Making REDD+ work: A case study of Colombia, the Democratic Republic of Congo and Ghana

Report prepared for Code REDD

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Executive Summary

This report presents an in-depth analysis of Colombia, the Democratic Republic of Congo (DRC) and Ghana’s REDD+ programs, to identify the conditions needed to unlock REDD+ performance at scale. Together, these three programmes provide a span of pathways for REDD+ implementation that provide insights on the key drivers of success.

Colombia is considered an early mover that has successfully attracted the private sector to develop projects and purchase emissions reductions. This has occurred while building capacity and experience implementing jurisdictional programs, as well as attracting bilateral and multilateral funding. Colombia has laid the groundwork for the successful implementation of projects and programs at scale by ensuring a strong initial buy-in from a wide range of stakeholders, building a track record of actions cementing the government’s commitment, and securing a strong and stable internal demand for carbon offsets. The recent surge of jurisdictional programs promises to deliver environmental results but the alignment of such programs with the project-based frameworks is likely to be a major challenge. Despite the relative success in driving the uptake of REDD+, deforestation rates have increased over the past decade, as deforestation has expanded to former conflict regions. Scaling up REDD+ markets to enable further investments will play a crucial role in helping to reverse these recent negative trends.

Despite numerous challenges, DRC has been able to implement large REDD+ projects and jurisdictional programs, but its ability in future to attract scaled up finance will depend on its ability to demonstrate environmental integrity. Although rates of deforestation in the DRC are low compared to other tropical forest countries, almost half a million hectares are lost each year. Being an early REDD+ mover in a new sector together with Government instability and general lack of capacity have made it difficult for the REDD+ process to be fully implemented and supported by appropriate policies and infrastructures. Despite that, DRC is at the forefront of Congo Basin countries engaged in the REDD+ process, primarily through two extensive project-based activities serving international markets, and a jurisdictional REDD+ program. This progress however, risks being undermined by potential threats to the environmental integrity of its REDD+ program. Stakeholders report unreliable official data and scarce application of safeguards. Additionally, the perceived credibility of the program is threatened by the lack of clear rules regarding the possible nesting of projects, as well as the uncertainty created by disagreements over the calculation of forest reference emission levels.

Ghana has established a functional national REDD+ governance, with broad government buy-in, strong multi-stakeholder participation, and solid cross-sectoral support, yet mitigation results remain sparse. Deforestation in Ghana has dramatically increased in the past 5 years and, to date, only a modest amount of finance has been disbursed through the REDD+ program. Lack of clear land tenure, limited monitoring reporting and verification (MRV) infrastructure, and large revisions to forest reference emissions levels may be contributing to limited performance. Further, stakeholders report that the focus on jurisdictional approaches has slowed private sector investment in REDD+ projects to date. If private sector engagement remains limited, this may result in Ghana missing out on a potentially significant source of finance.

Each case study highlights the importance of country specific factors and local circumstances when seeking to maximise REDD+ performance, but some cross-cutting lessons emerge from this analysis. In general, the performance of the REDD+ programs involve the interplay of supply and demand factors, mediated through standards, which set the ‘rules of the game’. These factors are considered in detail in this report:

- **Enabling conditions for enhancing supply:** Strong institutions, appropriate policies, sound MRV, and trade infrastructure, determine the enabling conditions for a REDD+ program to deliver results at scale. As the Paris Agreement moves towards implementation and private sector initiatives establish new criteria for ensuring environmental integrity, building country capabilities will be essential to access certain types of market-based finance.
- **Demand for REDD+ results**: Strong and stable demand is a key determinant of REDD+ success. This demand can come from a variety of sources including voluntary markets, compliance markets and multilateral/bilateral climate finance. Each source of demand brings different preferences around assurance of environmental integrity, focus on community involvement and sensitivity to price. Demand from the voluntary markets and multilateral/bilateral climate finance may have stronger preferences for environmental integrity and community safeguards, and as a result is also often less sensitive to prices than compliance demand. It is important to highlight that compliance markets in most countries are likely to have standards that ensure environmental integrity, especially with jurisdictions adopting targets and NDCs, and/or contemplating trading under Article 6.

- **Standards**: Crediting standards set the rules that seek to align host country capabilities, with the attributes desired by demand sources. The United Nations Framework Convention on Climate Change (UNFCCC) guidelines are not sufficiently detailed to ensure the environmental integrity of the REDD+ market, so carbon accounting standards play a key role in helping host countries set the rules of the game. National engagement with the UNFCCC process is a necessary condition, but is not sufficient. Standards create minimum criteria in key areas such as the definition and revision of Forest Reference Emissions Levels (FRELs), the use of buffers, deductions and other assurance mechanisms, rules regarding aggregation and requirements for safeguarding. This requires countries to carefully balance their limited capacity with the desires of different buyers for high integrity credits. Excessively stringent standards may set such a high bar that most developing country jurisdictions are disincentivised or unable to participate at scale with mutual benefits and opportunities lost. Setting loose standards may lead the limited funds available to flow to jurisdictions or projects that are not legitimately reducing emissions.

**Differences in national circumstances mean that there is no silver bullet for making REDD+ work, but countries can learn from previous successes and failures to establish supportive enabling conditions in a rapidly changing environment.** Countries need to establish strong foundations to ensure they can competitively supply REDD+ results now and in the future. Onboarding the private sector in delivering these results will be key, and improvements in governance and the facilitating ecosystem of service providers can help ensure that REDD+ activities have attractive risk-return profiles at scale. Establishing rules that provide returns to investment whilst improving social and environmental outcomes should be a key consideration for governments and standard setting agencies looking to guide the development of future REDD+ programs.
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1 Introduction

The sustainable management of the world’s tropical forests forms a central part of any credible strategy to meet the Paris Agreement’s objectives to limit global warming to well below 2°C. Since 2003, the global community working through the UNFCCC have sought to support activities to reduce deforestation, degradation and support sustainable forest management in developing countries (REDD+) through concessional and results-based climate finance.

To date, REDD+ has proved unable to attract the climate finance needed to combat deforestation and forest degradation at scale. The agriculture, forestry and land use sector is the second largest contributor of GHG emissions worldwide, exceeded by only the energy sector. While many countries have shown promise in delivering GHG mitigation and attracting climate finance for the land use sector, REDD+ activities have proved unable to scale these results. Whereas it is estimated that nature based solutions (NBS) provide up to 30% of global cost-effective mitigation potential, as of 2017-18 only 4% of global climate finance flowed to sustainable forests and land-based carbon sinks.

As the Paris Agreement is operationalized, it is imperative that jurisdictions and the global community renew their efforts to scale REDD+ finance. With countries, industries and firms increasingly committing to net zero emission economies, supply chains and operations, a new era of market-based cooperation provides an incipient source of REDD+ finance. However in its current form it is not clear that REDD+ is fully matching this opportunity. This report seeks to understand why this may be the case, and in doing so to draw lessons that can inform a blueprint for success that can accelerate REDD+ performance globally.

The report draws on over 30 stakeholder interviews with global and national REDD+ experts to identify key factors that supported or inhibited REDD+ success. These in-depth case studies of Colombia, the Democratic Republic of Congo (DRC) and Ghana, provides insights from jurisdictions representing the breadth of experience with REDD+. This provides a “view from the ground” to identify interactions between local and international dynamics that form the basis of success, or act as bottlenecks to investment and results.

Informed by these cases, the report identifies critical REDD+ success factors, this includes access to sources of demand, sufficient enabling conditions for market development and appropriately specified standards. Together these factors determine the ability of jurisdictions to deliver REDD+ finance on the scale necessary to deliver environmental outcomes and substantial benefits to community. The core elements of these success factors include:

- **Demand**: scaling up sources of demand for REDD+ credits is a critical component of success. This can include demand from compliance or voluntary markets, as well as multilateral or bilateral climate finance or trade in mitigation outcomes.

- **Enabling conditions**: the relevant local context and capabilities needed to operationalise REDD+; including fit-for-purpose MRV and trade infrastructure, strong institutions and policies that support REDD+ development.

- **Standards**: carbon certification standards play a key role mediating supply and demand alongside third party validation and verification bodies. Standards reflect buyers preferences for environmental stringency through the definition of Forest Reference Emissions Levels (FRELs); crediting, allocation and aggregation rules; buffers, deductions and other assurance mechanisms; and safeguards.

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1 Nature based solutions are activities related the protection, managements and restoration of natural ecosystems, with the objective of meeting societal objectives like the ones set in the Paris Agreement. NBS is a term that fully encompasses REDD+ activities.
2 UN REDD. 2020. Increasing finance for sustainable land use in Latin America through the UN-REDD Programme’s support
There is no “silver bullet” that can ensure successful implementation, and even in the presence of a global market, local circumstances may act as a bottleneck impeding REDD+ performance. Despite differences in local circumstances, our case studies show that a lack of REDD+ process ownership; tensions between jurisdictional and project-based REDD+; and generalised institutional weakness pose key barriers to future REDD+ performance. In the sections below we outline the history of REDD+ activities, the scale of the funding gap, and the role that this report plays in identifying future priorities.

1.1 History of REDD+

Since 2003, negotiations under the UNFCCC have sought to develop mechanisms to channel climate finance to activities to reduce deforestation in developing countries. At COP13, the Bali Action Plan broadened this focus to include reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries; known collectively as REDD+. In subsequent years important decisions were made on technical aspects of REDD+ like the development of FRELs, MRV systems, safeguards, and sources of finance. This process culminated with the publication of the Warsaw Framework in 2014 and the UNFCCC REDD+ rulebook in 2015.4

These COP decisions established the foundational set of rules for REDD+:5 including the scope and scale of REDD+ activities; institutional structures; methods of financing activities; and policies required for implementation. Rules regarding scope and scale of activities provide flexibility for parties to choose a scope appropriate to a jurisdiction’s local circumstances. However, the UNFCCC requires all countries to designate a focal point to serve as liaison with the UNFCCC Secretariat. These rules also establish that sources of finance may be public, private, bilateral or multilateral, as long as they are additional, predictable and results-based.8

The REDD+ rulebook outlines a clear set of policies required for implementation:

1. **Phased implementation**: Phase 1 should set out a national strategy and action plans, develop national policies and measures and build internal capacity. Phase 2 requires the implementation of policies and demonstrated readiness for result-based REDD+. Phase 3 involves results-based actions.

2. **National REDD+ strategy and/or action plan**: countries are requested to develop, disclose and implement a national strategy.

3. **Forest reference emission levels (FREL)**: FREL serve as benchmarks for assessing the performance in implementing REDD+ activities. The rulebook established that FRELs should take into account historical data and adjust to national circumstances; the FREL should be updated periodically; and the construction of the FREL can follow a stepwise approach in which subnational FRELs may be established as a step towards a national FREL.

4. **Monitoring**: governments are required to establish a National Forest Monitoring System following international best practice.

5. **MRV**: all activities under REDD+ need to be measured, reported and verified.

6. **Safeguards**: parties implementing REDD+ activities must respect safeguards around environmental integrity, local communities and biodiversity.

7. **Addressing drivers of deforestation**: REDD+ rules also encourage government to tackle the underlying drivers of deforestation through national and subnational policies.

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4 UNFCCC REDD+ web platform: https://redd.unfccc.int/fact-sheets.html
5 Baker and McKenzie (2014), Consolidated Guide to the REDD+ Rules under the UNFCCC.
6 UNFCCC Wasaw Framework: https://unfccc.int/topics/land-use/resources/warsaw-framework-for-redd-plus
7 The COP19 decision states that “drivers of deforestation and forest degradation have many causes, and that actions to address these drivers are unique to countries’ national circumstances, capacities and capabilities”
8 Results-based finance refers to any programme or activity that provides rewards after agreed-upon results (often GHG mitigation) are achieved and verified.
The framework provided by the UNFCCC rulebook provides space for development institutions, NGOs and other actors to develop additional standards for the implementation of REDD+. This flexibility has provided space for REDD+ programs to develop but has also triggered calls for standardisation from actors concerned with the real or perceived risks to the integrity of some REDD+ credits. This includes concerns regarding the climate and environmental impact of projects and the protection of the rights of indigenous and other groups affected by these activities. In response, carbon certification standards are positioning themselves as the guarantors of the quality of credits by establishing requirements in key areas. This includes standards regarding:

- **establishment and updating of FRELs**, which refer to the baseline against which projects and programs can declare emissions reductions. Standards determine the technicalities of how FRELs need to be calculated and updated.

- **crediting, allocation and aggregation rules**, jurisdictional REDD+ programs receive results-based payments when they deliver emissions reductions. Often, these reductions are jointly achieved by government policies and projects, which can be either privately or publicly funded. Standards determine how these can be counted towards jurisdictional-based results, and how the payments (determined by performance against a reference level) can be allocated to different players within the jurisdiction.

- **the use of “buffers” to assure emissions outcomes**, refers to emissions reductions that Standards determine should not be retired to insure against data uncertainty, leakage or reversal risk (that is the risk that carbon saved by forests gets released back into the atmosphere).

- **safeguards to protect communities and the environment**, refers to a set of minimum rules that projects and programs need to meet in terms of community involvement and non-carbon environmental benefits/damages.

In parallel to the official UNFCCC process, independent accounting and verification bodies developed standards seeking to provide guidance REDD+ programs and projects. Verra and The Forest Carbon Partnership Facility (FCPF) were early movers in this space. Verra published its Verified Carbon Standard (VCS) for Jurisdictional and Nested REDD+ (JNR) in 2012 while FCPF put out its Methodological Framework in 2013. Major standards considered in detail in this report include:

- **FCPF’s Methodological Framework**. The Forest Carbon Partnership Facility’s (FCPF) Carbon Fund is a World Bank administered multi-participant trust fund that aims to generate carbon credits through large-scale REDD+ programs. The Methodological Framework lays out the criteria to be met by jurisdictions in order to receive payments for results from the Carbon Fund. It consists of 37 criteria and related indicators, associated with 5 major aspects of Emission Reduction (ER) Programs: level of ambition, carbon accounting, safeguards, sustainable program design and implementation, and ER Program transactions.⁹

- **Verra’s Verified Carbon Standard (VCS) Program** is the world’s most widely used voluntary GHG standard for projects. The VCS lays out the rules and requirements which all projects must follow in order to be certified. VCS was developed in 2005 and currently includes 14 approved methodologies for forestry and REDD+, with CDM methodologies also being accepted in some cases. Once projects have been certified against the VCS Program’s rules and requirements, project developers can be issued Verified Carbon Units (VCUs). Those VCUs can be sold on the open market and retired by individuals and companies as a means to offset their own emissions.

- **Verra also provides a jurisdictional-scale framework, the Verra Jurisdictional and Nested REDD+ (JNR) framework**. JNR integrates government-led and project-level REDD+ activities and establishes a

⁹ https://www.forestcarbonpartnership.org/carbon-fund-methodological-framework
pathway for subnational- and project-level activities to be incorporated within broader REDD+ programs. JNR provides several different pathways, for nesting. It includes options for crediting to only occur at a jurisdictional level, or for projects to be nested under the jurisdictional FREL with crediting only to projects, or for crediting to be split between the jurisdiction and projects.

- The Architecture for REDD+ Transactions (ART) has recently approved the REDD+ Environmental Excellence Standard (TREES). TREES specifies requirements for the quantification, monitoring, reporting and verification of emission reductions from REDD+ activities at a jurisdictional and national scale. TREES builds on early action pilot programs and is consistent with UNFCCC decisions including the Warsaw Framework and Cancún Safeguards. 11

Other entities have also developed REDD+ standards. These include the Green Climate Fund, the California Air Resources Board which developed the California Tropical Forest Standard, REDD+plus and the Brazilian state of ACRE which developed its own jurisdictional standard.

In coming years, the development of REDD+ markets and standards may face further complications from the need to align with the requirements of the Paris Agreement. The requirement for countries to identify nationally determined contributions (NDCs) under the Paris Agreement has mobilised developing country governments to set policies that target GHG mitigation. Article 6 of the Paris Agreement opens the door for governments to complement their domestic efforts with voluntary cooperative approaches using internationally traded mitigation outcomes (ITMOs). This means that emissions reductions produced by a REDD+ program in one country could be used towards meeting the NDC of another country. To ensure the additionality of REDD+ programs, the UNFCCC may decide that corresponding adjustments are required following the transfer of ITMOs associated with REDD+ credits. Corresponding adjustments ensure that GHG mitigation can only be counted once, either in the country where REDD+ activities occur or the country that purchases the credit, not both. This could also mean that trade between private sector market participants could have an impact on a jurisdiction’s ability to meet its targets. In turn, governments may choose to regulate the market to make sure that trade in REDD+ credits does not undermine the achievement of their NDC.

1.2 The finance gap

Forests play a critical role as the most economically effective form of negative emissions technology. Negative emissions technologies are key to meeting the objectives set in the Paris Agreement and NBS (including REDD+) are well positioned as a cost-effective source of emissions avoidance and sequestration bringing substantial co-benefits. Negative emissions technologies like NBS, direct air capture with carbon storage, bioenergy production with carbon storage, soil carbon sequestration, among others, will play a key role. To keep global warming below 2°C an estimated 2.5 – 17 billion tonnes (Gt) CO₂eq of negative emissions technologies will be needed by 2050 (See Figure 1). Within the NBS category, reforestation has the highest mitigation potential but avoided deforestation, natural forest management, conservation agriculture and peatland conservation are likely to be the most cost-effective. Forestry has the highest potential of becoming a scalable climate change solution given its relatively low cost, and large potential across a wide range of geographies12.

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10 https://serra.org/project/jurisdictional-and-nested-redd-framework/
Figure 1  The role of NET in reaching the objectives set out in the Paris Agreement

With adequate finance, NBS can make a major contribution to limiting global warming, providing around 30% of the cost-effective mitigation needed by 2030 to stabilise warming to below 2°C. Recent academic research estimates activities related to avoided deforestation, sustainable forest management, reforestation, afforestation and increased forest rotations could mitigate 0.6–6.0 GtCO₂ per year by 2055. Avoided tropical deforestation comprises the largest share of this mitigation potential with 30% to 54% of total mitigation, followed by afforestation, reforestation, and sustainable forest management.

Yet despite the importance of NBS – and REDD+ in particular - the finance gap is significant. The scenarios above would require annual investments in NBS of at least US$722 billion annually by 2030, more than 5 times current levels. These investments will be mostly focused on avoiding deforestation, restoring degraded land, and transitioning marginal farmland to forest lands. More broadly, the Task Force for Scaling the Voluntary Carbon Market argues that to limit global warming to 1.5°C, voluntary offsetting will need to expand 15-fold by 2030. Ranges for REDD+ vary widely, with estimated financing needs from $17 billion/year to $30 billion/year. These financing needs could in large part be met using well-functioning carbon markets, with modelling suggesting efficient carbon markets could facilitate trade in the range of US$185 billion in 2030.

Some countries are starting to attract private forest finance while maintaining social outcomes, but REDD+ programs still depend on donor money which won’t be enough to deliver mitigation at the necessary scale. Despite demand from developed countries and corporates, forests attracted only US$0.8–US$1.4 billion in 2019.

Source: Vivid Economics

[21] Only Colombia accepts REDD+ credits, with the other jurisdictions accepting other forestry and land sector projects.
California constitute the largest proportion with US$0.7-US$0.8 billion. These sources far outstripped international REDD+ results-based payments at the national or jurisdictional level, which accounted for flows of finance of US$40-US$500 million. The voluntary market transacted about US$8-US$150 million, primarily through Verra’s Verified Carbon Standard, plan Vivo and Gold Standard.

1.3 Barriers to REDD+ financing

Projects and programs that reduce emissions in the land sector face a particular set of challenges that require additional measures to assure environmental integrity and social safeguarding:

- **Additionality:** almost all forest credits become valid when the project developer or jurisdiction can demonstrate that the credited project/program was instrumental in reducing deforestation or increasing forest cover in a given area compared to a crediting baseline, which is often a counterfactual historical emissions average or business-as-usual scenario. This includes the need to demonstrate that the project or activities would not have happened in the absence of the carbon finance. Demonstrating financial additionality for projects is often less of a challenge in developing country settings where forestry projects are seldom financially viable.

- ** Leakage:** leakage of emissions refers to the potential for emissions reductions from one project or jurisdiction to be partially displaced by emissions increases in another. While case dependent, avoided deforestation projects can displace deforestation to outside the project boundaries. While there are sustained improvements, quantifying and mitigating the risk of leakage can still be particularly challenging for small scale projects.

- ** Permanence:** land-based projects and programs generally rely on the biological storage of emissions, usually in forests or other biomass. This storage can be at risk from natural and human factors. For instance, wildfires may reverse mitigation in credited areas, or deforestation and/or degradation could occur from future land use change driven by a range of potential political, economic, or social factors. Reversal risk can apply to any programme that measures emissions reductions against a baseline, regardless of the sector.

- ** Uncertainty:** project developers or jurisdictions are required to monitor, report, and verify (MRV) emissions reduced or sequestered by a credited project or program. Land use interventions often cover large swaths of land in remote places, making MRV activities difficult and expensive. Recent development in satellite data enable remote MRV systems but they still involve a degree of uncertainty. Similarly, the measurement of forest reference emission levels (against which projects get credited) is also subject to uncertainty related to the use and interpretation of data.

A range of assurance mechanisms have been developed to address these issues. Additionality tests relating to financial or policy criteria are often used to ensure that projects would not have occurred in the absence of REDD+ financing. The use of buffer pools has emerged as a protection against the risk of reversals to ensure the permanence of emissions outcomes. Further, several forms of crediting deductions are used to account for the risk of leakage or uncertainty in emissions measurement.

Countries with tropical forests – comprising the bulk of REDD+ potential – face local circumstances that exacerbate the risks to environmental integrity and raise concerns regarding social and biodiversity safeguarding. Tropical forests are located in low and middle-income countries in Latin America, Africa and South East Asia. These countries are often characterised by weak and unstable institutions that increase the

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22 The World Bank, 2020. State of Carbon Pricing. Note that each jurisdiction also establishes its own standards for offsets such as the California Air Resource Board Standard or the Colombia Icontec Standard.


risks mentioned above. Additionally, there is a risk that countries can fail to protect the interests of local communities and preserve biodiversity from activities that generate carbon revenues.

Carbon standards like VCS, ART TREES, the World Bank methodological framework, Plan Vivo, amongst others, have established rules for crediting REDD+ projects or programs to try to ensure high-quality REDD+ mitigation. These standards vary in their treatment of their approach to the scale of REDD+ activities, using jurisdictional approaches, project-level approaches or multi-scale nested approaches. Jurisdictional approaches are implemented through national or sub-national governments who receive carbon and non-carbon payments, based on performance against a national or jurisdictional FREL. A project level approach directs incentives towards project stakeholders or local communities based on performance against a project baseline. Finally, a nested approach integrates projects into an accounting and incentive scheme of the host jurisdiction, allowing finance to flow to project developers and local communities as well as national/subnational governments.

These challenges have slowed the development of REDD+. Despite increasing global interest in REDD+, the absolute scale of demand for mitigation outcomes remains small and volatile, leaving jurisdictions over-reliant on ODA and concessional climate finance. To date bilateral and multilateral donors have provided the main source of finance, with a smaller but significant share of funds flowing from a nascent voluntary carbon market. The Green Climate Fund, as the main financing arm of the UNFCCC, has pledged US$ 500 million towards supporting REDD+ programs including allocations for results-based finance, primarily in Latin America and Indonesia. In parallel, Norway, Germany and the UK have signed agreements worth US$5 billion, with Brazil and Indonesia as the primary recipients. The voluntary market has seen increased activity as corporates seek to offset their emissions, most notably large oil and gas companies and airlines, and increasingly corporations adopting net-zero emissions pledges.

1.4 Opportunities for scaling REDD+

Scaling REDD+ finance requires moving beyond the current reliance on concessional climate finance toward market-based sources of demand. The mobilisation of demand from the Carbon Offset and Reduction Scheme for International Aviation (CORSIA) from 2021, and the potential expansion of compliance markets following Colombia’s example and accepting REDD+ credits, could underpin private sector demand. In addition, markets developed under Article 6 of the Paris Agreement could unlock demand for the purchase of REDD+ emissions reductions to meet NDCs. This mechanism opens the door for high emitting jurisdictions to offset their emissions with REDD+ emissions reductions sourced from forest countries. Alongside this, the expansion of voluntary carbon markets provides potential strong tailwinds for REDD+ demand. This all means that REDD+ programmes are expected to be less constrained by limited concessional climate finance.

Alongside this, recent technological developments in remote sensing technology and improved analytical methods can help ensure that REDD+ credits maintain a high level of environmental integrity. Best practices are emerging in the remote sensing space that facilitate more accurate MRV but also more precise calculation of project baselines and FRELs. More accurate and credible technology reduces uncertainty around REDD+ crediting and helps forest countries capture more opportunities and benefits by reducing uncertainty, and therefore the need for overly conservative approaches. The implementation of crediting buffers and deductions also reduce the risks associated with additionality, accuracy, leakage and permanence.

Finally, support for REDD+ readiness has supported institutional strengthening to increase environmental integrity and implement social and biodiversity safeguards. Together these developments may enhance the ability of REDD+ programs to serve new markets, by providing confidence in the integrity of credits and their associated co-benefits.

https://www.ecosystemmarketplace.com/articles/norway-germany-uk-pledge-5-billion-to-combat-tropical-deforestation/
1.5 Purpose of the report

This report seeks to identify the key factors that are supporting or inhibiting success, and to identify a pathway to support greater flows of finance. Through this it seeks to support performance that delivers high integrity emissions reductions and avoidance at the greatest scale, and delivers maximum benefits to communities. This pathway will be informed by the experience of REDD+ implementation in Colombia the DRC and Ghana. These countries bring varying levels of success in mobilising REDD+ activities and have faced different challenges in implementation that provide lessons for REDD+ development worldwide.

The remainder of this report is set out as follows:

- **Section 2** develops a framework that defines a successful REDD+ implementation and identifies its key enablers and barriers.

- **Section 3** describes the case studies that test the framework in the case of Colombia, DRC and Ghana through desk-based research and stakeholder engagement.

- **Section 4** set out recommendations for standards, country governments, project developers and investors.

- **Section 5** sets out our key conclusions.
2 A framework for REDD+ success

This section sets out a framework for understanding the determinants of REDD+ performance. Mobilising finance at scale requires strong and stable demand for emissions reductions, enabling conditions within jurisdictions that ensure environmental integrity and protect the interests of investors, intermediaries, and local communities. It is only with these factors in place that REDD+ can attract climate finance at scale and deliver the desired environmental and social results. The core attributes of the framework build on the findings of the broader literature on REDD+ set out in Box 1 below.

Box 1 Literature on REDD+ success and failure

Previous studies assessing REDD+ programs globally have identified a consistent set of barriers as well as enablers for performance.

- The Green Climate Fund (GCF) surveyed 55 countries and identified that governments faced challenges getting their national forest monitoring systems to the required standard, while data used for generating and updating FREL/FRL was of insufficient quality. Additionally, they identified the need to establish or enhance information systems regarding safeguards. The GCF concluded that the slow progress on these fronts was delaying the delivery of results. These lessons learned are a good starting points to test during the stakeholder interviews.

- The Taskforce on Scaling Voluntary Carbon Markets identified six key topics for action, all of which are directly applicable to REDD+: 1. Core carbon principles and attribution taxonomy; 2. Core carbon reference contracts; 3. Trade, post-trade, financing and data infrastructure; 4. Generate consensus on legitimacy of offsetting; 5. Market integrity assurance; and 6. Demand signals.

- The Environmental Defense Fund (EDF) acknowledges the need to scale up the voluntary market and advocates for the expanded use of carbon offsets. They highlight that the rapidly changing policy landscape, including Article 6 implementation, requires carbon offsets to be of high quality and aligned with the Paris Agreement. However, EDF also emphasises that ongoing negotiations regarding corresponding adjustment should not delay urgent action.

- Architecture for REDD+ Transaction (ART) and Verra Jurisdictional Nested REDD+ (JNR) have recently developed, in consultation with a wide range of stakeholders, standards for jurisdictional offsets. In both cases, the main bottlenecks identified relate to ensuring results at scale by aligning different market players. Jurisdictional performance requires high level buy-in from the national government, political will and capacity from the jurisdictional government, and a trusting relationship with the private sector and local communities.

This Framework, illustrated in Figure 2, requires alignment between a jurisdiction’s capability to implement credible REDD+ programs to service the demand of markets and mitigation finance providers, as mediated through relevant standards. Countries’ enabling conditions reflect their capacities and offerings in terms of institutions, policy, trade infrastructure, and data analysis and MRV capacity. Standards reflect the minimum environmental and social requirements that stakeholders might need to fulfil to ensure performance or market-based payments. Standards, notwithstanding growing consensus, are developed with different interests and circumstance in mind, and as such cater to different types of demand. When national capacities allow stakeholders to fulfil standards’ requirements, then this can unlock sources of demand, supporting greater performance. The following subsections describe each element outlined in the framework.
2.1 Performance indicators and impact

The objective of REDD+ is to reduce emissions from avoided deforestation and degradation, as well as to generate economic development benefits for host jurisdictions and communities. Our framework identifies three central performance indicators that are indicative of success and achieving the desired impact:

1. **Environmental outcomes.** The underlying objective of REDD+ is to reduce emissions, and achieving credible emissions reductions at scale is the key metric for REDD+ success. Over the period 2014–2018, REDD+ activities reduced emissions by an estimated 3.16 GtCO$_2$e globally. REDD+ activities can also bring a range of other environmental benefits, such as protecting biodiversity and reducing local pollution.

2. **Flows of finance.** To achieve its intended impact, a REDD+ program must attract large and robust financial flows, while ensuring environmental outcomes and benefits to local communities. Decades of experience in REDD+ programs show that the intended impact can be achieved by incentivising sustainable practices with financial returns. Financial support needs to be appropriately targeted with up front support for readiness transitioning, post readiness finance for the implementation of activities as well as enabling conditions, and scaled up demand for mitigation outcomes over time. These financial returns need to be large enough to generate substantial emissions reductions and robust enough to reduce risks to governments and project developers.

3. **Benefits to communities.** This relates to the proportion of finance flowing to local communities and/or the ancillary benefits created through the generation of economic opportunities (for instance employment, education, and access to telecommunication, water or other infrastructure) and enhanced environmental outcomes. This is fundamental to the framework, and all its elements aim to generate this impact. While financial returns incentivise government and private sector action, it is important that the program share benefits with local communities. This is crucial to ensuring the sustainability of outcomes and a just climate transition.

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These performance indicators provide a lens through which to view the success of REDD+ in delivering its fundamental objectives, and balancing the finance needed to mobilise investment with the environmental and social outcomes achieved.  

### 2.2 Enabling conditions for enhancing supply

*Forest countries have been unable to keep up with the increasing demand for carbon credits despite substantial investments in REDD+ readiness.* A survey of 55 countries found that only 8 countries have submitted REDD+ results, while another 26 have completed their national strategy or action plan, 28 have completed FRELFRLs, 19 have a national forest monitoring system, and 14 have addressed safeguards. Most funding emerging from the international community has been centred around REDD+ readiness, which provides technical assistance to countries to establish baselines and reference levels, develop protection systems for their forests, and put in place monitoring and verification systems to track forest-based emissions.

**Strong institutions, appropriate policies, sound MRV, and trade infrastructure, determine the enabling conditions for a REDD+ program to deliver results at scale.**

#### 2.2.1 Institutions

Fundamental institutions like the rule of law and respect for private property are a key requisite for a REDD+ program to function well. Clearly defined and enforceable rules are vital for the program to function properly because REDD+ treats GHG mitigation as a commodity, which needs basic guarantees in order to have market value. Hence, institution must be strong and stable to provide such guarantees. A flawed legal and institutional framework would undermine the environmental objectives of the program and weaken confidence among market participants.

REDD+ programs must balance a high-level of ownership from lead agencies with cross institutional buy-in to be effective. To be effective these programs must have clear support and ownership within the government with the necessary governance tools and mechanisms, such as project approvals and a means for ensuring appropriate grievance and benefit sharing mechanisms. These agencies are usually Ministries of Environmental, Ministries of Finance, Planning Departments, amongst others. Additionally, a central authority may need to maintain trading infrastructure, such as a registry and ensure it is regularly updated and provides assurance against double counting or claiming of emissions reductions. Independent observers should be involved in the operationalisation of REDD+ to increase its legitimacy and credibility. A central point of control allows for better coordination and consistent implementation across subnational jurisdictions, but it is fundamental for implementation to take account of local circumstances and have direct contact with participating entities. Community and private sector support are also fundamental for ongoing success.

#### 2.2.2 Policy

Appropriate policies can help build confidence in the overall credibility of a REDD+ program and act to mobilise investment and demand.

Clear NDC commitments backed by nationally appropriate policies to deliver commitments can build confidence in the credibility of commitments and the quality of REDD+ credits. It is key that the government sets out a solid and stable NDC commitment with a clear implementation roadmap, including enforcement.

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28 This report would like to have used additional data for the performance indicators. Whilst the research and stakeholder feedback provided a useful degree of such data, it was difficult to get quantitative evidence for each of the indicators. For example, it was particularly challenging to segment finance between readiness, private sector investment in activities and end market demand for results. Similarly in the case of environmental outcomes, the only available indicator was verified emission reductions, with definitions of absolute opportunities (at both the jurisdictional and project scale) being difficult to quantify. Community benefits data across the board was difficult to assess. As jurisdictional programs mature, further research may allow for the increase of both types of data.

and financing strategies. Uncertainty regarding strategies to meet an NDC or other commitments creates regulatory uncertainty and may undermine perceptions regarding commitments to the credible implementation of REDD+ programs.

**Countries can also support the mobilisation of demand and market development through domestic policies.** For instance, establishing compliance markets for REDD+ mitigation through an emissions trading system, a carbon tax or other form of compliance requirements can stimulate a substantial source of stable demand, which can underpin investment and project development. Additionally, policy decisions, such as allowing the participation of financial sector participants in secondary markets, can facilitate the participation of market intermediaries that enhance liquidity and facilitate trading and investment. Finally, policies around rural development (for example, sustainable development for commodity supply chains) facilitates the engagement of commodity supply chain related businesses and smallholder landowners in the market. Zero deforestation commitments in global commodity supply chains have mainstream momentum, with sustainable intensification of commodity production of mutual interest and benefit to almost all stakeholders. While this report covers such policies at a high level, their relevance is clear as highlighted in the case studies of Ghana and Colombia. A lot of REDD+ resources have already focused on these opportunities with best practice guides developed by the World Bank, and preferential sourcing initiatives from REDD+ jurisdictions having been established. The former includes banking and development related finance connections, and the later connections to standards.

### 2.2.3 Capacity in data analysis and MRV

Both appropriate MRV systems and expertise in assessing data with FRELs are required to ensure the accurate quantification of emissions reductions.

Monitoring systems must be tailored to the specific context of each forest but can draw on a standard set of best practice techniques. For instance, remote sensing techniques have become widespread best practice, as long as they have high enough spatial and temporal resolution, as well as disciplined ground truthing protocols. Monitoring systems draw upon a wide library of detailed methodologies, product and activity descriptions, emissions factors, calculation models, and relevant assumptions depending on the context. There is no universal monitoring system readily available, but best practice indicates that spatial resolution needs to be high enough to capture small scale disturbances, data must be drawn frequently enough to generate timely actions and ground truthing protocols need to be disciplined enough to ensure precision.

All the entities that participate in a REDD+ program must report the monitoring data on a timely, transparent and standardised way. A reporting system should be transparent and directly engage responsible entities. It is also important for the reporting system to be consistent across projects and jurisdictions within a country. Finally, it is important that reporting rules align with the requirements of relevant UNFCCC reporting and national compliance guidelines and timeframes.

To reduce risks of inaccurate or misleading reporting, programs need to verify the accuracy and reliability of the information provided. The method of verification is less important than ensuring it is credible. For instance, most systems currently use independent third-party verifiers to ensure that reporting is accurate. However, verification could also draw on national laws and protocols in a given jurisdiction, for instance with self-reporting backed against substantial punishments for inaccurate or misleading reporting.

Limited capacity to construct a credible FREL may put into question its credibility. Uncertainty around FRELs is directly related to uncertainty around the REDD+ program’s additionality. This has a double effect of driving away potential demand or forcing conservative baselines that potentially reduce the programme’s ability to attract finance. Poor expertise or capacity both internationally and domestically can create negative impacts and volatility to the scope of REDD+ programs.

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30 ICAP (2016) provides links to monitoring approaches used around the world on their website.
2.2.4 Trade infrastructure

Market development is enhanced through the development of appropriate infrastructure that facilitates trading between credit owners (supply), end users (demand) and intermediaries.

This requires appropriate registry infrastructure for creating and trading credits. A comprehensive registry of program and/or project credits facilitates secondary market transactions, standardised contracts that facilitate commodity-style trading, and long-term risk management instruments. Additionally, it is fundamental for the credibility of the market as a whole, because it ensures that emissions reductions are not double counted, nor double sold.

To scale up REDD+ programs, requires a robust secondary market where REDD+ credits can be traded. At present, the overwhelming majority of REDD+ mitigation is traded in bilateral transactions over the counter, meaning there is no significant secondary market. Relying on over-the-counter transactions increases costs and reduces liquidity, transparency, and price discovery, all of which can undermine participation in and the expansion of markets for REDD+ credits.

2.3 Demand for REDD+ results

Strong and stable demand is a key determinant of REDD+ success. Compliance markets are by far the largest sources of demand for credits and can provide a relatively predictable source of demand as they are closely linked to compliance requirements of emitters within a jurisdiction. Eligibility rules in compliance markets also establish a standardised baseline for REDD+ projects which supports standardisation and secondary market development. Voluntary market demand on the other hand, is smaller in scale and demand may differentiate significantly based on the underlying characteristics of projects. Developed countries and multilateral institutions are also a considerable source of demand.

Each source of demand brings different preferences around environmental integrity assurance, focus on community involvement and sensitivity to price. The different attributes of REDD+ demand sources include:

- **Voluntary markets**: most buyers in the voluntary market are large emitting companies most often purchasing to comply with their environmental, social and governance (ESG) commitments or objectives. The motivation behind their participation varies widely, often responding to the demands of existing or prospective customers, fulfilling the ESG mandates of investors, or to differentiate from competition. Demand from the voluntary market will often have more stringent requirements for environmental integrity and community safeguards and as a result is also often less sensitive to prices than compliance demand. Voluntary buyers are often willing to pay a premium on projects that perform across multiple ESG criteria. Voluntary market participants are generally more interested in demonstrated project level impacts. Nonetheless, there is also significant interest in the large scale purchase of jurisdictional and national level credits, when these become available.

- **Compliance markets**: compliance buyers are usually composed of large emitters who are required by law to reduce their GHG emissions (through an ETS or a carbon tax). These markets can create demand for domestic emissions reductions or sequestration (such as in Colombia and New Zealand)\(^{31}\) or from international sources (such as CORSIA, and potentially California’s cap and trade system or even ITMOs). Offsetting is often one of several options that entities have for meeting their liabilities at least cost, and as such firms are often more interested in cost competitiveness than the broader attributes of credits. Compliance markets often cover the largest emitters in a jurisdiction, which means that the scale of demand from compliance markets can be significantly larger than other sources.

- **Multilateral and bilateral climate finance**: multilateral and bilateral sources of climate finance may directly cooperate with jurisdictions, or support projects that deliver REDD+ mitigation outcomes.

\(^{31}\) Note, New Zealand does not accept REDD+ credits, but covers deforestation and allows generation of credits for afforestation in its ETS.
They predominantly provide concessional assistance as part of overseas development assistance programs. The largest buyers in this category are currently Norway, UK, Germany, the World Bank’s Forest Carbon Partnership Facility (FCPF) and the Green Climate Fund. These financers often want to ensure high levels of integrity of sourced emissions reductions given purchases are directly financed from donor government budgets. Therefore, these buyers often require stringent standards to be met at both a project and jurisdictional level.

2.4 Standards

Standards reflect the minimum environmental and social requirements that suppliers of REDD+ credits need to fulfil to ensure market-based payments. Historically standards have had very different approaches to certifying REDD+ credits, leading to potentially large variations in the quality of REDD+ credits. Consensus around the best way to deliver results at scale is only starting to emerge. There are strong tailwinds pushing jurisdictional approaches forward, and this trend can either create opportunities or risks for private sector participation.

The key aspects that standards and policy makers need to take into account are set out below and summarised below.

2.4.1 Forest reference emissions levels

Standards in most cases establish rules or guidance on the setting and updating of crediting baselines, or Forest Reference Emissions Levels (FRELs), at a jurisdictional or project level. A FREL is the benchmark against which the emissions and removals from a results period are compared. Thus, reference levels serve as benchmarks for assessing each country’s performance in implementing REDD+ activities. As such the approach to setting a FREL is one of the most important and contentious aspects of standards.

Setting an appropriate FREL is a challenging process, as it requires the use of historical emissions to estimate a counterfactual scenario for future deforestation and subsequent emissions. If the FREL is too conservative, it will reduce the incentives for the private sector to participate in the market. If it overestimates likely deforestation, it will undermine the environmental integrity of the credits and the market. It has also long been recognised, that market participants suffer from perverse incentives and adverse selection problems when setting their baselines.32

An appropriate choice of FREL will depend on jurisdiction-specific circumstance. There are two main approaches to setting a FREL, both of which draw on historical records to infer future deforestation levels:

- **business as usual trends** establish a FREL based on an extrapolation from recent emissions trends assuming that these trends continue in the future.

- **historical averages** establish a FREL assuming that future emissions will resemble an average of recent years.

Additionally some standards also allow for High Forest Low Deforestation (HFLD) adjustments to reflect that fact that deforestation could be an increasing phenomenon in certain jurisdictions, though historically low for reasons such as armed conflicts ending. Some standards also have an additional crediting line with crediting available only once the prescribed additional performance beyond the FREL has been achieved. Other approaches may yet be introduced, such as a ‘max cap’ that hybridizes the average, BAU and crediting line approaches, by setting performance required at the peak of a trend without further increases.

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Table 1  Standards address baseline issues by establishing reliable methodologies

<table>
<thead>
<tr>
<th></th>
<th>Verra VCS</th>
<th>Verra JNR</th>
<th>ART TREES</th>
<th>FCPF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline setting approach</strong></td>
<td>Project methodology requirements.</td>
<td>Historical annual average*</td>
<td>Historical annual average</td>
<td>Historical annual average</td>
</tr>
<tr>
<td>*<em>HFLD and national circumstances adjustments</em></td>
<td>No</td>
<td>Currently being considered</td>
<td>HFLD crediting level approach is proposed for TREES 2.0 (currently in public consultation process)</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Baseline reference data</strong></td>
<td>Not specified</td>
<td>Past 4-6 years, ending within two years of the start of the crediting period</td>
<td>5 years immediately adjacent to crediting period</td>
<td>10 years, ending two years before the start of baseline period</td>
</tr>
<tr>
<td><strong>Revision frequency</strong></td>
<td>Every 10 years</td>
<td>Every 4-6 years</td>
<td>Every 5 years</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: *New VCS JNR guidance coming up at the end of 2021 regarding trend based FREL.
Source: UNFCCC; Verra; ART; FCPF and Vivid Economics

Figure 3 shows indicative examples of how FREL calculations could lead to over crediting or under crediting, given the true counterfactual trajectory (in the absence of a REDD+ program).

As well as ensuring an adequate counterfactual, it may be appropriate to consider whether there may be a required level of ambition for a FREL to be considered adequate. This may be the case if buyers wish to ensure that host jurisdictions are taking a reasonable degree of unconditional action as a contribution to avoiding deforestation. This could be achieved by establishing a crediting baseline below the appropriate counterfactual.
Figure 3  FREL calculations may lead to undercrediting or overcrediting of mitigation

Note: These graphs are for illustrative purposes only
Source: Vivid Economics
2.4.2 Crediting, allocation and aggregation (including nesting)

Standards determine how REDD+ performance and credits are aggregated from the local to the jurisdictional level and how the FREL, crediting or revenues generated are allocated between the relevant stakeholders. Jurisdictional approaches to REDD+ are gaining momentum because they help reduce leakage risks and encourage landscape level actions. However, crediting at the jurisdictional level puts at risk some of the incentives that have driven the private sector (including, but not limited to, projects) to engage in REDD+ activities. FCPF is in the process of writing the rules that determine if and how local projects can be nested to coexist with jurisdictional and national programs. Other jurisdictional standards like ART TREES allow jurisdictions options to either use an already published allocation approach, build on their existing allocation approaches or design a new allocation approach suited to their specific circumstances.

The idea of nesting local level projects to help achieve jurisdictional and national level objectives is attractive because it can help bridge divisions between public and private action. Some experts are of the view that in order to promote mitigation action at scale while preserving environmental integrity, REDD+ credits should not be issued to project-level entities, but only to governments. Governments could then choose to aggregate project level emissions reductions and reward them for their “fair share” of the effort in the jurisdictional performance. Other experts favour decoupling projects and government performance, and allowing crediting at either level as the only realistic means to reduce risks and attract substantial private sector project developer participation and scaled up sustainable commodity supply chain investment, whilst still keeping financial incentives for Governments related to the results of additional policies. Regardless of the approach used it is essential that the rules are clearly specified to give investors confidence that their actions will be appropriately credited.

The process of aggregating activities and allocating credits has several technical difficulties, and there is no clear consensus on how this should be done. For example, Brazil or Guatemala have tried to nest projects within their jurisdictional programs with limited success. In the case of Brazil, the state of Acre established a jurisdictional program covering an area that had pre-existing private projects that had been generated to comply with VCS JNR. The technical divergence between the project and the jurisdiction created barriers (e.g. large transaction costs and disincentives) that stopped the process. A similar case happened in Guatemala where the government designed its jurisdictional program to comply with VCS JNR and then a methodology to comply with FCPF. According to the World Bank, the technical challenges relate to:

- Data and methodological mismatches: there are important differences between national and project level GHG accounting methodologies. National level methodologies are usually tailored to GHG inventories reported to the UNFCCC, while project level data usually focuses more on high resolution data and data collected on the field. Advancements in MRV technologies may mean that current capacity barriers decline over time.

- Baseline setting and allocation: especially in the case of avoided deforestation projects and programs, the way in which the baseline is set varies widely. This is especially problematic with legacy projects that overlap with jurisdictional programs. Different standards propose different solutions, ranging from not accepting nesting in the case of avoided deforestation projects, to allocating a share of the jurisdictional baseline to the project. The most sophisticated solution is the one proposed by VCS JNR which proposes using deforestation and degradation risk maps to adjust the jurisdictional FREL to the project level.

- Avoidance of double counting: if accounting is not done properly, emissions reductions could be counted at both the project and jurisdictional level. With Article 6 of the Paris Agreement coming into play, this will become a critical issue for REDD+. Double counting can be avoided if the jurisdictional program allocate emissions reductions centrally or if project and program credits are

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part of a nested system and managed in the same registry. Other provisions to prevent double counting could include checking for issuances from the same accounting area under other programs, which is an integral part of verification for project and jurisdictional scale programs.

Table 2  Allocation and aggregation rules are often decided by the jurisdiction itself

<table>
<thead>
<tr>
<th>Nesting guidelines</th>
<th>Verra VCS</th>
<th>Verra JNR</th>
<th>ART TREES</th>
<th>FCPF-MF</th>
</tr>
</thead>
<tbody>
<tr>
<td>No guidance.</td>
<td>Allocation Tool estimates the risk of deforestation and forest degradation to allocate the FREL, and estimate project baselines or subnational jurisdictional FRELs</td>
<td>No guidance. Up to the jurisdiction.</td>
<td>No guidance. Up to the jurisdiction.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project level disaggregation</th>
<th>Verra VCS</th>
<th>Verra JNR</th>
<th>ART TREES</th>
<th>FCPF-MF</th>
</tr>
</thead>
<tbody>
<tr>
<td>No guidance</td>
<td>Projects perform in line with jurisdiction according to nesting rules, and in case of jurisdictional non-performance, projects get credits from the jurisdictional non-performance pooled buffer.</td>
<td>Projects perform in line with jurisdiction according to nesting rules, and in case of jurisdictional non-performance, projects cannot issue jurisdictional credits.</td>
<td>No guidance. Up to specific ERPAs.</td>
<td></td>
</tr>
</tbody>
</table>

Source: UNFCCC; Verra; ART; FCPF and Vivid Economics

Some standards are coming up with innovative means to allocate FRELs, including risk-based modelling based on social, economic, and spatial factors. What is most important is that FRELs are based on a robust evidence base, and can justifiably be considered to represent an accurate assessment of the available information to reflect a true baseline against which projects and/or jurisdictions need to perform. For instance, the updated JNR standard includes a Risk Mapping Tool that is "a spatially explicit assessment of the risk of deforestation and/or forest degradation. This risk map provides the information to allocate portions of the jurisdictional FREL to specific areas within the jurisdictional boundaries in a proportion that corresponds to the deforestation or degradation risk faced by such areas". 34

2.4.3 Buffers, deductions and other assurance mechanisms

Standards set the rules that projects and programs need to follow in order to mitigate the uncertainty created by reversal risk, leakage and measurement error:

- The reversal risk (or risk of non-permanence) refers to the possibility that emissions captured in forests are released back into the atmosphere. Some standards argue that the only way to properly deal with this risk is if the influence area is large enough to ensure that reversals in one area are

offset by increased sequestration in another. As such, under most standards, projects and programs contribute a share of their carbon credits to a buffer pool.

- The **leakage risk** refers to the unanticipated increase in greenhouse gas emissions outside of a project’s accounting boundary resulting from the project’s activities.
- Crediting is often prone to **measurement error** due to data inaccuracy or other factors.

**A range of measures including buffer pools and deductions can be used to address these risks.** Buffer pools are generally used to address the risk of reversals/permanence. Should reversals or leakage occur, an equivalent number of credits are retained to secure the integrity of issued carbon credits. Sometimes standards request that some credits are set aside in a buffer pool to make up for the lack of high-quality data to estimate performance. Under the VCS only VCU’s are withheld in the buffer pool to compensate for reversals. Leakage is addressed as a discount to the creditable performance. Buffers must be data driven to ensure they are large enough to cover these risks but do not deplete incentives for the private sector. In addition to buffers, standards also use a range of deductions to address the risks of leakage and uncertainty of emissions measurement. These take account of project and jurisdictional factors to risks and then reduce crediting accordingly. Further details are provided in Table 3.

**Table 3 Standards often require deductions to mitigate risks from non-permanence and leakage**

<table>
<thead>
<tr>
<th>Reversal / non-permanence risk buffer</th>
<th>Verra VCS</th>
<th>Verra JNR</th>
<th>ART TREES</th>
<th>FCPF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reversal / non-permanence risk buffer</td>
<td>10-60% to buffer pool. No distinction in intentional versus unintentional reversals.</td>
<td>6-53% to jurisdictional buffer pool. No distinction in intentional versus unintentional reversals.</td>
<td>5-25% to buffer pool (5% more for 5 years after reversal). No distinction in intentional versus unintentional reversals</td>
<td>10-40% to buffer pool.</td>
</tr>
</tbody>
</table>
| Leakage risk deduction | Required: deduct based on risk assessment | Required: deduction based on risk assessment:  
- Global commodity (default) leakage: 3% to 9%  
- Domestic market leakage: 15%  
- Deforestation to degradation leakage: 4%  
Total: Up to 28% | Required if subnational; deductions based on % of national forest area included in accounting 0-20% deduction (max deduction if <25% national forest covered) | Not required due to accounting and attribution challenges and following UNFCCC guidance on REDD+ |
| Uncertainty deductions | Included with consideration on a case-by-case basis | Included with consideration on a case-by-case basis | For the reference and the crediting period, uncertainty calculated with a 90% confidence interval, and: | Uncertainty of the emission reduction must be calculated using a 90% confidence interval. |
2.4.4 Social and environmental safeguards

REDD+ has the potential to deliver social and environmental co-benefits that go beyond the reduction of greenhouse gas emissions, but REDD+ may also entail potential risks to people and the environment. These benefits and risks will depend on a number of factors related to national circumstances—such as how REDD+ actions are designed, as well as where, how and by whom these actions are implemented.

All standards must ensure they protect or avoid risks (do no harm), while promoting benefits (do good) to provide the assurance of integrity that markets need. Safeguards ensure that projects are aligned with broader development objectives, and to ensure the involvement and protection of potentially vulnerable social groups. Additionally, safeguards ensure that REDD+ projects do not deplete biodiversity. Both aspects are fundamental aspects because they ensure the long-term sustainability of the project or programs. Seven safeguards, also known as the "Cancún safeguards", were agreed for REDD+ at the 16th Conference of the Parties to the United Nations Framework Convention on Climate (COP16) in 2010.35

1. Actions complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements;
2. Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
3. Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws;
4. The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities;

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35 https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf
5. That actions are consistent with the conservation of natural forests and biological diversity, taking into account the need for sustainable livelihoods of indigenous peoples and local communities and their interdependence on forests in most countries;

6. Actions to address the risks of reversals;

7. Actions to reduce displacement of emissions.

**Standards usually leave the practical application of safeguards to project developers and communities.** Standards, such as the Climate, Community and Biodiversity Standard provide developers with guidance on project design and provide a practical mechanism for checking (i.e., validating) that design before implementation begins, followed by verification. Project standards will require the greatest level of primary data collection to demonstrate compliance of key requirements such as the Free, Prior, Informed Consent of indigenous populations. The FCPF MF sets broad safeguarding objectives and request project and/or program developers to addressing the requirements of the applicable safeguards before receiving any payments. This is because practical application of these safeguards depends on the project or program context and will vary across countries.

**There is not yet a consensus on the appropriate design of benefit sharing mechanisms, which are usually agreed directly between project and program developers and local stakeholders.** Project and program developers are requested to come up with ways financial benefits are shared between different stakeholders, and more specifically local communities living in areas where REDD+ projects and/or programs are being implemented. For example, under the VCS Kenya Agricultural Carbon Project, 60% of carbon revenues are to formally contracted to farmer groups, 35% of carbon revenues are used by the project entity for advisory services to farmers and 5% are used by the project entity for communication and marketing of excess emission reductions to buyers other than the Bio-Carbon Fund. In the Mai Ndombe REDD+ project, the local forest community of more than 50,000 Congolese villagers will receive direct benefits from the project in the form of jobs, schools, health clinics, improved food security through improved agriculture and the redevelopment of native fish stocks, and capacity building of local NGOs and Community Based Organisations, all financed through transparent sharing of the carbon revenues.

**The guidance in this topic across the main different standards:**

**Table 4**  
Most standards require conformance with UNFCCC REDD+ safeguards

<table>
<thead>
<tr>
<th>Safeguards considered</th>
<th>Verra VCS</th>
<th>Verra JNR</th>
<th>ART TREES</th>
<th>FCPF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conformance with VCS requirements</td>
<td>Optional conformance to CCB requirements</td>
<td>Conformance with UNFCCC REDD+ safeguards</td>
<td>Conformance with Cancun Safeguards</td>
<td>Conformance with World Bank safeguards policies and UNFCCC decisions on safeguards for REDD+</td>
</tr>
</tbody>
</table>

Source: Verra; ART TREES; Climate Focus; UNFCCC and Vivid Economics

**2.5 Future REDD+ developments**

REDD+ is operating in an increasingly complex environment, that both holds opportunities for significantly scaling investment and risks that these investments could be undermined by inappropriate policy settings.

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27. https://verra.org/deep-dive-into-the-kenya-agricultural-carbon-project/
The increasing involvement of governments in line with NDCs under the Paris Agreement is likely to scale up the financial flows directed to REDD+ programs and projects. However, the potential for this to lead to changing ‘rules of the game’ creates increased risks for the private sector.

The increasing involvement of the government in the REDD+ market since the Paris Agreement has created increased complexity and risks for private sector participants. The Paris Agreement has pushed many governments to increase their involvement in the REDD+ programs as a way of achieving jurisdictional mitigation objectives. Indeed, most tropical countries have pledged to use land use mitigation to fulfil their NDCs. The incorporation of land use into formal international commitments means that countries have needed to take a greater degree of involvement in establishing how crediting occurs and is accounted for in their jurisdiction. However, this creates risks for the private sector, as rules for allocation and aggregation affect the distribution of risk and reward between investors and government. To the extent that these rules are too restrictive, or remain uncertain, this can reduce investment as returns are insufficient or subject to excessive uncertainty.

Private sector engagement in REDD+ is conditional on the ability to assess and manage risks that compromise project success. While the private sector is normally prepared to deal with risks associated with project performance, counter-party credit risks, and market and currency fluctuation, it is not normally willing to take on significant political and sovereign risks (such as failure of the government to perform, absence of clarity of carbon rights, and poor enforcement capacity). The risk faced by REDD+ investors, project developers and commodity supply chain investments linked to REDD+, are heightened in countries that may not possess the enabling conditions required to ensure effective governance and institutions. The period during which the appropriate policies, institutions and governance mechanisms are developed may be accompanied by low levels of investment and private sector engagement. However, in the longer term, the implementation of effective project and jurisdictional level protections for environmental integrity can enhance REDD+ performance by enabling jurisdictions to access new sets of demand that are interested in ensuring high integrity.

To be effective standards must balance the need for credible rules that ensure environmental and social outcomes at scale with the predictability that is needed for private sector investors to proactively assess opportunities and manage risks. As standards and jurisdictions seek to identify rules that deliver results at both the jurisdictional and project level, it is important these remain cognisant of the need to provide a predictable investment environment. Necessarily this will require some degree of risk sharing between governments, that wish to ensure they meet their commitments, and businesses, who require a degree of certainty to make investments. Establishing clear rules for public-private interactions will also facilitate the engagement of new types of cooperation such as emergent cooperation across supply chain firms for agricultural commodities.

In the longer term a system that ensures environmental credibility and facilitates private sector engagement will likely deliver greater levels of performance. This will unlock new sources of demand, by enabling REDD+ to become increasingly integrated into domestic and international compliance markets, which provide the most promising opportunity for mobilising finance at scale. An indicative example of this transition of a jurisdiction’s movement from a pure project focus to a jurisdictional or national focus is shown in Figure 2.

The case studies that follow outline how Colombia, the DRC and Ghana have differed in their ability to mobilise REDD+ performance, and identifies priorities for them to enhance their REDD+ performance.
Figure 4: Indicative development of REDD+ funding sources

<table>
<thead>
<tr>
<th>Performance Mitigation delivered</th>
<th>Project focus</th>
<th>Transition phase</th>
<th>Project and jurisdictional alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Access to finance</td>
<td>Access to finance</td>
<td>Access to finance</td>
</tr>
<tr>
<td></td>
<td>Voluntary</td>
<td>Voluntary</td>
<td>Compliance</td>
</tr>
</tbody>
</table>

- **Environmental integrity**: Project level assurance, but risk of leakage and double claiming • Requirements established for jurisdiction and project interactions • Robust protections established at a project and jurisdictional level
- **Capacity requirements**: Very low requirements for government involvement, with much outsourced • Low government capacity can inhibit establishment of appropriate rules • Increased government capacity supports robust systems
- **Investment environment**: Investment facilitated via standards with limited local involvement • Lack of clarity on rules for nesting and attribution reduces investment • Demand grows, clear rules for risk sharing enables private investment

Source: Vivid Economics
3 Case study: Colombia

Colombia is amongst the most active participants in REDD+ activities globally. This engagement primarily through project-based activities serving the domestic compliance market and global voluntary markets, with jurisdictional scale engagement also ongoing. Despite the relative success in driving the uptake of REDD+, coverage remains low and deforestation rates across much of the country have increased as deforestation has expanded to former conflict regions in the past decade.

As one of the 9 nations home to the Amazon, Colombia’s forests are expansive, covering 60 million hectares in 2018. In its Forest Reference Emission Level submission, Colombia reported a natural forest area of 60 million hectares in 2018, which represents 52.6% of the national territory. Average rate of deforestation in the last 18 years was of 0.24%. Forests cover more than half of Colombia’s territorial land, equivalent to an area just smaller than Texas or just larger than France. Colombia is the second most biologically diverse country in the world, hosting five major biomes (Amazon, Andes, Caribbean, Orinoco and Pacific).

Following the 2016 Peace Agreement, which ended over 50 years of civil war, renewed economic activity in forest regions has led to an increase in deforestation rates. In 2016, more than 180,000 hectares of forest were cleared – an increase of roughly 40% increase on previous years. Estimates suggest that these rates have continued to increase, with Global Forest Watch recording a further loss of 265,000 hectares of forest in 2019 – or 104 MtCO₂e of emissions. In its FREL submission, Colombia warned that the post-conflict period could have negative consequences for forests as these areas opened to economic development, given the relatively low level of capacity for forest management in these regions. In the last five years deforestation in Colombia has been concentrated in the departments of Caquetá, Meta and Guaviare, home to some of the municipalities most effected by the Peace Agreement. This impact is also evidenced in other deforestation hotspots such as Serranía de San Lucas (Antioquia and Bolívar) and Catatumbo (Norte de Santander).

3.1 Engagement with REDD+ programs

Forests are an important component of the Colombian Government’s strategies for mitigating and adapting to climate change. At present, Colombia hosts both jurisdictional and project-based REDD+. Colombia currently hosts the Orinocia Sustainable Integrated Landscape Program, a jurisdictional program financed by the BioCarbon Fund. Colombia previously hosted the Amazonía Visión Program, which acted as an umbrella for activities aimed at reducing deforestation in the Amazon Region. The Amazonía Visión initiative was kick-started by the REDD+ Early Movers program. In parallel, Colombia hosts a large number of REDD+ projects, primarily developed by the private sector working with indigenous communities. According to Colombia’s registry system (RENARE), many of these appear to be at an early stage of implementation, however this may be due to the registry still being under development. Of the 55 projects identified in RENARE, none are listed as being implemented. 20 of these 55 projects are also listed on the...

References:
42 [https://www.globalforestwatch.org/my-gfw/](https://www.globalforestwatch.org/my-gfw/)
45 [https://unfccc.int/sites/default/files/rem_wfc_09_15_final.pdf](https://unfccc.int/sites/default/files/rem_wfc_09_15_final.pdf)
Verra VCS registry, of which only half have issued Voluntary Carbon Units (VCU).\textsuperscript{46} Table 5 below provides a breakdown of the VCU issuance.

Verra’s VCS standard appears to be the most widely used standard amongst projects catering to both national and international voluntary markets. The VCS Program is the reference standard for international REDD+ demand. It is also the world’s most widely used voluntary GHG program.

Colombia is unique in developing a framework for local REDD+ standards operating alongside global standards. The first local standard, ProClima, is used by local entities seeking to offset their impact under the Colombian Carbon Tax.\textsuperscript{47} It is not recognised outside of Colombia, and therefore is not used by participants seeking to participate in international markets where Verra’s VCS standard is preferred and is also accepted under the Domestic Carbon Tax offset framework. Other local standards are in development but are not yet operational.

3.2 Enabling conditions

Colombia has laid the groundwork for the successful implementation of projects and programs at scale by ensuring a strong initial buy-in from a wide range of stakeholders, building a track record of actions cementing its commitments, and securing a strong and stable internal demand for carbon offsets.

3.2.1 Institutions

Cross-ministerial buy-in to REDD+ backed by the inscription of REDD+ in the law, has helped to align institutional agendas to support performance. Broad consensus on the need for REDD+ approaches enabled the government to inscribe it in its legal framework to build partnerships between ministries (in particular between the Ministry of Environment and Sustainable Development and the Ministry of Agriculture and Rural Development), and coordinate actions in line with REDD+ objectives. In recent years, the Ministry of Agriculture reiterated its commitment to REDD+ objectives by providing financial support for the implementation and maintenance of commercial forest plantations, financing up to 50% of the costs.\textsuperscript{48} In addition to enabling Ministries to align their actions towards the same goals, the approval of REDD+ across institutions provided continuity in civil service teams despite changes in governments and/or political vision.

Boosted by the institutional approval of REDD+, governments took ownership of the process and ensured it was adapted to its context and proceedings. By combining strong legal foundations and cross-ministerial buy-in, institutions became entitled to ‘absorb’ the UNFCCC’s REDD+ structure and adjust it to Colombian circumstances. By doing so, they not only boosted cross-institutional buy-in but has also ensured capacity building at the national level by avoiding delegating key activities to international third parties.

However, the implementation of policies in Colombia has been slow, given gaps in capacity, exacerbated by the complexities of post-conflict governance. Stakeholders have highlighted that structural changes can be a multi-decade process, making it difficult for results to be observed in the short and medium run. Despite internal development of REDD+ programs, there remain critical knowledge gaps on the practical implications of REDD+ within the civil service, especially on community involvement.

Notwithstanding capacity issues at the government level, the private sector is regularly involved in REDD+ discussions, which combined with the government’s liberal attitude towards projects, has boosted their engagement. To ensure that the REDD+ framework reflects the interests of project developers as well as agribusiness, the government includes both as interested parties represented in policy development and the implementation of REDD+. By doing so, the government has built a degree of credibility with the private sector.

\textsuperscript{46} https://registry.verra.org/app/search/VCS/All%20Projects
\textsuperscript{47} https://proclima.net.co/wp-content/uploads/2021/03/ProClima-Voluntary-Standard-v1.0.pdf
\textsuperscript{48} https://www.agronet.gov.co/Noticias/Paginas/Minagricultura-est%C3%A1-recibiendo-proyectos-de-reforestaci%C3%B3n-comercial-para-acceder-al-Certificado-de-Incentivo-Forestal.aspx
sector regarding their management of the process which in turn has increased confidence in the broader system. In parallel, the government’s comparatively ‘hands-off’ approach to projects has enabled experimentation and avoided creating bottlenecks which has contributed to channelling private sector investment.

A further example of this collaborative approach is the wide range of sectoral initiatives aimed at stopping deforestation. For instance, in 2017, palm oil producers agreed to Acuerdo de Voluntades para la Cero Deforestación en la Cadena de Aceite de Palma. This was followed in 2018, by the Ministry of Environment and Sustainable Development and the Ministry of Agriculture and Rural Development working alongside the cocoa sector to support a sustainable cocoa sector around the Cocoa, Forest and Peace Initiative. The initiative’s objective is to commit protect and restore forests; unlock the sustainable production and livelihoods of farmers diversification of cocoa production to improve farmers’ livelihoods and incomes; and ensure community participation and social inclusion around cocoa. At the 2019 Tropical Forest Alliance Summit, dairy and cattle producers agreed to fully tackle deforestation in their supply chain by 2025.

In parallel, the Colombian government has recognised the vital role of indigenous communities in REDD+ and ensured their participation. Colombia’s REDD+ National Strategy incorporates the plan for participation and involvement of stakeholders that recognizes all the instances and platforms for participation and decision-making of the communities and its stakeholders. In the early days of REDD+, the government ensured that indigenous communities’ rights were guaranteed by the law by formally protected their land tenure and making it mandatory for project developers to obtain their Free, prior and informed consent (FPIC) before registering a project. Giving indigenous communities ownership over REDD+ and recognising their vital role increased buy-in and their participation in the process. Notwithstanding governmental capacity issues, indigenous communities are consulted, alongside the private sector, on a wide range of topics relevant to the operationalisation of REDD+, from development of the FREL to nesting guidelines. As a result, the incorporation of REDD+ in the national agenda has generally mobilised support of a wide range of interests.

However, the application of social safeguards is still unclear in post-conflict areas. Despite social safeguards being embedded in the Colombian legal framework, the application of safeguards for communities remains contested. For example, in 2019, the Constitutional Court of Colombia ruled that the Ministry of Environment (MADS, in Spanish) had failed obtain the FPIC of the indigenous community of Andoque de Aduche, under the Visión Amazonía program. This situation is particularly evident in post-conflict areas, with clear voids of governance. Given the central role of communities in the performance of REDD+ projects and programs, the lack of community involvement may slow REDD+ potential in Colombia.

3.2.2 Policy

Colombia’s commitment to the REDD+ process has gained credibility internationally given its track record of national policies and pledges aimed at reducing GHG emissions and deforestation. Shortly after the incorporation of REDD+ in its legal system, reduction of deforestation became one of the main pillars of Colombia’s National Development Plan. Since then, Colombia has embarked on a series of policies and laws with the aim of mitigating and adapting to climate change, such as the Colombian Low Carbon Development Strategy in 2014, and the National Climate Change Policy in 2018. The 2018 “Integrated Strategy of Deforestation Control and Forest Management” (EICDGB), which integrates the REDD+ National Strategy, constitutes a bridge between green growth and climate change policies in supporting implementation of Colombia’s international agreements. The same year, the government passed Resolution 1447, which designs the country’s system of monitoring, reporting and verification of mitigation actions at national level. In 2018, the Colombian Government pledged it will reduce its greenhouse gas emissions by 20% by
2030 compared to the projected baseline. In its second NDC in 2020, Colombia announced further efforts in its fight against climate change and committed to reduce emissions by 51% by 2030.\(^\text{34}\)

**The creation of a Colombian Carbon Tax which allowed entities to meet their tax obligation by purchasing national offsets has been crucial to creating a strong and stable demand source for emission reductions.** In 2016, the Colombian government approved Law 1819 creating a National Carbon Tax. This was followed by Decree 962 which allowed regulated entities to be exempted from the tax liability by purchasing emission reductions from national projects complying with the Clean Development Mechanism (CDM), VCS, Gold Standard and local standards’ REDD+ requirements. The creation of a national carbon market has enabled the creation of a strong and stable demand for carbon offsets. According to Colombia’s National Directorate of Taxes and Customs (DIAN), 32 million carbon credits were sold in the national market between 2017 and 2019.\(^\text{35}\) The government has also committed to corresponding adjustments if necessary for project credits sold to the voluntary, ODA or compliance market overseas, and has not introduced any export controls.\(^\text{36}\)

**Colombia has also put in place policies to ensure the involvement and rights of communities at the centre of the REDD+ process.** Colombia created and implemented a National System of Safeguards (SNS, in Spanish) that includes:

1. understanding of the seven Cancun safeguards according to national circumstances
2. consolidation of the national legal and institutional framework
3. implementation of tracking tools
4. engagement of the Safeguard Information System (SIS)
5. reporting mechanisms and continuous improvement.

**Colombia finalized its fourth summary of safeguards information in August 2020.** To ensure safeguards are implemented and receive results-based payments, Colombia has periodically submitted Safeguards Information System (SIS) to explain how these are being addressed and respected in REDD+ activities.\(^\text{37}\) In agreement with UNFCCC directives, it has also embedded communities’ Free, prior, and informed consent (FPIC) in its legal framework. Colombia’s constitution recognizes Afro-Colombians and indigenous peoples’ right to FPIC before the implementation or approval of any legislation, administrative measures, public policy or economic/infrastructure projects that would potentially affect them. In addition, Article 329 of the Colombian Constitution of 1991 guarantees that the territory of indigenous peoples and Afro-Colombians is non-transferable and is collective property.

**There remain gaps in the policy mix, with guidelines on allocation and accounting under nesting schemes still to be clarified.** The coexistence of jurisdictional programs and projects, as seen with Visión Amazonía, aims to integrate incentive mechanisms at multiple scales. The government, however, has still not agreed on clear guidelines for balanced risk management. Given the lack of a clear position, the government internalised losses from the under-performance of Visión Amazonía in 2017 but was still required to issue offsets for the Indigenous People’s Matavén project. Similarly, the government still has not finalised technical guidance laying out how nested projects can align with the jurisdiction’s FREL. As such, while allowed, the practical efforts on projects electing to carve-out from jurisdictional initiatives are still unclear. In the Visión Amazonía program, offsets crediting baselines were changed from an Amazon FREL to the national FREL, which is likely to create an unexpected change in emission reduction potential for nested REDD+ projects. Such decisions might damage the Colombian’s government predictability in the eyes of project developers (including Indigenous communities) and/or investors.

\(^{34}\) [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Colombia%20First/NDC%20Actualizada%20De%20Colombia.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Colombia%20First/NDC%20Actualizada%20De%20Colombia.pdf)


\(^{37}\) [https://redd.unfccc.int/files/ris lv colombia.pdf](https://redd.unfccc.int/files/ris lv colombia.pdf)
3.2.3 MRV infrastructure

Colombia has developed a national Forest Monitoring System to support accurate measurement of deforestation and emissions. The National Development Plan (Law 1955 of 2019) mandated the creation and regulation of an MRV system of national-level mitigation actions and reference scenario for the AFOLU and REDD+ sector, regulated through Resolution 1447 of 2018. The development of Colombia’s National Forest Monitoring System (SMByC) was recently completed, with changes in forest cover now reported on an annual, quarterly, and weekly basis. The main components of the SMByC include: i) monitoring of deforestation, ii) monitoring of biomass and carbon in natural forests, and iii) identification of causes and of deforestation.

The responsibilities for Monitoring, Reporting and Verifying results are clearly laid out. Colombia’s second biennial update report lays out the roles and responsibilities for MRV in the country. IDEAM and the Ministry of Environment oversee monitoring and reporting of results, through the SMByC and the National Forest Inventory (IFN). The reporting of results takes place at the national, regional and international level. Verification is carried out by UNFCCC through third party experts.

The recent submission of a national FREL provides a standardised baseline against which projects and jurisdictions can calculate their emissions using the same baseline. In 2015, Colombia submitted its FREL for the Amazon Biome which was followed by the development of a national FREL. The Amazon FREL was estimated using average historical annual data, with a “High Forest, Low Deforestation” (HFLD) adjustment of 10% to emissions over the historic level. This adjustment accounts for specific national circumstances related to the impact of peace negotiations and the implementation of post-conflict policies, which it argued led to lower rates of deforestation or forest degradation during the eligibility period. In 2019, Colombia submitted a national FREL to the UNFCCC based on 2008-17 historical annual average trends, adjusting for national circumstances which is currently under the Technical Assessment process. According to the national FREL, between 2008 and 2017, 94 MtCO$_2$e were emitted annually. The submission projects that, between 2018 and 2022, CO$_2$ emissions will increase between 124 MtCO$_2$e and 144 MtCO$_2$e.

Figure 5. The Colombian national FREL is based on annual historical data

Source: UNFCCC; Vivid Economics
It is unclear whether the national FREL will use a spatially explicit allocation of reference levels. Deforestation trends vary throughout the country and by type of biome, meaning that some areas are most at risk of being deforested in the near future than others. To ensure that areas at risk are allocated enough incentives to tackle deforestation it is key that the national FREL clarifies how the reference levels will be allocated, and whether a risk-based spatial allocation will be used. For example, the national FREL could allocate a higher quantity of emission reductions to the Amazon region, and any activities or projects located in the area.

Colombia regularly reports to the UNFCCC on its progress with submitted its Biennial Update Reports, accompanied by GHG inventories, and National Communications. Colombia’s has systematically submitted its Biennial Update Reports alongside National Inventory Reports, the latest ones dating back to 2018. Its National Communications have also been consistent. It also periodically submits Safeguards Information Systems, which provide information on how the UNFCCC REDD+ 'Cancun' safeguards are being addressed and respected throughout the process. The Colombian government made public its emission reductions reports, alongside their respective independent verification reports and the registry of the emissions reductions between 2013-2015 and the official communication payments of the REM program.

3.2.4 Trade infrastructure

Colombia has developed the local infrastructure and an incipient business ecosystem needed to support trade with project developers, auditing entities, verification providers and brokers.

Colombia’s registry of REDD+ programs and projects contributed to ensure transparency and environmental integrity across different REDD+ initiatives. Currently, RENARE is in the starting phase. In the meantime, Colombia implemented an Interim Registry, which was developed in order to report reduced emissions reductions as well as the payments received; both sources of information will be available while the starting phase is finalised. Since 2020, Colombia’s international standardization body (ICONTEC) is responsible for overseeing existing standards.

Given the surge in demand for offsets created by the Carbon Tax, a growing network of brokers and intermediaries are facilitating trade in offsets. Market intermediaries like Bolsa Mercantil de Colombia and South Pole have facilitated trading by serving as clearing houses and enabling national and international over-the-counter transactions. Carbon trade associations like ASOCARBONO have been formed to push the formation and development of the market.

An unexpected alteration of accounting rules reduced market participations confidence in the predictability of the policy environment. In 2018, the Ministry of Environment passed Resolution 1447, which, amongst other measures, creates and regulates RENARE, Colombia’s national registry for GHG mitigation activities. The resolution also created an accounting system for GHG reductions and creates an MRV system of mitigation actions at the national level. Existing projects were asked to meet the new accounting system requirements under a specific amount of time to ensure the eligibility of past results-based payments. Whist the rules in general were applauded by developers as they clarified the role of projects in the national REDD+ program, unfortunately, the accounting guidelines that nested projects were supposed to follow have still not been shared, leading to confusion for stakeholders.

Colombia’s domestic carbon market supports trade but remains relatively underdeveloped. Through its carbon tax Colombia promotes the use of units of GHG reductions or removals as part of the voluntary mechanism in lieu of the national carbon tax. However, most of this trade occurs through over-the-counter and direct trade. More sophisticated trading approaches may develop in future as volumes and liquidity increase, but there are no near-term plans to support exchange-based trade. Regulations are still being

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64 https://reid.unfccc.int/files/02012019_nref_colombia_v8.pdf  
65 https://unfccc.int/BUR 
66 https://unfccc.int/non_annex_1NGs 
67 https://redd.unfccc.int/submissions.html?country=col 
developed in order to operationalize the National Program of Tradable Greenhouse Gas Emission Quotas, with support from international experts via the World Bank’s Partnership for Market Readiness.

3.3 Assessment of performance

Table 5  Overview of Colombia’s financial and environmental REDD+ performance

<table>
<thead>
<tr>
<th>Key metrics</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale and robustness of access to finance</td>
<td>US$377 million</td>
</tr>
<tr>
<td>Environmental outcomes</td>
<td>52,992,968 tCO₂e</td>
</tr>
</tbody>
</table>

Source: Verra Registry; Forest Trends; Climate Focus; UNFCCC and Vivid Economics

Colombia has received and invested more than US$377 million in REDD+ readiness and implementation between 2009 and 2017. Between 2009 and 2014, Colombia received more than US$44 million in REDD+ in readiness activities, which also address aspects of policy implementation and project piloting. According to Forest Trends, the government disbursed US$5 million in the process.70, 71 Between 2015 and 2017, Colombia received up to US$328 million from international sources. This represents 54% of Colombia’s international climate finance.72

Colombia received US$63.6 million worth of payments for results under the REDD Early Movers (REM) Program in the Visión Amazonía jurisdictional program between 2013 and 2016.73 The Visión Amazonía jurisdictional program registered 31.1 MtCO₂e of emission reductions between 2013 and 2016, but failed to reduce deforestation rates below the FREL in 2017. These emissions reductions are calculated against the Amazon biome FREL, which applies to projects spanning a number of jurisdictions. Payments were received by Colombia from the REDD Early Movers (REM) Program, funded by the governments of Norway, Germany and the United Kingdom and one participating project in the voluntary market. The program did not achieve results in 2017, and therefore received no payments, as deforestation increased above the FREL. The 2018 results are yet to be assessed against the newly submitted national FREL.74, 75

Colombia’s carbon offsets have attracted a wide range of multilateral and bilateral donor funds, as well as funding from voluntary carbon market actors through both upfront and end-market finance. Projects registered under the Verra VCS standard have generated 21 MtCO₂e of emissions reductions. As displayed on Table 1 below, the Matavén REDD+ Project, has generated most of the emissions reductions to date, with more than 17 million VCU’s issued since 2019. It is in the Indigenous Reservation of the Matavén, located in the Orinoco-Amazon transition zone of Colombia and in the Visión Amazonía jurisdiction.76

Table 6  Colombia’s REDD+ performance is concentrated in Matavén for projects

<table>
<thead>
<tr>
<th>Project/Program</th>
<th>Verified Emission Reductions</th>
<th>Verification (/report) period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bajo Calima y Bahía Málaga (BCBM) REDD+ Project</td>
<td>1,852,924</td>
<td>Aug 2013 – Dec 2017 verification (report July 2019)</td>
</tr>
</tbody>
</table>

72 https://unfccc.int/sites/default/files/resource/47096251_Colombia-BUR2-1-BUR12%20COLOMBIA%20SPANISH.pdf
74 https://registry.verra.org/app/search/VCS/VCUs
<table>
<thead>
<tr>
<th>Project/Program</th>
<th>Verified Emission Reductions</th>
<th>Verification (/report) period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision Amazonia</td>
<td>31,000,000</td>
<td>Jan 2013 – Dec 2016 (report Jul 2017)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>52,992,968</strong></td>
<td><strong>--</strong></td>
</tr>
</tbody>
</table>

Note: Each VCU represents a reduction or removal of a tCO₂e achieved by a project
Source: Verra Registry; Vivid Economics

Project verification and monitoring documents report positively on the respect to the form of participation of individuals or entities interested in the project. This is the case at the level of demonstrating the legal possession of the land, the ownership rights of the resources and services obtained. However, the specificities of benefit sharing mechanism with local communities are unclear, with consolidated reporting of these benefits currently not available.

### 3.4 Contributors and barriers to success

Colombia has managed to secure a strong and stable internal demand for emission reductions and has established a supportive enabling environment for project implementation. The incorporation of REDD+ under Colombia’s Carbon Tax and ongoing support for voluntary carbon market development positions it well to meet future growth potential. However, the Government will need to clarify its position on public and private risk sharing, and particularly the nesting of projects if it wants to unlock accelerated growth.

Colombia has laid the groundwork for the successful implementation of projects and programs at scale by ensuring a strong initial buy-in from a wide range of stakeholders, and building a track record of actions cementing its commitments. The government is seen as a credible partner, creating a supportive
environment for investment. Given this, the main contributors to the success of REDD+ implementation in Colombia include:

- **Cross-institutional buy-in and cooperation, reinforced by a strong legal framework.** The successful implementation of offsets has required institutional willingness and capacity plus champions within government. Inscribing REDD+ in the law has increased the credibility of the government’s commitment, allowing stakeholders to further approve of the process.

- **Local ownership and appropriation of the REDD+ process.** By combining strong legal foundations and cross-ministerial buy-in, local parties were enabled to ‘absorb’ the UNFCCC’s REDD+ structure and adjust it to be appropriate to Colombian circumstances. By doing so, they built capacity at the national level by avoiding delegating key activities to international third parties.

- **Input of civil society in decision making, including indigenous communities.** Early in the process, the Colombian government recognised the vital role of indigenous communities and ensured their participation, which, in turn, increased the communities’ buy-in. This enabled the creation of many projects across the country as well as their smooth development.

- **Private sector buy-in and involvement.** The private sector has been involved at all stages of REDD+ discussions, while the government’s liberal attitude towards projects boosted their engagement and investment in the process. The trust in the government’s efforts to create an enabling environment for investment and deforestation prevention has further increased private sector buy-in at a project and sector level.

- **Policies aligned with REDD+ goals creating a supportive enabling environment.** The track record of cross-cutting polices from different ministries have increased the credibility of the government’s commitments to create a suitable environment for a successful REDD+.

Trade in REDD+ credits has been supported by Colombia’s establishment of a local trading mechanism:

- **Generation of a stable internal demand for credits.** Colombia’s Carbon Tax and the potential to use credits to meet liabilities, has created a steady demand in results. This has in turn encouraged the development of projects, independently of external and/or international funding.

- **Transparent project and program registry, alongside a growing ecosystem of actors supporting transactions.** RENARE has given the investors the reassurance by ensuring transparency of and has effectively facilitated transactions. The number of brokers is growing, facilitating trade of emission reductions. The government’s current development of an emissions trading system has also reinforced the perception of its commitment to market-based approaches.

Despite the overall success of Colombia’s efforts, there remain challenges to continued success of REDD+ nationwide. In particular, the current liberal approach to REDD+ has come at the cost of the integrity of outcomes in some post-conflict areas, with key challenges including:

- **A lack of regional governance and appropriate policies tailored to post-conflict areas, which are the most affected by deforestation.** Areas affected by previous conflicts have clear gaps in governance capacity, which means that cross-cutting policies aiming at decreasing deforestation do not reach these areas or are inappropriate for the local context. The lack of a strong government presence in these specific regions has also led to a general lack of oversight, creating risks of inadequate social safeguards. This may create risks to indigenous communities’ rights by creating space for actors who are willing to push the limits of established negotiation mechanisms or overlook benefit sharing mechanisms, as seen in the Amazon region.

- **Slow implementation of policies that can underpin a supportive enabling environment.** Policies supporting the REDD+ process imply structural changes spanning many decades. As a result of this
complexity and a general lack of capacity, implementation can be very slow. This can be exacerbated by the complex post-conflict context.

- **Decisions which have undermined the predictability of the government’s commitments.** Some decisions have affected already existing projects and their viability, creating uncertainty for the private sector. Examples of ex-post decisions adversely affecting underway projects are RENARE and the change of FREL in the Visión Amazonía, or the unexpected talks of a “Visión Colombia” which could potentially affect the baseline of all existing projects. These changes create additional and uncertain costs to projects developers.

### 3.5 Future REDD+ priorities

Given the key enablers and barriers of REDD+ performance and the recent trends in carbon markets, Colombia has the opportunity to benefit from remaining at the forefront of REDD+ developments. Colombia can ensure its future performance by maintaining the broad design of its current system while clarifying its approach to nesting and performance and risk sharing.

Given this, priorities for Colombia should include:

- **Maintain a supportive policy environment.** Colombia has become uniquely successful in developing a local ecosystem of REDD+ project developers and service providers, alongside jurisdictional ambitions, building on a conducive national policy environment. In particular, Colombia’s success in leveraging its domestic climate policies to support REDD+ developments can provide a strong underpinning for future expansion, and potential diversification of markets.

- **Clearly define its position on nesting by establishing a clear process for sharing risk and incentives between actors.** The Colombian government may undermine private sector investment by failing to clarify guidelines on allocation and accounting under nesting approaches, thereby adding uncertainty to revenues from emission reductions projects. Reaching the right balance of public and private sector engagement in REDD+ is conditional on the Colombian government’s ability to assess and manage risks affecting project success. The government currently appears to carry the burden of under-performance, as seen in the case of the 2017 Visión Amazonía under-performance. As the world moves to implement the Paris Agreement and unconditional NDC commitments increase in stringency, further clarity on responsibility for underperformance is needed as although it is clear for the domestic compliance market it isn’t as well clarified for international markets. For nesting systems to work, it is key that the government specifies how projects’ baselines are tied to the national and subnational baselines. Where possible, this should seek to avoid making unexpected changes to the treatment of existing projects.

- **Clearly define the allocation of the national FREL across the country to ensure an appropriate alignment of risks and incentives.** Given the heterogeneity of risks and incentives, the government should clarify if reference levels will be allocated homogenous to all regions or if it will use a risk-based spatial allocation to spatially different risks and rewards to actors at all scales. A risk-based spatial allocation ensures that areas at higher risk of deforestation are allocated more potential for emission reductions than areas which are not at immediate risk.

- **Strengthen REDD+ governance in post-conflict areas and provide new alternative livelihood solutions to unlock possibilities for REDD+ to operate.**

- **Limit decisions that affect pre-existing projects and increase consultation with the private sector and indigenous communities to increase the transparency and predictability of the environment.**

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77 This was recently noted by ASOCARBONO in a letter to the Ministry of Environment
Case study: Democratic Republic of Congo

The Democratic Republic of Congo (DRC) is at the forefront of Congo Basin countries engagement with the REDD+ process, primarily through two large project-based activities serving international markets, and a jurisdictional REDD+ program with the Forest Carbon Partnership Facility (FCPF).

The DRC is home to the second largest tropical forest in the world. Forests are estimated to account for more than 65% of the country’s territorial area, covering 152 million hectares. The densest forest in the DRC can be found in three provinces: Équateur, Bandundu and Orientale. Collectively, this forestland accounts for about 89 million hectares, or 69.9% of national forest cover.

Although rates of deforestation in the DRC are low compared to other tropical forests, almost half a million hectares are lost each year. Slash-and-burn agriculture, fuelwood production, and small-scale and industrial logging are the main reasons behind deforestation. According to a recent paper, 84% of the forest disturbance area in the region is due to small-scale, non-mechanized forest clearing for agriculture. The DRC’s 2018 FREL submission suggests that, between 2010 and 2014, more than 1.7 million hectares of forest, more than 1%, were lost every year. This is amongst the highest rate of emissions from forest loss in the Congo Basin.

Demographic pressures and population displacement have increased the risk of deforestation. In 2018, the DRC lost approximately 481,000 hectares of primary forest, 30% more than what had been lost between 2010 and 2015. Population growth has implications for the expansion of cities and their infrastructure and will also increase demand for charcoal used by most of the urban population. The correlation between population growth and increasing annual primary forest loss area indicate that all of the DRC’s primary forest could be cleared by 2100.

4.1 Engagement with REDD+ programs

The DRC has recently increased its engagement in REDD+ with an Emission Reduction Purchase Agreement with the FCPF for the Mai Ndombe jurisdictional program signed in 2018. It is also working towards developing five REDD+ Integrated Programs (PI-REDD, in French), collaborating with a consortium of funders including the Central African Forest Initiative (CAFI), the World Bank, United Nations and development agencies.

The two projects currently being implemented in the DRC adhere to the Verra VCS standard and cater to international voluntary markets. The VCS Program is the reference standard for international voluntary demand. It is also the world’s most widely used voluntary GHG program. The DRC does not have a domestic compliance system operational to generate local demand for REDD+. Further given historical challenges of political instability, weak governance and inconsistent application of social safeguards, the DRC may struggle to capture future compliance market demand, such as CORSIA.

80 https://redd.unfccc.int/files/2018_frel_submission_drc.pdf
82 https://carpe.umd.edu/content/small-holder-clearing-drives-forest-loss-congo-basin
4.2 Enabling conditions

Government instability and capacity barriers have made it difficult for the REDD+ process to be fully implemented and supported by appropriate policies and infrastructures.

4.2.1 Institutions

The government has struggled to build a lasting institutional consensus on REDD+ despite promising initial momentum.

Corruption and political instability create challenges for providing a conducive investment environment. The DRC government has failed to maintain strong and credible governance given high rates of corruption and political instability. In 2019, the Mo Ibrahim Foundation ranked the DRC 49th out of 54 African states on its general governance index, with a score of 31.7 out of 100, well below the Central Africa regional average of 50. Similarly, Transparency International’s Corruption Perception Index ranked DRC 170 out of 180 countries examined. As such, despite significant investment in readiness, stakeholder interviews suggest that attempts to align institutions around REDD+ objectives have had only limited success, which has resulted in an inconsistent policy direction. Indeed, stakeholders confirmed that corruption and lack of capacity have often impeded the government’s efforts to create a positive enabling environment for REDD+.

For example, pointing to failures of the national and state institutions in addressing persistent issues regarding corruption and mismanagement. The 2018 FREL submission notes that legal and institutional gaps have contributed to the continued exploitation of forest areas.

As a consequence, the provincial institutions responsible for forest protection have not been consistently mobilised by the central government. The decentralized forest governance framework is at the core of the DRC’s 2002 Forest Code. Despite the Mai Ndombe province being a good example of successful decentralisation, a lack of understanding around the provisions of the Code has led to incomplete coordination between the central government and most entities operating at local level. In some cases, provincial coordinators have been appointed, but not all provinces yet have a focal point. This has been compounded by a lack of funding of decentralised entities.

Albeit originally informed by donors, the delegation of REDD+ governance and responsibilities to REDD+ National Fund (FONAREDD) has complicated inter-ministerial cooperation and buy-in to the process. As a result, FONAREDD has centralised decision making, despite the Ministry of Environment being originally in charge of overseeing the process. However, stakeholders suggest that it lacks transparency in its operation and has limited technical capacity such as with overseeing projects’ compliance with safeguards. There are also concerns regarding FONAREDD’s lack of strong anti-corruption and integrity policies. These issues regarding REDD+ governance create disagreements on cross-cutting issues key to the success of the process.

Despite being recognised by law, the involvement of indigenous communities in decision making has been inconsistent. The DRC requires the participation of indigenous communities in REDD+ activities and sets conditions for it, including the need to obtain their free, prior and informed consent. There is official civil society representation of indigenous peoples in the DRC REDD+ program under two organisations called GTCR (Groupe de Travail Climat REDD) and REPALEF (Réseau des Populations Autochtones et Locales pour la Gestion Durable des Ecosystèmes Forestiers de la RDC) which are networks of local CSOs throughout the DRC. However, given decentralisation obstacles, lack of funding and infrastructure to access remote areas, there remain barriers to the involvement of indigenous communities in REDD+ discussions and decision making. For example, despite having signed an Emission Reduction Purchase Agreement with the FCPF and testing several grievance mechanisms, the DRC government is still working to agree on an appropriate benefit sharing mechanism and independent observation tools that are needed to ensure indigenous

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84 https://mo.ibrahim.foundation/iaag
86 https://redd.unfccc.int/files/2018_frel_submission_drc.pdf
communities’ involvement. To do so effectively may require enhanced funding to enable civil society participation during its implementation.\(^{88}\)

The DRC government has been supportive of involving the private sector and has facilitated their engagement in the REDD+ process. Open stakeholder consultations on the REDD+ framework have engaged project developers alongside other interest groups such as timber producers, mining companies and agribusiness. In parallel, the government’s supportive approach to projects has contributed to creating a positive environment for project developers. However, the government’s interactions with the private sector has sent mixed messages regarding their intention to protect the forest. This includes alleged breaches of a logging moratorium in 2018.\(^{89}\)

### 4.2.2 Policy

Concerns regarding capacity, transparency and corruption, whilst not stopping, continue to restrain, access to REDD+ finance.

The inconsistent implementation of the decentralisation of forest governance has been an obstacle to developing effective policies. The alignment of provincial and national policies remains weak. Funding decisions influenced by political patronage has led to inconsistent funding of provincial REDD+ institutions, which lack access to relevant information/data and capacity to align their operations with the REDD+ strategy and produce results.

Land tenure reform remains unfinished despite commencing in 2009, creating uncertainty for project developers and jeopardising expected REDD+ results. In 2009, the DRC announced several reforms relating to land tenure to create an institutional environment that motivates the implementation of REDD+ in the DRC. As of 2021, these reforms remain incomplete. In part, these delays reflect the long lead times on reforms, for instance with DRC’s Land Policy. This impairs the ability of sectoral policies to adapt to fast changing socio-political conditions, resulting in policies that are outdated, sometimes before they are even implemented. Currently, the government owns the carbon, and grants operators the right to monetise those credits on behalf of all the project stakeholders.

Despite efforts to create a legal framework to guarantee social safeguards, most laws are poorly enforced. Most stakeholders interviewed agreed that legal frameworks are generally favourable to communities, with the Free, Prior and Informed Consent inscribed in the law in 2015. FPIC refers to the principle that local communities have a right to give or withhold consent to actions that will affect them, especially actions affecting their traditional lands, territories and natural resources. In 2014, the Decree on Conditions for the Granting of Local Communities’ Forest Concessions was adopted. Community forestry is the country’s most recent innovation in forest governance. However, a lack of capacity, incentives, and enforcement of laws has created a lack of trust in the government’s handling of communities’ rights. The country has not submitted any Summary of Information on Safeguards to the UNFCCC reporting on the monitoring of social safeguards.\(^90\) In addition, a consensual mechanism for sharing revenue from the implementation of REDD+ has not yet been defined. As this would require deciding the legal status and ownership of carbon it is unlikely to be defined in the near term.

While efforts are being made in the Mai-Ndombe province, the country lacks coherent policies to provide communities alternative livelihoods for forest communities. The majority of DRC’s population live in forested areas or historically deforested areas. Local livelihoods are strongly connected to the exploitation of natural resources, for subsistence and income (such as artisanal mining, small-scale logging for timber or charcoal).\(^91\) Providing alternative livelihoods for communities are therefore essential to protect forest cover and prevent degradation. This is particularly the case given the rapid growth in population expected in coming decades.

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\(^{90}\) [https://redd.unfccc.int/submissions.html?country=cod](https://redd.unfccc.int/submissions.html?country=cod)

The Mai-Ndombe Jurisdictional REDD+ Program is implementing a green development model at the provincial level, that seeks to provide alternatives to deforestation and provide performance-based payments for emissions reduction activities, poverty reduction, sustainable management of natural resources and biodiversity protection. However, at the national level, key ministries, such as the Ministries of Agriculture, Rural Development, Industry, Mines and Hydrocarbons, Land Use Planning, and Energy, have shown little evidence of coordination to provide solutions to cross-cutting issues, which is exacerbated by the inefficient deployment of forest governance policies.

Similarly to many other Least Developed Countries, the DRC’s NDC lacks a robust commitment to REDD+ or other forms of mitigation action. The DRC has only submitted an NDC that is conditional on international funding. Despite renewed commitments to, it has yet to comply with UNFCCC reporting requirements, which has led some stakeholders to question the country’s commitment to emission reductions. In addition, it has not submitted any Summary of Information on Safeguards, which report the country’s progress and actions taken to ensure the respect of REDD+ safeguards, despite being a requirement for results-based payments.

Although the DRC has ratified several international conventions on environmental issues, it has not integrated these commitments into their policy framework. The DRC has signed and ratified 29 international environmental agreements, many of which are not fully integrated through appropriate reforms and revisions of existing legislative texts. Many principles drawn from these international agreements are included in the 2002 Forest Code and the 2011 Law on Fundamental Principles of Environmental Protection in the DRC. This includes provisions for benefit sharing and recognition of the rights of local communities. However, as described by some stakeholders, there are several barriers to implementation including debate regarding land tenure and ownership of emissions allowances which creates challenges for benefit sharing.

Given the lack of coordination across government ministries, sectoral policies are often not aligned with forestry policies. Given the significant impact that agriculture, energy and mining policies have on forests, the lack of central coordination and alignment results in policies that in many cases lead to further deforestation and forest degradation. This is particularly the case given that the Environment Ministry is generally considered a relatively “weak” ministry, which may be overruled on issues where there are trade-offs with economic development. The 2002 Forest Code aims at balancing the forest’s ecological and social functions, for forest administration to “substantially contribute to national development” and for local communities to actively participate in forest management and ensure legitimate benefits from forests. According to stakeholders, the Code still focuses heavily on timber as an exploitable resource and dedicates most of its provisions to regulating its use. In 2016 the government signed a complementary order to promote community forestry. It has resulted in the formal forestry sector competing with the informal sector, with the latter serving both growing domestic demand, and demand in certain neighbouring countries.

4.2.3 MRV infrastructure

Despite substantial funding directed to MRV, the DRC’s National Forest Monitoring System is incomplete. CAFI reports having disbursed US$10 million to finalise and operationalise the DRC’s National Forest Monitoring System. However, stakeholders report that the system remains incomplete and information regarding it has been removed from FONAREDD’s website. In addition, DRC lacks basic infrastructure to verify results, in part reflecting the low level of REDD+ activity which provides inadequate incentives for the entry of potential service providers. MRV at the project-level is available through local service providers. MRV capacity is often limited in developing countries, given competition for government resources with other priorities such as poverty alleviation and agricultural development.

The national FREL, submitted in 2018, is still under revision due to concerns over a lack of data and the methodological approaches used. To obtain the FREL values for 2015–19, the Democratic Republic of the

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92 https://redd.unfccc.int/submissions.html?country=cod
93 https://redd.unfccc.int/submissions.html?country=cod
94 https://unfccc.int/sites/default/files/resource/tar2018_COD.pdf
Congo employed a linear model that extrapolates the trend in emissions observed between 2000 and 2014. The DRC uses two points in time, i.e. average data for two periods: 2000–10 and 2010–14. It only accounts for “gross deforestation”. It results in a scenario in which 2015-19 emissions range between 1,040 MtCO$_2$e and 1,326 MtCO$_2$e per year. Following its submission, the Technical Advisory body noted that the two points in time that the FREL is based on are not enough to establish a robust trend in emissions. Thus, its use may result in significant statistical errors. The Technical Advisory body also noted that other models may be constructed with the same data that could yield different results. By building on such feedback and by including emissions from degradation, the DRC may increase its potential to demonstrate REDD+ results.

The DRC’s has also not met the UNFCCC’s reporting requirements. For instance, the DRC has yet to submit a Biennial Update Report to the UNFCCC, Safeguard Information Systems, and has not yet identified unconditional commitments under its NDC. 

4.2.4 Trade infrastructure

There is little trading infrastructure and trade occurring in the DRC, with trade being dependent on international project developers doing projects based on international standards.

The DRC has not yet established a registry of REDD+ programs and projects. Without a registry tracking results and payments for different projects and programs, the DRC cannot provide transparency on its management of REDD+ funds, and it therefore relies on the VCS registry and may utilise the FCPF registry if the Mai Ndombe program and FCPF transact. This creates challenges for the distribution of concessions and sharing of revenues, as well as their ongoing monitoring. As such, it may increase the probability of corruption occurring and preventing performance.

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95 https://redd.unfccc.int/files/2018_frel_submission_prc.pdf
96 https://redd.unfccc.int/files/2018_frel_submission_drc.pdf
97 https://redd.unfccc.int/submissions.html?country=COD
98 https://unfccc.int/BURs
DRC faces similar challenges to several other REDD+ participant countries, from a lack of in-country market intermediaries to facilitate trading as clearing houses or by enabling national and international over-the-counter transactions. Despite the considerable amount of emissions reductions being sold by the two REDD+ projects in the DRC, local trading infrastructure has not developed to serve international markets. Nonetheless, international actors like Wildlife Works Carbon and South Pole are advising the unit buyers, project developers and the government and facilitating transactions. Similarly, project verification appears limited which implies continued reliance on international support for project verification services.

4.3 Assessment of performance

<table>
<thead>
<tr>
<th>Key metrics</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale and robustness of access to finance</td>
<td>&gt; US$250 million</td>
</tr>
<tr>
<td>Environmental outcomes</td>
<td>14,472,274 tCO₂e</td>
</tr>
</tbody>
</table>

Source: Forest Trends; UNDP; FCPF; Verra Registry; Vivid Economics

Between 2009 and 2014, US$264 million was committed to the REDD+ process, with more than half, US$151 million disbursed.\(^9\) In its early phases, REDD+ in the DRC benefited from strong financial support via specialized institutions working closely with the World Bank and Forest Carbon Partnership Facility (FCPF). These institutions included the UNDP, the Food and Agriculture Organization (FAO) and the United Nations Environment Program (UNEP). The main donor at this stage was the Norwegian Government. Other private and non-government organizations, such as the WWF and Wildlife Works Carbon, have also provided additional support to the government.

Between 2016 and 2019, the Central African Forest Initiative (CAFI) disbursed more than US$100 million to FONAREDD. Since 2016, the REDD+ process has relied heavily on funding from US$200 million over 5 years.\(^10\) In 2017, CAFI agreed to disburse US$41 million.\(^11\) In 2018, CAFI approved the disbursement of further US$42 million.\(^12\) In 2019, CAFI approved the transfer of US$28 million.\(^13\)

Between 2013 and 2018, little progress was made on REDD+ in the DRC. Conflicting interests among actors at the national and subnational level; inconsistent direction and engagement from donors; elite capture and corruption; and disturbances pre- and post-election, slowed down REDD+ implementation.

Since 2018, progress has accelerated with the DRC committing to REDD+ cooperation with the FCPF and signing an ERP for the Mai Ndombe Emission Reduction Program (ERP). This has paved the way for future payments of up to US$55 million for verified emission reductions.\(^14\) The payments will come from the Carbon Fund of the Forest Carbon Partnership Facility (FCPF), a global partnership housed at the World Bank.

According to the Verra VCS registry, two projects were credited for results for 14 MtCO₂e. The Mai Ndombe REDD+ Project represents the vast majority of the Verified Carbon Units issued in DRC by Verra, with 13 MtCO₂e over the past decade. While a significant project by global standards, given the scale of the

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\(^10\) https://www.undp.org/content/dam/cafi/docs/Our-work/Events/CAF%20in%20the%20DRC%20factsheet_EN.pdf
\(^11\) https://www.undp.org/content/dam/cafi/docs/Executive%20Board/CAFI_EB_Decisions/English/EB.2017.18-%D0%90%D0%B0%D0%92%D0%B8%D1%82%D1%8B-%D0%9D%D0%BD%D0%B8%D0%BD%D1%83%D1%82%D0%BA%D0%B8-%D0%9A%D0%95%D0%93%D0%9F%D0%9F_%20FONAREDD.pdf
\(^12\) https://www.undp.org/content/dam/cafi/docs/Executive%20Board/CAFI_EB_Decisions/English/EB.2018.20-%D0%90%D0%B0%D0%92%D0%B8%D1%82%D1%8B-%D0%9D%D0%BD%D0%B8%D0%BD%D1%83%D1%82%D0%BA%D0%B8-%D0%9A%D0%95%D0%93%D0%9F%D0%9F_-_Disbursement%20-%20Sub-ERP.pdf
\(^13\) https://www.undp.org/content/dam/cafi/docs/Executive%20Board/CAFI_EB_Decisions/English/EB.2019.27-%D0%90%D0%B0%D0%92%D0%B8%D1%82%D1%8B-%D0%9D%D0%BD%D0%B8%D0%BD%D1%83%D1%82%D0%BA%D0%B8-%D0%9A%D0%95%D0%93%D0%9F%D0%9F_-_Annual-Fund-Allocations_DRC.pdf
country’s forests the scale of emission reductions sold to markets remains small relative to potential. Further, there has been no issuance of credits for the Mai Ndombe project since 2018, and there are no other projects in the Verra pipeline, this possibly means the outlook for private investments has slowed.

Table 8  The Mai Ndombe REDD+ Project represents most of the Verified Carbon Units issued in DRC by Verra

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</tr>
</thead>
<tbody>
<tr>
<td>Isangi REDD+ Project</td>
<td></td>
<td></td>
<td>112,000</td>
<td>67,000</td>
<td>420,998</td>
<td>20,000</td>
<td>180,993</td>
<td>349,007</td>
</tr>
<tr>
<td>Mai Ndombe REDD+ Project</td>
<td>1,000,000</td>
<td>140,000</td>
<td>159,500</td>
<td>188,750</td>
<td>11,834,026</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,000,000</td>
<td>140,000</td>
<td>271,500</td>
<td>255,750</td>
<td>12,255,024</td>
<td>20,000</td>
<td>180,993</td>
<td>349,007</td>
</tr>
</tbody>
</table>

Notes: Each VCU represents a reduction or removal of a tCO₂e achieved by a project. Issuances are equal to verified results for both of these projects.

Source: Verra Registry; Vivid Economics

Projects’ verification reported extensive community training and capacity building in a wide range of topics as well as improved access to education and health services. The Isangi REDD+ and Mai Ndombe REDD+ projects’ Monitoring and Implementation documents report extensive community training and capacity building in a wide range of topics as well as improved access to education and health services.¹⁰⁵,¹⁰⁶ There is strong local support for the Isangi REDD+ project and stakeholder engagement, as reflected by recent changes in the Cahier des Charges to reflect the community’s changing priorities. The Mai Ndombe project also seeks to renew communities’ Free and Prior Informed Consent when there is a significant change in their circumstances.

4.4 Contributors and barriers to success

The DRC has had mixed results in creating an enabling environment for jurisdictional programs and project implementation. To unlock further demand it will likely need to improve its commitments to safeguarding and clarify rules on nesting.

Despite a challenging local context, the DRC has managed to facilitate some REDD+ projects. This has been enabled by the DRC’s high emission reduction potential and private sector participation in the early stages of its REDD+ programs. However, the rapid evolution of the REDD+ process and its sometimes opaque governance arrangements have been associated with growing pains, which risk undermining the perceived efficacy of the system.

The DRC’s current approach to REDD+ creates risks to environmental integrity and social safeguards, which could limit demand and the overall performance of the system. Key areas for improvement include:

- **Unstable governance lack of coherent policies measures to address forest loss.** Having struggled to secure the buy in of its institutions, the government has not entirely managed deploy a wide range of policies aligned with REDD+ goals designed to create opportunities for sustainable emission reductions to happen.

¹⁰⁵ https://registry.verra.org/mymodule/ProjectDoc/Project_ViewFile.asp?FileID=44881&IDKEY=3903d3e5fa83f0u90amnmasdfkaidfnndf9348c09d9mdfksamdf
¹⁰⁶ https://registry.verra.org/mymodule/ProjectDoc/Project_ViewFile.asp?FileID=46476&IDKEY=jkjalskjf098234k280985fjklf098098k32lasjdfkjh099k64090404
• Weak MRV capabilities complicating the enforcement of environmental and social safeguards. MRV infrastructure is still incomplete, which may send inadequate incentives for the entry of potential service providers who wish to implement projects. Further, whilst there is ongoing investment and end market demand for REDD+ in the DRC, the country’s full potential in carbon markets may be affected by some investors and purchasers reputational concerns.

• A lack of basic trade infrastructure and actors to support REDD+ progress. Despite hosting ongoing projects and jurisdictional programs, the DRC does not maintain a registry to record information necessary to facilitate transparency and tracking of required information. This further complicates the integration of different initiatives into national accounting.

4.5 Future REDD+ priorities

To enhance its ability to access finance, the DRC should reduce uncertainty around risk management and commit to concrete and cohesive safeguards:

• Close the gap in credibility of requirements to ensure environmental integrity and benefits to community. The implementation of safeguards and standards is crucial to providing public and private sector investors of the emission reduction and social and environmental viability of REDD+ activities. As such, the DRC needs both safeguards with independent grievance mechanisms and standards, which apply transparent monitoring mechanisms and consequences for non-compliance.\(^{107}\)

• Implement a transparent MRV infrastructure to ensure credibility of environmental and social safeguards. Efficient MRV activities ensures the accurate measurement and reporting of carbon stocks and emissions of GHG. A well-functioning MRV system is necessary for assuring the efficient and equitable distribution of REDD+ benefits among stakeholders, and is therefore closely tied to the issue of social safeguards. This includes periodically reporting to the UNFCCC on GHG emissions and Safeguards Information Systems. MRV capacity building financing should be aimed at specific technical national departments.

• Increase capacity to construct a credible and science-based FREL. In the absence of proper data and scientific capacity, it makes sense to use conservative assumptions to construct the FREL. However, this could mean that the DRC misses out on large opportunities to receive funds for real performance in reducing rates of deforestation. A credible and science-based FREL that takes into consideration the increased trend in emissions would open up significant opportunities for finance to flow into DRC’s REDD+ programme.

• Clearly define its position on nesting by establishing a clear process for sharing risk and incentives between actors. The DRC government may undermine investment by failing to clarify guidelines on allocation and accounting under nesting approaches, thereby adding uncertainty to revenues from emission reductions projects. Private sector engagement in REDD+ is conditional on the DRC government’s ability to assess and manage risks affecting project success. As the world moves to implement the Paris Agreement and unconditional NDC commitments increase in stringency, maintaining an opaque position regarding responsibility for underperformance is not a sustainable option. For nesting systems to work, it is key that the government clarifies how the receipt of REDD+ credits at the project level is tied to government performance at the national and subnational levels, if at all. Additionally, frameworks for allocating national and sub-national reference levels should be decided upon. Where possible, unexpected changes to the treatment of existing projects should be minimised in order to retain incentives for emissions reductions and reduce perceived regulatory risk which can create a barrier to investment.

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Case study: Ghana

Ghana’s tropical forests are amongst the most biodiverse in the world and make a major contribution to the economy. The tropical forest areas of Ghana are one of 34 severely threatened World Biodiversity Hotspots. Forest resources contribute up to 38% to the income of Ghana’s forest dwellers and about 6% annually to the Gross Domestic Product of the country. The decline of the resource will impact on the livelihoods of those who depend directly on the forest and the economy of the country. With the current rate of deforestation, Ghana’s forests could completely disappear in 25 years.

Ghana’s 9.3 million hectares of forest accounts for 41% of its total surface area. These forests are divided into three main ecological zones: the High Forest zone, Transitional Zone and the Savannah Zone. The High Forest zone, in the southern zone of Ghana, consists of forests ranging from wet evergreen to dry semi-deciduous. It has a rich indigenous flora, with species that are of interest to the timber trade. The High Forest Zone is the main area for cocoa farming, one of Ghana’s main agricultural commodities.

Deforestation in Ghana has increased over the past decade, although official estimations have varied significantly in the past years. The latest FREL submission indicates that about 17,133 ha of forest were deforested every year between 2001 and 2015. This represents 0.34% of forest loss in 15 years. In comparison, the first FREL submission estimated that Ghana’s deforestation rate had been approximately 3% per year, more than 320,000 ha year, since 2000. Ghana’s forest resources face pressure of deforestation and forest degradation with the principal drivers identified as unsustainable logging and fuelwood harvesting, agricultural expansion, free ranging pastoralists, permanent and shifting cultivation.

By some estimates, Ghana’s High Forest Zone is the region most affected by deforestation. Forest degradation and deforestation across the High Forest Zone, is being driven by continued cocoa farm expansion and other agriculture, coupled with illegal logging and a recent increase in illegal mining. Over a quarter of agriculture conversion resulted from cocoa expansion, making it the single most important commodity driver of deforestation in the program area.

5.1 Engagement with REDD+ programs

Ghana has been implementing REDD+ by focusing on eco-region jurisdictional approaches in partnership with the FCPF, with an initial focus on the High Forest Zone. Initially, Ghana adopted a REDD+ implementation approach that focused on small-scale REDD+ pilots but many of these pilots lacked the technical expertise and financial backing to make significant progress. Ghana has since then adopted an eco-region jurisdictional approach to REDD+ implementation with an initial focus on the High Forest Zone, which makes up 80% of the country’s forests, with the ambition on scaling up to cover the other distinct major ecological zones of the country such as the Savanna Zone.

As such, Ghana has identified two sub-national Emission Reductions Programs (ERP), of which the Cocoa-Forest REDD+ Program is the most advanced. The two jurisdictional approaches comprise:

1. The Emission Reductions Program for the Cocoa Forest Mosaic Landscape (The Cocoa-Forest REDD+ Program). The program’s objective is to improve land use and socio-economic development in the High Forest Zone and cocoa production areas of Ghana. The program does this by increasing cocoa yields on farmland areas through intensification and climate-smart practices in order to prevent

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110 https://www.timbertradeportal.com/action/countries/country/2
114 https://www.forestcarbonpartnership.org/system/files/documents/GCFRP_Carbon%20Fund_Final%20Draft_April%202017-formatted.pdf
expansion of cocoa farms into forests. The Ghana Cocoa Forest REDD+ Program is the leading commodity-based emission reductions program in Africa.

2. **The Emission Reductions Program for the Shea Landscape of the Northern Savanna Woodland (The Shea Savanna Woodland Program).** The objective is to restore the Shea Landscape of Northern Ghana, improve savannah woodland and agroforestry management practices and strengthen tree-based income generation for local communities.

The National REDD+ Strategy also identifies three other programs that require further analysis and consideration for REDD+ implementation in Ghana:

1. Emission Reductions Program for the Transitional Forest Landscape;
2. Emission Reductions Program for the Coastal Mangroves;

Ghana has recently signed a five-year Emission Reduction Purchase Agreement with the FCPF for its Cocoa-Forest REDD+ Program.

According to Verra’s registry there are no voluntary market projects currently implemented or being piloted in Ghana. The government has consciously focused on landscape approaches to tackle deforestation issues, leaving limited room for the implementation of projects, despite the importance placed on the private sector. However, stakeholder interviews revealed that one project developer is in negotiations with the Ghanaian authorities.

### 5.2 Enabling conditions

Ghana has established a centralised and functional national REDD+ governance, with significant government buy-in, strong multi-stakeholder participation, and solid cross-sectoral support.

However, lack of coordination between public institutions and unclear land tenure dynamics have recently threatened the performance of the process.

#### 5.2.1 Institutions

Through the Cocoa-Forest Program, the government has secured support from different ministries, agencies, private sector and the civil society for REDD+ objectives. The logic and strength of the Program is based on the premise that current cocoa production is unsustainable and threatens forests. To balance productive cocoa production and limited forest loss, the country requires a landscape-level approach gathering all relevant actors.

Since its establishment, a wide range of ministries have committed to work together to support REDD+ performance. Ghana’s Cocoa-Forest Program is co-hosted by two institutions: Ghana’s Cocoa Board and the Forestry Commission which includes the National REDD+ Secretariat. These institutions work in close collaboration with the stakeholders in the environment, minerals, and agricultural sectors across the high forest zone landscape. Ministries and agencies involved include the Ministry of Lands and Natural Resources (MLNR), Ministry of Environment, Science, Technology and Innovation (MESTI), Environmental Protection Agency (EPA), Ministry of Food and Agriculture (MoFA), and Minerals Commission (MC).

In turn, the government has given institutional support and clear management responsibility for forests and REDD+ issues. In Ghana the Forestry Commission developed a Climate Change Unit to serve as the National REDD+ Secretariat. Having a central coordination body has opened up opportunities to access additional support through the World Bank’s Forest Investment Program.
By combining credible commitment to develop climate smart cocoa to protect the forests with extensive stakeholder involvement at all stages of REDD+, the government secured private sector buy-in. As part of the preparation of the Cocoa-Forest Program the government of Ghana engaged major cocoa private sector actors including Touton, Olam, Mondelez and Ecom/Armajro. Given strong public support for reducing cocoa-led deforestation, the private sector has contributed to discussions on how to best support and implement the Program. Three cocoa companies, Touton, Mondelez and Nyonkopa (a subsidiary of Barry Callebaut), have signed Memorandums of Understanding with the government. The private sector’s participation in the Program has reinforced the government’s jurisdictional approach.

An example of this collaborative approach is the signing of the Cocoa and Forest Initiative between the government and 35 leading cocoa companies to end cocoa-related deforestation and restore forest areas. The Initiative, which was agreed after the start of the REDD+ process, aims to roll-out climate-smart cocoa interventions and facilitate a no-deforestation supply chain. Implementing the Framework will require government, businesses and civil societies to collaborate at national, regional and district levels. However, progress is slow: while most participating companies have released individual action plans, there is no common methodology to assess whether investments and activities in these landscapes are effectively reducing deforestation, or whether any such performance delivered by non-state actors can directly be rewarded.

The private sector has contributed to the process by financing and implementing projects aligned with REDD+ objectives. Touton’s Memorandum of Understanding, “Partnership for Productivity Protection and Resilience in Cocoa Landscapes” has brought together the Ghana Forestry Commission, Ghana Cocoa Board and a wide range of civil society organisations to catalyse private investment from the private sector to preserve approximately 160,000 ha of protected forest reserve and deliver socioeconomic benefits to an estimated 150,000 people by 2020. Touton has also been working with partners as part of a national committee to develop a landscape standard for assessing Climate-Smart Cocoa. Work is now planned to build a market for Climate-Smart Cocoa at scale. Olam, Cargill, Yayra Glover and Mondelez are financing and implementing projects with civil society stakeholders in High Intervention Areas (HIA).

The government has recognised the role of smallholders in REDD+ within its legal framework. The Constitution of Ghana acknowledges that local communities are governed by customary law. Traditional authorities, such as the national and regional House of Chiefs and traditional councils are officially recognised and have a degree of autonomy, including in terms of arbitration. Ghana has conducted a Strategic Environmental and Social Assessment (SESA), and developed Environmental and Social Management Framework (ESMF) and Resettlement and Policy Framework (RPF) to ensure that safeguards-related issues are integrated into the entire REDD+ process. The ESMF establishes clear procedures and methodologies for the environmental and social assessment review, approval and implementation of interventions. It specifies appropriate roles and responsibilities and outlines the necessary reporting procedures for managing and monitoring environmental and social concerns.

The Community Resource Management Area (CREMA) empowers communities to protect their forested land, and in doing so has supported REDD+ development. The CREMA initiative offers a bottom-up approach to forestry which is more in line with traditional land tenure governance devolving land management rights to communities. It has resulted in improved natural resource governance, conservation awareness, increased collective community action in their respective jurisdictions, and reduced incidence in anthropogenic activities that underlie deforestation and forest degradation activities. There are over 30 CREMAs in various stages of development in Ghana.

While the government has encouraged the participation of the civil society it still struggles to secure smallholders’ buy-in. Active international and national NGOs partners include Solidaridad, Rainforest Alliance, IITA, NCRC, IUCN-Ghana, and Arocha-Ghana. Their engagement has materialised through their

116 http://www.ghanaredddatahub.org/ecozone/details/1/
partnership with cocoa producers to implement their High Intervention Areas (HIA). Most importantly, there is strong support and willingness to engage from traditional leaders, communities, and cocoa farmers across the program area. However, the fragmented cocoa supply chain, which is composed of hundreds of thousands of smallholder farmers, lacks coordination institutions and the means for tracing, which complicates the effective implementation of REDD+ outreach.

In addition, lack of tree and land tenure reform to improve the coordination between customary and statutory structures poses a threat to any landscape-level initiative willing to reduce pressure on forests. There are strong linkages between tenure security and sustainable cocoa production. Cocoa production in Ghana has historically relied on the movement of individuals and families into frontier areas to open up new cocoa farms causing continuous degradation of natural forests. Decreasing cocoa yields and high costs of cocoa rehabilitation has been discouraging farmers to replant cocoa on their existing lands. Instead, they tend to shift their cultivation to frontier regions, contributing to further deforestation and biodiversity loss. Conflicts between landlords and tenants combined with unwritten contracts create perverse incentives to keep old and unproductive trees on old farms.

There remain some gaps in community involvement and safeguards. Despite recently submitting its first Summary of Information (SOI) to the UNFCCC, Ghana does not have an operational Safeguard Information System (SIS) allowing stakeholders to monitor Cancun safeguards implementation. This means Ghana does not provide accessible and transparent information/data on how Cancun safeguards are being addressed or respected throughout the implementation of REDD+ activities. In addition, despite having submitted an Advanced Benefit Sharing Plan, it is unclear whether the government has agreed on a final Benefit Sharing Plan with the civil society.

Coordination between ministries and donors remains a problem, which has led to misallocation of resources for climate change activities. Weak governance in the country has in some cases, resulted in duplication of activities and in a lack of disclosure of climate financing directed at sub-national levels to the Ministry of Finance. This is often the case when funding does not directly target a national initiative, which can result in inefficient use of aid funding. The Ministry of Finance is currently building a platform to track different flows of climate finance and incentivise recipients to create synergies between different projects.

Despite receiving technical assistance from donors, Ghana’s government still experiences lack of capacity and staff retention, which may jeopardise REDD+ performance. Ghana spent a large proportion of its readiness funding on the development of forest monitoring systems and reference levels, safeguard assessments, and even drafting the national REDD+ strategies. However, to date it has relied heavily on international consultants, and limited domestic capacity building. The limited transfer of capacities between personnel within ministries has led to capacity loss when key staff changed jobs. According to Ghana’s Fourth National Communication, substantial gaps remain in data processing, Quality and Assurance, expertise on GHG as well as Monitoring and Evaluation.

5.2.2 Policy

Ghana’s commitment to the REDD+ process has built on its track record of national policies and pledges aimed at reducing GHG emissions and/or deforestation. National policies aligned with REDD+ commitments include: Agenda for Transformation: The Coordinated Program of Economic and Social Development Policies (2014-2020), National Climate Change Policy Action Program (2015-2020), The Revised Forest and Wildlife

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119 https://www.unredd.net/knowledge/redd-plus-technical-issues/safeguards.html
120 https://unfccc.int/sites/default/files/resource/Gh_NC4.pdf
121 https://unfccc.int/sites/default/files/resource/Gh_NC4.pdf

To ensure the sustainable use of the country’s rapidly diminishing forest resources, the government has committed to a complementary initiative for addressing deforestation with the European Union. In 2008, Ghana ratified a Voluntary Partnership Agreement with the EU, which aims to address illegal logging, improve forest governance and promote trade in legal timber products. Ghana has committed to developing a timber legality assurance system so it can issue verified legal timber products with Forest, Law, Enforcement and Trade (FLEGT) licences, which automatically meet the requirements of the EU Timber Regulation. To do so, in 2017 the government adopted the Timber Resources Management and Legality Licensing Regulation.

Ghana’s cross-ministerial coordination has helped to align agricultural policies with REDD+ commitments. In 2015, the government published the Ghana Cocoa Sector Development Strategy. The vision is to create a modernized, resilient and competitive cocoa industry where all stakeholders strive toward a sustainable cocoa economy in which farmers and their communities can thrive. The National Climate Smart Agriculture and Food Security Action Plan (2016-2020) translates to the ground level the broad national goals and objectives in climate-smart agriculture. The effectiveness of these policies has not yet been assessed. Finally, the Cocoa and Forest Initiative has brought together the Ministry of Lands and Natural Resources, the Ghana Cocoa Board and the Forestry Commission and strengthened their existing partnership.

Policies aimed at incentivising emission reductions are further reinforced by projects financed and implemented by the private sector. In response to the cocoa production challenges, Touton has been working with farmers in ten districts in Ghana’s High Forest Zone on progressive ‘climate-smart agriculture’ projects. In two districts, Bia west and Juabeso, the company has now gone a step further and is piloting an additional seventh pillar of activity, “landscape governance to fully achieve climate-smart outcomes”. Such exercise carried out under Verra’s Landscale initiative and with NCRC, is aligned with one of the five pillars of the Cocoa-Forest ERP, that is Landscape Planning within Hotspot Intervention Areas. It is expected that Touton’s work will contribute to results-based payments for the Ghana Cocoa-Forest ERP.

In 2015, Ghana submitted its first intended Nationally Determined Contribution (INDC). The country’s objective is to unconditionally lower its GHG emissions by 15% relative to a business-as-usual (BAU) scenario emission of 74 MtCO₂e by 2030. With external support, Ghana commits to a total emission reduction of 45% below the BAU scenario by 2030. It is unclear how much of it will be achieved through REDD+ initiatives, especially since the recent downward revision of Ghana’s FREL.

5.2.3 MRV infrastructure

Ghana does not have an operational National Forest Monitoring System, despite having signed an Emission Reduction Purchase Agreement in 2019 with the World Bank. Ghana designated the Resource Management Support Centre (RMSC) of the Forestry Commission as the technical unit responsible for Ghana’s Forest Reference Level (FREL) and Measurement, Reporting and Verification (MRV). The country’s Fourth National Communication states that “though the full version of the NFMS is not complete yet, most of the requisite dataset has been pooled together at a central point at the Forestry Commission during the preparation of the submission to the UNFCCC”. MRV capacity is often limited in developing countries, given competition for government resources with other priorities such as poverty alleviation and agricultural development.

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124 https://www.euflegt.efi.int/background-ghana
128 https://verra.org/65_countries/ghana/
129 https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ghana%20First/GH_INDC_2392015.pdf
130 https://unfccc.int/sites/default/files/resource/Gh_NC4.pdf
The recent change in national FREL levels has raised questions on the use and quality of the data and methodologies used to estimate emissions levels and trends. In 2017 Ghana submitted its first FREL using a “continuation of historical trend” for the 2000-15 period.131 As such, the projected emissions reflect the reference period’s rising trend. In 2021, Ghana submitted a revised Forest Reference Level, using the same period of reference (2001-2015). This time the Ghanaian authorities opted for ahistorical annual average technique. The FREL is estimated as the average of the annual net GHG emissions from the period 2001-2015. Despite using the similar Landsat images, the comparison between the two FREL shows there are significant differences in emission levels, which are attributed in the new report to the use of higher resolution data as well as a post-stratification approach. The 2021 submission estimates that within the reference period, the FREL corresponds to 1.5 MtCO₂ per year, compared to 60 MtCO₂ per year in the 2017 FREL covering the same period.132

Figure 7 The potential for emission reductions is 60 times smaller under the revised national FREL

Ghana’s revised National Forest Reference Emission Level (FREL) differs significantly from its original submission and that has created uncertainty regarding the potential for REDD+ performance. Stakeholders report that the 2021 FREL revision was carried out without the usual stakeholder consultation process. This created a difficult circumstance for potential project developers exploring the possibility to implement their own emission reduction projects and align them with the FREL. The significant change in FREL may considerably reduce the benefits to be distributed to local actors under the FCPF ER Program. The decrease in potential revenues, which is equivalent to approximately 58.5 MtCO₂, or more than US$251 million, per year, may, in turn, decrease actors’ willingness to engage in REDD+ activities.135

It is unclear whether the revised national FREL will use a spatially explicit allocation of reference levels. Deforestation trends vary throughout the country and by type of biome, meaning that some areas are most at risk of being deforested in the near future than others.136 To ensure that areas at risk are allocated enough incentives to tackle deforestation, it is key that the national FREL clarifies how the reference levels will be allocated, and whether a risk-based spatial allocation will be used. For example, the national FREL could allocate a higher quantity of emission reductions to the Cocoa region than in the Savannah region.

Ghana regularly reports to the UNFCCC on its progress with National Communications, National Inventory Reports and one Safeguards Information Summary. Ghana has periodically submitted National Communications accompanied with National GHG Inventory Reports and Biennial Update Reports. These reports prove Ghana’s potential to efficiently generate credible national inventory estimates on time, showcasing its domestic monitoring, reporting, and verification (MRV) abilities. The latest National GHG report dates back to 2019. Despite having submitted its first Summary of Information in 2019, the country is yet to publish an operational Safeguard Information System.

5.2.4 Trade infrastructure

Ghana does not have a registry of REDD+ programs and projects, despite having signed an Emission Reduction Purchase Agreement. This creates uncertainty regarding the integrity of results and the implementation of benefit sharing. The REDD+ Datahub collects and stores information about greenhouse gas emissions from Ghana’s forests. However, it is unclear if the datahub constitutes a formal REDD+ registry/data management system, which would be a key element to form a market.

Ghana has focused on implementing jurisdictional approaches to REDD+ under the FCPF partnership, which has prevented further private sector action. At present Ghana lacks network of brokers or intermediaries facilitating trade in offsets. The focus on developing jurisdictional programs under the FCPF means that all emission reduction transactions are channelled through the World Bank. It is unclear if all credits available are contracted to the FCPF. Ghana has not yet made any provision for project nesting. The lack of actors supporting trading might affect the ability for Ghana to mobilise project-based approaches alongside jurisdictional approaches. In addition, the recent change in FREL may further reduce market participant’s confidence in the predictability of the policy environment, the attractiveness of investing in country, and may impede the development of private trading infrastructure. Project developers that are exploring the possibility of developing a project in one of Ghana’s ERPs may have to consider the option of nesting and aligning with the recently amended national baseline. The increased conservativeness of the baseline could therefore deter private sector investment.

Ghana has not adopted carbon pricing or equivalent compliance mechanisms, although the NDC recognises carbon markets as a potential climate implementation strategy. In 2020, the UNFCCC Regional Office in Lomé initiated work with Ghana to evaluate the options for carbon pricing policy in the country. In the pursuit of the strategy to adopt carbon market measures, the government of Switzerland and Ghana are implementing National Clean Energy Access Program (NCEP) as a pilot under Article 6.2 on the Internationally Transferred Mitigation Outcomes (ITMOs). The NCEP31 seeks to operationalise Article 6.2 in Ghana and transfer mitigation outcomes as ITMOs to Switzerland.

5.3 Assessment of performance

Table 9  Overview of Ghana’s REDD+ performance

<table>
<thead>
<tr>
<th>Key metrics</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale and robustness of access to finance</td>
<td>&gt; US$30 million</td>
</tr>
<tr>
<td>Environmental outcomes</td>
<td>Lack of active REDD+ projects/jurisdictional program level performance means no environmental performance to date identified</td>
</tr>
</tbody>
</table>

Source: UNFCCC; Forest Trends; Climate and Land Use Alliance; Verra Registry and Vivid Economics

[137] https://unfccc.int/BURs
[138] https://unfccc.int/non-annex-i-NCs
Despite Ghana receiving a high level of committed funding, only a modest amount of finance has to date been disbursed. According to Ghana’s Fourth National Communication, US$337 million were committed to Ghana’s forestry sector between 2011 and 2019. However, Forest Trends reports that between 2009 and 2014 received US$29 million, out of the US$98 million committed.141 Most of this funding has come from the multilateral development banks.

Ghana’s five-year Emission Reductions Payment Agreement (ERPA) with the Forest Carbon Partnership Facility (FCPF) Carbon Fund, unlocks performance-based payments of up to US$50 million for carbon emission reductions.142 Ghana is still to receive payments for its performance. It is unclear how the promised result-based financing is going to change given the drastic revisions to the FREL. The 2021 submission estimates that within the reference period, the FREL corresponds to 1.5 MtCO$_2$e per year, compared to 60 MtCO$_2$e per year in the 2017 FREL covering the same period.143

Given the lack of disclosure of financing aimed at sub-national/local programs to the Ministry of Finance, it is difficult for the country to accurately track program implementation. The country’s fourth communication states that: “several organisations in the country receive climate funding from multiple sources that do not pass through the Ministry of Finance. It is because most of the programs take place at different levels and unless it is held at the national level, it is difficult to track.”144

An overview of committed climate funding per sector estimates that the forestry sector received US $338 million between 2011 and 2019. The forestry sector is the second biggest recipient, accounting for 26%, US $338 million, of the climate finance in Ghana.

Estimates suggest that implementation remains the weakest and least funded aspect of REDD+ in Ghana to date. It appears that the majority of REDD+ initiatives and related programs and activities in Ghana are intended to support the development of readiness and an enabling environment and are not specifically focused on directly or immediately reducing deforestation or degradation or producing emissions reductions or enhancements.145

There are currently no REDD+ projects based in Ghana registered in the Verra VCS registry, nor any in its project pipeline.146 In the absence of a national REDD+ registry, it is difficult to assess whether some REDD+ projects are being piloted and/or assessed. The absence of projects may be reinforced by the recent unexpected change in FREL, which has considerably decreased Ghana’s potential for emission reductions.

Benefit to communities is difficult to evaluate at this stage since there has not been monitoring of social and environmental safeguards through the Safeguard Information System. The Ghana REDD+ Datahub does not provide safeguards information.147

5.4 Contributors and barriers to success

Ghana has managed to secure adequate buy-in from the supply chain companies in the private sector, which has unlocked the possibility of establishing a supportive enabling environment for REDD+ implementation. However, due to lack of implementation financing and significant unexpected FREL revisions, Ghana does not yet have a solid MRV infrastructure to guarantee the integrity of its results. In addition, lack of clarity on tree and land tenure has further complicated the practical application of REDD+ objectives. Stakeholder interviews revealed the supply-chain buy-in has the potential to increase further.

146 https://registry.verra.org/app/search/VCS/All%20Projects
147 http://www.ghanareddatahub.org/ecozone/details/17
Enablers include:

- **Mutually beneficial business case behind the Cocoa-Forest Program**, enabling the government to secure support from different ministries, agencies, private sector and the civil society.
- **Financing and technical assistance help from cocoa companies**, has supported REDD+ performance.
- **Policies aligned with REDD+ goals creating a supportive enabling environment**. The track record of cross-cutting polices from different ministries have increased the credibility of the government’s commitments to create a suitable environment for a successful REDD+.

There remain challenges to mobilising emissions reductions through REDD+ as Ghana enters the results-based payments phase. Key challenges include:

- **Slow implementation process, partly due to lack of financing**. REDD+ financing in Ghana focused on readiness to test elements of REDD+ on the ground, build governance structures or assess feasibility, but not to actualize REDD+ at a project level. As a result, most initiatives in place have sought to improve forest and land management, but not with a performance-based orientation. As the government notes in its submission to the UNFCCC, a lack of coordination between actors and the Ministry of Finance may have contributed to challenges in the tracking and allocation of financing.

- **A lack of incentives for smallholders to replant cocoa on their existing lands**. Smallholders have been shifting cultivation to frontier regions due to a lack of incentives to replant cocoa on existing lands.

- **Lack of clear land and tree tenure.** Conflicts between landlords and tenants combined with unwritten contracts create perverse incentives to keep old and unproductive trees on old farms.

- **Lack of credibility and integrity with respect to safeguards will limit potential demand.** The absence of a working National Forest Monitoring System and Safeguards Information System fails to guarantee the integrity of any performance. The lack of MRV infrastructure may deter project developers that need to independently demonstrate the integrity of emissions reductions.

- **A lack of basic trade infrastructure and actors to support REDD+ progress.** Despite hosting ongoing jurisdictional programs, Ghana does not maintain a registry to record information necessary to facilitate transparency and tracking of required information. Further the lack of private sector infrastructure to support project-based crediting may deter investors.

- **Decisions which have undermined the predictability of the government’s commitments.** The decision to revise the FREL is likely to affect the performance of the current Cocoa-Forest Program, depending on how its FREL is tied to the national one, and create uncertainty for the recipients of potential emission reductions. As such, the significant change in FREL from 60 MtCO$_2$e per year in the 2017 FREL to 1.5 MtCO$_2$e per year in the 2021 FREL may considerably reduce the benefits to be distributed to local actors and deplete incentives to engage in REDD+ activities.

- **Limited capacity to construct a credible FREL.** Recent FREL revisions put into question its capacity and credibility. Uncertainty around FREL creates questions regarding the additionality of REDD+ programmes. This has a double effect of driving away potential demand and setting an overly conservative baseline that massively reduces the programme’s ability to attract finance.

- **Slow implementation of policies that can underpin a supportive enabling environment.** Policies supporting the REDD+ process imply structural changes spanning many decades. As a result of this complexity and a general lack of capacity, implementation can be very slow.

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5.5 Future REDD+ priorities

To enhance its REDD+ potential, Ghana should set out broad principles for risk management, materialise its emission reduction commitments through its MRV infrastructure and create an enabling environment for cocoa smallholders:

- **Implement a coherent MRV infrastructure to ensure credibility of commitments.** This includes establishing a credible National Forest Monitoring System to monitor and verify the integrity of its emission reductions. It also includes ensuring the operationalisation of its Safeguards Information System as a system on how the UNFCCC REDD+ ‘Cancun’ safeguards are being met.

- **Clearly define its position on nesting by establishing a clear process for sharing risk and incentives between actors.** REDD+ stakeholders must be able to assess and manage risks for projects based on clear policy from the government. Despite its focus on jurisdictional approaches, the Ghanaian government may undermine private sector investment by failing to clarify guidelines on allocation and accounting under nesting approaches, thereby adding uncertainty to revenues from emission reductions projects. Private sector engagement in REDD+ is conditional on the government’s ability to assess and manage risks affecting project success. As the world moves to implement the Paris Agreement and unconditional NDC commitments increase in stringency, maintaining an opaque position regarding responsibility for underperformance is not a sustainable option. For nesting systems to work, it is key that the government clarifies whether the receipt of REDD+ credits at the project level is tied to government performance at the national and subnational levels, or if credits at the project level would be issued only after a positive assessment of the government’s overall performance. Where possible, this should seek to avoid making unexpected changes to the treatment of existing projects as seen with the recent changes of the national FREL.

- **Similar to the DRC case, Ghana should invest in generating capacity to construct a credible and science based FREL.** Further to proper data and methods, improved analysis quality and capacity are very important to reduce the current uncertainty that has been created by drastic FREL revisions. It may also open space for Ghana to incentivise real emissions reductions and support further flows of investment.

- **Clearly define the allocation of the national FREL across the country to ensure an appropriate alignment of risks and incentives.** Given the heterogeneity of risks and incentives, the government should clarify if reference levels will be allocated homogenously to all regions or if it will use a risk-based spatial allocation to spatially different risks and rewards to actors at all scales. A risk-based spatial allocation ensures that areas at higher risk of deforestation are allocated more potential for emission reductions than areas which are not at immediate risk.

- **Strengthen land governance and clarify tree and land rights.** To reduce deforestation and enhance productivity of the cocoa industry, the government should address problems of the security of land tenure, that undermines incentives to invest in cocoa lands, such as through plantation of shade trees. It should establish mechanisms to resolve tenure disputes; enforce land, tree, and farm rehabilitation agreements; and establish tenure-responsive land use planning to help address both problems of accountability and transparency and promote farm rehabilitation.

- **Work with the private sector to provide smallholders with incentives and the means to replace unproductive cocoa plantations.** A possible solution would be to encourage smallholder entrepreneurship (particularly among youth), increase cocoa productivity, establish valuable tree species, and improve environmental sustainability. Sharing emission reduction benefits with farmers might further incentivise farmers to commit to protecting forests and switch to shade-grown cocoa.

- **Ghana should consider how to obtain buy-in from a wide range of stakeholders if future ERPs are not linked to a commodity.**
6 Recommendations for standards, country governments, project developers and investors

REDD+ remains the most promising source of low-cost emissions reduction potential at scale, however, after more than a decade since it’s launch, there remain challenges to mobilising REDD+ at scale. REDD+ could provide 10-20% of the cost-effective mitigation needed by 2030 to stabilise warming to below 2°C. However, to achieve this target, REDD+ would require more than five times the current levels of investment. This lack of investment reflects the complex environment in which REDD+ operates, with inherent difficulties of crediting in the land sector interacting with low government capacity to impede performance.

The objective of REDD+ should be to maximise performance in mobilising flows of finance that reduce deforestation and emissions and provide benefits to local communities.

The performance of REDD+ involves the interplay of supply and demand factors, mediated through standards, which set the ‘rules of the game’.

- **Enabling conditions for enhancing supply**: Forest countries have been unable to keep up with the increasing demand for high-quality carbon credits despite substantial investments in REDD+ readiness. Strong institutions, appropriate policies, sound data analysis and MRV, and trade infrastructure, determine the enabling conditions for a REDD+ program to deliver results at scale. As the Paris Agreement moves towards implementation and private sector initiatives like the Taskforce on Scaling Voluntary Carbon Markets establish new criteria for establishing environmental integrity, ensuring country capability will be essential to access certain types of market-based finance.

- **Demand for REDD+ results**: Strong and stable demand is a key determinant of REDD+ success. This demand can come from a variety of sources including voluntary markets, compliance markets and multilateral/bilateral climate finance. Each source of demand brings different preferences around environmental integrity assurance, focus on community involvement and sensitivity to price. Demand from the voluntary markets and multilateral/bilateral climate finance may have stronger preferences for environmental integrity and community safeguards, and as a result is also often less sensitive to prices than compliance demand. It is important to highlight that compliance markets in most countries are likely to have standards that ensure environmental integrity, especially now that most jurisdictions are interested in entering international trading as part of Article 6.

- **Standards**: Crediting standards set the rules that seek to align host country capabilities, with the attributes desired by demand sources. UNFCCC guidelines are not sufficiently detailed to ensure the environmental integrity of the REDD+ market, so carbon accounting standards are playing a role in helping host countries write the rules of the game. They create minimum criteria in key areas such as the definition and revision of FRELS, the use of buffers, rules regarding aggregation and requirements for safeguarding. This requires countries to carefully balance their limited capacity with the desires of different buyers for high integrity credits. Excessively stringent standards may set such a high bar that most developing country jurisdictions are unable to participate at scale and miss out on the benefits. Setting loose standards may lead the limited funds available to flow to jurisdictions or projects that are not legitimately reducing emissions and reduce demand further.

In recent years, requirements for environmental integrity have become more complex, as countries now seek to align their activities with the requirements of the Paris Agreement. As part of the agreement, countries are required to implement mitigation actions to meet their NDCs. The measurements of GHG mitigation at the project level only is no longer acceptable because it does not guarantee the environmental integrity of the NDC, instead mitigation needs to be demonstrated at the national level. These new
requirements create challenges, with many governments needing, for the first time, to integrate REDD+ activities into NDCs and national commitments.

The process of aligning REDD+ programs and projects to meet the objectives of the Paris Agreement creates opportunities and risks. A minimum level of surety regarding the integrity of mitigation outcomes is needed for countries to access potential sources of demand. However, this must be done with care, as countries are likely to ensure more stable access to demand and more robust REDD+ markets if they are able to draw on several of these sources.

Jurisdictional commitments enhance the integrity of REDD+ at a jurisdictional level and may provide the opportunity to access new sources of demand that require high levels of environmental integrity. In particular, flows of finance from compliance markets and trading facilitated under Article 6 provide significant opportunities to diversify potential funding sources and to mobilise REDD+ finance at a scale unlikely to be achieved through voluntary markets and bi/multilateral finance alone.

The integration of REDD+ into NDCs and nested REDD+ approaches requires jurisdictions develop processes to determine how risks of underperformance are managed and shared between jurisdictional level commitments and project level investments. This in turn creates risks for investors, who may find the crediting of emissions reductions from their project at risk, even if they have demonstrated performance and the project level. These risks are particularly prominent in the current “transitional phase” as jurisdictions move from earlier project-based approaches to establish rules that nest project-based REDD+ into larger jurisdictional systems. Where risk sharing rules are not clear, this can undermine confidence and investment that reduces REDD+ performance.

These trade-offs are borne out in the case studies of Colombia, the DRC and Ghana. In Colombia, there has been substantial success in mobilising private sector finance for the purchase of emission reductions. For its REDD+ performance to be sustained in the medium term and attract international finance at scale, the country faces the challenge of aligning jurisdictional commitments with project implementation. In the DRC, the liberal approach to project implementation is, to some extent, being undermined by unclear safeguard measures. It is also threatened by unclear rules regarding the potential nesting of projects as well as the uncertainty created by disagreements on the FREL’s methodology. Despite strong commitments on GHG reductions, Ghana has not yet produced clear mitigation outcomes. The lack of clear land tenure, MRV infrastructure and unexpected revisions to the FREL may have contributed to limited performance.

Together, these cases point to priority areas for future REDD+ development, ensuring an appropriate balance of risk sharing between host governments and the private sector. This relates to all key aspects of crediting, including establishing an appropriate FREL, providing sufficient buffer stocks addressing key possible integrity risks, and providing certainty regarding nesting in a manner that appropriately shares risks between the public and private sector. Standards should also ensure these points are included in their guidelines by supporting the development of science-based approaches that strike the right balance between integrity and accessibility to maximise performance.

Each case study highlights the importance of country specific factors and local circumstances when seeking to maximise REDD+ performance for governments and project developers:

- Colombia has successfully mobilised REDD+ investment in the private sector, but will need to clarify its approach to nesting between the government and private developers. It remains key for the government to ensure that local sources of demand are maintained, which also is a driver of a strong trade ecosystem, as well as continue their engagement with commodity supply chains. In the future, the lack of nesting guidance could introduce uncertainty for project investors (as well as Indigenous groups developing projects) regarding the way performance and risk are shared. This could reduce investment, particularly as buyers increasingly demand jurisdictional performance. Consultations with project developers as well as indigenous communities will be key to ensure rules balance the
needs of existing projects. It is important for the FREL to continue to be science-based and reflect the reality of recent emissions trends for credited emissions reductions to be accurate, real, and fair.

- The DRC may need to enrich its 2018 FREL with further data and address governance gaps to increase access to flows of future demand. This includes introducing and enforcing concrete and cohesive safeguards, with independent grievance mechanisms, which apply transparent monitoring mechanisms and consequences for non-compliance. Institutional clarity and high-level buy-in will also be key to ensure the scale up of REDD+. Additionally, a stronger FREL with more data points can ensure a realistic representation of the REDD+ potential in country. This is key because a credible and science-based FREL that takes into consideration the increased trend in emissions would open up significant opportunities for finance to flow into DRC’s REDD+ programme. To do so, finance for building MRV capacity should be aimed at specific technical national departments. Finally, as in Colombia, it is important for the REDD+ authorities to determine rules regarding nesting to facilitate future investment.

- Ghana could focus on incentivising private sector engagement to complement jurisdictional approaches to expand its access to flows of REDD+ finance. At present, private sector crediting is absent from Ghana, given the sole focus on jurisdictional crediting. To support the development of project crediting, a credible MRV system will be key. This includes an accurate FREL which is able to accurately account for future past deforestation dynamics. Having the proper data, methods and national capacity to calculate the FREL would reduce the current uncertainty that has been created by recent drastic FREL revisions. It may also open space for Ghana to incentivise real emissions reductions and support further flows of investment. Finally, land and tree use rights should be clarified to create incentives for smallholders to replant cocoa on their existing lands.

Standards can influence policies in forest countries, so it is key for them to encourage policies that ensure environmental integrity while maximising opportunities to perform. This report highlights the role of standards as a key intermediary between supply and demand, but also as policy influencers. Forest countries want to position themselves as credible suppliers of carbon credits and standards have become the ultimate guarantors of environmental integrity. At times, Standards have pushed for overly conservative approaches that could deplete countries’ opportunities to attract finance. It is key that standards push for science-based approaches that reduce uncertainty and therefore reduce the need for unnecessary conservativeness.

There is no silver bullet for making REDD+ work, but countries can learn from previous success and failure stories to set the right enabling conditions in a rapidly changing environment. All countries have localised circumstances which, in theory, should warrant a case-by-case approach. As such, there is no unique solution for enabling REDD+ performance. Instead, countries need to focus on establishing strong foundations to ensure they can competitively supply REDD+ results now and in the future. Onboarding the private sector in delivering these results will be key, but major advancement need to be made for REDD+ activities to have attractive risk-return profiles. This could involved innovative structuring of existing financing mechanisms, or the use of new tools (like enhanced green bonds) to channel financing. Generating these risk-return profiles while maintaining environmental integrity is the key issue that governments and GHG standards will need to balance when designing the future outlook.

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Footnote:
106 Contract structures can be used to manage risks between buyers and sellers in a way that supports investment and capital flows (for example, first loss contract structuring) while new tools like enhanced green bonds can provide new ways to channel finance (see World Bank and Vivid Economics, 2017, The Potential Role of Enhanced Bond Structures in Forest Climate Finance).
Company profile

Vivid Economics is a leading strategic economics consultancy with global reach. We strive to create lasting value for our clients, both in government and the private sector, and for society at large.

We are a premier consultant in the policy-commerce interface and resource- and environment-intensive sectors, where we advise on the most critical and complex policy and commercial questions facing clients around the world. The success we bring to our clients reflects a strong partnership culture, solid foundation of skills and analytical assets, and close cooperation with a large network of contacts across key organisations.