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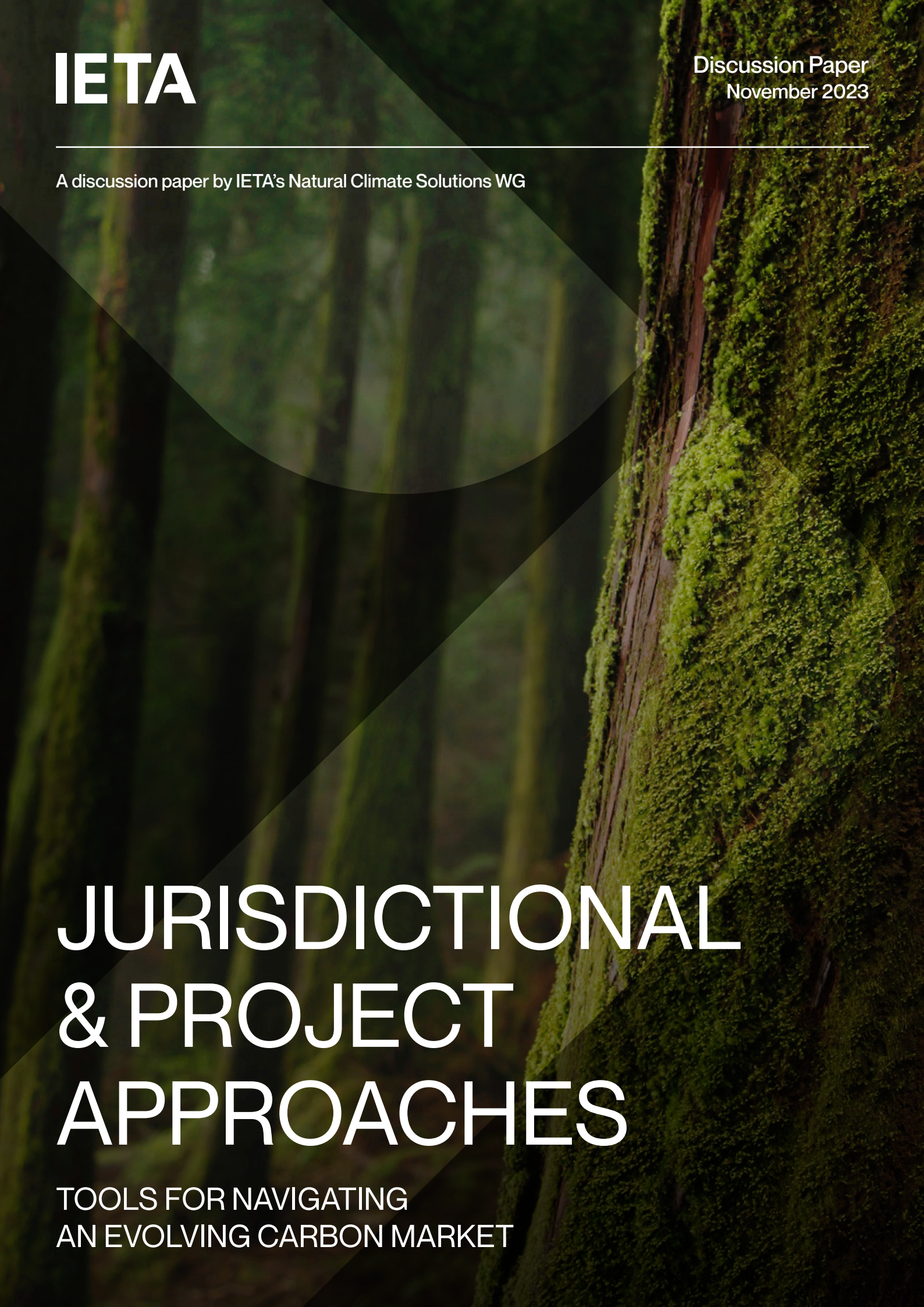

JURISDICTIONAL & PROJECT APPROACHES

TOOLS FOR NAVIGATING AN EVOLVING CARBON MARKET

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THIS PAPER IS A PRODUCT OF IETA'S NATURAL CLIMATE SOLUTIONS WORKING GROUP. WE WOULD LIKE TO THANK THE MANY IETA MEMBERS WHO CONTRIBUTED TO THIS PAPER THROUGH DRAFTING AND REVIEW.

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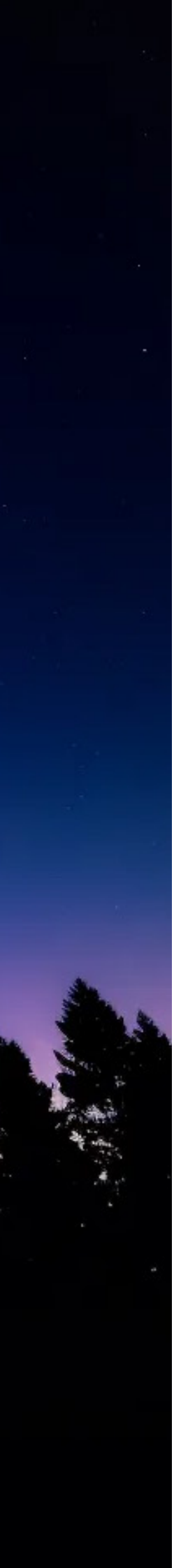
EXECUTIVE SUMMARY



DRIVING FINANCE TO CLIMATE MITIGATION ACTIVITIES, INCLUDING PROTECTING FORESTS, IS ESSENTIAL TO COMBATTING CLIMATE CHANGE. THE VOLUNTARY CARBON MARKET (VCM) IS ONE OF THE MOST EFFECTIVE AND EFFICIENT MECHANISMS TO CHANNEL CLIMATE FINANCE – PARTICULARLY WHERE GAPS ON POLICY AND REGULATION REMAIN. AS THE VCM RAPIDLY EVOLVES TO MEET EXPECTATIONS FOR HIGH QUALITY CARBON CREDITS, THIS PAPER DISCUSSES HOW BUYERS AND SUPPLIERS CAN CONSTRUCTIVELY ENGAGE WITH THE SHIFTING MARKET LANDSCAPE. IN PARTICULAR, IT ASSESSES HOW QUALITY AND INTEGRITY CAN BE ACHIEVED AT PROJECT AND JURISDICTIONAL SCALES, AND THE ACTIONS NECESSARY TO PROMOTE THE MUTUALLY BENEFICIAL COEXISTENCE OF MULTIPLE APPROACHES.

The VCM has been on a journey of iterative improvement and incremental change since its inception. This is a necessary and positive process, driven by several factors including a desire to improve quality and integrity, the ambition to scale the market, and continued efforts by countries to develop strategies to meet their NDCs and operationalise Article 6 transactions. In response to these drivers of change, implementing jurisdictional programmes has been magnified as a solution.

Fundamentally, forest loss is a collective problem and requires a collective solution. In the lengthy global history of efforts to address forest loss, there is a tendency to abandon a perceived inferior approach for a newer, hopefully improved approach. However, the iterative nature of improvement in the sector renders it counterproductive to start from square one every time a new and slightly improved mechanism is developed. The question facing us today is not how we can reinvent the wheel, but how we can build on the current landscape of approaches to level up on scale, impact and integrity. This will require creativity to tailor elements of project and jurisdictional approaches to forest loss to each local context.

This paper lays out how jurisdictional and project approaches can best play a role in the shared goal of halting forest loss. The focus of this paper is on forest carbon, but the takeaways and principles discussed here are widely applicable across many areas in the carbon market, including the power sector, where new initiatives like the Energy Transition Accelerator are also seeking to implement jurisdictional approaches.[1]

While jurisdictional programmes are under development and expected to grow in the coming years, projects make up a majority of the market today and are likely to play a prominent role in many jurisdictions for years to come. These approaches are continuing to evolve and adapt to the needs of the market, and this paper examines trends in core aspects of carbon credits, such as baselines (including nesting), additionality, management of leakage and permanence, benefit sharing, safeguards, and coordination with Article 6 of the Paris Agreement. Anticipating a future where these approaches coexist and intermingle, we raise four core considerations for the market and governments that are essential to scaling the market:

1. Cooperation
2. Continuous improvement
3. Equitable allocation of risk
4. Supporting a just transition

FUNDAMENTALLY, FOREST LOSS IS A COLLECTIVE PROBLEM AND REQUIRES A COLLECTIVE SOLUTION.

TO FACILITATE CONTINUOUS IMPROVEMENT, MARKET ACTORS SHOULD EXPECT ITERATIVE IMPROVEMENT AND CHANGE IN ACCEPTED PRACTICES. TECHNIQUES FOR MEASURING FOREST LOSS AND ESTABLISHING BASELINES ARE CONSTANTLY CHANGING AND IMPROVING.

Building on these considerations, the paper makes several recommendations for how market participants can contribute to collective solutions. Carbon markets are one link in a long chain of market and non-market tools necessary to mitigate climate change, including preventing forest loss. By prioritising connections with other links in this chain, market actors can demonstrate their importance in wider efforts to address climate change.

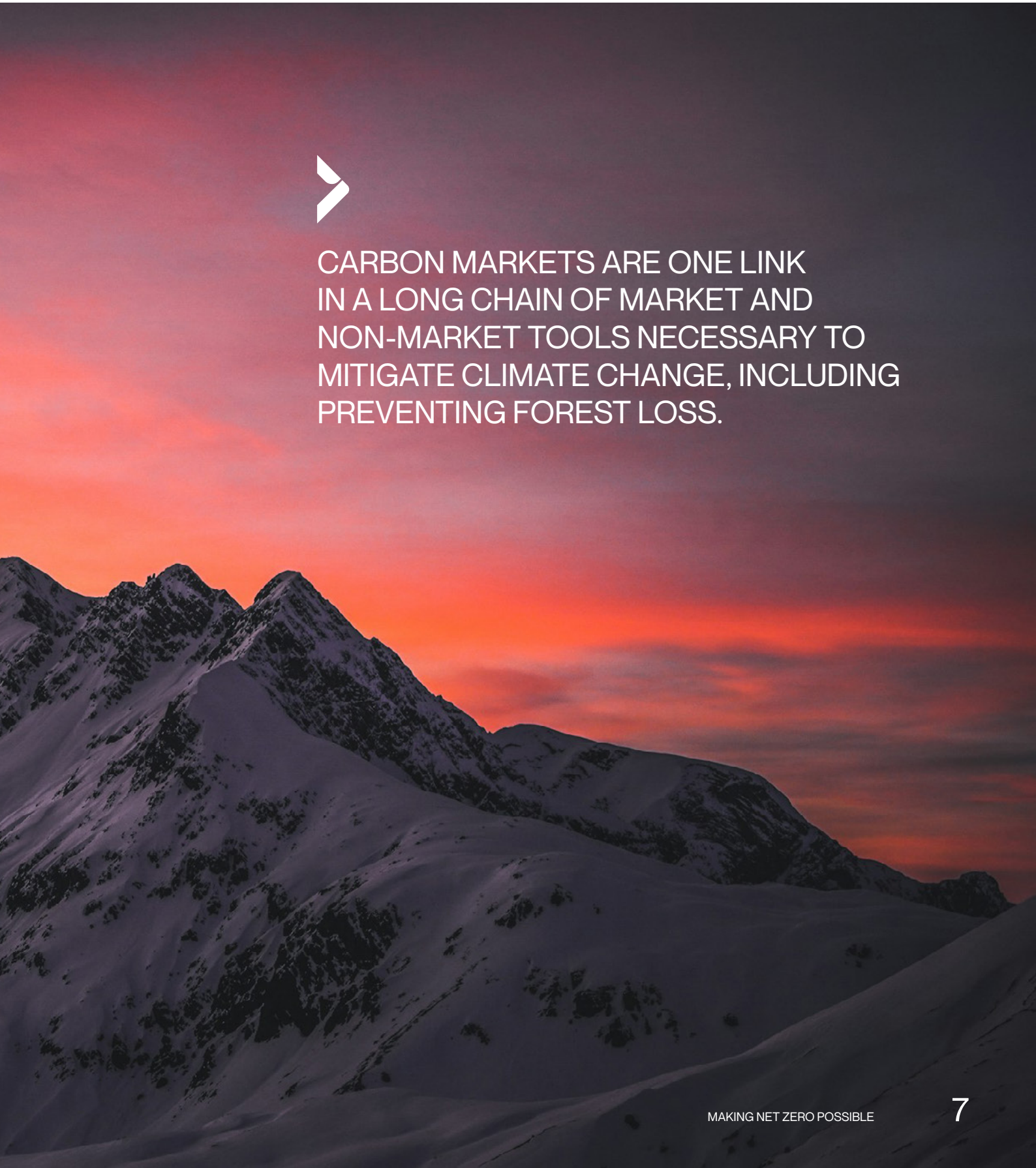
To build these links, actors on the supply side can place emphasis on cooperation that connects carbon market activities at both project and jurisdictional scale to the larger climate policy toolkit. This can include proactively assessing how activities interact with national or sub-national climate policy, incorporating new technologies (such as digital monitoring, reporting, and verification (d-MRV)) into projects, and working to nest baselines wherever possible. In jurisdictional programmes, clear guidance for nesting can provide an opportunity for private landowners to participate in a jurisdictional programme for non-public lands.

To facilitate continuous improvement, market actors should expect iterative improvement and change in accepted practices. Techniques for measuring forest loss and establishing baselines are constantly changing and improving. Embracing innovative improvements both technical (such as d-MRV) or policy-related (such as revising and nesting baselines), is important to driving improvement in the market.

However, this kind of rapid and frequent change introduces risk to business models for project developers and other supply side actors who depend on policy and financial stability. To mitigate risks in a volatile market, risk should be managed and shared more equally across market actors. Demand side actors play a very important role in sharing risk by accepting the evolving nature of the market as part of the long-term investment needed to address forest loss. This should also include considering whether the price paid for credits is sufficient to allow for innovation and change in supply side credit generation. In a complex market landscape, it is also important for buyers to assess credits on multiple levels to gauge how their purchases will support the market.

To facilitate a just transition, projects and programs must not only consult Indigenous Peoples and Local Communities (IPLCs) but consider them as key actors who equally benefit from their active participation. The prices paid for credits are most effective when they accurately reflect the cost of behaviour change in areas where forest loss is most prevalent. Put another way, carbon markets can't finance the transition in the global south if finance isn't flowing to the global south.

In the voluntary market, initiatives such as Voluntary Carbon Market Integrity initiative (VCMI) and the Integrity Council for the Voluntary Carbon Market (ICVCM) continue to show the market's commitment to continuous improvement in line with ambitious 2030 and 2050 climate goals. To meet these goals, market and government actors will have to make a concerted effort to reflect upon how the range of tools used to address forest loss can continue to be improved.



CARBON MARKETS ARE ONE LINK IN A LONG CHAIN OF MARKET AND NON-MARKET TOOLS NECESSARY TO MITIGATE CLIMATE CHANGE, INCLUDING PREVENTING FOREST LOSS.

01. INTRODUCTION

SHARED OBJECTIVES OF PROJECTS AND JURISDICTIONAL APPROACHES

Projects and jurisdictional programmes, in the context of the VCM, offer a variety of approaches to achieve the same objective – to reduce or remove greenhouse gas emissions. While often described as two distinct approaches, projects and jurisdictional programs instead represent methods that differ by degree, and often have substantial overlap. This chapter will describe the history of projects and jurisdictional approaches, why all approaches to protect forests are essential, and finally define the core concepts of projects, jurisdictional approaches and nesting.

HISTORICAL OVERVIEW OF PROJECT AND JURISDICTIONAL APPROACHES

The VCM has been around since the 1990s, supported by financial investment from private sectors seeking to offset their footprint, or otherwise invest in climate mitigation. Early activity in the VCM was project-based, and that formed the foundation of the VCM for the majority of the past decades.[2] The first REDD+ project was initiated in 1990 in Paraguay and has been active for 30 years.[3]

A decade later, Brazil's jurisdictional scale interventions to reduce deforestation in Mato Grosso emerged.[4] At the UNFCCC level, there were many stalled negotiations on REDD, and the exclusion of REDD from the Kyoto protocol at the COP3 negotiations in 1997.[5] The first jurisdictional REDD+ (JREDD+) credits certified by a carbon standard (ART TREES in this case) were issued to Guyana in December 2022.[6] Nonetheless, results-based payments (RBPs) for JREDD+, which includes non-market forms of financing, were operationalised much earlier and have been supported by the Warsaw Framework for REDD+, which was formally adopted by the UNFCCC at COP19 in 2013.

At the same COP, the UK, USA and Norway launched the Initiative for Sustainable Forest Landscapes (ISFL) under the World Bank's Biocarbon Fund, which remains an important source of finance for results based JREDD+. Results based payment agreements have operated outside of the VCM under multilateral and bilateral agreements, this includes some of the examples above – the ISFL – as well as the Green Climate Fund (GCF), REDD Early Movers, the World Bank's Forest Carbon Partnership Facility (FCPF) and bilateral agreements with the government of Norway. Furthermore, in the past four years new standards – namely the Architecture for REDD+ Transactions (ART) and Verra's Jurisdictional and Nested REDD+ Framework (JNR) – have emerged that enable the issuance of verified emission reduction credits that can be used in the VCM.

Another impetus for JREDD+ programmes (both market-based finance, and RBPs) was provided in 2015 by the Paris Agreement, which expects all countries to set ambitious climate targets, referred to as Nationally Determined Contributions (NDCs). The preceding Kyoto Protocol only required developed countries to reduce their emissions, whereas the Paris Agreement also requires reductions from developing countries, which are often host countries for REDD+. Developing countries are consequently evaluating how REDD+ activities, including potentially establishing a jurisdictional programme, can fit into their strategies to achieve their NDCs.

WHY WE NEED MULTIPLE APPROACHES TO PROTECT FORESTS

Halting forest loss is critical as it currently results in about 8 GtCO2 gross emissions every year,[7] or about 15% of all greenhouse gas emissions.[8] Addressing forest loss requires multiple actors working at different scales in order to address the numerous local and global drivers. With 2030 quickly approaching and forest loss continuing to rise, our best chance for forest protection is to leverage the strengths of multiple approaches to preventing deforestation and forest degradation. The question facing those working to improve the performance of global efforts to avoid forest loss is how to leverage the strengths of project and jurisdictional approaches together, not whether one should replace the

JURISDICTIONAL PROGRAMS ARE IMPLEMENTED ACROSS AN ENTIRE NATIONAL OR SUBNATIONAL REGION AND AIM TO ADDRESS FOREST LOSS THROUGH INTEGRATED LAND MANAGEMENT, REGULATION, AND ENFORCEMENT ACROSS THE REGION.

other. On their own, neither approach will be capable of solving forest loss entirely and each will be needed to amplify the strengths of the other. We are already seeing these approaches blended in practice and it will be important for the market to continue to focus on how these two approaches coexist in a way that accelerates forest protection.

PROJECTS OVERVIEW

Projects are implemented on specific parcels of land, typically non-profits or private sector entities working directly with the landowners or communities in and around the project area. Projects typically follow independent standards (e.g., Verra's Verified Carbon Standard, Gold Standard, ACR, Climate Action Reserve, etc.) which provide approved quantification methodologies for the projects and require third party validation and verification. A hallmark of projects is the use of bespoke baselines, and a focus area that is much smaller than the wider region or country. In practice, projects differ from jurisdictional approaches by degree, not by type. Increasingly projects involve some level of government interaction, and the market is developing approaches to baselines that look beyond the borders of a specific project.

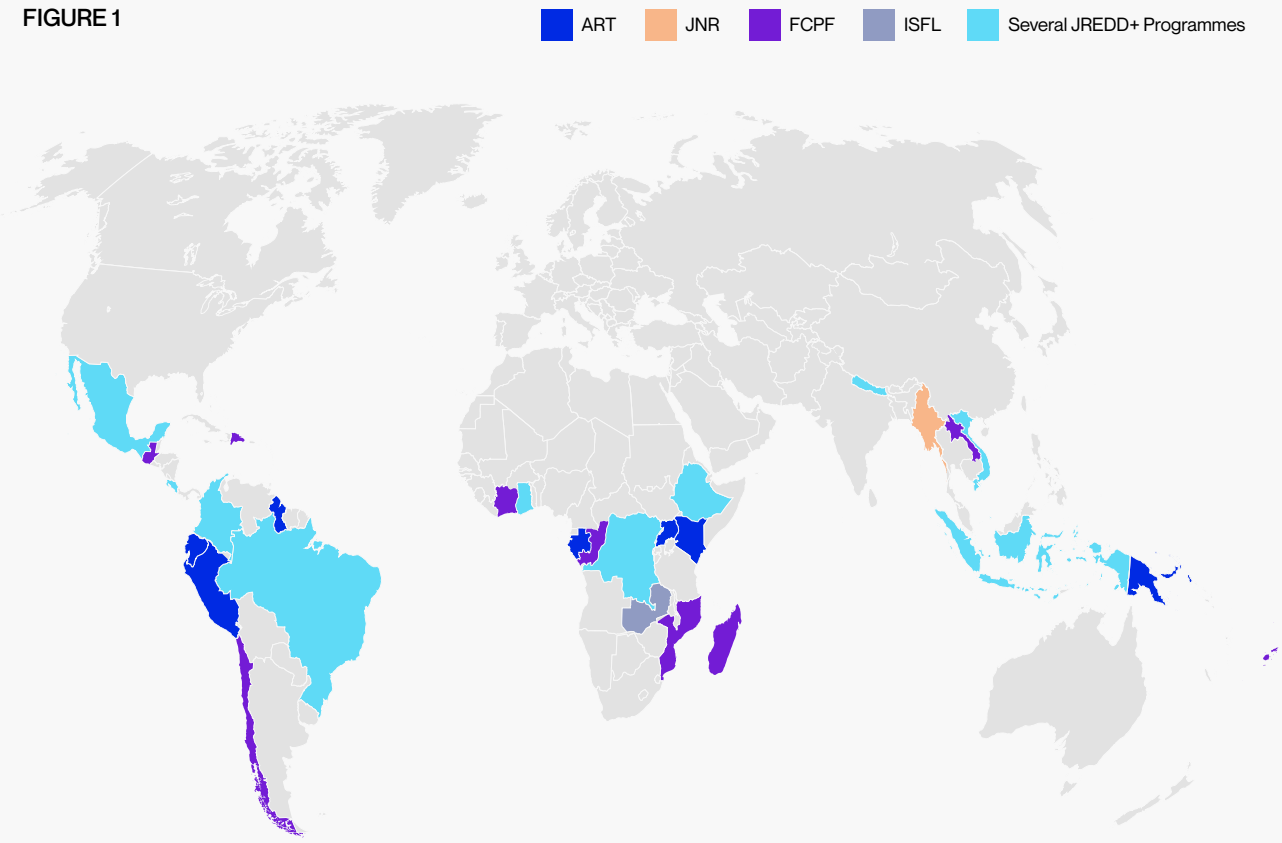
JURISDICTIONAL APPROACHES OVERVIEW

Jurisdictional programs are implemented across an entire national or subnational region and aim to address forest loss through integrated land management, regulation, and enforcement across the region. This allows for a cohesive view of the drivers of forest loss across the jurisdiction, and the stakeholders that are involved; helps to reduce leakage; and facilitates monitoring, since forest loss, leakage, and permanence can be observed together against a single, integrated baseline. At the same time, a larger operational area and multiple alternative land uses require more resources, coordination, and commitment from the managing entity – usually a national or subnational government – and thus JREDD+ programmes also take significantly longer to operationalise than projects.

JREDD+ programmes operate through two types of finance, namely market finance (from sales of carbon credits) and non-market or results-based payments from governments, NGOs, companies and the private sector. It is important to distinguish between mechanisms that can generate carbon credits, and other programmes that can produce REDD+ results.[9] The ART TREES methodology and Verra's JNR framework are voluntary market programmes used to certify JREDD+ carbon credits. These methodologies are also used for jurisdictional baselines in the absence of a full programme, further discussed below. The FCPF Carbon Fund, which was designed to pilot results-based schemes for JREDD+ programmes, includes both market finance (Tranche A) and non-market finance (Tranche B). The ISFL is another important initiative for results-based financing of JREDD+ programmes.

Figure 1 (see Pg. 10) shows all countries that currently engage with (or plan to engage with) a JREDD program under ART, Verra JNR, the FCPF, or the ISLF. Some countries, such as Ghana or Costa Rica, operate or plan more than one JREDD program.

FIGURE 1



Countries with jurisdictional REDD+ programs active or in development, either under market or non-market schemes (ART, JNR, FCPF, ISFL). Note that some countries host several programmes. Source: Graph and associated data courtesy of MSCI Carbon Markets (formerly Trove Research)

NESTING OVERVIEW

Nesting describes the concept of coordinating and aligning the accounting between different initiatives on different scales to ensure fair allocation of baseline and ex-post measured results, allow for benefit sharing based on measured results and avoid double-issuance of credits.[10] Nesting creates a shared jurisdictional baseline for all projects operating within that jurisdiction. While activities still happen within project boundaries, often developed by the same non-governmental actors, projects apply the jurisdictional baseline that is allocated to the project area based on the risk factors attributed to that project area. By applying this larger baseline area and additional coordination amongst involved actors can help manage leakage, integrate accounting practices, and better monitor and enforce project safeguards across multiple projects.[11]

ART only issues JREDD+ credits, though project-level activities can be implemented under a JREDD+ programme through a variety of scenarios. ART does not prescribe how the accounting of smaller-scale activities within a jurisdictional system must be done.[12] It does, however, require the disclosure of any verified or issued emission reductions in the same accounting area, including from projects, to prevent double issuance. In this case, the verified credits from another programme would be deducted from the final volume of TREES credits issued to the jurisdiction. Projects could also choose to "fully nest" and align the accounting of their delivered ERR results using the jurisdictional baseline and come to a participatory agreement in which they could receive an allocation of TREES Credits or other benefit sharing. Thus, ART does not require projects to transition to a jurisdictional baseline but provides flexibility for governments and projects to determine the nesting arrangement best suited for their circumstances.

NESTING CREATES A SHARED JURISDICTIONAL BASELINE FOR ALL PROJECTS OPERATING WITHIN THAT JURISDICTION

A KEY COMPONENT OF NESTING REDD+ PROJECTS WITHIN A LARGER JURISDICTION IS THE ABILITY TO ACCURATELY ACCOUNT FOR THE RESULTS WITHIN THE SMALLER PROGRAMME AREAS.

Nesting under a jurisdictional baseline does not always require a jurisdictional programme to be present or the ex-post monitored results to be measured over the whole jurisdiction. For example, both Verra's JNR Scenario 1 and forthcoming consolidated REDD+ methodology apply the jurisdictional baseline to all projects but monitoring of ex-post results only happens in project areas. In the case of the consolidated REDD+ methodology, Verra plans to work with multiple stakeholders to create jurisdictional baselines for around 40 jurisdictions by the end of 2024, which individual REDD+ projects registered with Verra will subsequently have to use.[13]

A key component of nesting REDD+ projects within a larger jurisdiction is the ability to accurately account for the results within the smaller programme areas. This requires that both the baseline and ex-post monitored results be quantified in a "spatially explicit" manner. To create a spatially explicit baseline for nested accounting requires modelling spatial drivers, such as roads, rivers, towns and other factors that have driven deforestation in the past. This is then used to establish which portion of the deforestation will be applied to each project area. When properly done it will ensure that project areas that are far from any agents of deforestation are allocated a smaller portion of the jurisdiction's deforestation rate than from areas close to roads where access to forest is greater. The ability to conduct accurate spatially explicit accounting ensures that there is not a transfer of wealth between projects and that benefits are fairly generated and shared based on the project's contribution of reducing emissions.

Whichever way nesting is done, it is a common way to try and scale up the integrity of projects by evaluating impact on a larger scale or connecting as an initial step to improving national accounting and enhancing the projects with larger efforts to combat forest loss. This can be done with a variety of levels of input and involvement from government. Often, but not always, governments will play a larger role in the development or approval of a nested baseline than they might for a baseline developed only for a single project.

WHICHEVER WAY NESTING IS DONE, IT IS A COMMON WAY TO TRY AND SCALE UP THE INTEGRITY OF PROJECTS BY EVALUATING IMPACT ON A LARGER SCALE OR CONNECTING AS AN INITIAL STEP TO IMPROVING NATIONAL ACCOUNTING AND ENHANCING THE PROJECTS WITH LARGER EFFORTS TO COMBAT FOREST LOSS.

02. MARKET STATE OF PLAY

HOW PROJECTS AND JURISDICTIONAL APPROACHES COEXIST

MARKET LANDSCAPE

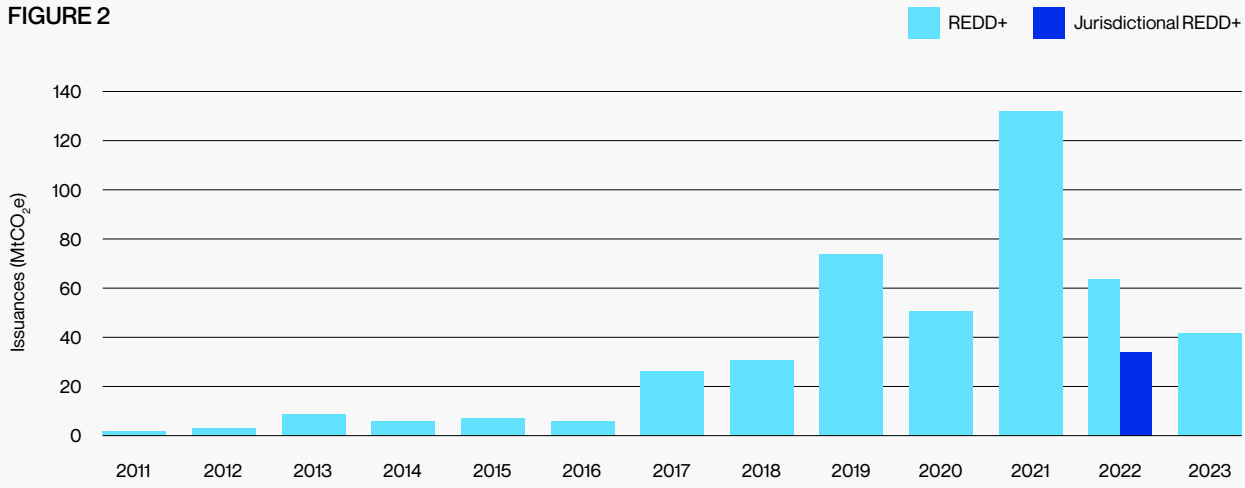
Project-based REDD+ credits have a long-standing history in the VCM, with 490 million credits issued since 2011 (see Pg. 13).[14] As of August 2023, 122 REDD+ projects are registered with Verra, BioCarbon or EcoRegistry, while a further 129 projects are in development. Furthermore, new standards and initiatives continue to be launched, including the Equitable Earth Coalition which is developing a standard and methodology applicable to REDD+ activities.

JREDD+ credits, on the other hand, only became a reality for VCM at the end of 2022, when Guyana issued over 33 million credits. While only 1,400 of these credits have been retired so far, Guyana has an established advanced purchase agreement with Hess Corporation for the sale of 37.5 million JREDD+ credits for a minimum of $750 million through 2030.[15] This demonstrates the potential market demand for jurisdictionally nested or JREDD+ credits. Both Guyana and Costa Rica have handed in new monitoring reports for validation and verification with ART, totalling a potential further 13.9 million JREDD+ credits that may soon be issued as well. There are numerous other jurisdictional programmes in various stages of development: 16 jurisdictions have expressed interest in ART and the LEAF Coalition has signed Letters of Intent with 10 jurisdictions.

The slower uptake of jurisdictional approaches has in part been attributed to the significant upfront investment required to get full scale jurisdictional programmes up and running. This includes, for example, a full forest inventory, jurisdiction-wide activity data for a historical reference period, and the transaction costs of establishing benefit sharing agreements with all relevant stakeholders. However, as the market infrastructure evolves, much effort is being made to operationalise JREDD+. Though only one JREDD+ programme has been issued credits in the voluntary market, many others have been operating as results-based programmes under the FCPF, ISFL and even the GCF. In recent years, even more JREDD+ programmes have been initiated or are under development as either market-based or results-based schemes. There is growing interest from national and sub-national governments to participate in JREDD+ as evidenced by the increasing number of concept notes and proposals that have been submitted to the LEAF Coalition, the ISFL and ART TREES in the year 2023: ART TREES Concept Notes were approved for Tocantins (sub-national Brazil), Jalisco (sub-national Mexico), Uganda (national) and Ethiopia (national); LEAF Coalition proposals were approved for the Republic of Congo, Bolivia and the Colombian Department of Choco, while Kenya signed a Letter of Intent with LEAF; the IFSL signed an Emission Reductions Purchase Agreement (ERPA) with Ethiopia, and validated Zambia's emissions reductions programme which is now ready to sign an ERPA.

Furthermore, several host country governments have recently drafted, or are in the process of drafting, regulations for carbon projects in the voluntary market and for jurisdictional-scale activities under Article 6 of the Paris Agreement (for example Ghana, Kenya, Indonesia). These country regulations aim to address quality, especially at the level of carbon accounting, additionality, permanence, and double counting, while also sending strong signals for domestic market frameworks that contribute to the country's NDCs. JREDD+ incentivises governments to enact policy and regulation. At the same time, the VCM is equally pushing for better quality. The ICVCM (supply side) and the VCMI (demand side) are two voluntary initiatives aimed at raising the environmental integrity bar in the VCM and boosting market quality. Voluntary carbon standards are also actively engaging with market quality. For example, REDD+ credits issued by Verra constitute the largest market share in voluntary carbon credits. Verra is consolidating its methodology in order to ensure integrity of its REDD+ projects within a given jurisdiction. Verra has also expressed its intention to align its revised methodology with the ICVCM's supply side quality criteria.

FIGURE 2



Issuances of project-based and JREDD+ credits in the voluntary carbon market since 2011. The data covers 5 registries: Verra, BioCarbon, EcoRegistry, Plan Vivo, and ART. Source: Graph and associated data courtesy of MSCI Carbon Markets (formerly Trove Research)

As already described above, jurisdictional approaches to REDD+ can take different forms and complexity. Below are a range of examples in the market today.

JREDD+ WITHOUT NESTING

Guyana has no pre-existing private REDD+ projects in its jurisdiction, which means that the country did not need to implement nesting strategies and was able to submit all emission reductions achieved to ART for registration. Other jurisdictions that are developing JREDD+ programmes and do not host any private REDD+ projects that would require nesting include Indonesia (FCPF), Uganda (ART), and Vietnam (FCPF).[16] Such jurisdictional programmes that do not have current projects could choose to establish a structure for future projects to be developed that could be nested – should it be identified that such activities will support efforts to halt deforestation.

Jurisdictions establishing programmes have diverse stances on accommodating new private REDD+ projects in their programmes in the future, so while nesting in these jurisdictions may not be necessary now, this could change. For example, while Vietnam has no plans on allowing future private REDD+ projects in its FCPF JREDD+ programme, Uganda plans for nesting future REDD+, ARR, and IFM projects in its ART JREDD+ programme area.[17, 18]

NESTING VIA CREDIT DEDUCTION

As mentioned above, ART's JREDD+ methodology currently stipulates that double issuance is prohibited, so any verified emission reductions and removals in the same accounting area, including credits from projects using a different greenhouse gas programme (GHG) programme, must be deducted from the final TREES issuance to the jurisdiction. For example, Kenya and Peru have REDD+ projects that are registered under a different programme in the VCM. According to Kenya's LEAF proposal, the country will deduct credits from existing projects and set up a registry to do so.[19] Peru already has an existing REDD+ registry (called RENAMI) for public REDD+ projects, which could cover private REDD+ projects if legal regulations were put in place.[20] Alternatively, a project owner that does not want to generate credits with any GHG programme, but whose project is located within the boundary of a jurisdictional programme, will not be issued TREES credits for the project's activities if the project and government do not come to a mutual agreement; in this case, the number of credits associated with the project would be subtracted from the TREES credits claimed by the jurisdiction and not issued at all.

It can also occur that two JREDD+ programmes need to be nested. This is the case, for example, in Costa Rica, a country with an operational non-market FCPF programme and a new market-based ART programme.[21] Here, nesting will work via credit deduction; the FCPF programme was established first, so its quota will be filled first. Successful emission reductions beyond the FCPF quota and for further crediting years that do not overlap will be registered under ART.

It should be noted, however, that some jurisdictions who participate in ART are voluntarily discussing plans to create jurisdictional baselines for private REDD+ projects. This is

the case particularly for Brazilian states, such as Amapá, Mato Grosso, and Maranhão.[22] In doing so, these jurisdictions would transition to nesting via baseline integration.

NESTING BY BASELINE INTEGRATION

Several countries and JREDD programmes nest by baseline integration, i.e., REDD+ projects transition to jurisdictional baselines and become much more integrated into the large-scale JREDD+ approaches. As explained above, deducting issued credits is one option for projects to align accounting with their jurisdiction and avoid double counting in TREES; projects can also choose to fully nest and support the jurisdiction in generating credits under ART, in which case a benefit-sharing agreement would be required between the jurisdiction and the project owner.[23] Two examples of nesting by integration can be seen in the non-market approaches FCPF and ISFL. The Mai Ndombe project (VCS934) is situated within a FCPF JREDD+ programme in the Democratic Republic of Congo.[24] Over the course of several years, the project coordinated with the JREDD programme administrators to transition to the program's jurisdictional baseline. Another example is Ethiopia's Bale Mountain Eco-Region REDD+ project (VCS1340), which is in the same jurisdiction as an ISFL JREDD+ programme.[25] According to the ISFL programme documentation, Bale Mountain will transition to the jurisdictional baseline and will deliver an agreed volume of Emission Reductions (ERs) to the ISFL in exchange for a share in the result-based payment revenue.[26]

As mentioned above, other jurisdictions are discussing plans for nesting via baseline integration, and Verra's consolidated REDD+ methodology will create further jurisdictional baselines, which means this type of nesting will likely become a lot more prevalent in the future.

PROJECT-BASED REDD+ WITHOUT NESTING

Not all jurisdictions will be able to establish a jurisdictional programme. Implementing jurisdictional programmes in a way that can be monitored, validated, and verified requires extensive capacity building. Further, significant funding is necessary to create jurisdictional baselines, implement programmes on the ground, or build and maintain a functioning national forest monitoring system.

Countries such as Paraguay, Malawi, and Tanzania host independent REDD+ projects, but currently do not have an active JREDD+ programme, or one in development. This may change in the future, in the same way that jurisdictions that declared interest in establishing a JREDD+ programme may not wish (or be able) to follow through.

EXAMPLES: PROJECT AND JURISDICTIONAL APPROACHES

This section highlights the key features of different approaches to forest carbon activities. Chapter 3 will discuss in further detail the implications of these features in today's market, where projects and jurisdictional programmes coexist.

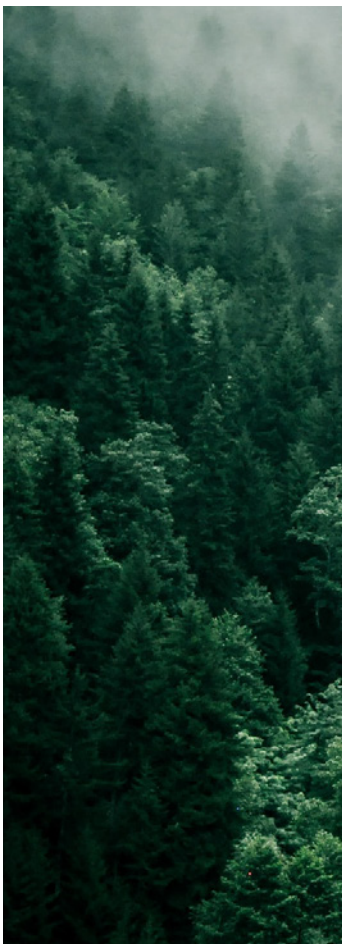
JURISDICTIONAL PROGRAMME: GUYANA FOREST CARBON CREDITS PROGRAM

One of the few countries issuing credits in the VCM with a jurisdictional programme operating at national scale is Guyana's Forest Carbon Credits Program (FCCP).[27] The FCCP funds the country's low carbon development priorities through a jurisdictional programme that is managed by the government of Guyana. The program is the result of 13 years of iterative work starting in 2009 when a bilateral agreement with Norway provided funding for forest monitoring and performance related payments. This bilateral partnership included the development of a national forest monitoring system and created the foundation for the country's 2020 application to ART and the elaboration of the country's 2030 Low Carbon Development Strategy (LCDS).[28] The government's long-term commitment to this process has been a key enabler of reaching the stage of credit issuance, and policy stability helps reinforce confidence amongst buyers that the emission reductions generated through the programme are permanent.

The FCCP's goal is to address systemic drivers of forest loss that threaten Guyana's low historic deforestation rates; the program maintains annual national forest loss rates of below 0.1% with an objective of maintaining 99% of existing forest in the country. Per an agreement between stakeholders, 15% of the program's revenues are shared directly with Indigenous communities; so far, the government has disbursed US$22 million directly to 242 villages. The other 85% of revenue from the sale of carbon credits will be invested in country-wide low carbon development initiatives, such as land titling for Indigenous villages, renewable energy, repairing canals, and protecting against climate change. In the longer term, the country aims to sell credits into international markets, particularly CORSIA, and to issue corresponding adjustments for post-2020 credits generated through the program. The first credits, representing reductions from 2016-2020, were issued in 2022 and 7-7.5 million credits are expected to be generated annually through 2030. There are currently no nested projects in the country, but the FCCP national strategy leaves open the possibility of nested projects in the future.

The national scale of Guyana's program allows for some benefits unique to jurisdictional

SIGNIFICANT FUNDING IS NECESSARY TO CREATE JURISDICTIONAL BASELINES, IMPLEMENT PROGRAMMES ON THE GROUND, OR BUILD AND MAINTAIN A FUNCTIONING NATIONAL FOREST MONITORING SYSTEM.



approaches. Firstly, the revenues from the program support the country's 2030 LCDS, which is focused on creating new incentives for a low carbon economy, protecting against climate change and biodiversity loss, stimulating future growth through clean energy and local carbon development, and aligning with global climate and biodiversity goals. In sum, the scale of the program allows for longer term focus on broader transformation of the national economy and can address economic drivers of a sustainable economy at a national scale. Carbon credit generating activities are also folded into wider government policy.

NESTING: MAI NDOMBE REDD+

The Mai Ndombe REDD+ Project protects 300,000 hectares of critical bonobo and forest elephant habitat within the world's second-largest intact rainforest and some of the most important wetlands on the planet, the Congo Basin. The project reduces the principal drivers of forest and biodiversity loss and drives direct investments to the surrounding local communities, which are among the most economically marginalised in the world. Such investments include building and renovating schools, improving access to healthcare services (such as through access to immunisations), strengthening food security (such as through agricultural diversification and fishponds), and co-creating sustainable economic opportunities.

The project began in 2012 using a non-nested project baseline, and since that time has become the first REDD+ project nested within a jurisdictional programme. The World Bank's FCPF helped to develop a JREDD+ programme for the Mai Ndombe province, and in 2019, the Mai Ndombe REDD+ project began using a baseline allocated from that program's provincial reference level. In September of 2018, the World Bank signed an Emissions Reductions Purchase Agreement (ERPA) for the sale, transfer of, and payment for emission reductions generated by the Mai Ndombe Program; the Mai Ndombe REDD+ Project's use of a nested baseline ensures that there is no double counting of ERs within this provincial program.[29]

In the near term, the nesting of REDD+ projects will become more common, at least in terms of baseline setting. Verra will soon release its Consolidated REDD+ Methodology which will require projects to use a baseline nested within a jurisdictional reference level.[30] The recently announced Equitable Earth Coalition is developing a standard and methodology that is centered around nested baselines for avoided deforestation projects and is specifically designed to accommodate the use of government FRELs as the jurisdictional reference level that is allocated to projects.[31] These developments and others reflect the ongoing importance of project-level mitigation activities, the increasing role of host governments in the VCM, and the desire of many market actors to scale REDD+ results to the national level.

THE MAI NDOMBE REDD+ PROJECT PROTECTS 300,000 HECTARES OF CRITICAL BONOBO AND FOREST ELEPHANT HABITAT WITHIN THE WORLD'S SECOND-LARGEST INTACT RAINFOREST AND SOME OF THE MOST IMPORTANT WETLANDS ON THE PLANET, THE CONGO BASIN.

03. CHALLENGES AND OPPORTUNITIES

APPLYING CARBON PRINCIPLES ACROSS MULTIPLE APPROACHES

THE SHIFTING MARKET LANDSCAPE OF BOTH PROJECTS AND JURISDICTIONAL APPROACHES RAISES QUESTIONS ABOUT WHAT IMPACTS A CHANGE IN APPROACH CAN HAVE FOR THE FOUNDATIONAL PRINCIPLES OF CARBON CREDITS. THIS CHAPTER EXAMINES THE IMPLICATIONS OF PROJECT AND JURISDICTIONAL APPROACHES FOR BASELINES, ADDITIONALITY, GOVERNANCE, LEAKAGE, PERMANENCE, BENEFIT SHARING, AND ACCOUNTING ACROSS MULTIPLE APPROACHES TO CARBON CREDITS.

BASELINES

In any carbon accounting framework, the baseline scenario is defined by what would have happened in the absence of the carbon credit generating activity. Baseline definition can be challenging because it is an unobservable counterfactual. Using a historical average can resolve that particular challenge. Baselines are a modelled estimate of what greenhouse gas emissions and sequestration would have occurred in the defined area during the defined timeframe in the absence of any project or programme activities.

There have been a range of baseline-defining approaches allowed under existing methodologies for projects in the voluntary carbon market. These typically involve first identifying areas around the project area that have similar drivers, agents and underlying causes of deforestation and tenure, and using these as reference regions. Then the emissions or sequestration in these 'reference areas' that share common attributes with the project area are used to establish the deforestation rate in the project area and the leakage area. Rates of deforestation are estimated in the reference areas for a historical reference period, and then used to estimate the anticipated deforestation in the project area. More recently, scientists and remote sensing specialists have proposed methods for defining both reference areas and baselines for REDD+ projects. These include creating 'synthetic' reference areas made up of many discontinuous, small parcels, and tracking those over time. While registries have been slow to adopt these approaches for REDD+ projects, they are increasingly used in the private sector by ratings agencies and organisations selling credits.

In the aforementioned techniques, project developers have some latitude to identify reference areas and propose baseline scenarios. In some cases, it is difficult to identify suitable reference areas. Concerns about 'over crediting' in REDD+ projects often are rooted in assessments that a baseline scenario used to calculate credits reflects implausibly rapid or severe forest loss, ultimately overstating the climate benefit of the REDD+ project.

In ART TREES, JREDD+ reference levels are set by quantifying the average emissions from deforestation and forest degradation in the same jurisdiction from a historical reference period immediately prior to the crediting or performance period. Verra's JNR framework estimates the average historical deforestation across an entire jurisdiction, then proportionally allocates the amount of deforestation (ha/year) in a particular year based on localised risk of deforestation. This is also being incorporated into Verra's new consolidated REDD+ methodology.[32] Working across larger geographic areas is made possible through increased leverage of remote sensing data and derived data products, such as time-series maps of forest carbon and land cover. This new consolidated REDD+ methodology is a significant move towards aligning project-scale and jurisdictional-scale baseline

WORKING ACROSS LARGER GEOGRAPHIC AREAS IS MADE POSSIBLE THROUGH INCREASED LEVERAGE OF REMOTE SENSING DATA AND DERIVED DATA PRODUCTS, SUCH AS TIME-SERIES MAPS OF FOREST CARBON AND LAND COVER.

approaches. However, this is not to say that all jurisdictional reference levels are calculated in the same way. In practice, tropical forest countries implementing jurisdictional approaches take decisions on reference levels within the parameters of the partnering body supplying funding or the standards body that will list the credits.

Projects are required by standards to update their baselines at regular intervals. Market actors concerned about baseline credibility have suggested that baselines be updated more frequently, and standards seem to be moving in this direction: Verra, for example, previously required REDD+ projects to re-evaluate baselines every ten years but is shifting to a six-year cycle. Programmes also must update their baselines, with ART's TREES requiring a baseline update every five years. The term "dynamic baselines" is often used to refer to methods that revise baselines according to changing circumstances or periodically reassess them to ensure they accurately reflect conditions on the ground.

It is important to note that neither project-based approaches nor jurisdictional programmes have a monopoly on high quality baselines – both approaches can produce credible baselines. The shifting process for baseline development does not guarantee a more credible baseline, and given the constant improvements in technology, modelling, and accepted best practice, baselines are all likely to need periodic review to be improved as the market develops. Continuously adapting to improved scientific methods and updated technology means that "best practice" will be an evolving process that cannot necessarily be applied retroactively.

GOVERNANCE

Effectively implementing various approaches to carbon crediting activities involves engaging a large number of stakeholders. While governments may play a leading role in jurisdictional programme governance, the legal context may place authority for forest management with a variety of actors. For example, in many countries, the legal framework places carbon rights with an entity other than the government, be it local communities, Indigenous peoples, concession holders, or private landowners.[33] In these jurisdictions, it requires innovative forms of cooperation between stakeholders and a delicate balancing act between inclusiveness and identification of who the most important stakeholders are that can make or break success of a programme.

Implementing jurisdictional scale programmes can involve a larger number of stakeholders than project-based approaches. Combined with the ambition to cover larger amounts of territory in a jurisdictional approach, questions arise over how such an initiative should be governed. The development of baselines can be a particularly fraught topic when large numbers of stakeholders are involved in development of a jurisdictional programme.

Jurisdictional approaches under development are likely to differ in their governance frameworks. In many instances, projects may continue to play a large role in the implementation of programme activities, monitoring of changes in forest cover or land use, and facilitating engagement with local communities. Overly restricting what is considered "best practice" to be applied to jurisdictional approaches generally, may force jurisdictions into designing programmes that are suboptimal or inapplicable in the local context. Regardless of scale, IPLCs and stakeholders must be involved throughout the process.

OVERLY RESTRICTING WHAT IS CONSIDERED "BEST PRACTICE" TO BE APPLIED TO JURISDICTIONAL APPROACHES GENERALLY, MAY FORCE JURISDICTIONS INTO DESIGNING PROGRAMMES THAT ARE SUBOPTIMAL OR INAPPLICABLE IN THE LOCAL CONTEXT.

COLLABORATION BETWEEN PRIVATE AND PUBLIC ACTORS IS PARTICULARLY IMPORTANT, AND GOVERNMENTS ADMINISTERING JURISDICTIONAL PROGRAMMES AND PROJECT OWNERS BOTH HAVE A ROLE TO PLAY.

LEAKAGE

Leakage is a problem that affects many different types of climate policy and action. It occurs at all scales (local, national, international) and can be difficult to precisely quantify. In forest protection and REDD+, leakage is a long-standing concern. In one example of how leakage can undermine efforts to address drivers of deforestation, a 2006 moratorium on soy production in the Brazilian Amazon led to a 31% jump in soy production in the neighbouring Cerrado.[34] Successfully addressing leakage requires the kind of coordinated effort across local, national, and international scales that often requires contributions from both jurisdictional programmes and projects.

All project-scale voluntary market standards require that projects make efforts to address leakage. In some instances, projects address leakage through discounting – whereby credits are discounted based on a predictive estimate of leakage on a project level depending on the region and activity. These assessments look at how specific actors may shift their activities around a country. For example, Wildlife Works assessed the ability of local actors to shift practices that deforest or degrade the land to nearby areas within easy access of the project boundaries in their Mai Ndombe Project in the Democratic Republic of Congo. In addition to addressing leakage at the local level, Wildlife Works also examined whether the logging concession holder that held the title to the project area could move logging activity to another concession within the country. This assessment looked at both the local and national scale and how specific actors might change behaviour at the national level in response to the project, but the leakage risks were specific to this particular project.

Jurisdictional scale standards also require leakage mitigation efforts and planning. By addressing drivers across a larger area and with a wider range of stakeholder involvement, there are increased opportunities for drivers to be addressed wholistically. By virtue of their larger geographic scale, jurisdictional programmes can actively monitor leakage across larger areas. The FCCP in Guyana covers 100% of the national forest area under the monitoring for the program, meaning that shifting forest loss activity within the country is captured within program monitoring. This kind of scale is extremely difficult for project developers operating in specific, limited project areas to replicate. Simultaneously, while leakage can be monitored remotely from afar, action to address leakage can be challenging where institutional presence is weak. A well-designed programme is one where the responsibilities of stakeholders to address leakage are matched to their capabilities. In most cases, this involves a cooperative, collaborative effort from many stakeholders, including governments.

In the face of leakage occurring at multiple scales, a multi-pronged approach is required to successfully address the issue. Placing the burden of addressing leakage solely on a single actor is likely to end in failure. To this end, lessons learned from project-based approaches can be considered and adapted for a larger jurisdictional scale where applicable. Governments can coordinate efforts to address leakage at larger scales, while local monitoring and enforcement can complement and enhance action taken at the national and international level.

Even when leakage is addressed at both local and national levels, production can easily shift internationally. Drivers of forest loss have been very responsive to market dynamics and can easily shift locations.[35] While not under the auspices of REDD+, the European Union has attempted to address the global nature of drivers of forest loss through a 2023 regulation on deforestation-free products that will impact imports from Brazil and Indonesia, among other countries.[36] The reality of international leakage is another reason that efforts to address forest loss must continue to work at global scale, not only in certain countries or forests.

BENEFIT SHARING

Collaboration between private and public actors is particularly important, and governments administering jurisdictional programmes and project owners both have a role to play. Governments can set minimum requirements in law for benefit sharing, provide land titles and give rights to the carbon in forests, and otherwise create a regulatory landscape that empowers communities to be justly and fairly included in forest carbon projects. A recent example is that of Kenya, whose new carbon market regulation sets a minimum benefit share of 40% of gross revenue from land-based carbon projects for local communities.[37] Political will and institutional capacity to take on this challenge varies widely by jurisdiction and many governments are still grappling with equitable benefit sharing policies. It is important that a balance is struck that allows carbon credit generating activities to maintain economic viability whilst distributing benefits to local communities.

Jurisdictional-scale standards, such as TREES, do not prescribe how benefit-sharing must occur. Rather, TREES stipulates the use of proceeds from REDD+ revenues, requiring participating jurisdictions to respect, protect and fulfil the right of all relevant stakeholders to participate fully and effectively in the design and implementation of REDD+ actions, and to promote adequate participatory procedures

for the meaningful participation of all relevant stakeholders, including Indigenous peoples and local communities, or equivalent. In addition, traditional benefit sharing plans tend to focus on monetary compensation. In many instances, stakeholders may prefer to receive non-monetary benefits such as land tenure rights, education and training opportunities, access to markets, improved governance, carbon rights or other benefits. These broader benefits would be identified as part of a participatory REDD+ activity development process.

The challenge is for both project developers and governments to reinforce the positive impacts each can have on implementing fair and practical benefit sharing arrangements in their respective contexts. Government oversight can help hold projects accountable for the impact on local communities, and conversely, in jurisdictions where governments have poor relationships with local communities, project developers have helped show a path forward for a more constructive relationship. Market actors can also serve as a form of accountability for governments by asking for transparency in how revenues are shared and spent.

Like many aspects of REDD+, benefit sharing takes time to develop and can both build trust between key stakeholders when done well and erode trust when done poorly. Ultimately, benefit sharing is not merely about distributing an arbitrary percentage of revenue, but about making sure that carbon credit revenues are distributed in a way that is equitable and reflects the cost of behaviour change among stakeholders that engage with the landscape. To this end, best practices could look quite different depending on local context, however financial transparency is an effective tool to build confidence that revenues have been distributed fairly.

SAFEGUARDS

The impact of carbon crediting activities on the surrounding environment and communities is a critical factor for developing a successful market and long-term maintenance of emission reductions. Perhaps the most widely known codification of safeguards for REDD+ is the Cancun Safeguards approved in 2010 at COP16.[38] In the years since the adoption of these safeguards, voluntary standards are continuing to tighten safeguard requirements to prevent harm to the environment and communities.[39] The ICVCM's Core Carbon Principles also seek for projects to go beyond a principle of "do no harm" to also deliver positive sustainable development impacts.[40]

Putting safeguards such as Free, Prior and Informed Consent (FPIC), into practice requires a concerted multistakeholder effort. Successfully doing so is a core enabler of many co-benefits related to carbon credit generation activities, whereby the projects or programmes help contribute to wider sustainable development goals beyond carbon impacts. When governments have clear plans for implementation of sustainable development goals, it can make it easier for projects and programmes to harmonise their actions with complementary activities impacting the environment and local communities.

WHEN GOVERNMENTS HAVE CLEAR PLANS FOR IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT GOALS, IT CAN MAKE IT EASIER FOR PROJECTS AND PROGRAMMES TO HARMONISE THEIR ACTIONS WITH COMPLEMENTARY ACTIVITIES IMPACTING THE ENVIRONMENT AND LOCAL COMMUNITIES.

ULTIMATELY, BENEFIT SHARING IS NOT MERELY ABOUT DISTRIBUTING AN ARBITRARY PERCENTAGE OF REVENUE, BUT ABOUT MAKING SURE THAT CARBON CREDIT REVENUES ARE DISTRIBUTED IN A WAY THAT IS EQUITABLE AND REFLECTS THE COST OF BEHAVIOUR CHANGE AMONG STAKEHOLDERS THAT ENGAGE WITH THE LANDSCAPE.

PERMANENCE

Both jurisdictional programmes and project-based approaches are required by leading standards to make extended commitments to maintaining emission reductions and removals. This typically involves monitoring over time to ensure no reversals occur after the crediting period has concluded, or to appropriately deduct credits from a buffer pool when reversals occur. The precise length of monitoring varies by programme, project, and/or standard, and continues to evolve. The ICVCM requires projects to monitor and compensate for reversals for a minimum of 40 years, and jurisdictional programmes to contribute to a pooled buffer reserve that is sufficiently capitalised to compensate for reversals for a minimum of 40 years, to be eligible to receive a Core Carbon Principle (CCP) label.[41]

Long term policy stability in a changing world is a challenge for both governments and the private sector. Commitments to ensuring permanence of emission reductions and removals over multiple generations are only as good as the ability of relevant stakeholders to uphold those commitments and the systems in place to compensate for any reversals. Fundamentally, before an emission reduction can be maintained for 40 years, it must first be maintained for one, five, and 10 years. To this end, while there are differences in the minimum period projects and jurisdictional programmes commit to ensuring longevity of emission reductions, a critical aspect of permanence is not just the length of the time commitment, but how projects and/or jurisdictional approaches support the durability of emission reductions in practice.

Jurisdictional programmes can institutionalise forest protection through legislation and long-term strategy development. This is the case in Guyana, where the FCCP was included in the national 2030 Low Carbon Development Strategy.[42] Such an institutionalised approach also helps coordinate policy across different arms of government and reduce risk for policy change. Projects can address permanence from the bottom up as opposed to the institutional process taken by jurisdictional programmes through strong relationships with local communities.

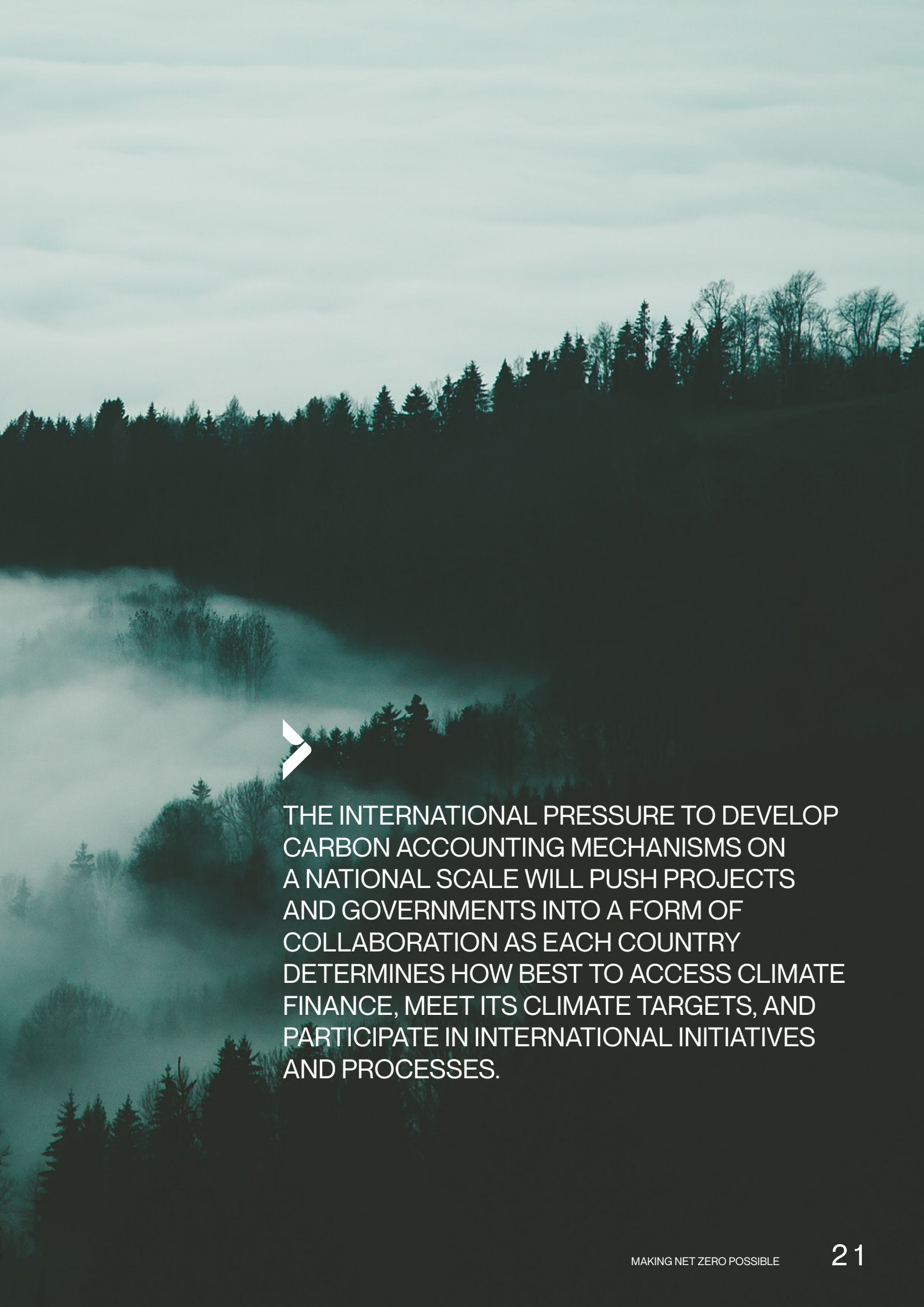
What these approaches have in common is long-term buy-in and commitment from key stakeholders. The most effective path to permanence in any given context is likely to be the one that can gather the greatest buy-in from the relevant stakeholders to continue to maintain forests long into the future. It is also worth recognising that no single approach to permanence can completely reduce risk of reversals, including from changes in climate such as long-term desertification or increasing wildfires. Only through the collective implementation of projects and programmes that have the best chance of creating long term behaviour change among those who engage with the landscape can the global community reduce risk of reversals that stem from ongoing climate change itself.

ACCOUNTING IN NDCS AND ARTICLE 6 INTERACTIONS

Ongoing Article 6 developments, increasing funding through multilateral organisations for jurisdictional approaches, and in the short term, a push to demonstrate responsiveness to critiques of project-based approaches, are all lending momentum to a market shift towards jurisdictional approaches. Global developments in carbon accounting and trading are creating a strong incentive for governments around the world to take a closer look at how projects are incorporated into their national plans and strategies to meet climate targets.

These global developments include the International Civil Aviation Organisation's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), developments in Article 6.2 and 6.4 mechanisms under the UNFCCC, and payments for ecosystem services administered by multilateral entities such as the GCF, Global Environment Facility (GEF), and the FCPF. These initiatives and developments all require national governments to account for emissions reductions within their territory and necessitate practical decisions on where and when to claim reductions in a landscape of multiple funding sources and opportunities, along with their own domestic goals. In short, governments are increasingly paying attention to the role that the voluntary market and/or REDD+ activities play in their overall climate strategy and how they relate to other sources of funding.

The clear implication is that the era of projects potentially existing outside the purview of the host country government is coming to a close. The international pressure to develop carbon accounting mechanisms on a national scale will push projects and governments into a form of collaboration as each country determines how best to access climate finance, meet its climate targets, and participate in international initiatives and processes. This reality will continue to provide an incentive for projects to demonstrate how they will continue to play an important role in meeting climate targets even as national strategies evolve.



THE INTERNATIONAL PRESSURE TO DEVELOP CARBON ACCOUNTING MECHANISMS ON A NATIONAL SCALE WILL PUSH PROJECTS AND GOVERNMENTS INTO A FORM OF COLLABORATION AS EACH COUNTRY DETERMINES HOW BEST TO ACCESS CLIMATE FINANCE, MEET ITS CLIMATE TARGETS, AND PARTICIPATE IN INTERNATIONAL INITIATIVES AND PROCESSES.

04. PRACTICAL CONSIDERATIONS FOR THE FUTURE MARKET

AS EVIDENCED IN CHAPTER 3, REDD+ INTERVENTIONS BOTH IN THE FORM OF INDIVIDUAL PROJECTS AND AT THE JURISDICTIONAL SCALE HAVE THE SAME AMBITION, BUT WITH DIFFERENT CHARACTERISTICS THAT CANNOT BE ASSESSED THROUGH UNIFORM EVALUATIONS OF QUALITY.

This distinction is reflected in the ICVCM's Core Carbon Principles and Assessment Framework which recognises that JREDD+ requires different quality criteria with regards to baseline accounting, leakage and permanence, due to the unique characteristics and scale of jurisdictional approaches. As noted earlier, neither approach has a monopoly over quality, and both approaches come with their own risks and challenges. As a result, it is imperative that the future of REDD+ in all forms is receptive to improvements for higher integrity. As we look to rapidly scale the market in the remainder of this decade and beyond to facilitate meeting Paris-aligned climate goals, our current global context is one where project-based approaches and jurisdictional programmes co-exist. We must keep this in mind as we consider how we can support the future market with robust quality commitments from all actors.

In practice, supporting jurisdictional approaches could look like directing time and resources towards emerging jurisdictional initiatives by national and subnational governments. At the same time, projects are expected to continue climate mitigation efforts with an aim to nest into jurisdictional programmes, when operational. As discussed in Chapter 2, project REDD+ contributes to the largest share of credits in the voluntary carbon market, and many proponents are determined to improve and standardise market quality. At the same time, there will remain many jurisdictions that are unwilling or unable to launch a jurisdictional programme. What does this mean for efforts to combat forest loss in these jurisdictions? Even relatively small projects can lay the groundwork in terms of establishing MRV processes, building confidence in carbon markets in communities, and identifying challenges and opportunities for expansion of project activities. Supporting a future for efforts to combat forest loss will also involve supporting projects that are creating the building blocks upon which governments could establish complementary and additional jurisdictional wide policies and approaches in the future.

Recognising that both projects and jurisdictional programmes will coexist into the future raises the question of how to navigate this complex market landscape. To this end, we raise four core considerations for the market and governments:

1. **Cooperation**
2. **Continuous improvement**
3. **Equitable allocation of risk**
4. **Just transition**

It will be necessary for project developers and those developing and implementing jurisdictional approaches to cooperate, leveraging the strengths of the other to maximise impact and deliver market growth. Success with jurisdictional approaches may require building on pre-existing project-based infrastructure. This can result in a variety of actions for individual actors, depending on local context. However, stakeholders across all countries with forest carbon projects can help push the market forward by promoting new activities and initiatives that build on existing strengths of both approaches instead of suggesting the future lies in a binary choice between jurisdictional and project approaches in a zero-sum game. This can facilitate a transition to a broader recognition of the complementary role of projects and jurisdictional programmes where each will need to adapt and improve over time to create a collective impact greater than what any one approach could achieve.

EVEN RELATIVELY SMALL PROJECTS CAN LAY THE GROUNDWORK IN TERMS OF ESTABLISHING MRV PROCESSES, BUILDING CONFIDENCE IN CARBON MARKETS IN COMMUNITIES, AND IDENTIFYING CHALLENGES AND OPPORTUNITIES FOR EXPANSION OF PROJECT ACTIVITIES.

ULTIMATELY, THE GOAL OF MARKET-BASED MECHANISMS FOR FOREST CARBON ACTIVITIES IS TO PUT A PRICE ON BEHAVIOUR CHANGE AMONG THE PEOPLE AND ENTITIES THAT ENGAGE WITH THE LANDSCAPE.

Improving integrity, credibility and scaling the market requires a commitment to continuous improvement from all stakeholders. Reliance on the status quo and failure to keep up with the pace of innovation and improvement will inevitably lead to criticisms of quality and integrity. As science, technology, and best practices evolve, no jurisdictional or project specific baseline developed today will be forever immune to critique. The best way to address this is to demonstrate commitment to continuous gradual improvement. Large step changes require extended timelines to implement and can generate uncertainty among key stakeholders and damage confidence in existing practices. Market stakeholders can proactively demonstrate that they are a constructive part of iterative improvement in carbon markets through openness to continuous gradual change and improvement beyond slower moving market benchmarks. Standards and requirements can be viewed as a foundation on which projects and programmes can innovate and develop newer and improved approaches.

The history of REDD+ has demonstrated the importance of continuous development and improvement, not reliance on a single perfect, static approach. However, developing collaborative arrangements tailored to local contexts and continually refining and improving practices involves an element of risk. These risks must be managed appropriately for key stakeholders to feel comfortable innovating and driving change. Equitable distribution of risk across market actors is a critical step towards making the change in the market a rising tide that lifts all boats. While market actors are accustomed to assessing risk to an individual project, programme, or investment, success in the wider market is more likely determined by whether risk can be equitably shared across multiple stakeholders.

An additional dimension to each of these core considerations is how they can facilitate a just transition. When local communities, IPLCs, and actors in forest countries play key roles in forest carbon initiatives, it enhances cooperation across communities and geographies, encourages further improvements, and can amplify the need to ensure both benefits and risks are equitably distributed. This is one of the strengths of community driven projects, where community involvement in the development and implementation of the project inherently helps equitably share risk, facilitates cooperation, and enables continual gradual change. Risk of project failure is lower for buyers and for the project developer when the community has made a commitment to the project with a long-term time horizon. A decision-making model that allows for the community to quickly consider expanding both the project area and project activity types builds in flexibility for the project developer that can allow the project to continually change and improve to reflect both community priorities and shifting best practices in the carbon market.

Including IPLCs can be challenging, but is essential, whether for projects or jurisdictional programmes. Guyana's efforts to consult with Indigenous communities in the development of the FCCP and the ongoing participation of Indigenous groups in their multistakeholder working groups has not prevented some groups from voicing discontent with the process. The role of carbon market standards is to set transparent requirements that all projects and programmes respect and protect, and they should fulfil the right of all relevant stakeholders to participate fully and effectively in the design and implementation of REDD+ actions.

Ultimately, the goal of market-based mechanisms for forest carbon activities is to put a price on behaviour change among the people and entities that engage with the landscape. Market efforts to address deforestation and forest degradation cannot be successful in the long term without the buy-in of these most important stakeholders. The imperative to continue to innovate in co-development of projects and programmes with IPLCs is not only a moral imperative, but the most likely path to long-term success in implementing the most effective and scalable solutions that will benefit the entire market and global community.

05. RECOMMENDATIONS

THE FOLLOWING SECTION PROVIDES RECOMMENDATIONS TO MAKE PROGRESS TOWARDS THE SHARED GOAL OF EFFECTIVE PROTECTION OF FORESTS AND CLIMATE MITIGATION THROUGH PROJECT AND JURISDICTIONAL APPROACHES. OUR RECOMMENDATIONS BUILD ON THE CORE CONSIDERATIONS EXAMINED IN CHAPTER 4: COOPERATION; CONTINUOUS IMPROVEMENT; EQUITABLE DISTRIBUTION OF RISK; AND JUST TRANSITION.

In order to facilitate cooperation, carbon market activities at both project and jurisdictional scale should position themselves within broader climate policies and actions. Projects should make efforts to slot into existing or emerging sub-national or national-scale approaches and policies, or even more broadly the land use policies or trends in a specific region. A clear tool for policy integration is the deployment of nesting and the use of shared baselines whenever possible. In jurisdictional programmes, giving clear guidance and ensuring a participatory process for determining nesting can provide an opportunity for private landowners to participate in a jurisdictional programme even if their land is not formally under the management of the state or sub-national jurisdiction.

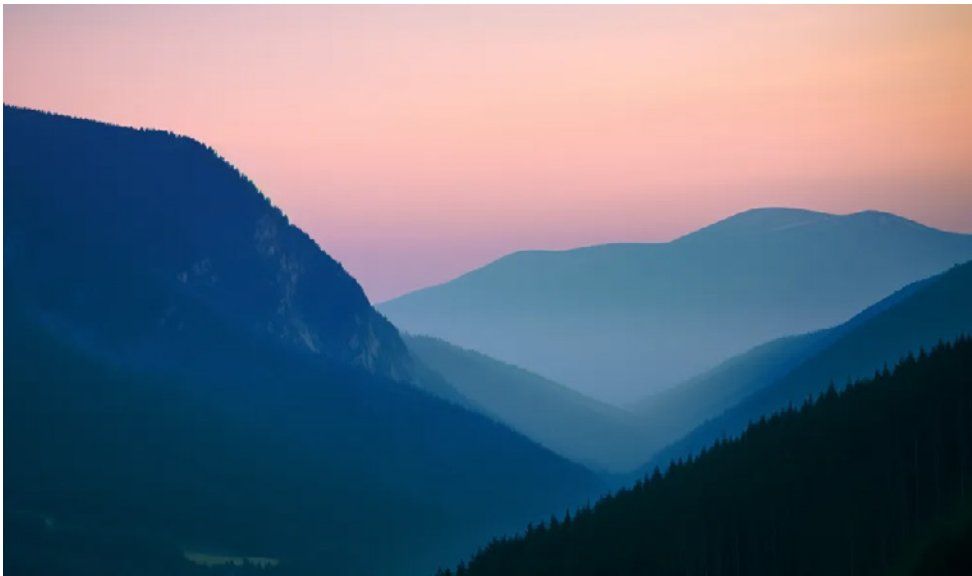
To promote continuous improvement, market actors should expect iterative changes and advancements in accepted best practices and expectations. Techniques for measuring forest loss, and therefore for establishing baselines, are constantly changing and improving. This includes the increasing availability of digital tools for MRV, which are further changing expectations of accuracy and frequency of data collection. Acceptance of the novel and innovative improvements both technical or policy related, such as increasing deployment of rules for revising baselines at shorter intervals, is important to driving the market forward. Carbon projects developed today look different than projects developed a decade ago and will likely look very different ten years into the future.

However, this kind of rapid and frequent change introduces risk to business models for project developers and other supply side actors who may find that the project model that they have invested time and money into must constantly be revised. To support the kind of market that can achieve the scale we need, and reach a higher level of ambition and integrity, risk needs to be managed, and shared more equally across market actors. Concentration of risk among project developers, who must shoulder the burden of shifting expectations of credibility, integrity, and scale largely on their own, has been an area of particular concern and can harm the prospects for the market to adequately scale.

In fact, concentration of risk with any one actor can restrict development of new projects, as well as damaging progress made in existing projects. A more productive collective approach would be to balance risk across actors, taking into account their respective abilities to bear risk. Larger and more established players are likely able to withstand more risk, and by sharing the risk burden, can help position the entire market to be more innovative, risk tolerant, and support overall market growth. Demand side actors can play a very important role in sharing risk by considering whether the price paid for credits is sufficient to allow for innovation and change on the part of supply side actors.

Price is important for many reasons. To facilitate a just transition, carbon crediting activities must properly involve IPLCs and appropriately distribute the benefits across stakeholders. The prices paid for credits are most effective when they accurately reflect the cost of behaviour change required to protect forests in areas of high risk and address drivers of forest loss. Carbon markets can't finance the transition in the global south if the finance isn't flowing there, or if that finance does not reflect the cost of protecting forests.

TO PROMOTE CONTINUOUS IMPROVEMENT, MARKET ACTORS SHOULD EXPECT ITERATIVE CHANGES AND ADVANCEMENTS IN ACCEPTED BEST PRACTICES AND EXPECTATIONS



WE CAN BUILD ON WHAT WE HAVE TODAY TOWARDS A BETTER TOMORROW.

FOREST LOSS REMAINS A COLLECTIVE PROBLEM THAT REQUIRES A COLLECTIVE SOLUTION. AS THE NUMBER OF JURISDICTIONAL PROGRAMMES INCREASE, IT WILL ONLY FURTHER REINFORCE THE MULTISTAKEHOLDER NATURE OF MARKET-BASED MECHANISMS TO PREVENT FOREST LOSS

Significant community buy-in is required to ensure REDD+ interventions can have impact and longevity. It is important to recognise and accommodate the timescales required to develop relationships with IPLCs and establish activities in a way that fosters long term success for the planet and the people. This is yet another reason to build on existing processes instead of discarding them in favour of starting anew. Building relationships takes time and many projects and programmes around the world have spent years establishing trust with key stakeholders on the ground. Using these relationships as a foundation for the latest best practices is the quickest way to scale the market. This in turn requires patience for improvements and changes to be implemented on the ground.

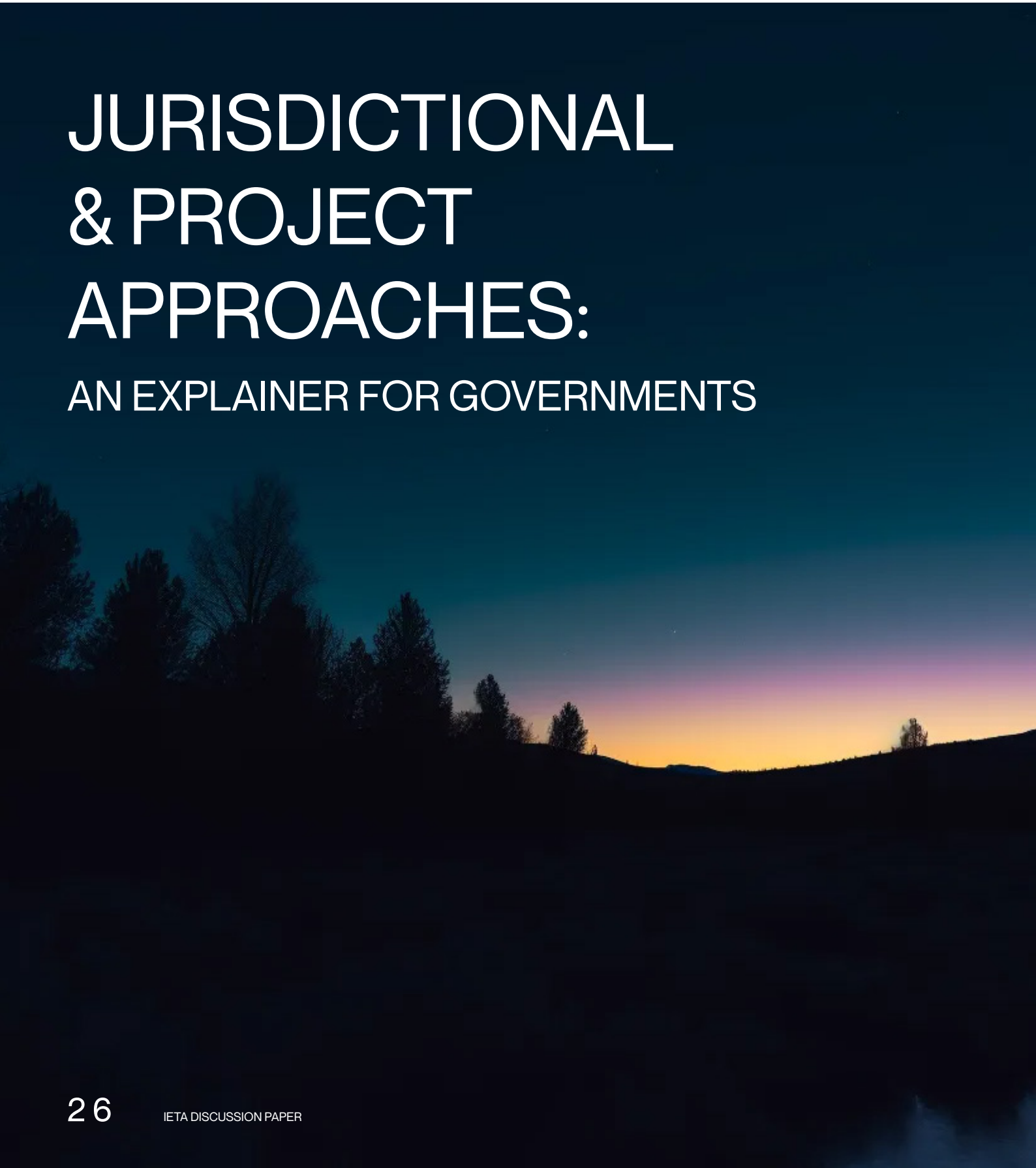
Unlike for other project types, in jurisdictional programmes governments can play the role of project developer, so understanding the dynamic country context is of utmost importance. Countries are diverse in their experiences, regulatory frameworks and socioeconomic factors, making it difficult to identify those presenting the biggest JREDD+ transition risks and opportunities. In countries where historically a government has not effectively incorporated the views of marginalised communities, there will need to be careful attention to ensuring such issues do not occur in the programme level activities.

It is important for buyers and corporate investors to stay abreast of quality advancements as they emerge in the VCM and in compliance markets. Particularly for JREDD+, higher demand will be influenced by schemes like CORSIA which accepts ART's TREES credits to be used for compliance[43], and Article 6.2 efforts that are underway between several countries. The VCM is also expected to see increasing demand, despite a temporary dip in the face of criticism and uncertainty.

For buyers and investors who drive this demand, purchasing or otherwise investing in projects and programmes typically requires various levels of due diligence. See some examples below:

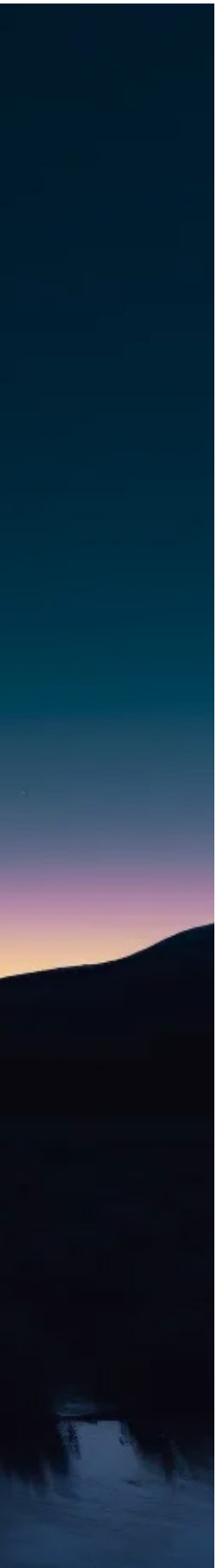
- From the supply side, carbon crediting standards such as Verra's VCS or ART's TREES set requirements for mitigation activities to be included in their registry. Project developers, governments and other implementers set best practices for the market with increasing ambition.
- Outside the VCM, schemes like CORSIA and domestic regulations in many host countries approve certain methodologies and standards. In the VCM, initiatives like the ICVCM set quality thresholds for carbon crediting programmes with an aim to approve only high-quality methodologies and tag high quality credits.
- On a more granular level, buyers assess whether a particular project or programme is delivering quality according to the local and national context under which it operates. There are many ways to do this work, including doing independent assessment and relying on carbon ratings agencies that provide data from assessing individual projects and programmes that perform differently across a quality spectrum; and conducting site visits to project areas.

Beyond a focus on supply or demand recommendations, forest loss remains a collective problem that requires a collective solution. As the number of jurisdictional programmes increase, it will only further reinforce the multistakeholder nature of market-based mechanisms to prevent forest loss. How we all constructively engage with this changing market landscape will have a big impact on the level of success achieved by new projects and programmes entering the market today and in the coming years. We believe that everyone involved in carbon markets can make meaningful contributions to this collective solution through a renewed focus on cooperation, continuous improvement, support for a just transition, and equitable distribution of risk. It's critical to remember that the solutions lie not in how we can reinvent the wheel, but how we can build on what we have today towards a better tomorrow.



JURISDICTIONAL & PROJECT APPROACHES:

AN EXPLAINER FOR GOVERNMENTS



JURISDICTIONAL PROGRAMMES ARE INCENTIVISED THROUGH MULTIPLE SOURCES OF FINANCE, NAMELY MARKET CLIMATE FINANCE (FROM SALES OF CARBON CREDITS) AND NON-MARKET FINANCE (E.G., RESULTS-BASED PAYMENTS FROM GOVERNMENTS, NGOS, COMPANIES, AND THE PRIVATE SECTOR).

Carbon markets offer a variety of ways to channel finance to mitigation activities, including protecting forests. Jurisdictional and project approaches can both play a role in the shared goal of halting forest loss. Projects are implemented on specific parcels of land, typically non-profits or private sector entities working directly with the landowners or communities in and around the project area. Jurisdictional programs are implemented across an entire national or subnational region and aim to address forest loss through integrated land management, regulation, and enforcement across the region. While often described as two distinct approaches, projects and jurisdictional programs instead represent methods that differ by degree, and often have substantial overlap.

Jurisdictional programmes are incentivised through multiple sources of finance, namely market climate finance (from sales of carbon credits) and non-market finance (e.g., results-based payments from governments, NGOs, companies, and the private sector). While many governments are already familiar with results-based payment programmes, such as the World Bank's Forest Carbon Partnership Facility (FCPF) or through bilateral partnerships including Norway's International Climate and Forest Initiative (NICFI), actors in the voluntary carbon market are increasingly looking to incorporate jurisdictional approaches into what has been largely a project-based market. In other words, a jurisdictional approach in the voluntary market can involve governments working with standards in the voluntary market. It is important to state, that while results-based payment programmes and market-based mechanisms to preserve forests may have a shared goal, they must not be equated or convoluted.

JURISDICTIONAL AND PROJECT APPROACHES CAN BOTH PLAY A ROLE IN THE SHARED GOAL OF HALTING FOREST LOSS.

ONE WAY TO CONCEPTUALISE POTENTIAL GOVERNMENT INVOLVEMENT IN CARBON CREDIT GENERATION REVOLVES AROUND THE RELATIONSHIP TO SEVERAL KEY PILLARS:

- **Additionality:** establishing that the activity will lead to outcomes that would not have occurred in the absence of the intervention
- **Setting a baseline:** the baseline scenario is defined by what would have happened in the absence of the carbon project or programme
- **Governance:** how the project or programme will be administered and who will be responsible for activities such as monitoring and enforcement
- **Permanence:** ensuring that reductions achieved are lasting and durable
- **Leakage:** monitoring and taking action to reduce risk that forest loss activities are displaced to a different location
- **Accounting and benefit sharing:** establishing how emission reductions are accounted for, including issuing corresponding adjustments if transferred internationally, and how the revenues and benefits should be distributed and shared
- **Safeguards and co-benefits:** which ensure that local people and communities are fairly treated in the activity and that support and benefits extend beyond carbon metrics

Implementing a jurisdictional programme typically would involve subnational or national government cooperation or direct involvement in one or more of these key pillars, however the details will vary by jurisdiction. Some voluntary market standards can also move forward in assessing performance against a jurisdictional baseline without participation from governments.

There are different jurisdictional approaches and structures, some that involve government fully administering the programme in a centralised manner, from setting the baseline to conducting interventions, to monitoring and reporting and where the government fully manages the sale of carbon credits. This style of jurisdictional programme involves government management of the large number of stakeholders within the jurisdiction impacted by the programme and/or who engage with forests, including local communities, businesses, and indigenous peoples. A full jurisdictional approach could also involve working to list credits with a standard in the voluntary market, and governments would then be a central stakeholder in determining where carbon market revenues are to be directed within the jurisdiction.

An approach where individual projects continue to operate using a shared jurisdictional wide baseline is called nesting. A government can help set this jurisdictional baseline and/or require that projects are using a baseline aligned with international reporting standards. Taking a role in monitoring and enforcing the law is another critical way that government involvement can help scale the market and improve the quality and integrity of forest carbon credits. Increasingly, many governments are establishing national registries or requirements for projects to register with governments and meet certain conditions. There is also an opportunity for governments to formalise best practices around leakage monitoring at scale, ensuring permanence over time horizons of many decades through institutionalisation of forest carbon requirements in government policy and regulation.

Finally, government involvement in elements such as benefit-sharing and use of credits under international mechanisms, such as Article 6 of the Paris Agreement, can take the form of establishing legal or regulatory standards, mechanisms, and forms of taxation. Implementing a programme at scale across an entire jurisdiction can also help bring economies of scale to the initiative that lower barriers to entry by spreading fixed start-up costs across a larger number of stakeholders.

Given the potential benefits that jurisdictional approaches can bring to scaling and ensuring integrity and credibility in the carbon market, there is increasing interest in expanding these initiatives around the world. However, there remains a great deal of flexibility for governments in how they can tailor involvement in these initiatives to meet their unique context. Furthermore, shifting to a jurisdictional approach does not presuppose eliminating the benefits to the climate and the community from projects. There are many opportunities for both approaches to coexist and to build upon one another within the same jurisdiction.

CARBON MARKETS OFFER A VARIETY OF WAYS TO CHANNEL FINANCE TO MITIGATION ACTIVITIES, INCLUDING PROTECTING FORESTS.

ENDNOTES

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