

An aerial photograph of a dense, lush green forest covering a hillside. The trees are tightly packed, creating a textured, vibrant green surface. The lighting is even, highlighting the natural beauty of the forest canopy.

Nesting REDD+

Pathways to Bridge Project and Jurisdictional Programs

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About

This paper reflects on historic carbon market approaches to Reducing Emissions from Deforestation and Forest Degradation (REDD+), identifying common approaches to crediting REDD+ at various scales, shares case studies of existing country approaches to REDD+, and proposes future options for countries seeking to nest REDD+ at various scales. By discussing the relative merits of on-the-ground and policy-led approaches, we hope to spur new insights and discussion around the role of REDD+ crediting in the coming years. We believe more guidance around this particular issue is critical in order to advance the tools needed to reduce emissions in the next decade.

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Photo Credit: Mark Godfrey/TNC

Glossary

Jurisdictional REDD+ | Jurisdictional REDD+ refers to government-led REDD+ activities at the sub-national OR at the national level.

Market-based approaches | A REDD+ project or program must meet a set of pre-determined criteria to produce a tradable credit, one that is oftentimes fungible with non-REDD+ credits. In a compliance market, the government will decide on criteria for REDD+ approaches; in the voluntary market, criteria are set by various voluntary carbon offset standards.

Nested REDD+ | Nested REDD+ refers to a patchwork of approaches that seek to create a common accounting system and/or crediting system in order to integrate existing REDD+ projects into REDD+ programs. This can range from simply accounting for all emissions reductions and cutting out crediting of projects from the broader REDD+ program to seeking to integrate project crediting directly within the existing program's approach to benefits sharing.

REDD+ programs | Jurisdictional REDD+ activities, administered by tropical country governments.

REDD+ projects | Site-specific REDD+ activities, often carried out by a non-profit or for-profit project developer.

Results-based payments | Similar to a market-based approach, results-based payments require the REDD+ program to achieve pre-determined results before payment is made. Unlike a market-based approach, the resulting credit is often not tradable, nor is it fungible with other non-REDD+ credits.

Acronyms

ART: Architecture for REDD+ Transactions

BioCF: BioCarbon Fund

CI: Conservation International

CORSIA: Carbon Offsetting and Reduction Scheme for International Aviation

DFI: Development Finance Institution

FCPF: Forest Carbon Partnership Facility

GCF: Green Climate Fund

GHG: greenhouse gas

JNR: Jurisdictional and Nested REDD+

NDC: Nationally Determined Contributions

NCS: Natural climate solutions

ODA: Official development assistance

REDD+: Reducing Emissions from Deforestation and Forest Degradation

REM: REDD+ Early Movers

TREES: The REDD+ Environmental Excellence Standard

UNFCCC: United Nations Framework Convention on Climate Change

WCS: Wildlife Conservation Society

A Closing Window to Mitigate the Worst Effects of Climate Change

There is a rapidly closing window in which to avert runaway climate change. Doing so will require both countries and companies to take responsibility for reducing or eliminating existing deforestation, which generates about 10% of global emissions. Governments must set policies that systematically value and protect forests and other natural ecosystems; corporations must ensure existing and future business practices do no harm to ecosystems or the communities that rely on them. Leaders of all kinds must better manage, protect and restore ecosystems in order to meet broader, ambitious climate mitigation goals.

Yet, the world is struggling to mobilize the resources needed to green the planet sufficiently. While nature could provide up to around a third of the cost-effective mitigation needed by 2030, it still attracts less than 6% of public climate funding,¹ and a likely far smaller share of private capital aimed at tackling climate change. It has become clear over the past decade of climate action that the amount of funding available to protect and restore the world's forests, for example from official development assistance (ODA), is vastly insufficient – especially compared to the extensive government subsidies and market demand that drive deforestation.

Both improved governance and increased funding for forests, including from both public and private sources, are critical to enable long-term, sustainable climate action at the scale and pace needed to make a meaningful impact. Following a decade of Reducing Emissions from Deforestation and Forest Degradation (REDD+) efforts, this paper reflects on lessons from historical carbon market approaches and showcases how a multitude of approaches is needed to best fit specific national and local contexts to halt deforestation and degradation, specifically:

- Tropical forest countries represent a wide variety of circumstances: these countries have very different starting points and resources to engage in REDD+, meaning some countries are more dependent on external finance and any requirements associated with that funding.
- Many countries take both an iterative and exploratory process towards REDD+ that often results in multiple approaches towards accounting, crediting and other programmatic features in order to meet different standard's requirements. Given the variety of country realities, multiple approaches are necessary to deliver emissions reductions – particularly in the near-term.
- In countries with REDD+ at various scales, including site-specific projects and jurisdictional programs, decisions – especially around accounting – should be made and communicated and enforced by the government at the national level for clarity and alignment of environmental integrity.

As tropical forest countries face both capacity and financial constraints in achieving REDD+, more support and, ideally, collaboration are needed from both public and private finance to maximize emissions reductions and removals – while balancing the need to scale quickly with the need for comprehensive safeguards and benefits-sharing approaches, which can take time to implement. Countries seeking to implement REDD+ today must navigate this uncertainty and complexity, while working towards eventual alignment across in-country REDD+ activities over time.

¹ <https://www.climatepolicyinitiative.org/wp-content/uploads/2019/11/2019-Global-Landscape-of-Climate-Finance.pdf>

Key Findings

- Historically, most jurisdictional REDD+ programs have received results-based finance while REDD+ projects have received payments through the voluntary carbon markets. Upcoming international compliance markets may open new funding streams for REDD+, but both jurisdictional and project-based REDD+ may need to modify current practices in order to meet the new requirements of these markets.
- The current variety of standards and funds allows countries flexibility in choosing how to implement REDD+. However, this can also prove confusing, especially when there are contradictory requirements for accounting, monitoring and crediting of results (among others). Wherever possible, donors and technical advisors should empower tropical forest countries to utilize those REDD+ standards which best fit their national objectives and seek to develop the necessary capacities to achieve them. Additionally, standards and funds should seek to minimize differences in reporting on REDD+ results.
- Implementation of REDD+ is often an iterative process that attempts to meet multiple financing criteria, leading to sometimes overlapping or contradictory REDD+ approaches within a single country. Tropical forest countries should implement transparent registries and tracking initiatives to ensure environmental integrity across various crediting of REDD+ results, especially regarding claims. This may take additional time and funding, especially for areas with low capacity or poor governance. Both private sector and donor funding has a role in filling this gap.



Photo Credit: Adriano Gambarini, Pau-Brasil National Park in Bahia, Brazil

A National Approach Envisaged for REDD+

The Paris Agreement encourages countries to address all domestic emissions, including those from forestry and agriculture. Currently, over 70% of countries recognize and include commitments to reduce emissions from the land sector within their Nationally Determined Contributions (NDCs); however, as only 20% have quantified targets,² more specific targets and funding mechanisms in subsequent NDC updates could better enhance the role of natural climate solutions (NCS) as the current level of ambition is insufficient.

Additionally, Article 5 of the Paris Agreement expressly encourages countries to implement and support approaches to REDD+, building on the 2013 Warsaw Framework where negotiators first codified REDD+ within the United Nations Framework Convention on Climate Change (UNFCCC). Among other elements, the Warsaw Framework established rules for results-based payments to national-scale REDD+ efforts, or subnational scale in the interim only, as negotiators recognized that national-scale policy and financial reforms could provide the best opportunity to transform the forest sector. The Framework furthermore notes that REDD+ action must occur with “adequate and predictable support” to developing countries.³

While the Warsaw Framework also notes that this funding may come “from a variety of sources, public and private, bilateral and multilateral, including alternative sources,”⁴ most result-based payments to date have come from public ODA funding. This includes nearly all funding committed to the following initiatives: Forest Carbon Partnership Facility (FCPF), Green Climate Fund (GCF), BioCarbon Fund (BioCF) and REDD+ Early Movers (REM), as well as bilateral agreements. Notably, many of these funding initiatives envisioned unlocking additional finance through market-based approaches, either through existing domestic carbon markets or through upcoming international markets such as via the Paris Agreement’s Article 6, the aviation sector markets (CORSIA), or voluntary carbon markets.

However, there is a potential mismatch between existing results-based payments and anticipated market-based approaches. Most of the former funding is accessible to governments that demonstrate greenhouse gas (GHG) performance at national or subnational scale; that is, the REDD+ results-based payment program is government-led and government administered. For donor governments and Development Finance Institutions (DFIs), this is a natural transaction in which to be involved; but for companies, it may be challenging to engage with these frameworks and so, to date, they have most usually favored using the voluntary carbon market.

To Date, Voluntary Buyers Favor REDD+ Projects

Voluntary carbon markets, driven by companies increasing their use of carbon credits from NCS to offset their emissions, have been a growing source of finance for forestry and other land sector projects. Voluntary buyers typically purchase credits directly from project developers or through intermediary reseller organizations, with transactions often operating independently of any country or UNFCCC oversight or approval. As of 2017, an estimated \$996.6M has been spent on the buying and re-selling of offsets from forest carbon projects.⁵ In contrast, corporate and civil society organizations have only committed an estimated \$17.7M to pay for results from jurisdictional REDD+ programs.⁶

While additional research would be needed to fully unpack the reasons for this historical discrepancy, it is worth noting the differences between how buyers engage in the voluntary

² <https://nature4climate.org/integrating-natural-climate-solutions-in-ndcs/>

³ <https://unfccc.int/resource/docs/2013/cop19/eng/10a01.pdf#page=24>

⁴ <https://unfccc.int/resource/docs/2013/cop19/eng/10a01.pdf#page=24>

⁵ https://www.forest-trends.org/wp-content/uploads/2018/01/doc_5715.pdf

⁶ Petrobras, a Brazilian oil and gas company, has donated \$7.7M to the Amazon Fund; while The Nature Conservancy and BP have each invested \$5M into the Forest Carbon Partnership Facility’s Tranche A.

carbon markets compared to engagement with jurisdictional programs. For example, many jurisdictions are just beginning to create benefit-sharing plans that give detailed insight into how and who will implement REDD+ within the country. Until recently, then, private buyers would not have been able to easily identify and assess the specific activities used to generate results, which is at odds with the due diligence approach many buyers take towards projects in order to understand any delivery risks.

As many governments start to implement NDCs and domestic emissions reductions policies, there is growing interest in how national REDD+ programs and other NCS approaches can manifest the best on-the-ground results. Significant attention is being directed to understanding how private finance can support national REDD+ objectives. This includes approaches to leverage corporate investments within a REDD+ program; the World Bank's BioCarbon Fund Initiative for Sustainable Forest Landscapes, for example, gave a \$3M loan to the coffee company Nespresso, who will use the money to train coffee farmers on climate-smart agroforestry practices in Ethiopia and Kenya.⁷ However, there is also interest in accessing private finance via the carbon markets, and tapping into such finance that has mobilized for REDD+ projects.

In doing so, some countries' governments are looking for ways to embed and enable project-level carbon crediting. Specific approaches vary among countries, especially given national circumstances around the variety of regulatory and legal contexts for private ownership of carbon rights, the different levels of government capacity to effectively implement a national program, and the regulations and implementation of domestic carbon markets.

One Decade Later: Where Are We Now?

Governments spend an estimated \$700B/year in subsidies for agriculture that continue to fuel land conversion (the leading cause of deforestation) and ever-increasing demand for wood, agricultural and other consumer goods has led to continued demand by businesses and consumers around the world for deforestation-causing products.

Reducing deforestation requires a full-scale transformation to sustainable forestry and agricultural practices that requires a variety of technical, institutional and policy improvements. This is a vastly complex challenge, and one for which, typically, REDD+ payments of \$5 or \$10 per tonne offer a relatively low financial incentive for change. As such, payments for REDD+ must take place in a broader effort to tackle deforestation that includes concerted international and domestic policy alignment, deforestation-free investments, and deforestation-free supply chain operations across businesses.

During the past decade, REDD+ "readiness" funding has helped align stakeholders, create new institutions, build capacity and enabling policies, and otherwise assist countries with understanding and planning to address the complex and multi-faceted drivers of the forest destruction and degradation. This funding has been directed at transforming the many efforts tackling drivers of deforestation that have existed for decades. These include deeply challenging issues such as clarifying rights to natural resources and land ownership and land tenure, putting in place robust social safeguards, and reforming subsidy regimes that are politically popular. However, due to the scale and complexity of these systemic issues and the lack of proportional funding, program design and implementation have taken much longer, and are ongoing in most countries.

It is perhaps no surprise that implementation has taken far longer than hoped. While jurisdictional REDD+ programs are ambitious in scope, the size and ambition have also brought a need for expansive management capacity and recurring planning processes in order

⁷ <https://blogs.worldbank.org/climatechange/i-ll-take-my-coffee-green-no-cream-no-sugar>

to translate the targeted outcome to specific, detailed activities. Indeed, it has taken more than a decade of work to bring jurisdictional programs, supported by the World Bank's Forest Carbon Partnership Facility, to the point of being on-track to generate first emissions reductions in 2021.

To date, only about \$1.5B⁸ has been disbursed to developing countries for achieving REDD+ at a national or subnational scale to date, and most of those payments (such as those from REM or from Norway and Germany to the Amazon Fund) come from bespoke agreements that calculate results outside of a third-party standard or framework, which do not produce carbon credits that would be fungible in a carbon market. Tropical forest countries looking to access increased opportunities through carbon markets will likely need to meet additional criteria. While no countries have engaged their jurisdictional REDD+ programs in carbon markets at a national or subnational scale yet, the expectation is that these opportunities will emerge in upcoming years (likely starting with CORSIA).⁹

Typically, REDD+ projects in the voluntary carbon market have shown quicker implementation due to the more targeted nature of a project-based approach. With implementation comes experience about what has worked – and what has not. While some of these lessons learned can be shared with jurisdictional approaches, in other cases, national or sub-national rules and/or data can help address existing issues with REDD+ projects, such as around determining baselines,¹⁰ reducing the risk of leakage, or ensuring emissions reductions occur across the entire jurisdiction or nation. For example, many projects tend to focus on areas where enabling conditions are most conducive, such as areas where land and carbon tenure is clear and enforced (though there are projects that specifically work with the government and local communities to clarify land tenure).¹¹ In contrast, national policymaking will likely be more successful at addressing global deforestation drivers, such as commodity-driven deforestation.

Going forward, REDD+ approaches need to drastically scale in order to support the global systemic change needed to protect the world's forests. Specifically:

- Projects should be evaluated to learn from the mistakes and successes of trying to reduce deforestation in a specific community, forest or ecosystem; successful approaches will require government support in order to scale and achieve national-level results.
- National and sub-national governments must continue to put the necessary legal and institutional structures in place and adopt and enforce relevant policy reforms – and, wherever possible, should do so at a much faster rate than before. This will require significant new financing commitments and political will to accomplish. While some countries should start seeing – and selling – results of these actions via carbon markets, many others will require years of additional work before they can access REDD+ payments.
- Additional policy and financing to protect forests should be explored domestically, such as through public-private partnerships to achieve zero deforestation across specific commodities, domestic carbon pricing programs, and removal of unsustainable agricultural subsidies.

⁸ This amount includes the \$1,288.2M disbursed to the [Amazon Fund](#), \$178.6M disbursed from the [GCF](#), \$100.7 disbursed from the [REDD+ Early Movers](#), and the \$56M disbursed from [Norway to Indonesia](#).

⁹ Two national and subnational REDD+ approaches – ART/TREES and JNR – have been recognized for use within CORSIA, and it seems likely (based on the 2020 draft text) that Article 6 will allow for national REDD+ programs.

¹⁰ <https://www.pnas.org/content/117/39/24188>

¹¹ <https://www.forest-trends.org/wp-content/uploads/imported/cobenefits-final-draft-032116-new-back-page-pdf.pdf>

Nesting: The Many Options In-Between

The need to scale up action on-the-ground to protect nature requires thinking bigger, broader, and more strategically than project-level approaches may allow on their own. Recognizing this, voluntary carbon standards (e.g., Verra), REDD+ financing initiatives (e.g., FCPF), and a number of country governments have developed plans to "nest" projects together with government REDD+ strategies or action plans.

Governments can develop a number of approaches to incentivize results on-the-ground. These range from encouraging project developers to operate within the program to offering non-monetary benefits directly for community participation. The attractiveness of these various crediting approaches will depend on national politics and law, but broadly speaking fall under the following categories:

- a) **Projects transition fully into a jurisdictional REDD+ program with no separate accounting or crediting.** In this case, projects may continue to operate but will not be able to sell credits from their emissions reductions or removals. Instead, projects and/or landowners would receive monetary or non-monetary payments via a program's benefit-sharing mechanism (such as in Costa Rica's REDD+ program). Alternatively, projects could stop operations entirely, and all future REDD+ activities will be carried out by the state. Exactly how or if a transition could happen would depend on carbon rights within the country, as landowners or communities may prefer to continue working with an individual project instead of working directly with the government (which might be perceived as less responsive and liable).
- b) **Projects operate within a jurisdictional accounting with limited crediting options.** In some countries, the government may prioritize the fulfillment of its own contracts before allowing projects to sell credits independently. For example, in Guatemala's REDD+ nesting framework, the state requires all emissions reductions to first be used towards fulfillment of its FCPF contract. In this case, Guatemala's Emission Reduction Program plans to reduce 9.2 MtCO₂e and to remove a further 1.8 MtCO₂e over a five-year period. If those obligations were met, and if in-country projects reduced more than their proportional amount of emissions, then the excess could be sold by those projects on the voluntary carbon markets.
- c) **Projects operate within a jurisdictional accounting framework but have independent crediting.** Some countries may want to allow for projects to be crediting directly, while still meeting national or sub-national accounting, safeguards, verification and other requirements. For example, in Australia, all NCS projects that sequester or remove emissions must use the state's Full Carbon Accounting Model (FullCAM), which also informs Australia's National Greenhouse Gas Accounts for the land sector.¹² In this way, project accounting is aligned with national accounting, while project crediting remains independent of any national crediting system. Other countries may allow direct crediting to projects and will subtract that amount from the overall emissions reductions claimed via a jurisdictional REDD+ program.
- d) **Projects operate separate from a jurisdictional accounting framework.** In regions where countries and/or sub-national governments have not taken any steps to address REDD+ at a jurisdictional level, projects may operate as stand-alone. For example, China has chosen not to participate in REDD+ standards or funds. Instead, the country encourages project-based improved management and restoration projects that, while primarily domestically traded, can trade internationally.¹³ Additionally, there may be specific sources of emissions reduction or sequestration activity where projects could

¹² <https://www.environment.gov.au/system/files/190318.pdf>

¹³ <https://www.mdpi.com/1999-4907/8/8/295/htm>

still operate outside of existing jurisdictional REDD+ programs (such as reforestation, blue carbon or soil carbon projects).

Countries may decide to encourage project development, while others may offer specific circumstances under which projects can receive credits for REDD+. Still other countries may wish to forgo projects altogether. The ease of implementation of these various pathways will depend, in part, on the volume of existing projects in-country; if project developers have already sold verified credits, re-alignment of baselines and other project activities within the jurisdictional approach can be both technically and politically challenging. Though difficult, such alignment of crediting and baselines can and should be solved. The specifics of REDD+ of exactly how to address these issues will depend on each country's national and local circumstances. Specific considerations about how or if to integrate projects include:

- **Who owns the emissions reductions?** Countries have taken a variety of approaches towards ownership over emissions reductions. In some countries, this is a national asset; in others, whoever owns the land also owns emissions reductions from that land. Many more countries do not have a legal precedent for this.
- **Who can claim (and sell) emissions reductions?** As countries seek to include forestry and agricultural emissions within their nationally determined contributions, there needs to be a way to account for emissions reductions claimed by the host-country and those sold to other countries or companies.
- **Are there existing projects? If so, has there been a comparison of existing methodological approaches at the project and jurisdictional level?** In countries with existing projects, there will likely be differences in how baselines, permanence, leakage, additionality and other risks are calculated, driven by difference in data availability and methodological requirements.
- **Are there domestic compliance markets or other payments for ecosystem services policies that might be aligned jurisdictional REDD+ approaches?** In countries with domestic compliance markets, there may already be clear rules around crediting or structuring projects that can help align project REDD+ with jurisdictional REDD+ programs. For example, Colombia's carbon tax allows for REDD+ projects (among others) but requires that all projects be tracked in its national registry, RENARE. While project baselines are currently calculated via Verra's VCS methodologies, Colombia has also signaled that it might create its own standard at some point in the future.
- **Which sources and sinks are included under the jurisdictional REDD+ approach?** Most jurisdictional REDD+ programs focus on reducing emissions from deforestation (and a few on forest degradation). Fewer have given serious thought to the reforestation and restoration aspect of these programs. Reforestation and restoration work often require more individualized on-the-ground work in order to be successful; additionally, these activities are typically easier to quantify because the results are calculated based on actual regrowth (compared to many REDD+ projects, which seek to estimate a counterfactual for what would have happened under a business-as-usual scenario). As such, reforestation and restoration work will likely have fewer technical issues with aligning baselines and crediting; jurisdictional REDD+ programs may find this particular approach more attractive to encourage and allow project-scale crediting.

Pros and Cons of Various REDD+ Crediting Approaches¹⁴

Project-based REDD+		
Pros	Either	Cons
<p>Responsive: Projects can be scaled to the size needed to make a difference locally, while also being focused enough to manage complexity and achieve efficient implementation.</p> <p>Approachable: On the demand-side, companies are familiar with contracts between non-state actors or other companies; often, there is less comfort with transacting directly with country governments.¹⁵</p> <p>Specific: Projects are able to design measurement and monitoring systems that provide specific data and insights about the local drivers of deforestation.</p>	<p>Individualized: Many projects are based in areas with a high risk of deforestation: this can result in baselines that are more sensitive to emerging deforestation rates and hotspots (pro) but also may result in higher emissions reductions than estimated across the jurisdiction, leading to issues with misalignment across project and jurisdictional baselines (con).</p> <p>Sales-driven: Unlike government-run programs, if projects cannot sell credits, there are real risks to the long-term viability of the project and implementation of necessary project activities. As projects seek as many reductions as possible, this can result in high ambition and motivation to reduce emissions (pro) or can lead to shortcuts or gaming of existing methodologies (con).</p>	<p>Limited: Successful projects that reduce deforestation may inspire additional reductions in nearby communities. However, for the project activities to transform approaches across a country, there usually must be supportive or complementary policy. In less successful projects, there are risks that the emissions reduction inside the project boundary simply moves elsewhere within the country.</p>

Jurisdictional REDD+		
Pros	Either	Cons
<p>Scale: Though taking longer to implement, jurisdictional programs can ensure that deforestation is being reduced at scale instead of resulting in actions shifting to a nearby area (reducing the risk of leakage).</p> <p>Transformational: Government leadership in REDD+ programs often include legal or policy decisions that seek to transform the forestry and agricultural industry as a whole, which can lead to longer lasting and more permanent systematic change.</p> <p>Standardized: Considering deforestation risks across a sub-national or national scale can ensure the same approach towards baselines and uncertainties are taken across the program, and can ensure deforestation is reduced across all areas in a country or jurisdiction instead of only those areas seeking to opt-in voluntarily.</p>	<p>Political: Systematic change to deforestation drivers requires a cohesive and durable policy environment. Leadership that supports REDD+ can therefore have an outsized impact (pro) but that impact can then be reversed under transitions to a different political party that does not favor REDD+ (con).</p>	<p>Uncertain: Different governments have access to varying levels of historical and detailed data. In many cases, the specificity of the data does not match that used by projects (even if accuracy might vary from project to project). This can improve over time as the costs of monitoring decrease and accuracy increases but can be a barrier for many governments currently.</p>

¹⁴ This is a non-exhaustive list, meant for illustrative purposes.

¹⁵ New initiatives like Emergent are trying to change this by seeking to act as a go-between in government-to-company transactions. While there have not been any transactions to date, that could change in the future.

Nesting REDD+ Today

As countries have begun to implement jurisdictional REDD+, many policymakers have discovered existing REDD+ projects in the same geographical areas. The question of how or if to integrate these two approaches has given rise to a variety of ideas about how to “nest” REDD+ projects into a program. These solutions range from fully transitioning projects into the program to allow projects some degree of autonomy to continue operations as-is. In many cases, policymakers have not decided on a clear path towards nesting and are still considering which approach to take.

Standard bodies have taken note of this interest and have begun to research and provide guidance towards countries interested in nesting REDD+. In 2020, for example, the FCPF commissioned a report that would provide guidance to countries that wish to develop nested systems. During that time, Verra released draft “Nesting Guidelines” for projects and an updated version of its Jurisdictional and Nested REDD+ (JNR) standard, which is expected to be finalized in 2021. While the Architecture for REDD+ Transactions (ART) Secretariat does not prescribe a specific approach towards nesting, the standard does allow countries to explore various nesting pathways. Additionally, ART is currently developing guidance for countries on how to incentive private finance under the standard.

With many nested REDD+ approaches still theoretical, the below chart shows the ideal outcomes of a nested approach. As more countries implement nested REDD+, more understanding around the downsides of nesting could be revealed over time.

Nested REDD+: Aligning baselines and accounting while allowing projects some degree of autonomy in implementing practices and/or selling credits
Ideally, nested REDD+ approaches could incentivize more tailored, targeted approaches in complex deforestation areas, while still ensuring a supportive policy framework and regional emissions reductions shift.
Ideally, nested REDD+ approaches that finance a variety of implementers could continue to protect some vulnerable places under a change of political leadership; however, the issue of effectiveness and scale of these activities remains.
Ideally, nested project-based approaches would target complex areas where a tailored local approach is most successful, while government policymaking could ensure that areas not attractive to projects are still included.
Ideally, governments will improve data over time and thus reduce uncertainty within the data. In the meantime, a balanced approach would include both on-the-ground data coupled with the best available jurisdictional data.
Ideally, projects should fit into a cohesive government REDD+ approach, which includes baseline alignment, a centralized registry, and grow in areas difficult to change without a targeted, on-the-ground approach.

In the following section, various case studies are presented to share existing approaches to nesting REDD+, in the hopes that these lessons will prove useful for other country governments. However, these case studies represent examples are not set in stone and may evolve over time.

Box 1: Carbon Rights and National Circumstances

Countries may structure REDD+ approaches differently based on carbon ownership rights, or in anticipation of carbon rights in the case where there is not yet a legal framework. Typically, carbon rights are either: a) tied to land or timber ownership, b) a separate right, decoupled from asset ownership (usufruct rights), or c) nationalized and owned by the government. Many countries still lack specific guidance around carbon rights altogether, leading to uncertainty around the interpretation of existing laws; other countries have changed their understanding of carbon rights over time. Examples of various carbon rights approaches include:

Government rights

Madagascar, for example, has drafted a REDD+ Decree¹⁶ that establishes government control over carbon rights. With an estimated 93% of forests in the country belonging to the state, this approach towards centralized carbon rights reflects the current forest ownership situation in Madagascar.¹⁷

Private rights

In contrast, Guatemala's forest ownership is a mix of state, private and community-managed forests, and landowners and communities have a right to carbon if there are no land conflicts. However, the government also requires that any carbon-generating REDD+ activities must be "formally and publicly recognized as a contributor to the National REDD+ Strategy and registered in Guatemala's National Registry of REDD+ Initiatives."¹⁸ To meet registration criteria, activities must also meet additional requirements such as contributing to sustainable development.

Inferred rights

Other countries have not codified carbon rights, but instead base carbon rights on existing forest ownership. This is the case in both South Africa¹⁹ and Colombia's²⁰ carbon taxes, which allow carbon projects registered under a national standard or through the Clean Development Mechanism, the Gold Standard or Verra to sell forest carbon. These standards are often based on forest ownership, rather than explicitly on carbon rights.

Changing ownership

New Zealand first decided that both forest carbon offsets and liabilities would be owned by the government in 2002. Many impacted forest owners disagreed with this decision and created the Kyoto Forestry Association to lobby against it. During this time, tree planting declined while deforestation rates more than doubled from 7,000 hectares deforested in 2005 to 15,600 hectares deforested in 2008. In late 2008, the government reversed course and recognized ownership of carbon offsets to forest owners; deforestation dropped to 1,800 hectares in 2009.²¹

Right to carbon versus right to sell

In the context of carbon rights, it is also important to understand that countries regulate the export of goods – including carbon. Thus, while landowners may have the right to carbon on their land, the ability to sell carbon across international borders may be restricted by separate country policy.

¹⁶ Expected to be approved February 2020, but it is unclear if the Decree was approved then or is still in progress.

¹⁷ <https://www.climatefocus.com/publications/who-owns-redd-carbon-markets-carbon-rights-and-entitlements-redd-finance>

¹⁸ https://www.forestcarbonpartnership.org/system/files/documents/English_Anex_XI_Enfoque_y_principios_de%20anidamiento_100219.pdf

¹⁹ <http://www.treasury.gov.za/public%20comments/CarbonTaxAct2019/Gazetted%20Carbon%20Offset%20Regulations%2029%20Nov%202019.pdf>

²⁰ <http://es.presidencia.gov.co/normativa/normativa/DECRETO%20926%20DEL%2001%20DE%20JUNIO%20DE%202017.pdf>

²¹ <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6307.pdf>

Madagascar

Projects transition into a jurisdictional REDD+ program with no separate crediting.

Madagascar's citizens in forest communities are deeply reliant on ecosystem services for food security and livelihoods. Small-scale agriculture, livestock, and fuelwood collection in forest communities are major drivers of deforestation, along with mining and illegal timbering, which have reduced Madagascar's forests to roughly 15% of its overall territory from 59% in 1953.²²

In 2003, the President of Madagascar announced a plan to triple protected areas in the country by 2008.²³ During that time, the government also partnered with non-profits to develop some of the world's first REDD+ projects to provide innovative and long-term funding to protect many of these areas. This included the Makira REDD+ project, which is led by the Wildlife Conservation Society (WCS) with support from Conservation International (CI), the Ministry of Environment and Forests, the Madagascar National Parks, and the Corridor Ankeniheny Zahamena (CAZ) and Corridor Fandriana Vondrozo (COFAV) REDD+ projects, which were led by the Ministry of Environment and Forests with technical and financial support from CI.

As one of the first countries to hit key REDD+ jurisdictional milestones, Madagascar was often at the forefront of addressing new opportunities and challenges. As an early participant of the FCPF in 2008, the government also established one of the first technical committees (CT-REDD) aimed at developing a nested approach to integrate projects into a national monitoring system.²⁴

The need to better coordinate multiple sources of external funding for REDD+ was recognized in 2016, when the government and CI submitted a funding proposal to the Green Climate Fund (GCF). The GCF project, which was approved to run from 2018-2023, overlaps with the dates of Madagascar's FCPF Carbon Fund program.²⁵ In subsequent FCPF discussions, it was decided that the CAZ project would receive funding from GCF and would be excluded from Madagascar's FCPF benefit-sharing mechanism during the GCF project period.²⁶

In 2018, the government adopted the REDD+ National Strategy Decree, which clearly detailed the ownership of REDD+ credits for both voluntary and compliance markets (all credits are considered public resources), the decision-making public agencies for determining who can implement and benefit from REDD+ activities (the National Bureau of REDD+ Coordination, or BNC), and the mechanism for determining baselines (the BNC will determine credit validation and issuance based on the FREL).²⁷

Further clarity to the role of existing projects was given in 2020, when Madagascar shared its FCPF benefits-sharing plan. According to this plan, REDD+ projects will be eligible for monetary or non-monetary benefits based on a "utilization plan" submitted and agreed to by the BNC. Existing projects, like CAZ, that may already have emissions reductions or financing in a carbon trading account must extract the remaining balance before the jurisdictional REDD+ program begins.²⁸

²² <https://www.sciencedirect.com/science/article/pii/S0006320718301125>

²³ <https://academic.oup.com/bioscience/article/56/12/960/221627#126066933>

²⁴ <https://journalmcd.com/index.php/mcd/article/download/SuppFile/138/11>

²⁵ FP026: Sustainable Landscapes in Eastern Madagascar

²⁶ https://www.forestcarbonpartnership.org/system/files/documents/Questions_Chair_Summary_BNCCCR_Final_with%20attachments.pdf

²⁷

https://www.forestcarbonpartnership.org/system/files/documents/Strate%CC%81gie%20Nationale%20REDD%2B%20Madagascar%20FINAL%2013-06-18%20accentue%CC%81_0.pdf

²⁸ https://bnc-redd.mg/images/documents/rapports/20200317/draft_benefit_sharing_plan-ERP_AtialaAtsinanana.pdf

Guatemala

Projects operate within a jurisdictional accounting with limited crediting options.

Guatemala's REDD+ efforts build on earlier environmental policy in the country dating to the late 1980's, which include the establishment of protected areas, development of a national forest incentives program, and adjustments to smallholder incentives for managing and restoring forests.

Recognizing that several REDD+ projects began before any coordinated sub-national or national REDD+ activity, the government offered early opportunities for REDD+ projects to participate in discussions around the upcoming sub-national REDD+ program developed under the FCPF's Carbon Fund. Two of the three existing projects have chosen to integrate project baselines; the third, the REDD+ La Costa del la Conservacion project, will not be nested, and that province is excluded from the sub-national program.

Guatemala's early approach towards nested REDD+ meant that project representatives were involved in many sub-national REDD+ discussions throughout the years. This includes technical discussions with relevant government ministries; in 2015, for example, GIMBUT (a technical group) and GCI (a political group) were created across ministries to address REDD+ in the country. These informal legislative groups have helped centralize government decision-making for nesting REDD+, and projects and NGOs have been involved in many of these meetings.

While the decision to nest was offered to existing projects, other decisions are not voluntary. In 2013, Guatemala created a Framework Law on Climate Change that created requirements for all current and future REDD+ projects and states that all projects must register in Guatemala's upcoming National Registry of REDD+ Initiatives. Additionally, all projects must meet a specific set of conditions, including complying with Guatemala's standards and with the voluntary standards and using national forest reference level (FRL); monitoring, reporting and verification (MRV) systems; and national uncertainty analysis. If the national FRL is not available, projects must use the jurisdictional FRL developed for the FCPF Carbon Fund. For existing projects, the Ministry of Finance will send a letter to REDD+ projects to explain how to adjust and update project baselines to meet these requirements, once those requirements have been finalized.

In 2019, Guatemala submitted an annex specifically on nesting REDD+ to the FCPF Carbon Fund.²⁹ Once the ERPA is signed with FCPF, all existing and future carbon projects in Guatemala will be required to enter the national registry and all *nested* projects will need to comply and align with national standards.

Guatemala has been working with Verra to determine how to allocate baselines to existing projects. While any future projects will be assigned a reference level by Guatemala's Emissions Reduction Program's Executing Unit (with GIMBUT and GCI technical support), the government is still considering whether there will be any grandfathering of existing project baselines or the creation of an adaptation period for such projects to migrate into using the jurisdictional reference level.

Emissions reductions from nested projects will then be used to meet national emissions reductions targets and the emissions reductions commitments under the FCPF's Carbon Fund. If Guatemala exceeds these commitments, and if projects exceed their assigned quotas, then projects will be able to sell excess credits on the voluntary markets. This will be determined by comparing the ex-ante quotas with the biennial measurement of actual emissions reductions, in addition to considering any additional uncertainties, buffer pool contributions or other restrictions around volume available for sale.

²⁹ https://www.forestcarbonpartnership.org/system/files/documents/English_Anex_XI_Enfoque_y_principios_de%20anidamiento_100219.pdf

Cambodia

Projects operate within a jurisdictional framework with independent crediting.

In the past decade, Cambodia has lost about a quarter of its tree cover; now, forests, many degraded, cover only about half of the country. This is in spite of efforts by the government to address deforestation: in 2002, the country passed a Forest Law, followed by the Protected Areas Law in 2008.³⁰ Yet at the same time, the government also granted more than 2 million hectares of forest land to companies via concessions, and Cambodia has lost an estimated 11% of forests within protected areas from 2001 to 2018.³¹ Illegal logging and conversion from rich, biodiverse forests to rubber plantations have been key drivers behind this deforestation.

The Cambodian government has been attempting to address these issues. In the past decade, the government began a review of all forestry concessions; by 2018, the government cancelled 20% of these concessions and increased protected areas to over 40%. Cambodia also worked on its REDD+ strategy during this time, starting on the strategy in 2010 and completing it in 2017. Since then, Cambodia has been working on phase one (2017-2021), which includes the development of a framework for REDD+ and Action and Investment Plan. The government hopes to secure finance for phase two (2022-2026), which will “operationalize a results-based mechanism with a measured, reported, and verifiable target of GHG emissions by 2026” that halve deforestation.³²

Yet challenges remain. Effective national governance of forests to date has been hindered by inadequate financial resources; weak institutional capacity; difficulty assessing, tracking and enforcing protected areas; and a lack of technical capacity. Existing REDD+ projects are helping to address some of these problems – for example, the Southern Cardamom and Keo Seima Wildlife Sanctuary projects have used voluntary carbon market sales to help cover the operational costs used to manage these protected areas, including support for some local government salaries.³³

The REDD+ national strategy states that “Cambodia will consider implementation of sub-national and voluntary market-based REDD+ projects subject to specific criteria.” The Cambodian government is currently working towards adoption of a new regulation that would ensure projects support the national REDD+ strategy, align emission reduction claims with the national forest monitoring and GHG accounting system, and report on the implementation of national safeguards. Work is also underway to allocate baselines to projects in line with the national forest reference emission level.

In the meantime, the Cambodian government continues to support the independent sale of REDD+ project offsets, with the Minister of Environment explicitly encouraging participation in the voluntary carbon markets last year.³⁴ Project sales have generated over \$20 million in conservation finance to date, and major sales from these projects include: (1) the Keo Seima project has sold credits to Disney and Delta,³⁵ (2) the Southern Cardamom project has sold credits to Gucci³⁶ and Shell,³⁷ and (3) the Prey Lang project³⁸ secured upfront investment from Mitsui Corporation. Finally, Cambodia’s Director General of the Forestry Administration recently announced plans to expand the fourth in-country project, the Tumring REDD+ project, after the project completed its first successful verification.³⁹

³⁰ <https://www.ecosystemmarketplace.com/articles/cambodia-embarks-on-building-a-nested-system-to-protect-remaining-forests/>

³¹ <https://blog.globalforestwatch.org/data-and-research/whats-happening-in-cambodias-forests/>

³² <http://www.cambodia-redd.org/wp-content/uploads/2017/09/1.-NRS-Final-Eng.pdf>

³³ <https://www.ecosystemmarketplace.com/articles/cambodia-embarks-on-building-a-nested-system-to-protect-remaining-forests/>

³⁴ <https://www.phnompenhpost.com/national/increase-carbon-credit-sales-sought>

³⁵ <https://newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/9125/Cambodias-Keo-Seima-Wildlife-Sanctuary-Sells-First-Carbon-Credits.aspx>; <https://news.delta.com/deltas-ambitious-carbon-neutrality-plan-balances-immediate-actions-and-long-term-investments-path>

³⁶ <https://equilibrium.gucci.com/carbon-neutral-strategy/>

³⁷ <https://www.shell.com/shellenergy/othersolutions/welcome-to-shell-environmental-products/>

³⁸ https://www.mitsui.com/jp/en/topics/2018/1225795_11241.html

³⁹ <https://www.phnompenhpost.com/national/joint-press-release-carbon-credit-issuance-cambodia-korea-joint-redd-project-1st>

South Africa

Projects operate in the absence of a jurisdictional accounting framework

South Africa's circumstances and carbon financing strategy differ notably from the cases above: deforestation is less a priority for emissions reductions than in relatively less developed, highly forested countries like Madagascar, Cambodia, and Guatemala. As such, South Africa has not participated in any REDD+ readiness programs.

Instead, the majority of emissions come from fossil fuel electricity generation and in 2019, South Africa launched a carbon tax that set a price of roughly \$7 for carbon emitted above certain sector-specific thresholds. Like Colombia's carbon tax, the tax allows for emitters to purchase offsets in lieu of paying the tax. Specifically, the program includes a 5-10% allowance for the use of carbon offsets as a substitute for the tax given that certain requirements are met: tradeable offsets must be located within South Africa and nationally registered under the Carbon Offset Administration System (COAS), must be verified by one of the major international voluntary carbon market standards (specifically, by the Gold Standard, Verified Carbon Standard, or Clean Development Mechanism), and must be reviewed and approved by the South African designated national authority.

The first phase of the carbon tax program runs from June 2019 to December 2022. So far, only one project – a CDM nitric acid project – has voluntarily cancelled offsets to be listed on COAS. There are an additional 56 CDM projects that can generate offsets eligible for use in lieu of the carbon tax, in addition to 24 projects from VCS and another 26 projects from the Gold Standard. Of these eligible projects, only 4 represent NCS projects, and they are focused on regeneration and reforestation.

There is potential for avoided degradation and deforestation in South Africa's grasslands (where an estimated 62% of terrestrial carbon resides) and forests.⁴⁰ Typically, forest degradation occurs via marginalized communities in smaller patches of forests, which results in higher transaction and monitoring costs that have proven to be a barrier to the development of REDD+ or avoided grasslands conversion voluntary carbon projects.

Analysis by EcoMetrix predicts that there will be a shortage of offsets compared to demand generated under the carbon tax.⁴¹ Additionally, emissions allowances are programmed to decrease, and carbon tax rates will increase in the second phase, which runs from 2023 to 2030. It is possible that higher prices will make it more feasible for future NCS offset projects.

Additionally, new methodologies may be developed for the forestry sector. The South African treasury department announced that local standards and methodologies will be developed through the World Bank's Partnership for Market Readiness and will focus on "small-scale and micro community projects and unlock mitigation potential in the agriculture, forestry and other land use sectors which are not well covered by international standards".⁴²

Importantly, this guidance only pertains to corporations purchasing offsets in order to comply with South Africa's domestic carbon tax. The government has not mentioned any role it sees for voluntary offsetting in the future; at the moment, voluntary projects in South Africa can be sold internationally without the need to reconcile these emissions reductions to the country's national accounting. This could change in South Africa and elsewhere, as countries begin to figure out how to meet their Nationally Determined Contributions and whether corresponding adjustments are required for voluntary offsets.⁴³

⁴⁰ https://www.environment.gov.za/sites/default/files/docs/carbonoffset_standardsandmethodologies.pdf

⁴¹ [http://www.treasury.gov.za/comm_media/presentations/Draft%20Regulations%20on%20the%20carbon%20offset%20\(25%20November%202016\)/EcoMetrix%20Ctax%20Offset%20Demand%20and%20Supply%20modeling%20\(251116\).pdf](http://www.treasury.gov.za/comm_media/presentations/Draft%20Regulations%20on%20the%20carbon%20offset%20(25%20November%202016)/EcoMetrix%20Ctax%20Offset%20Demand%20and%20Supply%20modeling%20(251116).pdf)

⁴² <https://powerlinks.news/south-africa/news/treasury-gazetting-carbon-offsets-regulations-terms-carbon-tax#>

⁴³ This issue is currently debated in the voluntary carbon markets and is not one that this paper will attempt to forecast.

Colombia

Various crediting approaches

Deforestation is the single greatest source of emissions in Colombia, representing 16% of the country's total as of 2020.⁴⁴ Over the years, various approaches have been taken to implement REDD+ within both national and regional strategies and programs. As a result, Colombia exhibits a patchwork of efforts to address deforestation, with different strategies employed over its six distinct ecological regions.

The early 2010s saw significant development of REDD+ with the USAID BIOREDD+ program and other voluntary carbon project approaches; however, these historic REDD+ activities have not always resulted in subsequent change to deforestation hotspots. Since then, the Amazonas and Orinoquia regions have taken a predominantly jurisdictional approach to REDD+ through participation in the REDD+ Early Movers (REM) and BioCarbon Fund's Initiative for Sustainable Forest Landscapes, though REDD+ projects can still co-exist alongside those programs. For example, when Colombia recently received results-based payments from the Green Climate Fund in 2020, the country excluded emissions reductions paid for by REM and via the voluntary carbon market (due to one REDD+ project) in the Amazonia region.^{45, 46} Most recently, Colombia has signed a joint declaration of intent with Norway, the UK, and Germany to explore accreditation under the ART/TREES standard.

However, Colombia has continued to encourage the development of REDD+ projects even as these jurisdictional REDD+ approaches have evolved. For example, Colombia's domestic carbon tax, launched in 2016, re-ignited interest in project-based REDD+. Under the tax, regulated entities could either pay \$5/tonne or purchase Colombian carbon offsets from approved Gold Standard, CDM and Verra methodologies. Since the launch of the tax, there has been high demand for offsets: more than 19.3 MtCO_{2e} Verra NCS (including REDD+) offsets have been retired, compared to <0.3 MtCO_{2e} from non-NCS projects.⁴⁷

All of these various projects, programs and payments point to a need for transparency and accounting of emissions reductions from REDD+. As part of Colombia's national REDD+ strategy, the country established a national reference level and standardized the assumptions and definitions used to coherently track the progress of various REDD+ and other carbon financing activities in the context of national goals.

Most importantly, Colombia recently launched RENARE, a registry that tracks all emissions reductions. RENARE also establishes maximum mitigation potentials to ensure alignment of all activities with Colombia's national emissions reduction and removal accounting. Specifically, RENARE states that all REDD+ projects "will be calculated from the methodological reconstruction of the NREF evaluated by the UNFCCC applicable to the project area" by using historical deforestation data combined with nation-wide definitions of a forest, global warming potentials, and emissions factors by forest type.⁴⁸ It remains to be seen how and if existing REDD+ projects under the carbon tax need to recalculate their project baselines to meet this new requirement.

⁴⁴ https://www.panda.org/wwf_news/21152816/Colombia-2030-target-NDC

⁴⁵ https://www.greenclimate.fund/sites/default/files/document/fp134-fao-colombia_0.pdf

⁴⁶ https://visionamazonia.minambiente.gov.co/content/uploads/2019/12/Registro_interino2013-2016.pdf

⁴⁷ <https://registry.verra.org>

⁴⁸ http://renare.siac.gov.co/GPY-web/utilidades/pdf/Guia_Tecnica_RENARE_V.1.0.pdf

REDD+ Approaches Are Iterative and Tailor-Made to Country Contexts

Multiple models for NCS market mechanisms now exist, ranging in scale from site-bound projects to nested within sub-national programs to a national approach. Additionally, countries are looking to finance their forests through a variety of market mechanisms, such as through the establishment of domestic markets or through attracting international finance via the sale of project-based and/or jurisdictional-based REDD+. Some countries are implementing or aspire to implement a combination of these approaches operating in parallel, which will require transparent accounting across these different financing mechanisms.

For Madagascar, the story is about a consolidated national approach to forest management. For Cambodia and Guatemala, it's about preserving the progress being made by existing projects and nesting them within an emerging national-scale, nationally-directed system; the two examples show the different possible extents to which nesting might be pursued, with more relative reliance on project-level crediting and sales in Cambodia and a more thoroughly nationally-led approach in Guatemala. For South Africa, project level carbon finance is an important tool for optimizing the nationally directed, domestic carbon tax program but the country has not given any indication about what role there may be for international sales, or if existing voluntary carbon projects may continue to operate as in the past. Finally, in Colombia, a combination of these approaches: a regional patchwork of REDD+ initiatives as well as a carbon tax, with movement toward national coordination to ensure accounting aligns across these approaches across various geospatial scales and regions.

Each country's story is complex and the result of national circumstances, but there are several themes from which this paper draws recommendations:

1. **Countries have different starting points and resources to engage in REDD+; many still need REDD+ readiness funding in order to access market-based finance.** Least developed countries are typically more dependent on international private sector finance and/or donor government funding and are less likely to have explored the creation of domestic carbon markets or non-standardized jurisdictional REDD+ approaches (such as Brazil's approach with the Amazon Fund or Indonesia's national REDD+ approach). In Madagascar, this has led to a reliance on FCPF and GCF funding; whereas in Cambodia, policymakers seek to continue to receive funding from a mixture of existing international donors, FCPF, JCM and project-based funding.
2. **Many countries have not yet received REDD+ finance or have not received enough REDD+ finance.** Many countries have not produced REDD+ jurisdictional results after over a decade of work. This does not mean that progress is lacking; instead, during this time, many countries have learned and responded to unique, in-country challenges around attempts to halt deforestation. For countries that have produced results, often existing funding does not entirely pay for the full extent of emissions reduced or stored. Colombia, for example, still sought GCF funding for emissions reductions made during the same time period as REM, as REM only paid for part of the total results. Predictable, long-term payments for REDD+ results are needed to continue to incentivize country readiness progress and scale existing REDD+ implementation.
3. **Decisions (especially around accounting) should be made, communicated, and enforced by the government at the national level.** Even within the case studies allowing for REDD+ projects, countries required some level of accounting and reporting at the national scale or planned to introduce these requirements soon. However, decisions made at the national-level may differ in terms of role for projects.

For example, Madagascar, Cambodia, and Guatemala all focused on developing national guidelines for site-specific activities but varied widely in the degree of autonomy that those projects could have outside of the jurisdictional approach. Despite these differences, all countries seemed to decide that national decision making is especially key with regards to accounting for emissions reductions and removals in order to ensure no double counting as countries begin to implement NDCs in parallel with REDD+ activities.

4. **Environmental integrity requirements should be aligned across various approaches.** Currently, environmental integrity requirements for REDD+ differ across methodologies and financial approaches, especially between market-based approaches such as CORSIA or the voluntary carbon markets compared to non-market approaches like the Amazon Fund or Green Climate Fund. Additionally, most countries prefer to access a mixture of funding for REDD+, rather than pursue a single standard or framework (such as only GCF or only FCPF). Future standards or updates to existing standards should not seek to burden countries with different requirements but should attempt to align with other standards wherever possible (while still maintaining environmental credibility). This can lessen the burden on countries with various REDD+ approaches needed to align various REDD+ approaches for a cohesive, comprehensive approach.
5. **Private sector finance has engaged differently, depending on the REDD+ approach.** To date, the private sector has primarily purchased REDD+ credits via projects. In contrast, within jurisdictional programs, many countries have engaged the private sector in helping to implement site-specific emissions reductions activities, enact zero deforestation commitments or participate in benefits-sharing plans. While there have been fewer purchases of jurisdictional REDD+ offsets by the private sector, new initiatives like Emergent hope to change this by offering streamlined pathways for corporates to purchase jurisdictional REDD+ offsets without having to negotiate directly with countries. If countries wish to access private sector finance for jurisdictional REDD+, detailing clear routes for corporate engagement (such as through Emergent or through nested projects) is needed.

There is no one right way to turn the tide of deforestation and carbon emissions. Major national-level shifts in policy are essential to REDD+, but the specifics of how countries implement on-the-ground activities may vary in order to best reflect the local legal, customary and cultural realities. These cases exemplify that there is room for individual country carbon financing strategies to be tailored with different combinations of project and jurisdictional components of decision making while also pursuing needed national-level coordination and alignment.

The Next Decade: Balancing Speed, Scale and Integrity

Country approaches to addressing deforestation will and should remain dynamic; frameworks will evolve, institutional capacity will change (and hopefully improve), and new or different sources of demand for REDD+ and other deforestation-free results will shift over time. Each country is unique, and there are many factors that influence the evolution of decision-making with respect to carbon market frameworks, including differing government models, policies, domestic and/or international market access, and views on project versus national crediting.

While varying approaches provide more room for innovation and tailoring of programs to national circumstances, such differentiation also brings challenges. In particular, the multiplicity of models for carbon markets creates a complex, dynamic policy environment, and results in uncertainty for those wishing to finance NCS. In response to that risk, it is tempting to seek a clear determination of which approach is optimal. However, it is equally important to recognize the various stages and progression of countries as they seek to implement REDD+, and to not hinder current support available now in search of a REDD+ approach that might take another decade to complete. At the same time, countries need to have clear long-term plans, in order to ensure that actions taken now don't later hinder progress.

Figure 2: Actions to Build Better REDD+ Approaches

Types	Project Actions	Government Actions
Align	Standards should encourage projects to align their baselines with government reference level; in cases where a FREL is insufficient to meet the criteria of a carbon market, both voluntary standards and projects should lobby the government for a more robust FREL.	Governments should seek to track all projects within the jurisdictional program, and create a registry or database to track REDD+ emissions reductions and removals.
Engage	Projects should participate in government-led consultations or working groups, as available, to align with benefit sharing plans, social and environmental safeguards, etc.	Governments should communicate and provide a clear plan to engage with projects around nesting.
Approve	Projects should seek to secure government approval to continue (in the interim) operating independently.	Governments should implement processes to approve project-based approaches.*
Implement	Standards should provide transition timelines for projects nest within a government REDD+ program, as such pathways become available.	Governments should create and implement a nesting REDD+ plan.

**If governments that have not yet begun to develop clear nesting guidelines, projects should make every effort to communicate with the government implementing agency and to align with upcoming REDD+ plans.*

Given the reality of countries choosing different paths and having very real capacity constraints, it is necessary to find ways to work productively from where countries are today, while also supporting them on the journey on which they want to go – and that means navigating policy, technical and market uncertainties. To do so will require the difficult task of "flying the plane while building it," but the climate crisis won't wait for countries to sort through complexities.

Multi-sector collaboration across non-profits, for-profits and governments will be necessary to achieve the scale of reductions in deforestation in the limited amount of time left for climate action. To accomplish this, there needs to be progress from the historical debate about project versus jurisdictional approaches in recognition that greatly differing country circumstances can result in a variety of different approaches. With this point established, the effort to bring about the best overall results from carbon financing becomes, rather than a debate, an exercise in achieving harmony between countries and the approaches they employ.

