
CATS	[World Bank] Carbon Assets Tracking System
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
EP-JSLP	Eastern Province Jurisdictional Sustainable Landscape Program
ER	Emissions Reductions
ERPA	Emission Reductions Purchase Agreement
FCPF	[World Bank] Forest Carbon Partnership Facility
GHG	greenhouse gas
ISFL	[World Bank] BioCarbon Fund Initiative for Sustainable Forest Landscapes
MRV	measurement, reporting, and verification
NDC	Nationally Determined Contribution
RBCaF	results-based carbon finance
RBClF	results-based climate finance
REDD+	Reducing Emissions from Deforestation and Forest Degradation, plus Fostering Conservation, Sustainable Management of Forests, and Enhancement of Forest Carbon Stocks
UNCITRAL	United Nations Commission on International Trade Law
ZIFL-P	Zambia Integrated Forest Landscape Program

INTRODUCTION

As the international community seeks to address climate change, it is widely understood that there is an enormous financing gap for climate mitigation and adaptation. Trillions of dollars are needed annually by 2030 to fund the climate transition, while roughly only US$300 billion is currently being committed. In an increasingly complex landscape of climate finance, results-based climate finance (RBCIF) and carbon markets represent an opportunity for countries to secure and direct more financing into activities that not only help reduce carbon emissions but also bring other important development benefits, such as improved livelihoods and ecosystem restoration, to communities.

Over the last 20 years, the World Bank has pioneered and delivered results-based emissions reductions (ER) programs. These programs are designed to incentivize both private and public actors by providing payments for generating Verified ER. Designing and implementing these programs necessitates consideration, negotiation, and agreement between the party generating the emissions reductions and the party making the payment as a reward for the reductions achieved. It is critically important to ensure that the emissions reductions generated, and the resulting carbon credits, are of the highest integrity—methodologically (how they are calculated), environmentally, and socially. This requires ensuring that the programs that generate the emissions reductions ensure a high quality of environmental and social integrity and that the resulting benefits of payment flows reach participant communities. It is also vital that the methodological underpinnings of the emissions reductions are of the highest standard and accompanied by rigorous verification and auditing of the credits produced, ensuring transparency, accountability, and accuracy. Without such integrity, interest in supporting such transactions will wither.

Through the BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) (box 1), the World Bank has designed and delivered a specific type of legal agreement to create the necessary contractual foundations for facilitating high-integrity ER transactions while maximizing opportunities for monetizing rewards: the ISFL Emission Reductions

Purchase Agreement (ERPA). The ERPA is not only a legal agreement but also a financial tool, representing forward contracts that guarantee the purchase of emissions reductions over a period at a set or market-linked price.

An ISFL ERPA is an agreement between the Program Entity, authorized by the host country to implement the ER program and sell the resulting emissions reductions (seller), and the World Bank (buyer, and trustee of ISFL).

This resource shares the unique experience of the ISFL to date in contracting for these ER transactions for jurisdictional land use programs. While several other World Bank trust funds have designed and negotiated ERPAs, and the ISFL itself builds on the experience of the Forest Carbon Partnership Facility (FCPF), the similarities and differences between them are beyond the scope of this report. Using the example of the ISFL program, this resource explains how ERPAs are created, how quality and integrity are maintained, and what terms and conditions are negotiated and documented. It shares insights into what parties may need to consider when designing and preparing to negotiate an ERPA or similar agreement. While the focus is on principles and processes used in ISFL ERPAs, the content covered is relevant to any entity, both within and outside the World Bank, looking to engage in the purchase or sale of carbon credits from jurisdictional land use programs.

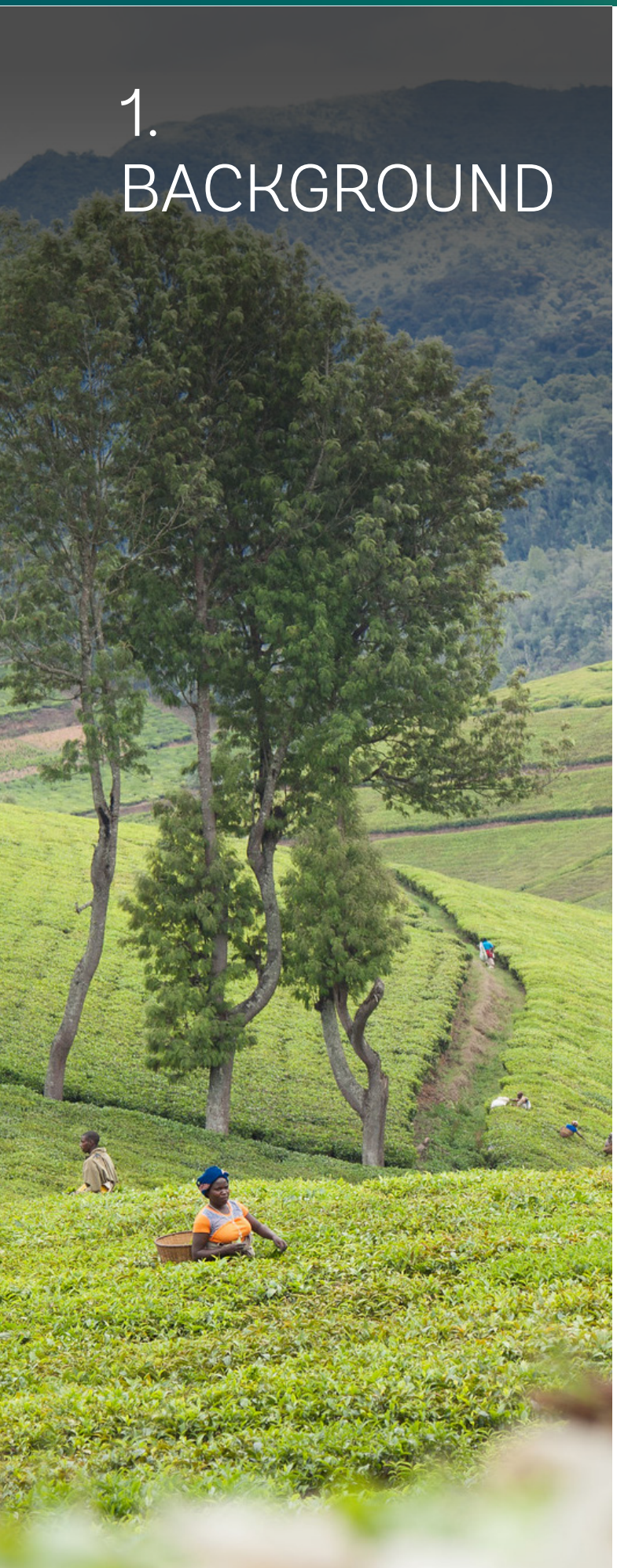
Box 1: BioCarbon Fund Initiative for Sustainable Forest Landscapes

The ISFL is a multilateral fund, supported by donor countries and managed by the World Bank.[a] It promotes reducing greenhouse gas emissions from the land sector, including efforts to reduce deforestation and forest degradation in developing countries (REDD+),[b] sustainable agriculture, as well as smarter land use planning, policies, and practices.

The ISFL enables program countries to implement integrated land use planning at scale through a two-pronged approach. First, the ISFL provides up-front grant financing and technical support to program countries. This funding enables them to improve jurisdictional land use management, including developing systems for measuring, reporting, and verifying emissions reductions. This up-front financing also funds advisory projects aimed at attracting private sector interest in ISFL jurisdictions, which can benefit farmers and other private sector actors. Second, the ISFL provides payments to the program countries for carbon credits through **Emission Reductions Purchase Agreements**. ISFL pilot programs are currently being implemented in five countries: Colombia, Ethiopia, Indonesia, Mexico, and Zambia.

a. ISFL's contributing participants include Germany, Norway, Switzerland, the United Kingdom, and the United States.

b. REDD+ stands for Reducing Emissions from Deforestation and Forest Degradation, plus fostering conservation, sustainable management of forests, and enhancement of forest carbon stocks.



1. BACKGROUND

1.1 What Is an ERPA?

Simply put, an Emission Reductions Purchase Agreement is both a legal contract and a financial agreement between the entity buying carbon credits and the entity selling them. For example, in the case of Zambia's Eastern Province (box 2), the ERPA is between the World Bank, acting as the trustee of the ISFL (the buyer), and Zambia (the seller).[1] The ERPA lays out the terms for the purchase of carbon credits generated under an ISFL ER program from the land sector. These reductions result from efforts to reduce deforestation and forest degradation, including sustainable land use planning, policies, and practices, as well promoting climate-smart agriculture and clean cookstoves.

The World Bank uses ERPAs in many of the ER programs it supports through trust funds, such as under the ISFL and the FCPF.[2] The World Bank signs ERPAs in its capacity as trustee of the ISFL or FCPF after providing support in preparing the country to implement an ER program. This includes providing funding and technical assistance for activities that lead to actual emissions reductions (such as climate-smart agriculture programs or reforestation programs) or for complementary processes like conducting a greenhouse gas (GHG) inventory, strengthening measurement, reporting, and verification (MRV) systems, and developing a national strategy for reducing emissions. The World Bank also

1 Throughout this document, for the sake of clarity, the material will refer to the interaction between a buyer of carbon credits and the seller of carbon credits. However, it is important to note that this is an oversimplification of the nature of the transaction. Both the buyer and seller can act on behalf of others, and elements of the purchase may be atypical, with some of the emissions reductions potentially being returned or transferred back to the seller. In the context of the ISFL, the buyer is the World Bank acting as trustee of the ISFL program, and the host country is the seller.

2 Within the World Bank, all ERPAs are anchored in Investment Project Financing—that is, ERPAs are contracted to pay for emissions reductions that are generated through activities implemented within programs financed by Investment Project Financing. There are important practical consequences to this relationship: for example, Investment Project Financing projects are subject to the World Bank's rigorous environmental and social conditions, which in turn are important for ensuring the environmental and social integrity of the emissions reductions generated and contracted through ERPAs.

conducts necessary due diligence to ensure that the implementing country has the necessary environmental and social systems in place to monitor and manage environmental and social risks associated with the program, in accordance with the Bank's standards.

ERPAs are a critical component of how the ISFL, the World Bank, and their partners help countries access climate finance and achieve their mitigation, adaptation, and development goals. As a legal and financial instrument, an ERPA also plays a critical role in a results-based ER program by defining the process for how results-based payments will occur once the emissions reductions have been verified. Importantly, an ERPA enforces a set of methodological requirements, including those discussed in this report, that have been created by a standard. The ISFL ERPA enforces the ISFL standard, which is outlined in the ISFL ER Program Requirements and other key documents. Other funds or programs may use different standards.

The ERPA is critical for ensuring transparency so that both parties (the buyer and seller) clearly understand the specific terms of the transactions and payments. Like any other contract, an ERPA should be negotiated in a transparent and fully understandable manner by all parties involved. It should only be signed once all parties are content with their respective obligations. The contract should lay out all key terms and avoid any vagueness relating to the process being adopted and the roles of all parties in the transaction.

Before addressing the considerations and risks associated with ERPAs, it is important to first examine the broader context in which ERPAs are negotiated and signed.

Box 2: Case Study: Eastern Province, Zambia

Eastern Province, Zambia, is overwhelmingly rural, with over 70 percent of the population (2.1 million people) living in poverty. Nearly half of the population lacks adequate food access year-round. Communities rely heavily on agriculture and natural resources, which are increasingly threatened by climate change. Forested landscapes are vital to local livelihoods, driving economic growth, creating jobs, providing clean water, and supplying energy, while also housing globally important biodiversity.

Unfortunately, illegal encroachment, habitat fragmentation, and deforestation are harming the landscape, reducing biodiversity, and increasing GHG emissions. The main drivers of deforestation are agricultural expansion, especially for maize and cotton, and wood harvesting for charcoal or firewood, driven by declining soil fertility owing to poor farming practices.

The government of Zambia recognized the interconnected challenges leading to landscape degradation and adopted an integrated land use planning approach at the provincial scale. This approach aims to reduce forest encroachment, prevent deforestation, protect incomes, and build farmers' resilience to climate change. The goal is to achieve climate mitigation and adaptation goals while lifting local communities out of poverty. For this approach to become self-sustaining, communities need to see the benefits of improved land management practices through increased productivity and incomes. Verifying and monetizing emissions reductions from these activities can provide additional revenue to reward landscape users and encourage further adoption.

This approach forms the foundation of the ISFL's Zambia program, comprising the **Zambia Integrated Forest Landscape Program (ZIFL-P)** and its successor, the **Eastern Province Jurisdictional Sustainable Landscape Program (EP-JSLP)**. This resource will use the Zambia program as an example of a large-scale ER program that has negotiated an ERPA to monetize ER gains and motivate communities to adopt improved practices.

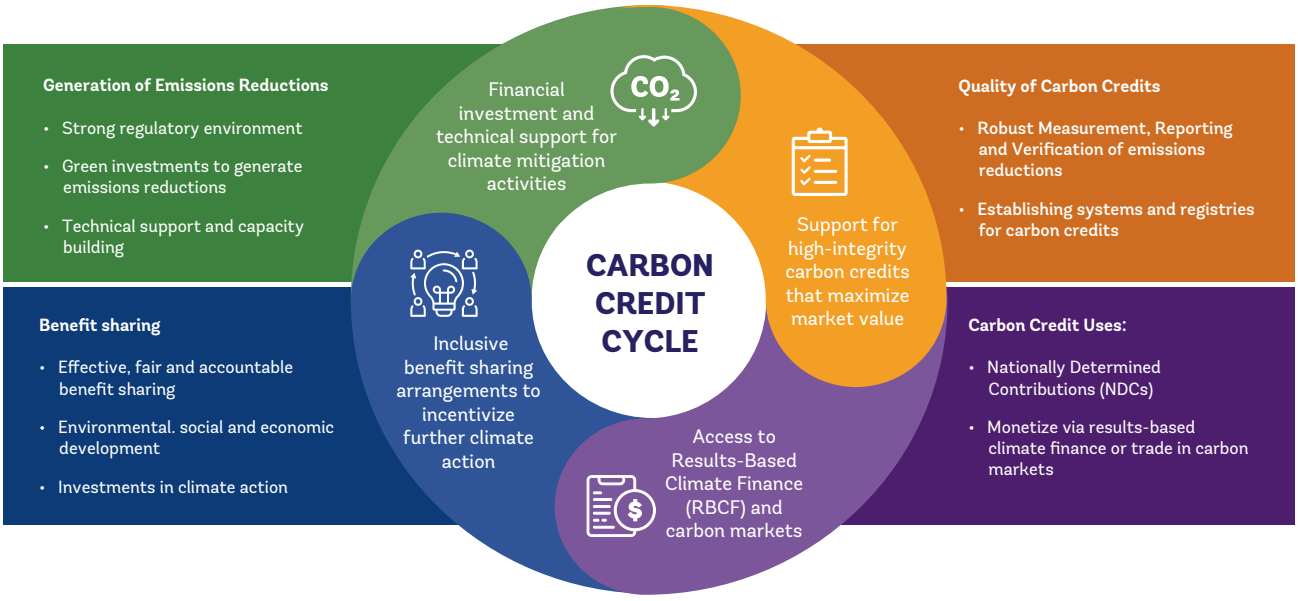
1.2 Carbon Credits

Emissions reductions occur when a low-carbon project (for example, a solar plant, forest preservation, or sustainable agriculture initiative) or policy (for example, subsidy removal) generates fewer emissions than a business-as-usual alternative (for example, a coal plant or a logging program). To calculate an ER, one must compare (a) the emissions that would occur if no changes were made (for example, continued deforestation or coal plant operation) with (b) the emissions after the changes are implemented (for example, reduced deforestation or a switch to renewable energy). The difference between the two represents the emissions reductions generated.

Reducing emissions not only benefits the environment but also builds the resilience of populations to climate change. When an ER undergoes a specific process (described in section 3), it can be converted into an asset called a **carbon credit**. A carbon credit is a certificate representing the mitigation or removal of 1 metric ton of carbon dioxide equivalent from the atmosphere. Currently valued at over US$1 billion annually—with scenarios projecting values of US$30 billion to over US$1 trillion by 2050—carbon credits are an increasingly crucial finance source for developing countries to achieve their climate goals.

Carbon credits can be monetized through results-based climate finance or through results-based carbon finance in international carbon markets (voluntary or compliance). The trading of carbon credits in international carbon markets is governed by different standards, including Article 6 of the Paris Agreement,[3] which facilitates international cooperation to reach climate goals. Voluntary markets, allowing individuals and companies to purchase carbon credits to offset emissions, operate outside of the Paris Agreement framework but represent an important financing source. Revenue from sales of carbon credits can reward communities for their efforts (for example, through a formal Benefit Sharing Plan, or BSP, as described in section 5.2) and provide sustainable financing for environmental programs. The generation and monetization of carbon credits creates a "virtuous cycle" (figure 1).

Figure 1: Carbon Credit Cycle



Note: MRV = measurement, reporting, and verification; RBCF = results-based carbon finance.

3 For a full list and definition of key terms and concepts used throughout this report, see the Glossary.

1.3 Results-Based Climate Finance and Results-Based Carbon Finance

One way to monetize emissions reductions is through **results-based climate finance (RBCIF).** RBCIF is a framework to make payments from a buyer, usually a sovereign nation, to a party in return for certain independently verified ER being achieved. Buyers pay entities (sovereign nations, private firms, or local communities) to achieve, report, and independently verify emissions reductions beyond the baseline. These results are tied to climate change mitigation activities, such as reducing GHG emissions through renewable energy or sustainable resource management. An independent verifier confirms the emissions reductions against the agreed-on requirements of the standard, generating Verified ER that can be monetized through direct payments (RBCIF). If transferred, these Verified ER become carbon credits that can be transacted in international carbon markets, generating results-based carbon finance (RBCaF). Importantly, RBCIF pays for the results (emissions reductions) of these mitigation activities but does not finance the underlying activities.

RBCIF ensures the delivery of high-integrity carbon credits, representing verified reduction or removal of GHG emissions associated with programs that meet rigorous standards of transparency, accountability, and environmental and social impact. RBCIF also facilitates the pricing of carbon credits and stimulates private sector investment, acting as a stepping stone for entities looking to engage in carbon markets.

As climate mitigation targets become more ambitious, market players are incentivized to invest in cleaner technologies and innovate their processes to reduce GHG emissions. RBCIF and RBCaF are mutually reinforcing, as RBCIF builds capacity and operational infrastructure for generating high-integrity carbon credits that can generate both RBCIF and RBCaF, opening opportunities for countries. RBCIF transactions are accounted for under Article 9 of the Paris Agreement, while international carbon market transactions (RBCaF) are governed by Article 6 of the Paris Agreement, which provides a centralized accounting mechanism for the international transfer of carbon credits between parties to the Paris Agreement.

Under RBCIF, a buyer pays for a verified outcome (for example, verified metric tons of carbon dioxide equivalent, or tCO_2e) following a previously agreed-on methodology and system for MRV, which can be based on an existing carbon standard. Carbon credits paid for under this model may have a fixed price or use a floor price that would allow the seller to find a third-party buyer willing to pay a higher price (see section 4). Carbon credits transacted through RBCIF stay with the host countries, which means they can use these to account against their Nationally Determined Contributions (NDCs). An example of this process under the ISFL can be found in appendix A.

ISFL programs, through their ERPAs, primarily generate RBCIF. ISFL programs can also generate RBCaF, as the generation of high-integrity carbon credits can potentially be traded in either voluntary carbon markets or compliance carbon markets, depending on (a) the preferences and needs of the seller, and (b) the seller's obligations to the buyer under the ERPA.

In voluntary carbon markets, corporations may pay for carbon credits to achieve climate commitments. For example, a corporation with net-zero commitments may purchase carbon credits in the voluntary markets to achieve its climate goals. In international carbon market transactions, the host country may issue a letter of authorization that authorizes the carbon project, approves the transfer of the carbon credits to the buyer, and confirms the host country is willing to apply a corresponding adjustment.[4] A corresponding adjustment is an accounting adjustment made by the host country to its national emissions balance to ensure that carbon credits sold to another party are not also counted toward its own climate targets and NDC, thereby preventing double counting. [5]

4 Carbon credits sold without authorization tend to sell for lower prices than carbon credits with authorization, with the corresponding adjustment representing an opportunity cost for the seller.

5 CORSIA represents an important potential source of demand for ISFL-generated emissions reductions. ISFL ER programs may be eligible to generate CORSIA-Eligible Emissions Units, with specific requirements in place for these to be issued.

Note that letter of authorizations and corresponding adjustments are not required for voluntary market transactions; the use of the transferred carbon credits is determined by the buying entity's jurisdiction. In the compliance international carbon market, mainly carbon credits with a letter of authorization and corresponding adjustment are traded. These credits are referred to as Internationally Transferred Mitigation Outcomes (ITMOs) or Article 6.4 credits under the Paris Agreement. Since compliance market credits are used to meet NDC targets through Article 6 or other compliance requirements, such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), it is important to ensure there is no double counting.

Box 3: Case Study: ISFL Zambia Program

In box 2, we introduced the context of Eastern Province, Zambia, setting the stage for the ISFL's Zambia program. The ISFL Zambia program aims to improve landscape management and increase environmental and economic benefits for rural communities in the Eastern Province. This integrated approach addresses interrelated issues of climate change, biodiversity loss, deforestation, food insecurity, and poverty across the entire landscape. The program is cofinanced by the Global Environment Facility (GEF) and supported by an International Development Association (IDA) loan.

The program collaborates with various levels of government, community forest management groups, traditional authorities, and other stakeholders to implement integrated land use planning approaches, conserve protected areas, and generate income from sustainable forest products. Recognizing the importance of agriculture for climate mitigation, adaptation, livelihoods, and food security, the ISFL Zambia program supports farmer field schools that teach farmers climate-smart agriculture techniques and promotes alternative livelihood activities like honey production. Additionally, the Department of Energy, under the Zambian Ministry of Energy, has trained community members to construct energy-efficient fixed mud stoves. These stoves run on twigs gathered from the forest floor, reducing the need to cut down trees and alleviating pressure on the forest.

The ISFL Zambia program also supports biodiversity conservation in Lukusuzi and Luambe National Parks. It promotes community participation in biodiversity conservation through community resource boards in protected and adjacent areas. The program funds wildlife monitoring and works to mitigate human-wildlife conflict by mapping animal corridors and engaging communities using Indigenous knowledge to protect these corridors.

These activities seek to address key environmental and economic issues, increase resilience, promote biodiversity, and reduce emissions. The emissions reductions from these activities can be monetized through the **ERPA**.

2. DESIGNING AN ERPA

The previous section introduced carbon credits and the broader context in which an ERPA is negotiated and signed. This section and the next ones focus on the ERPA itself: the key questions that need to be considered, discussed, and agreed on to facilitate the signing of an ERPA, and the implementation of the ER program it contains. While the focus is on the considerations and risks associated with negotiating an ISFL ERPA, an ERPA is simply one legal tool. Many of the issues it addresses will be relevant for anyone negotiating the sale of carbon credits, particularly from natural climate solutions.

Here are some key considerations when designing a contract to buy or sell a carbon asset.

Technical Considerations

Where are emissions reductions coming from?

The selection of a crediting approach determines the framework within which emissions reductions are measured, credited, and later transacted under the ERPA.

How will emissions reductions be calculated?

The methodological framework for calculating emissions reductions is defined by the relevant standard—in the case of the ISFL, it is the ISFL standard—and then adherence to the chosen methodology is enforced through the ERPA.

How will emissions reductions be confirmed to have taken place?

Measurement, reporting, and verification is an essential part of an ER program. Compliance with the MRV processes required by the given standard and enforced by the ERPA is essential for issuing and ultimately transacting high-integrity carbon credits under the ERPA.

What volume and type of emissions reductions will be generated and purchased?

The ERPA defines the volume and type of emissions reductions, including Contract ER and Additional ER, each with their own set of obligations for parties involved.

How will reversal and uncertainty risks be managed?

The ISFL standard includes provisions for a buffer mechanism that is then enforced by the ERPA, providing a legal mechanism to mitigate against reversal risk and ensure the integrity of the emissions reductions transacted.

Legal Considerations

Prior to signing the ERPA, does the seller have the right to transfer legal title of the emissions reductions?

The ERPA requires the seller to confirm and provide evidence of their right and ability to transfer legal title of the emissions reductions to the buyer, free of any interest, encumbrance, or claim of a third party other than in accordance with the ERPA, and in compliance with domestic laws and regulations.

What are some of the additional, non-negotiable terms contained in ISFL ERPAs?

ISFL ERPAs include additional terms by reference, including non-negotiable terms set out in the General Conditions, as well as additional requirements outlined in the Program Requirements and Buffer Requirements.

What conditions of sale and purchase need to be met before a country can receive an ER payment?

While ERPAs are effective from the date signed, to receive an ER payment, the seller must meet conditions of sale and purchase outlined within the ERPA.

What does a phased approach to an ER program look like?

ERPAs can accommodate for the progressive implementation of a program using a phased approach, which includes multiple legal agreements that outline terms for the overall program and each phase.

How are project-level activities legally integrated into jurisdictional programs?

Jurisdictional ER programs may incorporate existing or new projects into a broader ERPA framework, which brings about additional legal, social, and commercial considerations.

Environmental and Social Considerations

Who will receive payments and benefits from the sale of carbon credits?

Payments and benefits from the sale of carbon credits under an ERPA are legally required to be distributed through a BSP, ensuring equitable and efficient distribution to local communities and relevant stakeholders.

What measures are in place to ensure that ER programs minimize environmental and social risks and benefit communities taking part?

Within the World Bank, all ERPAs are linked to projects that must comply with broader environmental and social guidelines that further help to ensure high levels of social and environmental integrity for the carbon credits generated and transacted under an ERPA.

Commercial Considerations

How will carbon credits be issued?

Measured, reported and verified emissions reductions contracted under ERPAs are subsequently certified, issued, recorded, and ultimately transacted through a transaction registry as carbon credits.

What can transacted carbon credits be used for?

The ERPA defines how carbon credits can be monetized, with two modalities that offer different implications for usage and price.

How much will the seller get paid for the carbon credits?

The ERPA defines the price of emissions reductions contracted. Under the ISFL, this price is treated as a floor price.

What happens if a third party makes an offer to purchase carbon credits?

ISFL ERPAs include legal provisions for countries to find third-party buyers who may offer higher prices than the agreed-on floor price defined in the ERPA, with terms that allow the ISFL to match these offers, and obligations that a host country must fulfill if selling to a third party.

Box 4: Case Study: Signing an ISFL ERPA

"This ERPA marks an exciting time for Zambia. Our communities have joined together to improve our environment, adopting better practices in homes and on the land, and now we will begin to reap additional economic benefits from that hard work." [a] —Collins Nzovu, Minister of Green Economy and Environment for Zambia, May 24, 2024

The ERPA between the ISFL and Zambia was signed in June 2024. Through the ERPA, the ISFL will provide payments of up to US$30 million in exchange for carbon credits. The ERPA with Zambia establishes a floor price (see section 6.3) for the integrated, jurisdictional carbon credits generated in Eastern Province and commits the ISFL to purchase a portion of them. The ERPA payments will be channeled through a BSP, ensuring that the money from the sale of carbon credits goes directly to communities, enabling them to continue activities initiated under the program and produce even greater emissions reductions (see section 5.1).

The program activities in Eastern Province, and later, the distribution of benefits through the BSP, will comply with the World Bank Environmental and Social Framework. The emissions reductions generated from the program activities are monitored and reported by the host country and verified by an independent validation and verification body against the ISFL Program Requirements, the ISFL's methodological framework. The Verified ER are then issued as ISFL carbon credits.

The Zambia program aims to generate many more carbon credits than the ISFL will purchase. These will be measured, reported, and verified under the ISFL standard, providing Zambia with an asset that they can sell to third-party buyers, using the money earned to support communities across Eastern Province.

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a. For the complete World Bank press release, see: https://www.worldbank.org/en/news/press-release/2024/05/21/zambia-afe-and-world-bank-sign-agreement-to-cut-carbon-emissions-in-eastern-province.

3. TECHNICAL CONSIDER-ATIONS

3.1 Where Are the Emissions Reductions Coming From?

A key decision point in the design of an ERPA and the associated ER program is selecting an appropriate **crediting approach**. There is a range of crediting approaches—programmatic, policy based, sectoral, project by project, and jurisdictional—and selection depends on the nature of the supported mitigation activity. For the ISFL, a jurisdictional crediting approach is used. This approach offers many benefits to sustainable landscape programs, including reduced risk of leakage (for example, increasing deforestation outside of project boundaries), enhanced transparency, greater equity and inclusion in benefit sharing, and improved cooperation across sectors and government institutions.

The World Bank recently published a comprehensive guide to different carbon crediting approaches.

3.2 How Will Emissions Reductions Be Calculated?

Along with a crediting approach, an ER program needs a methodological framework to determine how an ER will be calculated. A **methodological framework** is outlined in a standard—in this case, the ISFL standard—and comprises a set of technical components integrated into a program to quantify an ER and support environmental integrity. The methodological framework should outline one or both of the following:

- **Business-as-usual (BAU) emissions:** This includes the emissions trajectory for the economy or sector in the absence of the activities. The BAU trajectory can form the program's baseline, and a country's conditional or unconditional NDC targets can also inform the baseline.[6]

6 The type of target set in the NDC and applicable to the ER activity can help determine the crediting threshold. Unconditional targets are those that a country commits to achieving without international support. Conditional targets are those that are contingent on receiving international support.

- **Crediting threshold:** This refers to the trajectory against which Additional ER are generated due to a particular program or policy. This trajectory is usually set with emissions below the baseline.

Other key aspects to consider for the methodology's development include the following:

- **Additionality:** The emissions reductions should represent activities beyond the BAU and/or unconditional NDC target.
- **Permanence:** Activities and/or policies leading to the emissions reductions not being stopped or reversed in the future.
- **Avoidance of double counting:** Only one party should use the emissions reductions for compliance purposes—for example, through a letter of authorization for a corresponding adjustment.
- **Leakage:** Activities or policies leading to the emissions reductions should not simply cause the emissions to shift to a location that is not monitored or targeted.

Methodological frameworks will differ based on the sector. In some cases, existing frameworks can be used, while in other instances, methods may need to be adapted or created. For example, while the Intergovernmental Panel on Climate Change's (IPCC) frameworks allow for accounting for emissions reductions in land use sectors, the ISFL (and the FCPF) have developed new and more focused frameworks that allow for ER accounting with sufficient confidence for results-based payments.

The ISFL's methodological framework is outlined in the ISFL Program Requirements and was developed through a series of workshops and a public consultation period. The framework sets forth approaches for setting baselines and accounting for emissions reductions at a landscape scale, considering existing concerns and limitations in countries' ability to account and report on emissions across different land use categories. Similarly, the FCPF developed a novel methodological approach for carbon accounting for REDD+ activities at a jurisdictional scale.[7]

3.3 How Will Emissions Reductions Be Confirmed to Have Taken Place?

Measurement, reporting, and verification refers to an adopted multistep process:

a. Measuring the amount of GHG emissions reduced by a specific mitigation activity, such as reducing emissions from deforestation and forest degradation, over a period of time

b. Reporting these findings to an accredited third party

c. Verifying the report via the third party for the certification of the results and the issuance of carbon credits

Essentially, MRV aims to prove that an activity has removed or avoided the generation of harmful GHG emissions. This, in turn, means that the actions taken in relation to the activity can be converted into credits with monetary value. One credit equals 1 metric ton of reduced GHG emissions, expressed in terms of tCO_2e. These credits are related to the results that the buyer pays for through specific results-based finance arrangements, such as the ISFL's ERPAs. They are also the basic units traded in international carbon markets and are used to fulfill participating countries' NDCs under the Paris Agreement, among other purposes. Therefore, MRV is key for unlocking climate finance and demonstrating transparent progress on climate goals.

For a carbon credit to be issued, a project must go through several stages.[8] First, the project must

7 In addition to the ISFL and FCPF methodological approaches, at the time of writing this document, some of the key REDD+ methodologies include the Architecture for REDD+ Transactions (ART) – The REDD+ Environmental Excellence Standard (TREES) and the Jurisdictional and Nested REDD+ (JNR) Framework under Verra's Verified Carbon Standard (VCS) Program.

8 For a detailed overview of the ISFL carbon crediting cycle, see appendix B.

develop a **project document** that details the project design and planned actions and interventions, defines a baseline, and determines with which standard or methodological framework the project will align (such as the Verified Carbon Standard or the Gold Standard; the ISFL and FCPF also have their own standards). This project document must then go through external validation by a validation and verification body. Following validation, the project implements activities and monitors results. These results are reported in a monitoring report that needs to be verified by a validation and verification body to confirm the total units of Verified ER generated. Once validated and verified, a verification report is prepared, and carbon credits can be issued through a registry (such as the World Bank's Carbon Assets Tracking System [CATS]), usually defined by the carbon crediting program.

Box 5: Case Study: Designing Context-Specific MRV

In the ISFL Zambia program, MRV is carried out at three administrative levels: (a) national, (b) provincial, and (c) district, in coordination with chiefdoms. While data collection takes place at the provincial and district levels, quality control, data analysis, and coordination are carried out at the national level. Various government agencies and actors are involved in the MRV process, including the following:

- The Forestry Department, which measures maintenance or reductions in forest cover
- The Ministry of Agriculture, which measures different agricultural indicators such as the use of fertilizer and crop residue
- The Ministry of Energy, which calculates reduced emissions from clean cookstoves
- Chiefdoms, which play an important role in approving data collection activities
- The Zambia Environmental Management Agency (ZEMA), which pulls all the data together

The project's MRV strategy looks beyond the ERPA and seeks to modernize the country's MRV capacity and systems, enabling Zambia to enhance its ability to measure and report emissions reductions, engage in carbon markets, and meet its NDC.

3.4 What Volume and Type of Emissions Reductions Will Be Generated and Purchased?

The negotiation process of an ERPA includes defining the volume of emissions reductions that will be generated by the host country and the volume that will be purchased by the ISFL (or equivalent buyer). Two kinds of emissions reductions are defined in the ERPA:

- **Contract ER:** These are the amount of emissions reductions that a host country commits to generate and sell under the ERPA during the crediting period. The buyer is obligated to purchase these emissions reductions once they are generated, verified, and transacted under the ERPA and compliance with World Bank Environmental and Social Framework is confirmed.
- **Additional ER**: These are emissions reductions beyond the full Contract ER defined in the ERPA that may be transacted under the ERPA during the crediting period. When a country has delivered all the Contract ER and the final verification report confirms the generation of Additional ER, the buyer has the right, but not the obligation, to transact these additional reductions through a provision known as the call option. Additional ER are subject to adherence to the program's BSP and compliance with the World Bank Environmental and Social Framework.

Note that there may also be **Excess ER**, which are not part of the ERPA but can be generated through the ER program. These are emissions reductions generated by the host country that have been verified and issued by the ISFL but not purchased by the ISFL. They are not accounted for under the ERPA either as Contract ER or under a call option. The host country is free to use these emissions reductions as they choose.

3.5 How Will Reversal and Uncertainty Risks Be Managed?

Emissions reductions represent carbon dioxide equivalent that has been removed from the atmosphere and stored, typically in natural resources such as forests. However, forests and other natural climate solutions are susceptible to reversal events, where the carbon that was removed and monetized can be released back into the atmosphere. This effectively reverses the carbon sequestration and negates the emissions reductions. Reversal events, such as deforestation and forest fires, result in carbon emissions and devalue carbon assets unless reversal risks are effectively managed. The risk of reversals sits with the buyer of the emissions reductions.[9]

To mitigate this risk and maintain high-integrity carbon credits, the ISFL standard establishes a buffer mechanism, outlined in the ISFL Buffer Requirements, that is proportionate to the specific level of risk of a particular program. This buffer mechanism is then enforced by the ERPA. Under the ERPA General Conditions,[10] **Buffer ER** are emissions reductions that have been generated, verified, and transferred into a buffer account in the CATS registry as a risk management mechanism against uncertainty and reversals. If transferred emissions reductions are reversed or found to be insufficient during the ERPA term, an equivalent number of Buffer ER are canceled to offset the loss. This ensures that the total amount of emissions reductions paid for under the ERPA remains unaffected by any reversal event even in the case of some ER losses. The amount of Buffer ER required for each program is in addition to the agreed-on number of Contract ER and Additional ER under the ERPA. The exact amount is calculated as a percentage of the total Verified ER, determined by the buffer manager considering the relevant reversal risks and in accordance with the ISFL Buffer Requirements.

During the ERPA term, Buffer ER can be released from the buffer account and sold if the risk of reversals

9 This is true unless the ERPA specifies otherwise. If reversal risk is not mitigated by the seller, it may deter carbon market participants from purchasing the credits or require the application of significant price discounts.

10 The General Conditions are a set of typically non-negotiable terms that apply to all ISFL-funded programs.

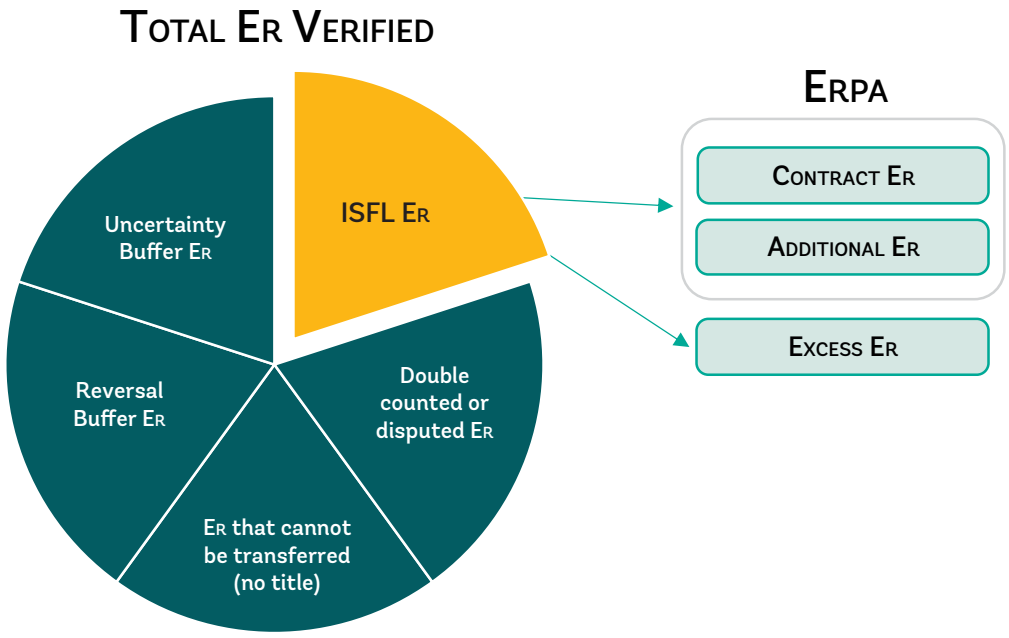
and uncertainty decrease at subsequent verification events, allowing the percentage of emissions reductions to be set aside as Buffer ER to decrease. At the conclusion of the ERPA term, remaining Buffer ER are either canceled or retained in a post-ERPA reversal management mechanism managed by the seller and acceptable to the trustee. Depending on the ER program, Buffer ER can be required to mitigate different risks, including the following:

- **Uncertainty risks** related to uncertainty associated with the estimation of emissions reductions.
- **Reversal risks** related to the potential reversals, which involve the intentional or unintentional release of carbon back into the atmosphere. This might be caused by natural disturbances, climate change, or anthropogenic activities. For example, if an ER program generates 10 million tons of emissions reductions over five years, but in the fifth year a forest fire generates 1 million tons of GHG emissions, the previously transacted and paid-for emissions reductions are protected against this reversal event by the cancellation of 1 million Reversal Buffer ER.

As shown in figure 2, a program's total gross emissions reductions, which are those generated by the ISFL jurisdiction within a given time frame (reporting period), are subject to certain discounts, including those related to emissions reductions that have already been claimed by or committed to another party, emissions reductions that lack the right to transfer title, and emissions reductions that go into the buffer account in the CATS registry (which includes both Uncertainty and Reversal Buffer ER). After these discounts have been made, the remaining emissions reductions are available to be transacted with the ISFL under the ERPA (Contract and Additional ER) or available to be sold to a third party or used toward a country's NDC under the Paris Agreement (Excess ER). Both the gross emissions reductions and the net ISFL emissions reductions are verified by an independent validation and verification body.

Under the ISFL, Contract ER, Additional ER, and Excess ER all have the *potential* to be transacted with third parties. However, they come with different obligations and require different processes (see section 6.4). Any amounts of Contract or Additional ER sold to third parties must be net amounts. This means that even if the host country sells emissions reductions to a third party, it still needs to set aside a certain number of Buffer ER to manage risks of uncertainty and reversals.

Figure 2: Total ER Verified



Note: ER = emissions reductions; ISFL = BioCarbon Fund Initiative for Sustainable Forest Landscapes.

4. LEGAL CONSIDER-ATIONS

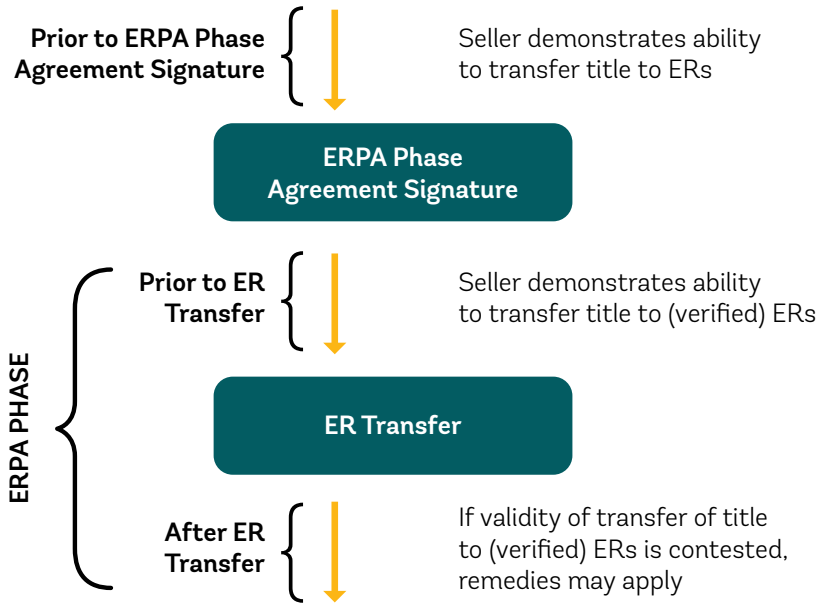
4.1 Prior to Signing the ERPA, Does the Seller Have the Right to Transfer Legal Title of the Emissions Reductions?

The presence of domestic laws and regulations that clearly define the ownership of the emissions reductions and the procedure for their transfer is a critical factor in ensuring legal security for ER transactions. However, many countries lack clear or comprehensive legal and regulatory frameworks regarding ER ownership and the parties entitled to engage in ER transactions. Some domestic laws and regulations make it clear who own the emissions reductions and how the emissions reductions can be transferred, but many countries have an unclear or incomplete legal and regulatory framework for governing emissions reductions. While a legal consideration, the question of title is also a significant social consideration, especially in jurisdictional programs.

Different standards have different requirements and process around title. Under the ISFL, the ERPA requires the seller to confirm, throughout the ERPA term, that it has the ability to transfer legal title of the emissions reductions to the buyer, free of any interest, encumbrance, or claim of a third party other than in accordance with the ERPA.[11] A selling country can demonstrate this in many ways; however, identifying the applicable approach and providing clear evidence and documentation are not always straightforward. Ensuring rights and interests in emissions reductions have been legally acquired and transferred is essential for ensuring high-integrity and high-value carbon credits for the seller. The ISFL's Guidance Note on the Ability of Program Entity to Transfer Title to Emissions Reductions outlines some of the key approaches and relevant considerations for countries looking to be able to demonstrate the ability to transfer legal title.

11 Section 14.01(a) of the General Conditions.

Figure 3: Transferring Titles in ERPAs



Note: ER = emission reductions; ERPA = Emission Reductions Purchase Agreement.

4.2 What Are Some Additional, Non-negotiable Terms Contained in ISFL ERPAs?

An ERPA can include all the terms and details relevant to the agreement between the buyer and the seller of the emissions reductions. However, often the ERPA will incorporate additional terms by reference. For example, the ISFL ERPAs include by reference additional terms contained in the General Conditions and additional requirements outlined in the Program Requirements and Buffer Requirements. The General Conditions are typically non-negotiable terms that the parties agree to and that apply to all ISFL-funded ER programs, whereas the ERPAs are unique to each particular ER program and detail the program-specific agreed-on commercial terms, covenants, and conditions. Some General Conditions are discussed at length in this resource, Buffer ER (section 3.5), title ownership (section 4.1), and benefit sharing (section 5.1). The following paragraphs summarize the remaining key General Conditions applicable to ISFL-financed ER programs.

Transfer, Payment, and Retransfer

The General Conditions specify the requirements, process, and timing required for the transfer, payment, and, where relevant, retransfer of emissions reductions. For example, Section 5.01 of the General Conditions states that the seller has 180 days following the end of a reporting period to submit to the buyer (the World Bank) the ER monitoring report for that period. This report provides, among other things, details of the number of emissions reductions generated, details of any reversal events (such as forest clearing or fires) and mitigation steps to address such events, reporting on environmental and social management, and information regarding the seller's ability to transfer legal title of all the emissions reductions to be transferred to the buyer.

The ERPA provides time frames for the review and submission of the verification report that verifies the information provided in the ER monitoring report, and the possibility of having the title of the emissions reductions retransferred back to the seller to be used against the seller's NDC. Note that whether emissions

reductions are to be retransferred back to the seller will depend on the agreed-on ER Use Modality (section 6.2) and related unit price (section 6.3), details that are typically recorded in the ERPA itself.

Events of Default

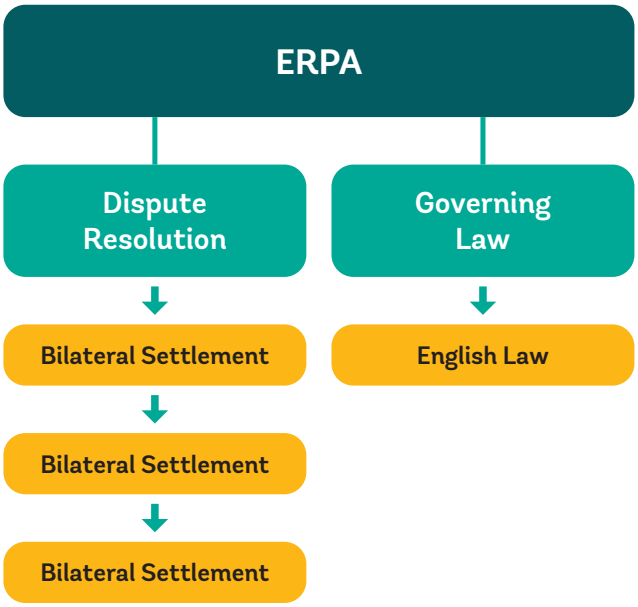
Failure by either party to comply with certain requirements under the General Conditions or ERPA can amount to an event of default, which may allow either the seller or buyer to (a) issue a notice of the default or action plan to remedy the default, and potentially (b) exercise its remedies, which may include terminating the ERPA, effectively ending financing for the ER program. Examples of events of default include failing to transfer the agreed-on amount of emissions reductions, delays in the program development, intentional breaches, or other breaches of agreed-on conditions, such as the requirement to adhere to the Environmental and Social Framework, or to implement the Safeguards Plans or the BSP. Depending on the nature of the event of default, the potential remedies available may include terminating the ERPA or reducing the volume of Contract ER.

Dispute Resolution and Governing Law

The General Conditions include standard details that are essential for most contracts, such as the governing law and dispute mechanism procedure. Noting that ERPAs are typically agreements between a sovereign country and a buyer, the ERPA specifies which law applies and in which jurisdiction any disputes are to be resolved. For ISFL ERPAs, English law applies.

The dispute resolution procedures require the parties to first meet and try to resolve the dispute. If this is unsuccessful within 60 days, and if both parties agree, they can proceed to an amicable settlement of the dispute through a United Nations Commission on International Trade Law (UNCITRAL) conciliation process. If conciliation is unsuccessful or both parties do not agree to the conciliation process, either party may refer the settlement to UNCITRAL arbitration. Arbitration processes and awards are generally final and binding (figure 4).

Figure 4: Dispute Resolution and Governing Law



Note: ERPA = Emission Reductions Purchase Agreement; UNCITRAL = United Nations Commission on International Trade Law.

4.3 What Conditions of Sale and Purchase Need to Be Met before a Country Can Receive an ER Payment?

ERPAs are generally effective from the date all parties have signed; however, all conditions of sale and purchase must be met before the first ER payment can be made under an ERPA. These conditions are program specific and typically actions that the seller must complete before the buyer is required to make any payments for the emissions reductions. Common conditions include the following:

- Submission of evidence, satisfactory to the buyer, that the seller has the ability to transfer title to the emissions reductions generated, free of any interest, encumbrance, or claim of a third party
- Submission of a letter of approval confirming the host country's government's approval of the ER program and implementation arrangements
- Submission of a final satisfactory BSP
- Submission of a letter confirming the application of the buffer and related buffer requirements
- Submission of executed arrangements between the key entities with program implementation responsibilities

The ERPA contains a deadline by which these conditions must be met, which is typically 12 months after the ERPA is signed.

4.4 What Does a Phased Approach to an ER Program Look Like?

ISFL ER programs can be prepared and implemented in different phases, which allows for progressive implementation as different sectors and entities become ready. To accommodate a phased approach to program implementation, a seller will enter into an ERPA Framework Agreement with the buyer that governs key terms applicable to all phases of the program. Additionally, the seller will also enter into an ERPA Phase Agreement for each phase of the program. The ERPA Framework Agreement includes provisions regarding the following:

- Duration, sector, and number of phases
- Indicative ERPA value and Contract ER volumes
- Program start date
- ER transfer/retransfer selections
- Third-party offers (that is, the right of the seller to pursue third-party buyers offering a higher unit price) and the seller's right of first refusal (that is, the requirement to give the buyer the option of purchasing the emissions reductions at the price offered by a third-party buyer)
- Requirements for good faith efforts to ensure corresponding adjustments are made for transferred ER under the carbon finance modality consistent with Article 6.2 of the Paris Agreement
- Buyer cost recovery, if applicable
- ERPA Phase Agreement negotiations and time frames
- ERPA term

Each ERPA phase is governed by both the ERPA Framework Agreement and the applicable ERPA Phase Agreement. If an ER program has only a single phase, then the terms of the ERPA Framework Agreement and the ERPA Phase Agreement can be combined into a single contract. When multiple phases are planned (for example, one phase per sector), these can be negotiated and implemented in parallel or sequentially, and a new ERPA Phase Agreement will be signed for each phase. ERPA Phase Agreements include provisions regarding the following:

- Duration of the ERPA phase and end date
- Conditions of effectiveness
- ERPA phase amount and ER Use Modality selections (which Use Modality and in what percentages for each phase)

- → Unit price for each ER Use Modality
- → Reporting periods and minimum emissions reductions to be transferred for each reporting period
- → Buyer rights to the generated emissions reductions (including rights to Additional ER generated above the agreed-on amounts)

Box 6: Case Study: Phased ERPAs in Ethiopia

Ethiopia's ISFL-financed Oromia Forested Landscape Program is one of the first multisector ER crediting operations. An ERPA Framework Agreement and the first ERPA Phase Agreement were signed in February 2023. The Framework Agreement provides an indicative total ERPA value of US$40 million, which will be delivered across two phases in accordance with two ERPA Phase Agreements. The first ERPA Phase Agreement facilitates transactions for emissions reductions generated from the forestry sector. The second ERPA Phase Agreement is anticipated to facilitate transactions for emissions reductions generated from the agriculture and livestock sectors; it will be negotiated once phase 2 of the operation is ready for implementation.

4.5 How Are Project-Level Activities Legally Integrated into Jurisdictional Programs?

REDD+ initiatives can occur at different levels within a jurisdiction. Where ER projects exist within a jurisdictional ER program area, additional steps and due diligence must be undertaken to avoid double counting and potential undermining of the integrity of emissions reductions. During the preparation of ER programs, parties need to do the following:

(a) Understand and define the scope of existing ER projects.
(b) Confirm the arrangements between existing ER projects and the proposed jurisdictional ER program.
(c) Review and confirm the program entity's ability to transfer title of the ER program emissions reductions considering the existing ER projects.

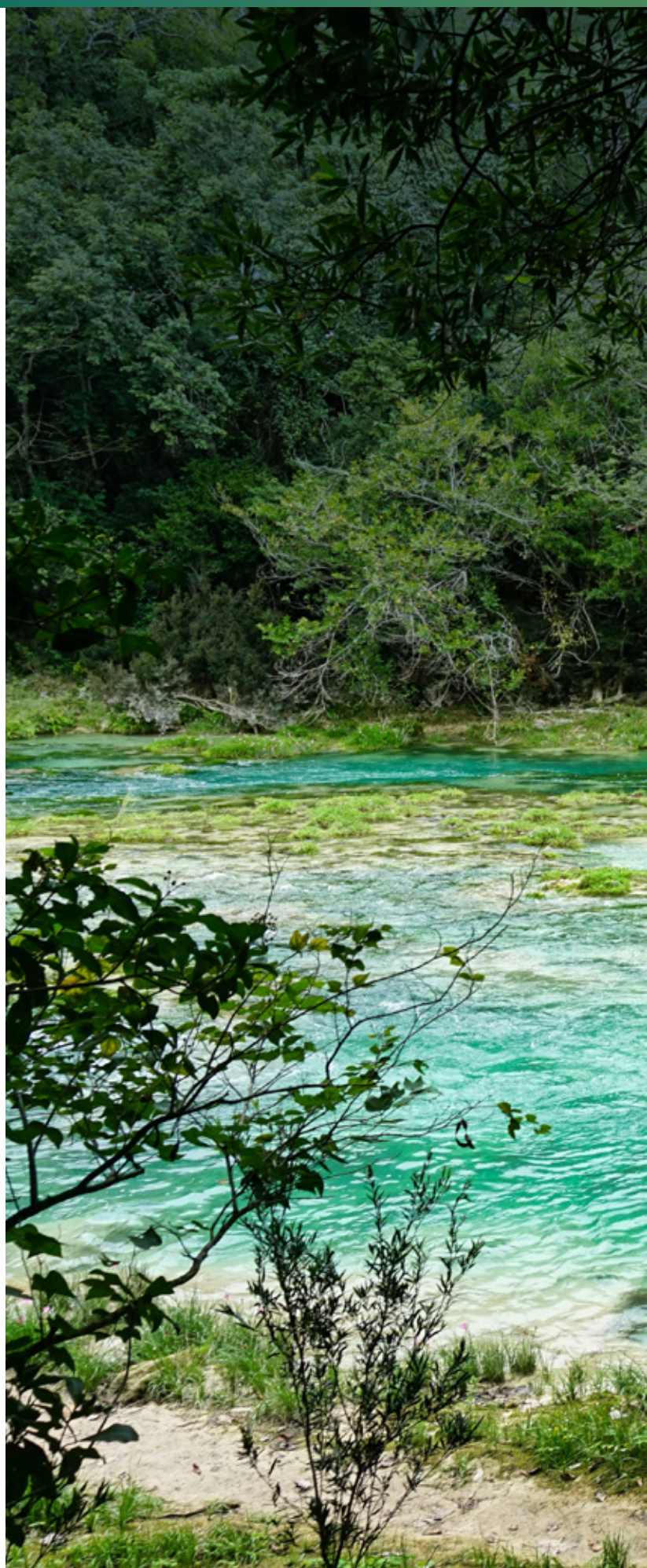
As part of this process, the program entity may need to do the following:

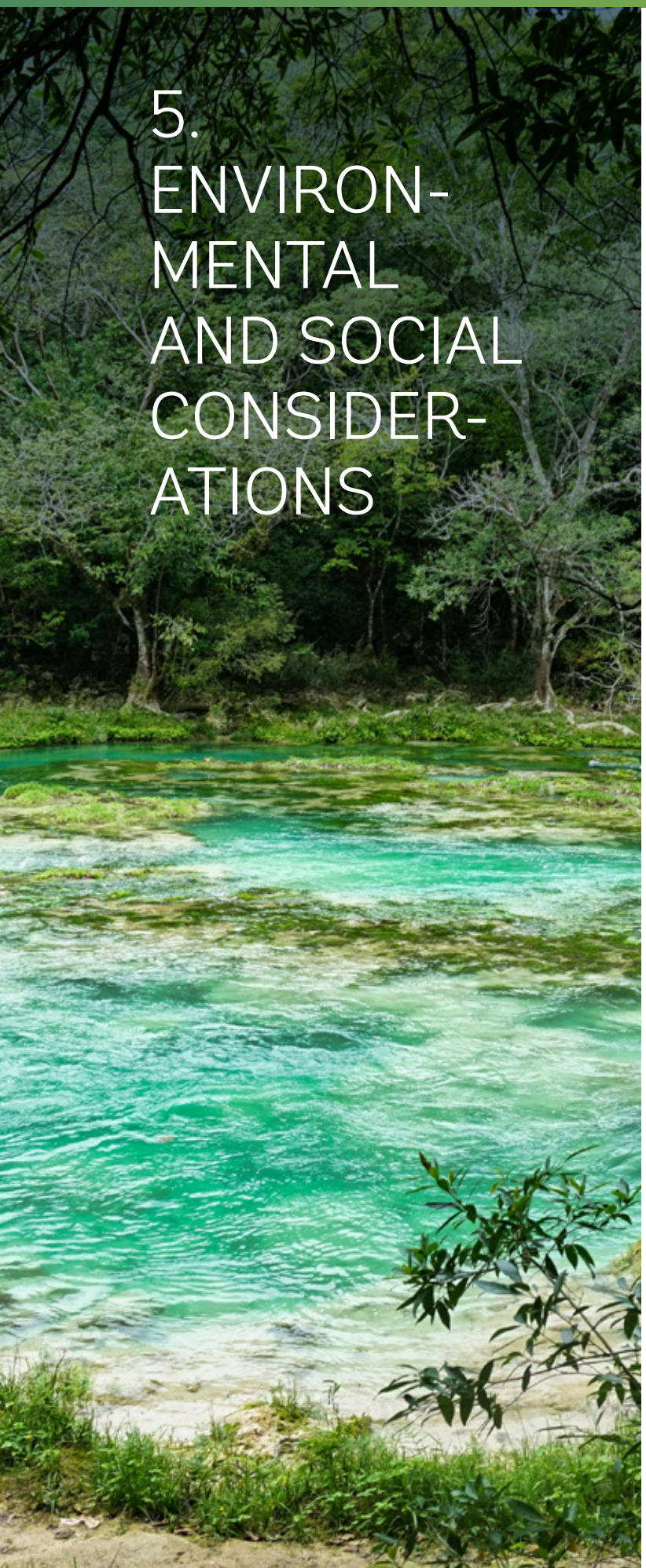
- → Establish legally binding arrangements (for example, nesting contracts, sub-agreements, or memoranda) between the program entity and project developers. These arrangements should clearly define roles and responsibilities, ER attribution rules, data-sharing protocols, and MRV alignment. These arrangements should ensure consistency in baseline setting, accounting methodologies, and registry systems across all levels to avoid double counting.
- → Ensure that the jurisdictional ER program has clear legal authority—either through national law, regulation, or other instruments—to aggregate ER claims from nested projects.
- → Clearly define the legal basis for the allocation or transfer of title to the ER generated at the project level, including any required approvals or consents from public authorities. Nesting arrangements should include dispute resolution clauses and mechanisms to handle conflicts related to ER attribution, benefit sharing, or methodological inconsistencies.
- → Nested projects should comply with environmental and social safeguards and be integrated into the BSP.[12]

Nesting of existing or new sub-jurisdictional projects into a larger jurisdictional ER program also brings about important technical and social considerations. This is particularly true when considering how to

12 For a detailed discussion regarding the necessary considerations for policy makers regarding the nesting of REDD+ projects in jurisdictional ER programs, see the FCPF's publication *Nesting of REDD+ Initiatives: Manual for Policymakers*.

incentivize private sector project developers within a model that emphasizes the distribution of revenue to local communities through a benefit sharing mechanism. For a more detailed discussion of how the ISFL approached these questions in the Zambia case, see appendix C.





5. ENVIRON-MENTAL AND SOCIAL CONSIDER-ATIONS

5.1 Who Will Receive Payments and Benefits from the Sale of Carbon Credits?

Social inclusion is central to the ISFL approach, ensuring that benefits from ER programs, including payments for carbon credits, reach communities through a **Benefit Sharing Plan**.[13] BSPs are essential for engaging stakeholders, providing compensation for costs incurred, and sustaining low-carbon practices by reinvesting some payments into these underlying activities that generate emissions reductions. BSPs help perpetuate a virtuous cycle, promoting sustainable development and climate mitigation. In jurisdictional programs, results-based revenue plays a critical role in helping finance the larger governance and policy functions that underpin the effectiveness and sustainability of these programs.

Under the General Conditions, both monetary and nonmonetary benefits must be shared in accordance with the BSP. The General Conditions also require that sellers report monetary, nonmonetary, and non-carbon benefits through ER monitoring reports and confirm that the benefits are in accordance with any environmental and social safeguard plans.[14] Benefits can include both carbon and non-carbon benefits. Carbon benefits come from revenue from the generation of carbon credits and include both monetary benefits, such as cash payments, and nonmonetary benefits, such as community development and capacity building. Non-carbon benefits result from investments or activities involved in carbon credit generation; they include empowerment, land tenure, improved resilience, and more. Non-carbon benefits, like improved land tenure, can be particularly valuable to local stakeholders.

Recipients of benefits are often referred to as beneficiaries, but this term has been challenged

13 For more information on benefit sharing under the ISFL, see *Note on Benefit Sharing for Emission Reductions Programs Under the Forest Carbon Partnership Facility and BioCarbon Fund Initiative for Sustainable Forest Landscapes* and *Designing Benefit Sharing Arrangements: A Resource for Countries.*

14 Section 5.01(b) of the General Conditions.

in recent times. A forthcoming guide to impactful benefit sharing uses the term "local partner" instead, recognizing the role of the communities and individuals who receive benefits for their contribution to a program. The local partners may include communities, civil society, and the private sector, including any nested projects. Governments, as implementers, may also retain a certain amount of results-based finance to cover their costs for implementing and/or managing the ER program.

Designing a BSP is a complex process. There needs to be clear identification of what is the problem (drivers of emissions), what is the purpose of the benefit sharing, who is involved, and what the intervention is. Answering these questions and developing the BSP requires wide-ranging stakeholder consultation involving not only government entities but also Indigenous Peoples, local communities, women, youth, other marginalized and vulnerable populations, civil society organizations, and relevant private sector. This is to ensure that all relevant beneficiaries and benefits are collectively considered to ensure a fair distribution of benefits. This process also ensures that there is two-way communication about how and when communities can receive benefits. During the consultation process, stakeholders are made aware that the distribution of benefits relies on the successful generation, verification, and transfer of ER. Any potential risks to ER generation and transfer should be clearly communicated in case the ER program underperforms or does not perform.

Successful benefit sharing fulfills the principles of effectiveness, efficiency, and equity, while impactful benefit sharing also fulfills the principles of legitimacy and sustainability. Legitimacy refers to ensuring that the process and outcomes are just, legal, accountable, and socially inclusive. Sustainability refers to the permanence of the program and impacts. All the principles are interdependent and can reinforce or be in conflict with each other.

As discussed in the previous section, if a third-party purchases contract or Additional ER, the payments for the emissions reductions must be disbursed through the BSP. The third-party offer, which the host country needs to show to the ISFL as proof that the offer is legitimate, must explicitly state that the sale revenue from the payment must be shared through the BSP and reported on by the host country—just as if the payment received had been through the ERPA.

Box 7: Case Study: Designing Benefit Sharing Plans

Benefit sharing plans are highly context specific: they depend on how emissions reductions are being generated and by whom, how the emissions reductions are measured, and existing administrative and cultural arrangements to consider for the disbursement of payments. A BSP will also depend on the goal of benefit sharing for a given program, which may include strengthening the enabling environment, paying activities that generate the emissions reductions, or rewarding parties for generating the reductions.

For example, for Eastern Province, Zambia, the BSP outlines how and to whom monetary and nonmonetary benefits from the program will be distributed. The BSP defines key stakeholders and beneficiaries (they are not called local partners in this case), drawing important distinctions between the two. Stakeholders provide technical services and capacity building to support local-level implementors of the ER activities, while beneficiaries are the ones who implement the activities at the chiefdom level. As such, while stakeholders, such as government bodies, civil society organizations, and nongovernmental organizations, receive direct payments to enhance the implementation of the ER activities, beneficiaries receive performance-based allocations as a reward for their role in implementing the activities. The BSP sets out how benefits will be allocated among the different actors and the rationale for the allocations. In the Eastern Province BSP, 55 percent of the benefits are allocated to local communities, while 45 percent is allocated to the private sector in nested areas and the government for implementation, operations, and services.

5.2 What Measures Are in Place to Ensure That ER Programs Minimize Environmental and Social Risks and Benefit Communities Taking Part?

The management of social and environmental risks and impacts is key to social inclusion efforts and the sustainability of ER programs. The World Bank seeks to ensure that all ER programs and the carbon credits generated and transacted meet the highest levels of integrity. This relies not only on using the best possible methodological framework, MRV, and ensuring that benefits are distributed equitably but also on ensuring that credits are generated in a socially inclusive and environmentally conscious manner.

In addition to the BSP and benefit sharing mechanisms discussed above, all underlying activities in the ISFL-supported program must be compliant with the World Bank's Environmental and Social Framework (ESF). The ESF comprises various objectives, frameworks, requirements, and standards, applying to both the Bank as a buyer and host countries as program entities. The ESF guides the Bank and client countries toward achieving the broader goals of ending extreme poverty and promoting shared prosperity in a sustainable manner.

The ESF contains Environmental and Social Standards (ESS) that apply to all borrowers and projects, including those financed by ISFL through ERPAs. These 10 standards lay out the requirements for the identification and assessment of environmental and social risks associated with a Bank-funded project. Specific standards set out obligations in areas including labor and working conditions, community health and safety, land use, biodiversity, and Indigenous Peoples, among others. Several of the standards are particularly relevant for ER programs, which often include complex land use arrangements and impact Indigenous Peoples and local communities, as well as other marginalized and vulnerable communities.[15]

Sellers must ensure that their ER programs and the carbon credits generated and transacted are compliant with the ESF to be eligible for Bank financing. The principles and frameworks contained within the ESF offer important tools for ensuring that ER programs and transactions maintain a high degree of social and environmental integrity, regardless of how those ER programs are funded. Third parties seeking to conduct ER transactions must consider how they will ensure that their programs are not only methodologically sound but also socially inclusive and address social and environmental risks.

15 ESS7 and ESS10 are particularly relevant as they relate to meaningful engagement with stakeholders, particularly Indigenous Peoples, for programs affecting them.

Box 8: Case Study: Preparing Safeguard Mechanisms

The Environmental and Social Management Framework (ESMF), prepared in January 2017 by the Ministry of National Planning for the Zambia Integrated Forest Landscape Program (ZIFL-P), and the Environmental and Social Commitment Plan (ESCP), prepared in November 2022 by the Ministry of Green Economy and Environment (MGEE) for the Eastern Province Jurisdictional Sustainable Landscape Program (EP-JSLP), lay out how activities under the program will be implemented to ensure compliance with the World Bank's Environmental and Social Framework and domestic policies. In addition to outlining steps to minimize and mitigate potential risks to ensure the social and environmental integrity of activities under the project, the ESMF assigns responsibilities for the implementation and monitoring of any systems or concerns. The ESMF was prepared through stakeholder consultations, literature review, analysis of baseline environmental and social data, field assessments, and analysis of World Bank safeguard and Zambian policies required for compliance.[a]

An updated ESMF for the ZIFL-P was prepared in 2021, informed by the Strategic Environmental and Social Assessment (SESA) to identify and assess potential impacts of subprojects and their activities.

The World Bank also conducted various assessments of environmental and social risks associated with both the ZIFL-P and EP-JSLP. This included an independent assessment of the program entity (MGEE) against the ISFL Program Requirements and guidelines, including environmental and social safeguards. The independent assessment found that the project (EP-JSLP) accurately identified environmental and social safeguards to minimize reversal risk. The Bank also conducted an Environmental and Social Review to assess and rate the environmental and social risks and the steps taken to manage these risks, and to discuss the relevance of Environmental and Social Standards.

a. The ESMF was prepared in advance of the World Bank's full implementation of the Environmental and Social Framework and hence reflects previous (but still active) iteration of the Bank's Safeguard Policies.

6. COMMERCIAL CONSIDER-ATIONS

6.1 How Will Carbon Credits Be Issued?

Carbon credit transaction registries are online databases that issue, record, and track carbon credits exchanged through market mechanisms or generated by results-based climate finance (RBCIF) and results-based carbon finance (RBCaF) programs. Different international crediting programs may have their own transaction registries. Robust accounting of international transfers through a registry is imperative for safeguarding the environmental integrity of carbon credits and mitigating the risk of "double counting," which occurs when a single carbon credit or removal is used more than once to demonstrate compliance with mitigation targets.

The World Bank's carbon credit transaction registry—the Carbon Assets Tracking System, or CATS—is a platform that supports the issuance, recording, and transaction of carbon credits generated under Bank-financed programs, including the ISFL ERPAs. In the absence of national transaction platforms, CATS provides a secure, transparent, and user-friendly global resource that participant countries can use to minimize risks in carbon credit payment operations.

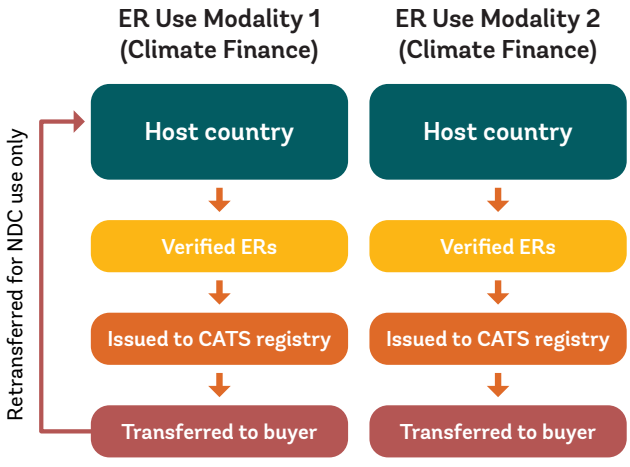
When ISFL credits have been verified, they will be issued to the host country's account in CATS. Currently, CATS only supports transactions of carbon credits between sovereign nations. Therefore, if a host country contracts with a third-party, private sector entity, the credits transacted will need to be issued by a separate registry. To facilitate this, the ISFL has entered into an agreement with Verra, allowing host countries to sell and transact carbon credits produced under the ISFL standard with nonsovereign entities. The credit first will be recorded in CATS and then, to prevent double counting, will be canceled in CATS and reissued as an ISFL credit in the Verra registry. Third-party buyers will be able to create accounts in Verra and have the contracted credits produced under the ISFL standard transferred to their accounts.

6.2 What Can Transacted Carbon Credits Be Used For?

The ISFL provides program countries with opportunities to monetize carbon credits through both RBCIF and RBCaF:

- **Climate finance modality (ER Use Modality 1):** Under this modality, the ISFL makes payments for the carbon credits but does not retain ownership of them. After being purchased by the ISFL on behalf of its contributors, the credits are transferred back to the ISFL program country for use toward its Nationally Determined Contribution (NDC) under the Paris Agreement.
- **Carbon finance modality (ER Use Modality 2):** Under this modality, once the program country transfers carbon credits to the ISFL, it can no longer use these credits to fulfill its NDC, creating an opportunity cost to the seller. Under the carbon finance modality, the host country and the buyer agree to make a good faith effort to undertake a corresponding adjustment consistent with Article 6.2 of the Paris Agreement.

Figure 5: ER Use Modalities



Note: CATS = Carbon Assets Tracking System; ER = emissions reductions; NDC = Nationally Determined Contribution.

Carbon credits transferred under the climate finance modality cannot be used by the buyer against their NDC because they are retransferred back to the seller for use against the seller's NDC. Consequently, climate finance modality credits typically attract a lower price than those transferred under the carbon finance modality. The ERPA includes the negotiated unit price for each modality, the percentage of credits that can be transferred under each modality, and the requirement to retransfer credits back to the seller under the climate finance modality.

6.3 How Much Will the Seller Get Paid for the Carbon Credits?

A key term negotiated under ISFL ERPAs is price.[16] The ISFL does not have a set price for carbon credits generated under its programs.[17] Instead, this pricing is negotiated with the host country and is treated as a **floor price**.[18] Through the negotiation process, the host country and the ISFL agree on a specific price per unit: this is the price that the buyer promises to pay for a certain number of carbon credits. Through the ERPA, the seller knows that if they generate and verify the total volume agreed on in the ERPA, they can sell these carbon credits to the ISFL at this agreed-on amount. However, the floor price mechanism allows the host country to take advantage of potentially higher prices in the market. Host countries can do this by securing a better price from third-party buyers and ultimately selling their Contract ER to them rather than to the ISFL. Third-party offers are discussed further in section 6.4.

When negotiating price, there will likely be a difference between credits purchased under Modality 1 and those purchased under Modality 2. Under Modality 2, there

16 Volume is measured in tons of carbon dioxide equivalent (tCO2e).

17 While the ISFL does not have fixed prices for emissions reductions, previously negotiated ISFL ERPAs are publicly disclosed and can provide an indication of the potential price range. Third-party buyers are therefore able to see the contracted pricing in the ERPA, which may aide their determination of pricing offers.

18 While the ISFL uses floor prices, other ER programs may use other pricing approaches.

is an opportunity cost to the seller—the seller country must generate Additional ER through additional climate mitigation actions to meet its emissions reductions goals.[19] As such, program countries are more likely to demand a higher price for such carbon credits. Parties may agree on different unit prices for Contract ER and Additional ER.

Box 9: Case Study: Carbon Pricing in ERPAs

In the ISFL Zambia program, two unit floor prices for the different modalities were agreed on in the ERPA. For 2 percent of the Contract ER, the price is US$8 per unit, and these credits will be transferred to the buyer (World Bank acting as trustee of the ISFL) and then retransferred back to the seller (Zambia) to be used against its NDC. For the remaining 98 percent of Contract ER, the price is US$10 per unit, and these are retained by the seller and then transferred to the buyer's account. For these credits, the seller is obligated to undertake in good faith a discussion with the buyer about turning these credits into Internationally Transferred Mitigation Outcomes (ITMOs). If this is done, it would likely require an agreement for an additional payment, raising the overall price received for these credits.

6.4 What Happens if a Third Party Makes an Offer to Purchase Carbon Credits?

As discussed above, ISFL ERPAs provide a floor price, which means that the host country is open to seeking higher prices from third-party buyers. The sale of carbon credits takes place after they are verified. Host countries have the opportunity (within a specific time frame) to find third-party buyers who can offer more than the floor price for the carbon credits produced under the ERPA. If the host country can secure an offer for a higher price, the ISFL then decides whether it will match the higher price—this is called the "**right of first refusal.**" If the ISFL matches the higher price, the carbon credits are still transacted under the ERPA. If the ISFL does not match the higher price, the host country can sell the carbon credits to the third party.

There are key differences depending on whether a third-party buyer is trying to purchase carbon credits accounted for under the ISFL ERPA (Contract or Additional ER) or outside of the ERPA (Excess ER). If a third-party buyer is purchasing credits that have been accounted for under the ERPA, then the host country needs to fulfill five key obligations:

1) Proof needs to be furnished showing that the offer (including the price per ton) is legitimate.

2) The ISFL (contributors) must be given the right of first refusal—they can either match the price offered by the third party or choose to let the third party purchase the carbon credits at the higher price.[20]

3) The payments for the carbon credits sold to the third-party buyer must be disbursed through the BSP arrangements. The third-party offer must explicitly state that the sale revenue from the payment must be shared through the BSP and

19 For further reading on pricing and corresponding adjustments, see the World Bank publication https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099061123165527000/p1741870a22ace01908ec00b67fe1192ab2.

20 If the host country would like to sell Contract ER or Additional ER, in full or in part, to a third party, then it needs to notify the ISFL Fund Management Team in writing within 30 calendar days after the final verification report has been received. The Fund Management Team (as trustee) has the right to match the price offered in the third-party offer and notify the host country within 30 calendar days following receipt of the evidence of the third-party offer.

reported on by the host country—just as if the payment received had been through the ERPA.

4) The third-party buyer and host country must respect the ER Use Modalities as negotiated under the ERPA. If the carbon credits are transacted under a carbon finance modality, the seller and buyer must agree to make a good faith effort to conduct a corresponding adjustment to be sure the credits are not counted twice.

5) Any amounts of Contract ER or Additional ER sold to third parties must be net amounts. This means that, even if the host country sells carbon credits to a third party, it still needs to set aside a certain number of Buffer ER to manage risks of uncertainty and reversals.

If a third-party buyer is purchasing Excess ER, then the host country and buyer are not obligated to fulfill these conditions. Host countries will likely wish to consider what type of buyers they wish to engage with when liaising with third-party buyers.

Box 10: Catalyzing Emissions Reductions beyond the ERPA

The carbon credits sold under the ERPA to the ISFL or third parties are not the end of the story. The seller can continue to generate and verify carbon credits beyond the volumes agreed on in the ERPA. These excess carbon credits can be used however the host country chooses. For example, it may use them toward its NDCs or sell them to third-party buyers (public or private sector).

The ISFL thus provides a "practice run" for program countries. By generating and transacting carbon credits under the program, they become better prepared to meet their NDCs and generate revenue from future results-based climate and carbon finance opportunities. In this way, the ISFL seeks to attract investments, incentivize climate action, and enable more benefits to flow to communities.

A seller's Excess ER are generated in accordance with ERPA requirements, including measuring, verification, and environmental and social requirements. However, unlike Contract ER and Additional ER, a host country's use of Excess ER is not governed by the ERPA. The host country can negotiate and sell Excess ER to third parties on its own terms. Host countries may continue to implement the existing benefit sharing arrangements to enable continued benefits to communities should they wish to do so.

6.5 What Other Commercial Terms Can Be Outlined in an ERPA?

Parties to an ERPA may consider including the following terms and clauses in an ERPA to balance financial certainty, flexibility and performance incentives during ER program implementation:

Call Options

A **call option** gives the buyer the right, but not the obligation, to purchase Additional ER that are generated beyond the agreed-on Contract ER volume. Call options become relevant after all of the agreed-on Contract ER have been delivered and verified, and they can be exercised by the buyer after the final verification report is received. Call options allow the buyer to secure extra carbon credits if they are available. For sellers, including a call option can ensure a potential buyer exists for surplus credits, though it may limit flexibility if the buyer exercises the right.

Put Options

A **put option** gives the seller the right, but not the obligation, to sell its share of carbon credits (for example, its percentage split) back to the buyer. A put option is exercised after verification. Sellers may choose to use a put option if they want price certainty, especially in volatile markets. It acts like a safety net for sellers, ensuring they have a pre-agreed-on buyer if market prices drop or they lack alternative buyers.

Percentage Splits

The **percentage split** in an ERPA determines how carbon credits generated during each reporting period are **divided** between the buyer and the seller. The ERPA will specify what percentage of carbon credits are transferred to the buyer (the buyer's split) under the carbon finance modality (ER Use Modality 2) and the remainder of credits that are retransferred to the seller (seller's split) under the climate finance modality (ER Use Modality 1).

Sweep Clauses

A **sweep clause** requires the seller to transfer all carbon credits above the minimum reporting period amount to the buyer, effectively accelerating the delivery of the total Contract ER volume. This means if the ER program performs better than expected in a given period, the Excess ER go to the buyer. Sweep clauses can be useful for buyers who want predictability and faster credit acquisition. For sellers, sweep clauses can reduce future flexibility but might be accepted in exchange for up-front financing or a premium price.

CONCLUSION

Emission Reductions Purchase Agreements and other results-based climate finance (RBCIF) mechanisms play a crucial role in mobilizing resources and incentivizing climate action. This resource provides an overview of ERPAs and the key technical, commercial, social, and legal considerations for designing and negotiating them. It emphasizes the importance of transparency, accountability, and robust safeguards in ensuring the effectiveness and legitimacy of ER programs. While the focus is on ISFL ERPAs, the principles and processes discussed are relevant to any entity looking to engage in the purchase or sale of carbon credits.

By understanding the complexities of ERPAs and the various considerations involved, stakeholders can ensure that these agreements are designed and implemented in a way that not only monetizes carbon credits but also promotes environmental integrity, social inclusion, and sustainable development. ISFL ERPAs facilitate high-integrity carbon credits by ensuring robust environmental and social risk and impact management, transparent benefit sharing mechanisms, and rigorous MRV systems. These measures are crucial for maintaining the credibility and effectiveness of ER programs.

Key Takeaways

1. **Comprehensive preparation:** Successful ERPAs require well-prepared ER programs, including comprehensive MRV systems, robust environmental and social management systems, equitable benefit sharing arrangements, legal and regulatory frameworks, greenhouse gas inventories, and jurisdictional programs and strategies for reducing emissions.

2. **Environmental and social management systems:** Implementing strong environmental and social management systems facilitates compliance with the relevant standards, ensures that ER programs are socially inclusive and environmentally sustainable, and increases the integrity and potential market value of carbon credits.

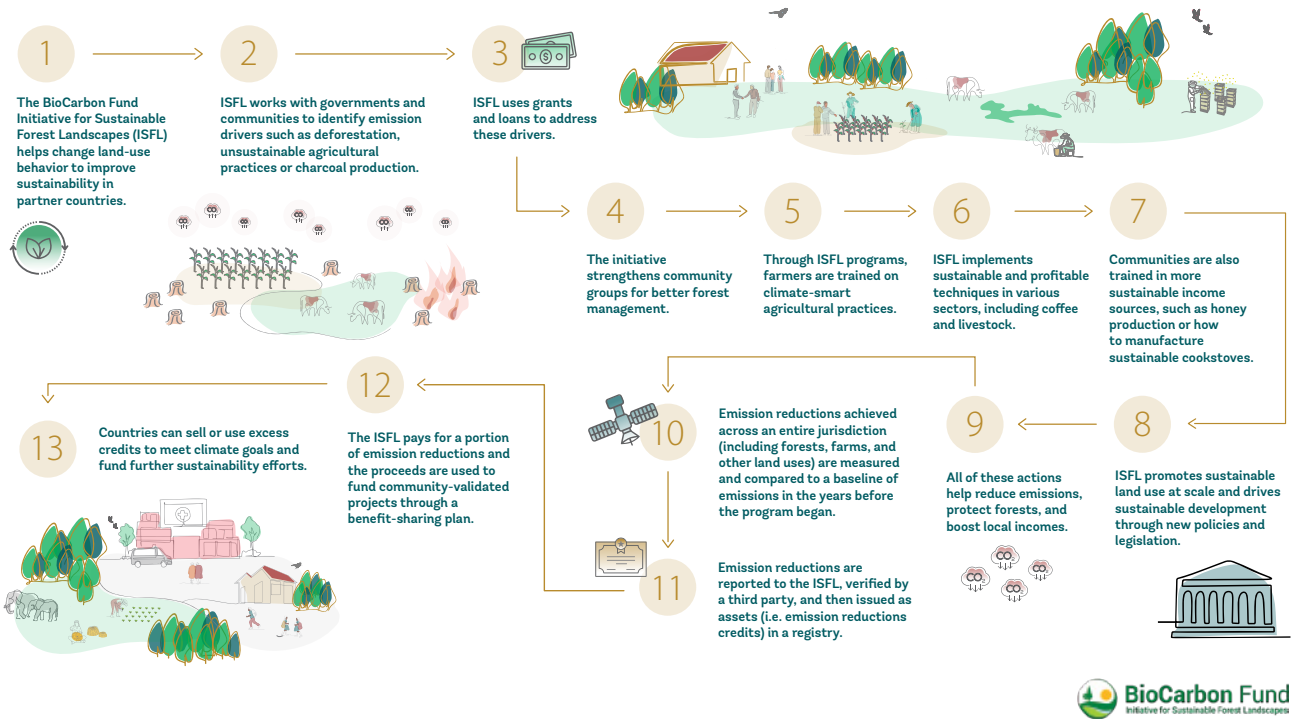
3. **Benefit sharing:** Benefit sharing is essential to building local support and buy-in, which is vital for the sustainability of the programs through a "virtuous cycle." Designing impactful Benefit Sharing Plans requires going beyond efficiency, effectiveness, and equity and striving for legitimacy and sustainability. This includes focusing on inclusion and representation in the benefit sharing process and ensuring that benefit structures reward the permanence of the emissions reductions.

4. **Negotiation of terms:** The negotiation of ERPAs involves agreeing on key commercial terms, such as the price and volume of carbon credits, ER Use Modality, ERPA term, and reporting periods. Once these key commercial terms are agreed on, they can be reflected in the ERPAs together with other key components of the ER programs, including buffer management, MRV, title transfer, and environmental and social compliance.

5. **Flexibility of price mechanisms:** Incorporating price flexibility through innovative mechanisms reduces risk for buyers and increases their comfort with entering into an ERPA. ISFL ERPAs feature several unique price mechanisms, including a floor price, which guarantees host countries a minimum price for their carbon credits while allowing them to seek higher prices (subject to certain procedures and requirements). This flexibility makes it easier for countries to agree to lower initial prices. Additionally, phased ERPA agreements allow for renewed price negotiations, further enhancing flexibility. Finally, call options allow for exercise prices to be negotiated when final verification reports confirm the generation of Additional ER.

APPENDIXES

Appendix A:
How BioCarbon Fund ISFL Programs Generate ER Credits



Appendix B: Jurisdictional ER Crediting in AFOLU and REDD+ Programs

The ER programs discussed in this resource, specifically those under the ISFL, are jurisdictional agriculture, forestry, and other land use (AFOLU) programs. They focus on reducing emissions in the AFOLU sectors through land use planning, policies, and practices. Another area where the World Bank has pioneered results-based finance is in programs focused on reducing emissions from deforestation and forest degradation, forest carbon stock conservation, sustainable forest management, and more, commonly referred to as REDD+. One of the World Bank's older trust funds, the Forest Carbon Partnership Facility (FCPF), provides results-based payments to countries for carbon credits generated from REDD+ activities.

The ER programs under both the ISFL and the FCPF take a jurisdictional approach to crediting ER. Under this approach, the quantification of emissions reductions and issuance of carbon credits takes place at a broader regional scale, usually a province or region, rather than at a project level. Both funds also employ a two-phased approach to financing their programs. The first stage of financing focuses on grants and loans to establish an enabling environment for sustainable land use and build crucial infrastructure for measurement, reporting, and verification (MRV). The second phase of financing is enabled through the ERPA, the focus of this resource, and follows the provision of results-based payment for carbon credits generated through the programs.

However, the jurisdictional crediting approach employed by the ISFL for AFOLU programs goes beyond that of REDD+ programs. While REDD+ activities comprise a part of the emissions reductions credited in ISFL programs, these programs also include emissions and removals related to agriculture and other land uses. While REDD+ programs seek to reduce emissions by directly incentivizing reducing deforestation and improving forest management, ISFL AFOLU programs also address behaviors in related activities that contribute to forest degradation, mainly agricultural practices. For example, in Zambia, agricultural expansion and wood harvesting for charcoal or firewood are key drivers of deforestation. Hence, the Zambia program rewards communities for efforts in forest conservation, as well as climate-smart agriculture, fuel-efficient cookstoves, and sustainable charcoal production.

This integrated, jurisdictional approach has many benefits, including the ability to address feedback and leakages across a range of activities within the landscape, ensuring more accurate and reliable estimates of net emissions reductions. The synchronization of multisectoral and multipartner land use interventions also helps maximize the positive impacts of independent activities and broaden access to funding.

Appendix C: Example of a Benefit Sharing Arrangement: Zambia ER Program

A key concern for ER programs is considering how to better include private sector investors or project developers who are seeking to monetize emissions reductions from their investments in program-related activities. This is particularly challenging for jurisdictional programs because it can be difficult to combine private sector–focused models with the Benefit Sharing Plan approach, which focuses on distributing carbon revenues to communities.

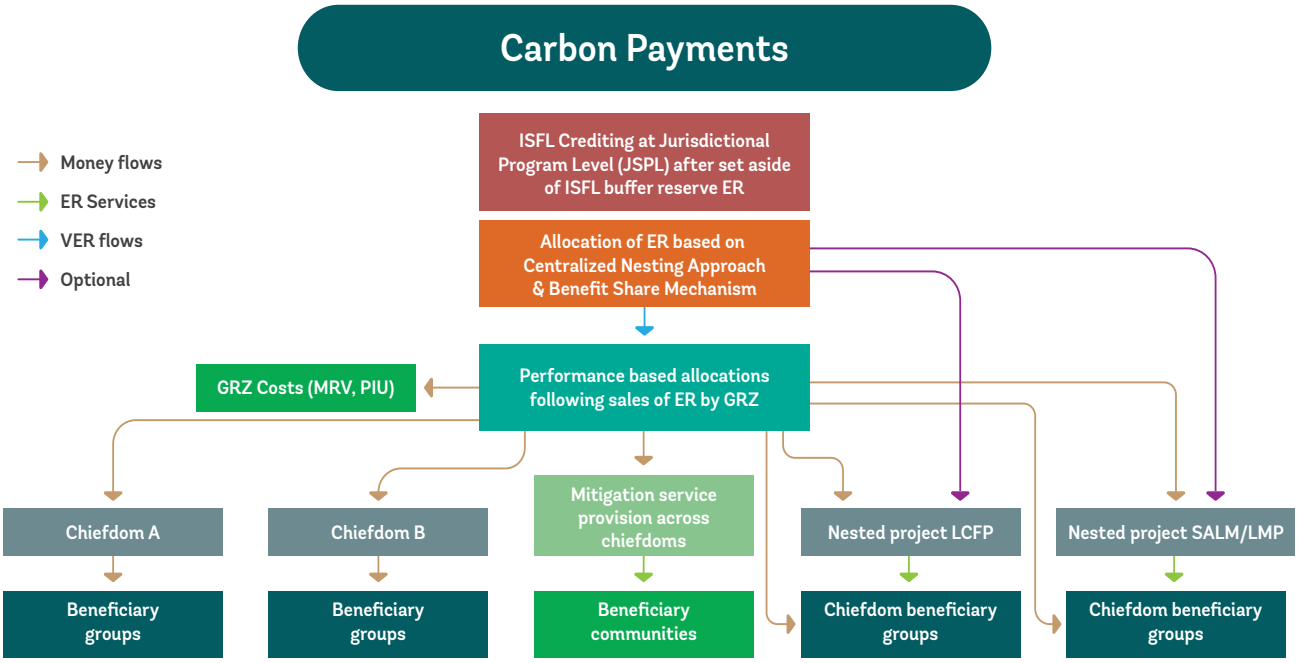
The ISFL Zambia program addressed this challenge by earmarking a subset of carbon revenues through the BSP for project implementers, both private (nested project implementers) and public (extension services). This approach not only enabled the BSP to include existing nested projects into the broader jurisdictional program but also built in flexibility for future private partners to join and invest. To participate, private actors must sign a Nested Emission Reductions Purchase Agreement (NERPA), which details the services provided and renumeration.

The Nested Emission Reductions Purchase Agreement includes a pre-agreed-on performance assessment system that will evaluate the contribution of the nested project based on the activities that are implemented. As such, there is no direct attribution of emissions reductions to the nested project, which would require a project-level baseline and MRV system aligned with the jurisdictional baseline and MRV system. Instead, the completion of the pre-agreed-on list of activities is used as a proxy to determine the performance of the nested project. This performance then determines the exact portion of carbon revenues (in kind—emissions reductions—or cash) allocated to the private project developer within the earmarked envelop for the nested projects.

Figure C.1 illustrates the flow of carbon revenues from the program. Following the completion of crediting at the jurisdictional level and after setting aside Buffer ER as outlined in the ERPA, emissions reductions are allocated based on the performance report that assesses the activities performed by the nested project. Once the carbon credits have been sold, proceeds flow to the various beneficiaries as delineated in the BSP, including the nested projects, which receive their share based on the assessment of their performance.

It is important to emphasize that the carbon revenues are not attributed to the chiefdoms or the nested project developers based on emissions reductions that would be attributable to them (which would require a MRV system decentralized at the chiefdom/project level). Instead, the carbon revenues are shared based on a proxy that assesses the performance in the implementation of predetermined actions that generate the emissions reductions (such as reforestation, forest management, or enforcement against illegal logging) or based on indicators (surface of forest in the chiefdom). Hence, the performance approach is preserved without the complexity involved in creating a low-level, decentralized MRV system.

Figure C.1: Flow of Carbon Payments in ISFL Programs



Note: ER = emissions reductions; GRZ = Government of the Republic of Zambia; LCFP = Luangwa Community Forests Project; LMP = Landscape Management Plan; PIU = Project Implementation Unit; SALM = Sustainable Agricultural Land Management; VER = verified emissions reductions.

GLOSSARY

Additional ER	The additional amount of emissions reductions (ER) generated beyond the Contract ER defined under the Emission Reductions Purchase Agreement (ERPA). These may be transacted under the ERPA during the crediting period. The buyer has a right to buy Additional ER, but no obligation to do so.
Additionality	Ensuring that an emissions reductions generated by a program is *additional* to what would have been achieved without the program (the business-as-usual/ baseline scenario).
Article 6 (of the Paris Agreement)	This article recognizes voluntary cooperation in realizing climate goals, including through carbon markets. It establishes the framework for compliance carbon markets, which are regulated markets in which carbon credits can be traded internationally between governments and private sector entities as Internationally Transferred Mitigation Outcomes (ITMOs). The article also outlines accounting mechanisms to ensure that credits are not double counted, including the corresponding adjustment.
Avoidance of double counting	Ensuring that an ER credit generated by a program is only used by one party toward decarbonization or compliance targets (e.g., to meet its Nationally Determined Contribution, or NDC).
Benefit Sharing Plan (BSP)	A plan developed by the seller and submitted to the buyer on how the monetary and nonmonetary benefits generated by the program will be distributed and shared with beneficiaries.
Buffer ER	A portion of the emissions reductions generated and verified under the ERPA that is set aside in a buffer account as a risk management mechanism against uncertainty and reversals.
Business as usual (BAU)	The reference level against which emissions reductions are being measured. For ERPAs and results-based climate finance (RBCIF), the BAU emissions are necessary for calculating the level of emissions reductions achieved by a program. BAU emissions are calculated based on the emissions trajectory of the economy or sector for the program location in question, assuming no changes. This is also often called the baseline.
Carbon Assets Tracking System (CATS)	The CATS is an ER transaction registry, designed to support the issuance and transactions for carbon credits generated by World Bank–financed programs, including those under ISFL programs.
Carbon credit	A carbon credit represents a standard unit to measure emissions reductions, equivalent to 1 metric ton of carbon dioxide (tCO2e) that has been generated, measured, verified, and then certified and issued in a carbon registry. A carbon credit is also commonly known as an ER Credit.
Carbon markets	Trading systems through which countries or companies may buy or sell units of greenhouse gas (GHG) emissions in order to meet their climate commitments.

Conditions of effectiveness	A set of program-specific conditions that must be met and steps taken by the seller before the buyer makes any payments for emissions reductions.
Contract ER	The maximum amount of emissions reductions a host country commits to generate and sell under the ERPA and during the specific ERPA crediting period. These emissions reductions are generated and verified, and the buyer is obligated to purchase them.
Crediting approach	Defines the scale of crediting for emissions reductions from a program. The crediting approach is selected based on the nature of the program, for example, if it is a stand-alone individual energy plant or a program that cuts across different sectors and encompasses broader emissions reductions within a specific geographic area.
Crediting threshold	The trajectory against which emissions reductions generated by the program are measured. The crediting threshold is often set below the BAU, to account for existing emissions reductions commitments and initiatives under countries' NDCs.
Emission Reductions Program Document (ERPD)	This document presents technical and organizational aspects of the ER program and the planned actions and interventions to reduce GHG emissions, in accordance with the various buyer requirements.
Emission Reductions Purchase Agreement (ERPA)	An ERPA is an agreement between a buyer and a seller of emissions reductions. ERPAs provide for the sale, transfer and purchase of emissions reductions generated under the ER program during all ERPA phases. ERPAs incorporate related documents and instruments by reference, including General Conditions, Benefit Sharing Plan, Safeguards Plans, Buffer Guidelines, etc. The ERPA may exist as a single agreement or as multiple agreements for multiphased programs, requiring an ERPA Framework Agreement and each ERPA Phase Agreement.
Environmental and Social Framework (ESF)	The ESF is a collection of standards and processes that reflect the World Bank's broader environmental and social safeguard systems. All new World Bank–funded programs, including programs funded by the ISFL, must adhere to this framework.
ER monitoring report	A report prepared by the seller, in accordance with different requirements. The report must include (a) the number of emissions reductions generated by the program in the previous reporting period, (b) occurrence of any reversals and actions taken to minimize of mitigate the effect of these, and (c) any inability, in part or full, to transfer the title to emissions reductions to the buyer.
ER Use Modality 1	When the ISFL pays for emissions reductions but does not retain ownership of them. Instead, the emissions reductions are retransferred back to the program country to be used for other purposes, most often toward the country's NDC. Also known as a climate finance modality.
ER Use Modality 2	When the ISFL pays for and retains emissions reductions from the ERPA. Also known as a carbon finance modality.
Excess ER	Any emissions reductions that are not transacted under the ERPA but are generated by the seller and verified and issued by the ISFL (or other standard).

Floor price	A specific price per unit (measured in tCO_2e) at which the buyer promises to pay for a certain number of emissions reductions. If the seller (host country) can find higher prices in the market, it has the option of finding and selling to third-party buyers at higher prices.
General Conditions	A set of (generally) non-negotiable terms that are applicable to all ISFL-funded ER programs.
High integrity	Carbon credits are considered high integrity, and therefore high value, when the development of the carbon credits ensures additionality, includes robust verification and management, and includes effective mitigation and management of permanence, environmental, and social risks.
Measurement, reporting, and verification (MRV)	Refers to the processes involved in ensuring that emissions reductions actually take place. This includes measuring the amount of emissions reductions associated with the given program over a specified time frame, reporting these to an accredited third party, and having the results independently verified to ensure integrity and accuracy.
Permanence	Ensuring that an ER credit generated by a program is *permanent*, i.e., it is not reversed in the future. This closely ties to considerations around reversal risks and Buffer ER in ERPAs.
Reporting period	Time period specified in the ERPA for which the seller has to measure and report on emissions reductions generated under the ISFL ER program in the form of ER monitoring reports.
Results-based climate finance	A type of climate finance where payments are made upon achieving verified, pre-agreed-on climate results.
Right of first refusal	If the host country is able to secure an offer from the market at a higher price for its emissions reductions during a specific period of time, the ISFL then has the option of deciding whether to match this offer or not, which is known as the "right of first refusal." If the ISFL chooses to match the higher price, emissions reductions are still transacted under the ERPA. If not, then the host country can choose to sell to a third party.
Title to ER	The full legal and beneficial title and exclusive right to emissions reductions contracted under an ERPA.
Verified ER	Emissions reductions, equivalent to 1 metric ton of carbon dioxide (tCO2e), that have been measured, reported, and verified. Unlike a carbon credit, Verified ER may not have been certified and issued in a carbon registry.

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