

# Options for private sector involvement in REDD+ under ART

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**ART**  
Architecture for  
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# 1.0 Introduction

**Natural climate solutions – including the protection and restoration of forests – are now universally recognized as an integral part of the solution to global warming.** While 2020 arguably was a year dominated by the unleashing of the COVID pandemic, it was also a year of renewed commitments to forest conservation and recognition of the critical need for natural climate solutions in reaching global climate targets. Scientific reports that evaluate pathways to limit global warming to 1.5 degrees by mid-century conclude that natural climate solutions – in particular the protection and restoration of forests – are critical to deliver near-term low-cost climate results at scale. A number of studies suggest that forests together with other natural climate solutions can deliver over one-third of the cost-effective mitigation results the IPCC says is needed by 2030<sup>1</sup>.

**Equally accepted is that the delivery of these critical natural climate solutions requires effort and ambition on scales not yet realized in the forestry sector.** Countries must not only meet their forest-related greenhouse gas goals but surpass them and continue to set new, ever more ambitious targets. The Green Gigaton Challenge suggests targeting at least one million jurisdictional REDD+ emission reductions per year by 2025<sup>2</sup>. A key factor in achieving sustainable, significant emission reductions is a well-planned and comprehensive REDD+ strategy. Such strategies encompass the participation of a range of important stakeholders at each level, including the private sector. The private sector's role can vary widely from owning or managing forests, investing in forest conservation, to running businesses which have significant forest impacts. Hence, at a minimum, the private sector must be considered in REDD+ strategies, and for many governments it will be necessary to involve private entities as active collaborators in order for the REDD+ program to achieve the highest ambition possible.

**The purpose of this paper is to offer options for the roles that the private sector can play in supporting government objectives in the forest sector.** We will show that private sector participation can span from being a passively taxed or regulated entity, to responding to policy incentives offered by governments, to implementing mitigation projects that can sell offsets in domestic and international markets as agreed with governments. The range of private sector involvement in REDD+ programs is generally not well understood with a typical binary focus either on the great benefits or the catastrophic risks of private sector participation in REDD+. With this paper, we hope to offer clarity and nuance to the discussion and to put such binary discussions to rest. We will also demonstrate how each of the private sector options outlined in this paper can provide climate change benefits and contribute to the success of a country's overarching REDD+ strategy and climate goals.

**This paper provides guidance for governments participating in the Architecture for REDD+ Transactions (ART) who wish to consider collaboration with the private sector.** The guidance is a tool to assist governments in high-level decision making. It is not a methodology, nor does it include prescriptive steps or requirements that must be followed to participate in ART. However, the paper does include a brief discussion of how each model can be integrated with ART participation. The guidance can be used in any geography – and as such it is generic, although we have drawn on existing illustrative models from around the world. In our discussions of private sector models, we acknowledge their strengths and weaknesses with the understanding that what works in some countries may not work in others due to legislation, history, or other contextual factors. It is expected that governments will utilize a combination of approaches to be as successful in reducing emissions as possible and provide the greatest benefits to their citizens.

1 For example: Griscom et al. 2019. RSTB 375 (1794) <https://doi.org/10.1098/rstb.2019.0126>

2 The Green Gigaton Challenge | UNEP - UN Environment Programme

## 2.0 Models for Private Sector Involvement

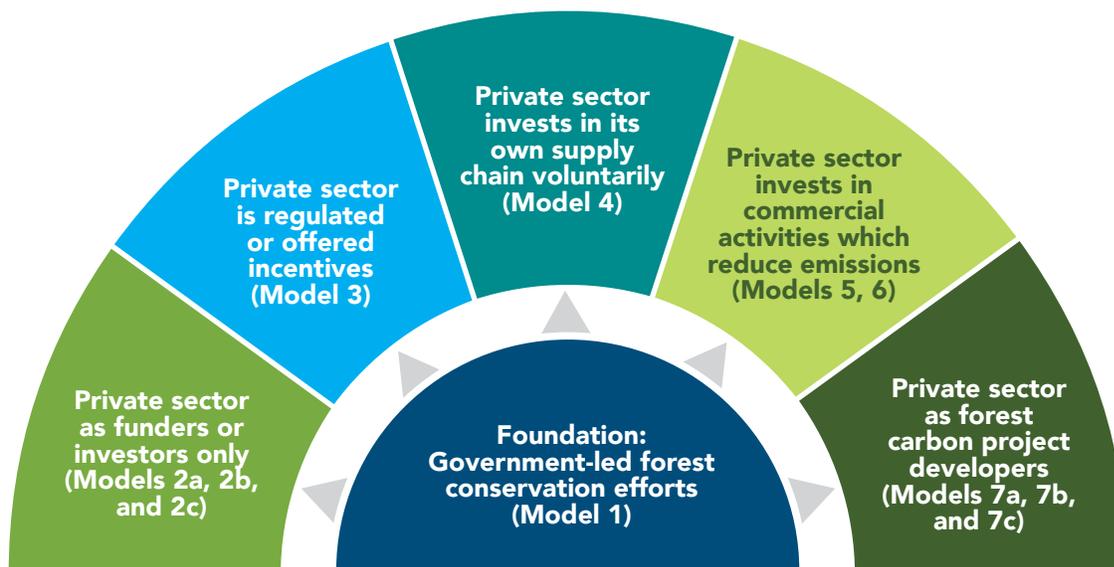
**As a first step, governments should assess what they want from the private sector and recognize that collaboration can extend far beyond offset project development.** Private sector participation in the forest sector can encompass a range of roles, and the government can choose to draw on the private sector's expertise, execution capability or funds – or all of these. Each country or jurisdiction must decide what model or models for private sector participation best supports their REDD+ strategy. While discussions to date have primarily centered on how to integrate or “nest” existing REDD+ offset projects into a jurisdictional accounting system, the question of how to involve the private sector in forest protection and restoration is much broader. Governments will want to ask themselves questions such as: Do we envision the private sector as investors offering capital or would we like companies to participate in REDD+ activity design and implementation as well? Do we regulate and mandate changes to private agribusinesses or do we provide incentives such as tax breaks? How much potential does cap-and-trade regulation offer and is this the best way to create a domestic demand for offsets?

**Governments' choices may be limited by legal frameworks and its NDC.** Governments must consider current laws, regulations, and policies and how they may impact the choice of options, as well as what changes to these that may be required. The government should also consider what impact, if any, international obligations such as achieving goals set out in its NDC commitment will have on the options being considered. While it is not the role of this paper to discuss legal implications of each model as that will depend on each country's circumstances, the specific issue of carbon rights is briefly covered in Section 3.

**In this paper we use a broad definition of 'private sector' and we consciously use the term 'involvement' rather than 'participation'.** In some models, the private sector could be represented by a multinational consumer goods producer while in others it may be a local community organization or a carbon project developer. Although the latter group has been instrumental in developing forest carbon projects globally, the options for private sector involvement extend well beyond offset project development. The term involvement is used to include both models where the private entity is obliged to take part (regulated) and others where the private entity's participation is entirely voluntary and for commercial gain.

**A total of 7 models - organized on a continuum starting with 'private sector funding' and ending with 'private sector design and implementation of activities'- are presented below.** The common starting point is a government in charge of conservation efforts – Model 1, 'Foundation' - where these efforts are limited to creating national parks and other measures of forest protection. From that foundation, the government can seek to involve the private sector in different ways - by picking one or several of the models to build a portfolio of efforts that reduce emissions and increase removals across the economy.

**FIGURE 1: PRIVATE SECTOR INVOLVEMENT MODEL UNDER ART: A CONTINUUM**



# MODEL 1 – GOVERNMENT-LED FOREST CONSERVATION AND RESTORATION EFFORTS



## MODEL 1 QUICK LOOK:

- Traditional approach to forest conservation
- Not likely to achieve necessary global ambition on its own



In many countries there is currently very little involvement of the private sector in protecting or restoring forests and the government's strategy consists primarily of creating and maintaining conservation areas, national parks and regulating land-use. If a national park is created, it is typically run by a government agency or by a local community but financed by the government.

This is how conservation has traditionally been managed, starting in Europe and the U.S. and spreading globally in the 20<sup>th</sup> century. The model is still the basic building block for how most governments view ownership and management responsibility for forest conservation, and in Europe it continues to be the prevalent model, although private sector participation has increased in recent decades<sup>3</sup>. The model often involves the participation of indigenous populations as guardians of the forest<sup>4</sup>. Government-centric models make sense in countries with a well-developed capacity for regulating land use, excellent execution powers and generous budgets. The advantage of the traditional approach is that – if well executed – control over land-use and forest

cover is high, the model is easy to implement and can effectively prevent unwanted deforestation or forest degradation. Its greatest disadvantage is that many countries lack the financial resources to implement such a strategy effectively. And although development assistance and international donations can help, they are usually woefully inadequate and not a source that can be relied on in perpetuity. Another challenge is that government regulation is often ineffective in reducing deforestation unless it is strictly enforced, and the value of the alternative land-use is low (which would lower the incentive to convert the forest). Indeed, the failure to stop deforestation in the three largest tropical forests (Congo Basin, Brazil and Indonesia) is arguably a testament to the limits of this approach.

## INTEGRATION WITH ART

ART provides a global voluntary carbon program (architecture) to register, verify and issue high-quality REDD+ emission reduction credits to countries and jurisdictions, allowing them access to markets and sources of carbon-revenue beyond what has been available to date. While Model 1 represents the traditional conservation approach rather than a fully integrated national or sub-national REDD+ strategy, its successful implementation would reduce greenhouse gas emissions from deforestation and degradation. The scale of the reductions would be largely dependent on the nature and area of the lands protected, as well as the emissions occurring outside of the protected areas. These emission reductions could be monitored, reported, and verified under ART allowing the country to transparently document its success. Revenues from either the sale of credits or a results-based payment could then be generated.

## TURNING THE DIAL

The traditional conservation model is likely to be a useful starting point for developing a REDD+ strategy, but it is likely to be insufficient to achieve a country's desired ambition on its own. While government regulation and ownership of national processes are fundamental to a successful REDD+ process, expansion of efforts to include additional stakeholders, introduce incentives and add sources of capital is likely to improve outcomes (immediate results as well as long-term sustainability). **From this foundation, where can governments go – how can they turn the dial?** A first iteration could be one where the private sector is invited to participate as funders and investors and thus offer governments increased access to capital to enable expanded or new activities.

3 Via incentives to set aside or grow forests or protect natural habitats through EU programs such as EIB's Natural Capital Financing Facility, the UK Woodland Carbon Code, etc.

4 As the main purpose of the paper is to discuss options for involving the private sector in forest conservation, we do not always distinguish between the various levels of government (national, state, district, etc.) nor do we specifically discuss the role of indigenous peoples. We assume all rightful ownership is respected and included in our models.



## MODEL 2 – GOVERNMENT DESIGNS AND IMPLEMENTS REDD+ ACTIVITIES, THE PRIVATE SECTOR FUNDS OR INVESTS.



### MODEL 2 QUICK LOOK:

- Government in charge, private sector provides capital
- Innovative model and potentially very effective, but Models 2b and 2c require proof-of-concept



While Model 1 requires planning and action on the part of the government, the following models begin the transition to a more integrated REDD+ strategy that involves a larger set of stakeholders.

### MODEL 2A – PRIVATE SECTOR FUNDS GOVERNMENTS THROUGH CREDIT PURCHASES

In this model, a national government or subnational jurisdiction designs and implements their REDD+ program. Once the emission reductions and removals have been verified and issued, the government may sell the credits to domestic or international private sector purchasers. Payments may be linked to the transfer and use of the credits by the purchasing private sector entity (offsets), may be able to be used both for a private sector claim and a country's NDC goals, or may be a results-based payment (RBP) where the credits are retired against the country's NDC goals rather than transferred. Governments will need to consider issues around double counting and whether they wish to sell credits into international compliance markets, sell only domestically or sell into voluntary markets and retain them for use towards NDC achievement. These considerations are further outlined under Model 7.

The sale of credits (or payments for performance) enable the government to receive sorely needed funding for its REDD+ program goals. Moreover, the process takes advantage of an international market for carbon and assigns a value to jurisdictional REDD+ credits. Governments are likely to find that while some private sector entities will prefer the hands-on approach outlined in Models 6 and 7, others will appreciate the decreased risk associated with purchasing the already verified credits offered in Model 2a.

However, a potential challenge with this model on its own is that governments only receive payments once reductions have been issued – a process which can take several years - and may suffer from an upfront funding gap. Two models which seek to overcome this obstacle are presented below (2b and 2c).

## MODEL 2B - CREATION OF A REDD+ COMPANY

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Under this option, the government sets out to develop a REDD+ program by creating a company to develop and coordinate REDD+ activities. The company could be a state enterprise, joint venture or special purpose vehicle (SPV). It would be governed in the national interest while being backed by private investors. The option may be attractive to governments because it allows for public ownership of the strategy and program implementation oversight, while benefiting from the infusion of private capital.

Private investors could provide equity or debt to the company and in return receive dividends or other types of return on their investment. The return would likely reflect the risk/reward profile of the country (including sovereign risk) as well as of the global carbon market as the rate of return would most likely be driven by the carbon revenues generated by the country.

There is precedent for this type of institution in the form of national energy or infrastructure companies, where countries historically decided some areas of the economy were of sufficient strategic value to warrant government ownership. There is recent precedent in the form of national green or development banks with mandates to boost investments in particular industries (e.g., renewable energy). Traditionally these institutions have been owned by governments, although the UK Green Bank is an example of a company with a public purpose which has transferred ownership from public to private hands.

Potential drawbacks of the model include the demands it places on national governments in terms of planning, organizing and initial funding. There is also a risk that private investors do not materialize if they find the risk/reward profile unattractive. The model is untested in the context of REDD+ and although it has a certain appeal it would have to be developed further.

## MODEL 2C - REDD+ BONDS

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Rather than funding restoration or protection activities from general government coffers or creating a separate company, this model suggests governments can issue debt – typically on the international market and most likely in a foreign currency (\$ or EUR) – and limit the use-of-proceeds to REDD+ activities. Tapping into international capital markets has long been recognized as an opportunity with potentially huge benefits but has recently become more realistic as the pools of sustainable funds continue to grow<sup>5</sup>. Bonds can be issued as standard government paper or can include the additional following features:

- Issuing the bond as a ‘green bond’ to attract new investors and reap any other benefits from that market segment. Funds dedicated to buying green bonds are emerging from institutional investors such as PIMCO, BNP Paribas, and HSBC indicating a growing and sustained interest in these types of investments. No dedicated REDD+ (forestry) bonds have been issued to date, however the Republic of Indonesia issued a green bond in 2018 and 2020 where one of the eligible categories was the financing of ‘Sustainable Management Natural Resources’ (including carbon sequestration through afforestation/reforestation).

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5 Traditionally limited to certain pension funds or small niche investors, sustainable investments have in the past year become recognized as mainstream by the likes of Black Rock, etc.

- **Enhanced Options:** If the government measures GHG reductions and can credibly link these to the activities funded by the proceeds from the bond, they could attract payments for performance from international donors (on an annual basis) to pay for the interest (coupon). Such a set-up has been proposed in the context of a 'financial architecture' for Brazil<sup>6</sup>. Indeed, potential variations in bond structures are many<sup>7</sup>.

On the plus side, issuing a government bond is relatively straightforward and is unlikely to require any new legislation. A country's ability to issue a REDD+ bond (or its attractiveness) will primarily be determined by non-forest related factors such as a country's credit rating and any access it may have to guarantees and other risk mitigation instruments or return incentives. Moreover, some of the enhanced options – for instance where the coupon is paid by international REDD+ donor funds – offer an innovative way of leveraging limited public funds to access (deeper) private capital markets. However, a non-enhanced REDD+ bond would offer no financial benefits to the country above what it can already access in existing international credit markets. And for many of the bond options, the government will be exposed to the usual risks and downsides of borrowing money: the principal will have to be repaid eventually and if any part of the payment involves carbon credits or payments which depend on emission reductions, the risks of non-performance apply.

## INTEGRATION WITH ART

There are several ways in which the models above can be integrated with participation in ART.

Most fundamentally, Model 2a would be directly linked to ART participation and issued TREES credits would document the success of the government's REDD+ program. Revenues would be realized either through the sale of credits or through a payment-for-performance approach. The Emergent Forest Finance Accelerator has been set up to facilitate transactions of this kind. However, governments are not restricted to this option and could choose to sell credits directly to compliance and voluntary buyers alike.

Models 2b and 2c provide options for securing up-front financing for governments that can be used to implement the REDD+ program and generate the emission reductions and removals. Revenues would be realized as described above for Model 2a and returns would be paid in accordance with a scheme agreed upon at the outset.

There are several options for defining how returns for investors are calculated: fixed return, return based on success of REDD+ activities financed by the bond, or return based on success of overall jurisdictional program. In the first choice, the private sector would be guaranteed a specific return (dividend, coupon) and the government could use any additional revenues to fund additional programs.

Alternatively, returns for investors in Models 2b or 2c could be tied to the specific success of REDD+ activities undertaken using the funds raised. This would require detailed monitoring and advance agreement on how the accounting would be integrated into the jurisdictional or national accounting.

## TURNING THE DIAL

The options described in Models 2a, 2b and 2c can be innovative and effective ways of mobilizing international capital for government conservation efforts, but they do not change the behavior of private businesses in forest countries. How can these actors be effectively engaged in national conservation efforts? For that to happen, national regulations and incentives have to be implemented.

6 See Ecosystem Marketplace/Rupert Edwards (2018): *Towards a Financial Architecture to Protect Tropical Forests: The Case of Brazil and World Bank. 2017, The Potential Role of Enhanced Bond Structures in Forest Climate Finance*. Washington, DC, World Bank.

7 We discuss some of these in the context of how to integrate sovereign bonds with ART below. Additionally, rather than the government issuing a bond, a green/forest bond can be issued by a private entity to fund their commercial activities. This has happened in Brazil for example (paper companies) but activities are usually not focused on conservation or emission-reduction activities.

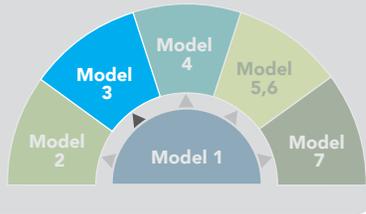


## MODEL 3 – GOVERNMENT REGULATES OR PROVIDES INCENTIVES ACROSS THE ECONOMY TO ACHIEVE GHG BENEFITS.



### MODEL 3 QUICK LOOK:

- Regulation and Incentives can and should be applied to steer the economy
- But applies to only a subset of relevant private actors and often suffers from ineffective enforcement'



Governments typically find that creating national parks and protected areas is not enough as deforestation often occurs on privately owned land as well. Introducing regulation on the management of private land is one way of extending government control over deforestation outcomes. Hence, in this model, the private sector is mandated or incentivized to participate in activities which improve forest cover or reduce deforestation and degradation.

The government can also introduce regulation on companies in other parts of the economy through a cap-and-trade system or carbon tax and apply the auction and tax revenues to forest restoration and protection activities – that is, to fund the government-run activities described in models 1 and 2a.

Asking private agricultural land holders to set aside areas for forest conservation is one type of regulation. In 1965, Brazil created its first Forest Code, a law requiring landowners in the Amazon, Cerrado and other areas to maintain between 20 to 80 percent of their property under native vegetation. The government of Indonesia has similarly introduced a regulation on plantation owners to set aside high-carbon value forests within their oil palm or timber concessions as buffer zones. More recently, the government of Gabon mandated all forest concessions in the country to be FSC certified by 2022.

Incentives can include tax breaks, reduction in fees or interest rates, and subsidies. Incentives can be applied in addition to regulation - to 'sweeten the pill' - or introduced on their own. For example, the United States uses conservation easements to incentivize improved management and conservation. In exchange for the easement (a commitment to uphold certain environmental benefits in perpetuity which becomes part of the property's deed), the landowner obtains tax benefits. Governments can also apply incentives via third parties when they offer subsidized credit lines or other types of credit enhancement for loans dedicated to sustainable farming practices through local financial institutions. In Brazil, the ABC Program offers lines of credit to farmers who adopt less greenhouse gas-intensive practices and has been in place since 2010.



In theory, introducing regulation or incentives is a relatively straightforward way of extending control over unwanted deforestation. However, powerful industry lobbies may make it difficult to approve legislation. In the case of Brazil's Forest Code, the legislation has been amended and (arguably) made laxer over time – largely as a result of lobbying. And even when the legislation exists, it must be enforced to assure full compliance. In Indonesia, timber concessions are under an obligation to set aside some of their hectareage and while the concessions may meet the minimum requirements for the set-aside, there have so far been no consequences for failing to undertake meaningful restoration efforts. Similarly, incentives may offer attractive features, but do not guarantee outcomes. For instance, a tax rebate may be offered but for various reasons not taken up and the desired forest benefit remains undelivered. Brazil's ABC Program, for example, has performed below its potential in terms of uptake of its credit lines<sup>8</sup>. Another perceived disadvantage of incentives is that they carry a fiscal cost to governments in the form of outlays for credit enhancements or lost tax revenues, although if undertaken in combination with other policies (such as a bond issuance or debt-for-nature swaps) and viewed as an investment rather than a cost such skepticism should subside.

## INTEGRATION WITH ART

Governments can monitor the emission reductions and removals achieved as a result of these policies at the jurisdictional level and transform them into REDD+ credits and revenues through ART – effectively using Model 2a to transfer credits to buyers or to receive payments for performance. With the payments it receives, it can fully or partially cover the costs of various forms of incentives and enforcement efforts and may even be able to fund new activities.

## TURNING THE DIAL

It is clear that regulations and incentives have a key role to play in any economy, and in combination with payments through ART, governments may be able to wholly or partly fund a range of policies. However on-the-ground players such as farmers, landowners and commodity producers are but one piece in the puzzle of commodity production. In what ways can involvement from companies further up the supply chain increase REDD+ success for countries?

# MODEL 4 – VOLUNTARY COMMITMENTS AND SUPPLY CHAIN INVESTMENTS



### MODEL 4 QUICK LOOK:

- Voluntary supply chain initiatives continue to grow
- But have been insufficient and could be strengthened with better coordination

Commodity traders and consumer goods manufacturers have over the past 20 years been subject to increasing scrutiny and in response have taken on commitments to eradicate deforestation from their supply chains. A plethora of zero-deforestation commitments and initiatives to monitor, coordinate and improve these now exists and most multinationals have engaged in activities to improve the sustainability of their supply chains. These efforts present an opportunity for governments to engage with the private sector to better coordinate activities and incentivize private sector action.

Companies such as Nestle, L'Oreal and Walmart can meet supply chain goals of reduced GHG emissions and/or zero deforestation by screening suppliers, certifying products and investing in supplier training schemes. In this model, the private sector implements measures to reduce emissions in its own supply chain but does not sell offsets or (necessarily) expect a return on investment – although in many cases it may be a profitable investment, especially over time. However, the company may quantify and even verify the reduction in emissions and compare them against overall corporate emissions. The practice is commonly referred to as carbon 'insetting'.

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The government case for encouraging supply chain commitments should be clear, given that some 70% of tropical deforestation is linked to the production of four agricultural commodities: soy, palm oil, cattle, and timber. Because it is voluntary,

<sup>8</sup> See e.g. Newton, P et al., Overcoming barriers to low carbon agriculture and forest restoration in Brazil: The Rural Sustentável project, World Development Perspectives, November 2016 and Carauta et al. Can preferential credit programs speed up the adoption of low-carbon agricultural systems in Mato Grosso, Brazil? Results from bioeconomic microsimulation, Regional Environmental Change, February 2017.

the option can be undertaken without waiting for market or regulatory signals. Governments will likely find that supply chain investments can be an effective way for companies to test new approaches and technologies, and by focusing on its own supply chains and acting within the mitigation hierarchy, companies can avoid resistance amongst some stakeholders against offsetting should they wish to engage in that market. However, voluntary commitments have so far proven to be woefully inadequate in reaching the necessary scale and results on the ground as evidenced by the lapsed deadline of commitments made through the Consumer Goods Forum and the New York Declaration on Forests and the slow uptake of certification<sup>9</sup>. The absence of a price signal or other (short-term) monetary benefit together with a piecemeal and un-coordinated approach are some of the reasons voluntary commitments have not achieved their potential. Creating formal mechanisms within a jurisdictional approach could improve the impact of this model<sup>10</sup>, as would the presence of the government providing coordination of monitoring and reporting of results.

## INTEGRATION WITH ART

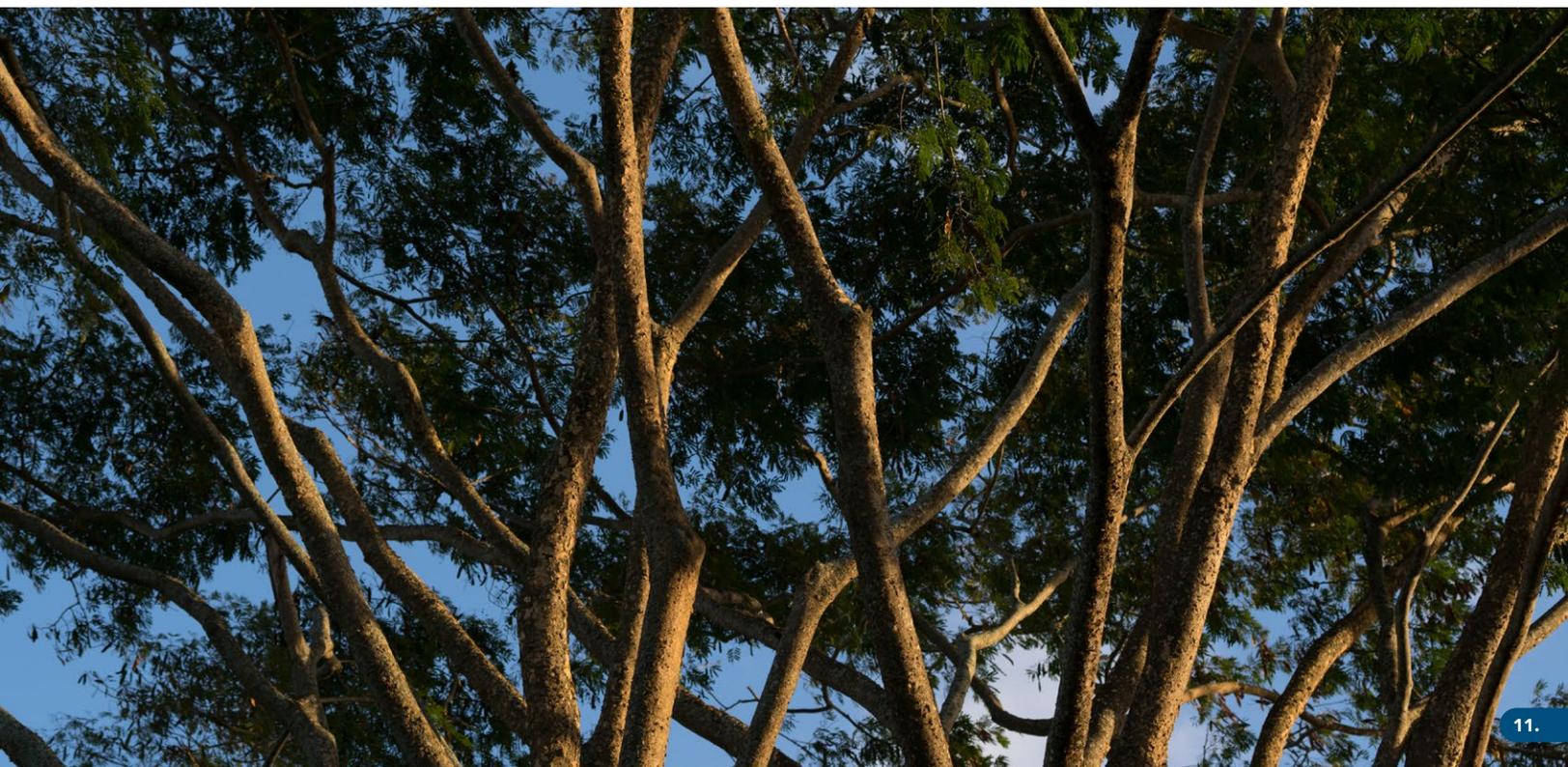
Historically, these initiatives have either not conducted monitoring and reporting of their GHG benefits or have done so under a framework such as ISO 14064 without verification. Companies have often failed to demonstrate verifiable results from their activities. Under ART, however, governments can monitor and report the GHG results across the jurisdiction, as well as the social and environmental benefits. This works in favor of the companies as well as the government: Companies will have greater evidence that the actions undertaken lead to meaningful change and are conducted with comprehensive environmental, social and governance safeguards. This transparency and accountability will support their inseting programs and provide greater credibility, eliminating many of the challenges faced to date by these efforts. Governments would be able to help integrate actions across companies and government initiatives, thereby promoting the efficiency and effectiveness of emission reductions. Some of the revenue from jurisdictional level emission reductions could be put toward encouraging collaboration platforms among corporates to further improve supply chain reductions, or even shared with the private sector in some form of revenue-sharing model.

## TURNING THE DIAL

Consumer-facing companies have an important role to play in improving the performance of supply chains and sending the right signals to producers in forest countries. However, they are but one set of players. Many areas are not suitable for commodity production or indeed intended for that use. Rather, their primary purpose is to retain forest cover while allowing the local population to prosper in a sustainable way. What sort of partner can we expect from the private sector in these cases?

<sup>9</sup> Deutz, A., et al., 2020. Financing Nature: Closing the global biodiversity financing gap (The Paulson Institute)

<sup>10</sup> IDH is supporting a jurisdictional level effort in Kenya's South West Mau forest which is showing some success



# MODEL 5 – PRIVATE SECTOR INVESTMENTS IN COMMERCIAL ACTIVITIES WHICH PRESERVE OR RESTORE FOREST COVER



## MODEL 5 QUICK LOOK:

- Forest enterprises can provide powerful local support for forest conservation efforts
- But often struggle to provide sufficient incentives



Vast areas of forest landscapes are inhabited by local communities who impact the forests both positively and negatively. Engaging these communities in productive and sustainable economic activities that reduce pressure on forests can be key to protecting landscapes and to creating employment opportunities. Governments can encourage this model through regulation and incentives such as providing production licenses to local enterprises, requiring sustainable forest management practices or giving preferential funding or other incentives to attract commercial interests.

Successful examples of forest enterprises producing timber, timber products, nuts and other non-timber forest products exist in the Maya Biosphere Reserve of Guatemala where interventions have led to near-zero deforestation rates, increased economic activity and a reduction in outward migration<sup>11</sup>. Eco-tourism is another type of activity with the potential to both protect forest cover and create economic growth - Costa Rica being perhaps the prime example of this.

In this model, the private sector invests in forest-related industries or activities which lead to forest protection and provide alternatives to activities that cause deforestation.

However, their revenues come from the sale of commercial products or services and do not depend on revenues from carbon credits.

## INTEGRATION WITH ART

Sustainable forest enterprises implemented by the private sector or local communities are likely to result in emission reductions that can be captured under ART by governments at the jurisdictional level. Governments have a role in promoting and attracting forest enterprises and can use some of the revenues from the sale of carbon to build infrastructure and otherwise support the forest communities and their private sector partners.

## TURNING THE DIAL

However, in many cases forest enterprises do not generate sufficient revenues to provide viable livelihoods for the local population or to attract commercially minded investors. Indeed, the challenges related to the commercial success and financial sustainability of forest enterprises have been noted in several studies<sup>12</sup>. In those cases, revenues from carbon will be a welcome supplement, and inviting enterprises to develop such projects represents a way of further turning the dial on private sector participation.

11 See e.g. Source: B. Hodgdon et al., The GuateCarbon initiative and REDD+ readiness in Guatemala, EFRN News 53: April 2012, Various annual reports for the CNGC project, and the Rainforest Alliance (<https://www.rainforest-alliance.org/articles/new-report-shows-net-forest-gain-in-maya-biosphere-reserve>)

12 See e.g. The Food and Land Use Coalition, 2019, Prosperous Forests. Even the success of Guatemala's Maya Biosphere Reserve has depended on external additional funding from USAID and philanthropists over many decades.

# MODEL 6 – PRIVATE SECTOR INVESTMENTS IN CARBON REDUCTION PROJECTS WHICH ARE PAID BASED ON PERFORMANCE OR PRACTICE



## MODEL 6 QUICK LOOK:

- Private enterprises engage in carbon project development,
- The system is performance-based but without recourse to the carbon market

The model described in 5 has many positive features, but a recurring challenge is to obtain sufficient funding for forest conservation practices which only rely on local forest products or other small-scale activities. In those cases, additional revenues from carbon can play a key role in keeping trees standing.

In model 6, the private sector – defined here inclusively as international entities, local enterprises, indigenous peoples, or communities - assists the government in achieving emission reductions by helping to implement REDD+ activities and is in turn compensated based on implementation goals, emission reductions or removals, or ecosystem services created. The model has traditionally relied on a payment-for-performance or payment-for-practice system where the private sector has little or no autonomy in designing the programs but can easily be expanded to include private sector-led programs.

The US government has used practice-based systems for several decades through the Farm Bill, in a system where farmers are compensated for adopting certain climate-beneficial agricultural practices (e.g. low-tillage, cover crops, riparian buffers).

Other examples include payment for ecosystem services programs in Costa Rica (PSA), Ecuador (SocioBosque), and Peru (National Forest Conservation Program) which reward landowners, Indigenous Peoples and Local Communities and/or land users for forest conservation and the resulting environmental services produced.

For the government, a benefit of the practice and performance-based system is that it avoids the inherent challenges related to 'nesting' private projects within a national REDD+ strategy. From the private sector perspective, practice and performance-based payments may be an attractive way to engage in carbon-generating activities with relatively secure income flows, albeit without the opportunity of participating directly in the sale of carbon credits.



## INTEGRATION WITH ART

The government will monitor and capture the reductions and removals achieved by these efforts as part of its accounting under ART and receive funding through the sale of credits. These revenues can be used to pay private sector entities and forest communities based on reductions achieved. The carbon benefits of the implemented forest enterprise activities can be quantified and rewarded using a simplified accounting method to reduce the burden on the private sector.

## TURNING THE DIAL

The government may, because of a lack of capacity or funding, decide that it would like to open up the market for generating carbon credits from projects to private developers directly. For this we turn to our last set of models.



# MODEL 7 – PRIVATE SECTOR AS CARBON OFFSET PROJECT DEVELOPERS

## MODEL 7 QUICK LOOK:

- Carbon project development by private sector, with nesting into national system
- Offsets can be sold by the government or directly by the private sector



In this last set of models, the private sector develops forest carbon projects and receives a return on investment from offset revenues. A key feature of jurisdictional REDD+ is the ability to integrate smaller-scale activities into the overarching strategy and accounting. Successful legacy projects or programs represent activities from which we can learn and build upon and the options under Model 7 represent different ways these projects can continue to support national ambition and be rewarded for their achievements. Projects in the design phase, on the other hand, present greater flexibility as the government and developer can discuss what model is best for their mutual success.

One important factor for the government to consider is whether new or future projects will be allowed to sell credits independently from the national government, either through ART or another GHG program. This will influence which of the three models below are most appropriate. Double counting issues will potentially need to be addressed, but more strategically, the government will need to decide whether it wishes to make a corresponding adjustment in its UNFCCC Biennial Transparency Reports for credits transferred outside the country. Certain compliance programs, such as the

International Civil Aviation Organization's Carbon Offsetting Scheme for International Aviation (CORSIA), require these corresponding adjustments. While adjustments for international voluntary carbon market transactions are not required at this time, some buyers may wish to require adjustments now or in the future, as this may be considered by the market as best practice to avoid double claiming. Until such a requirement exists, however, each government can decide how it wishes to proceed.

## MODEL 7A - DOMESTIC SALES OF OFFSETS

In the first version of this model, offsets are sold domestically with the government potentially creating a domestic demand for offsets and overseeing the administration of offset supply. The demand for offsets can be created via a compliance mechanism such as a cap and trade or taxation system or indeed from voluntary demand.

Colombia is an example of a country that has chosen to support a domestic carbon market through the introduction of a national carbon tax on fossil fuels in late 2016, followed by a decree that allows carbon credits to be used against (offsetting) the new carbon tax. Many emerging economies are currently developing cap-and-trade systems and could contemplate the introduction of a domestic offset mechanism which ties in with these systems.

A key advantage of selling into a domestic offset system is that it avoids the need for international transfers of credits and removes the risk of double counting of offsets. A domestic offset system can be seen as a key REDD+ strategy. However, a key prerequisite for the domestic system to work is that there is sufficient demand for offsets to create a viable market and this will depend on a country's industrial base and ability and willingness to establish a cap-and-trade or taxation system.

## MODEL 7B AND 7C – INTERNATIONAL SALE OF OFFSETS: FULLY NESTED UNDER A CENTRALIZED HYBRID MODEL - PAID IN CREDITS (7B) OR REVENUE (7C)

These models represent the options most think of when private sector investment or 'nesting' in REDD+ is discussed. Private developers may invest funds and oversee the identification of opportunities as well as the design and implementation of the carbon project. Historically, these projects have quantified their reductions and removals using one of several project-level methodologies available in the voluntary carbon market. Each of these methodologies has offered a different approach to calculating the reductions and removals, in particular as they relate to the baseline or the emissions that would have occurred without the project being implemented.

In Model 7b and 7c, it is assumed that the project's baseline would have to fit within the government's crediting level (be nested), and the project would receive either carbon credits or carbon revenues in return for their successful efforts. Applying the jurisdictional crediting level to the project avoids the instance where a project using a non-nested baseline generates a disproportionate quantity of credits. Provisions to avoid double counting of carbon credits, including subtracting credits issued to projects from the volume issued to the government, may reduce the number of credits the government can receive for its efforts significantly or even entirely in the case of international sale of offsets.

Both of these options are likely to encourage private sector investment and engagement, provided sufficient price levels and liquidity exist in the market. Indeed, some private sector participants may only be interested in engaging with a government on forestry activities if they are able to be directly involved as the models in 7 presuppose. Allowing them to do so may increase the number of interested parties and increase participation and the overall value of forest-related investments in a country.

However, these models are not without challenges. For one, governments and projects must ensure alignment of crediting levels, monitoring and reporting. In addition, it will be critical for projects to align with the national safeguards systems and reporting mechanism to ensure that applicable social, environmental, and governance safeguards are addressed and respected. Legacy projects that have already been generating credits may require different nesting arrangements than future projects.

## INTEGRATION WITH ART

Countries or jurisdictions participating in ART can and most likely will integrate projects into their REDD+ strategy. There are multiple pathways possible for project nesting under ART and different pathways may be selected for legacy projects than for future projects.

- 1. Fully nested and only TREES credits are issued:** In this pathway, the government has an agreement with the project developer, and the project is not registered with any other GHG program. The terms of the agreement are left to the government and project developer to negotiate. ART only issues credits to governments, so following successful verification of emission reductions and removals, the government would either transfer a portion of the TREES credits to the project developer or share a portion of the carbon revenue with the project developer. If TREES credits are transferred to the project developer, the developer would then be free to negotiate and transact the sale of credits on its own, which is likely to be attractive to many project developers.

A key question is how to allocate the number of credits or revenues to a project. There are numerous credible ways to conduct this allocation and all are permissible under ART; this flexibility provides opportunities for governments to build on existing efforts rather than enforcing a "one-size fits all" requirement.

Several allocation systems exist in the market that can be used as examples. A spatial or risk allocation could be utilized to assign portions of the crediting level to specific areas based on localized deforestation risks. A scoring system could be used based on selected characteristics of the programs and forest such as area, ecosystem services, biodiversity, cultural significance, or other factors. ART accepts all allocation systems as long as evidence of agreement by all stakeholders is provided<sup>13</sup>.

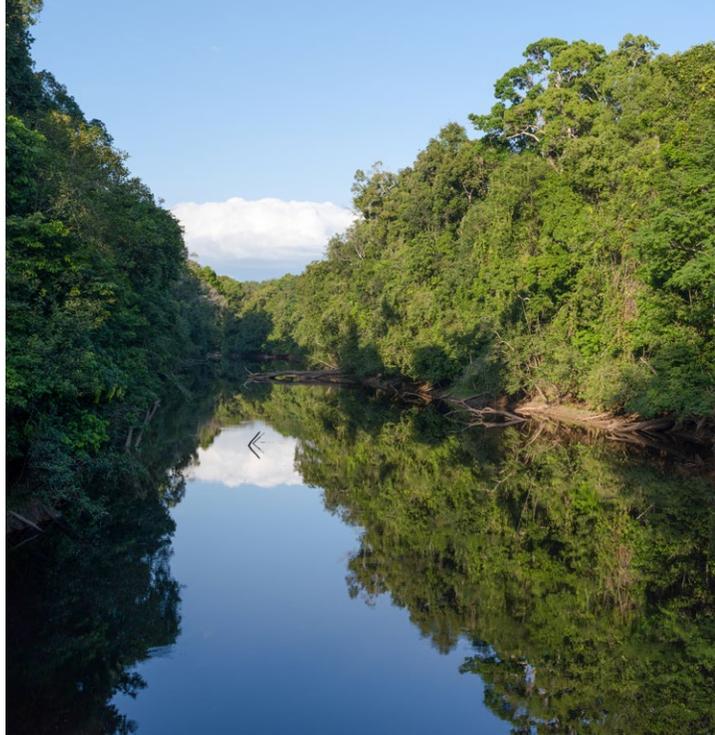
- 2. Fully nested and project credits are issued under a different GHG Program:** In this pathway, the TREES crediting level is applied as the baseline for project level accounting. The project would register the credits under a GHG Program outside of ART. In this instance, the government would need to subtract the volume of credits issued under the other GHG Program from its claimed TREES credits in line with the double counting provisions of TREES.
- 3. Not nested:** A government participating in ART could choose to allow projects to quantify and issue credits under a different GHG Program using a different baseline or crediting level. As in Pathway 2, the volume of credits issued from the project would need to be subtracted from the TREES credits issued to the government for that same year. Without the alignment of the crediting level, a significant risk exists that the government will receive few or no TREES credits.

For more information, see the Nesting Under ART paper on the ART website.

<sup>13</sup> For further discussions: Lee, D. Llopis, P., Waterworth, R., Roberts, G and Pearson T. 2018. Approaches to REDD+ Nesting: Lessons learned from country experiences. World Bank; Cano, J, Fernandez, M, Lee, D., Llopis, P and Streck, C. 2021. Nesting of REDD+ initiatives: Manual for policy makers. World Bank Forest Carbon Partnership Facility.

## 3.0 Carbon rights

The growth of the voluntary carbon market, increased focus on jurisdictional REDD+ programs and negotiations under the Paris Accord have led to much discussion and an emerging area of legal expertise around carbon rights – identifying who is able to participate in carbon markets and who can claim the benefits of the emission reductions, whether by transferring ownership of the credits or receiving payments for performance. The topic is both critically important and incredibly complex. While often not a simple task, it is possible for carbon rights to be defined across landscapes. The exact solution depends on the specific legal framework of the government in question: Are rights described in the constitution of the country? Are they tied to land tenure or to the use of the land? Are they defined locally or nationally? Are rights defined under multiple provisions? Is regulatory clarification required? Work in this field will continue to evolve and resources continue to emerge for governments needing assistance in this area<sup>14</sup>.



### INTEGRATION WITH ART

ART will issue serialized carbon credits representing one metric ton of CO<sub>2</sub> equivalent emission reduction or removal. The carbon credits are an asset that can be transacted in many different ways in the market, and therefore, the entity to which credits are being issued must demonstrate ownership of or rights to the asset regardless of the intended use of the credit or the types of claims that will be made. ART has the same requirements regardless of the end-use of the credits to protect the rights of landowners (and those that own the rights to the carbon).

No TREES credits will be issued unless the participating jurisdiction can demonstrate ownership of the credits or the right to receive payments for credits or other negotiated benefits. For example, in the case where rights to the emission reductions or removals are granted to private landowners within the accounting area, the government would need to have an agreement with the landowners either to receive the payment for the ERRs or to have rights to the credits that would allow for the transfer of title.

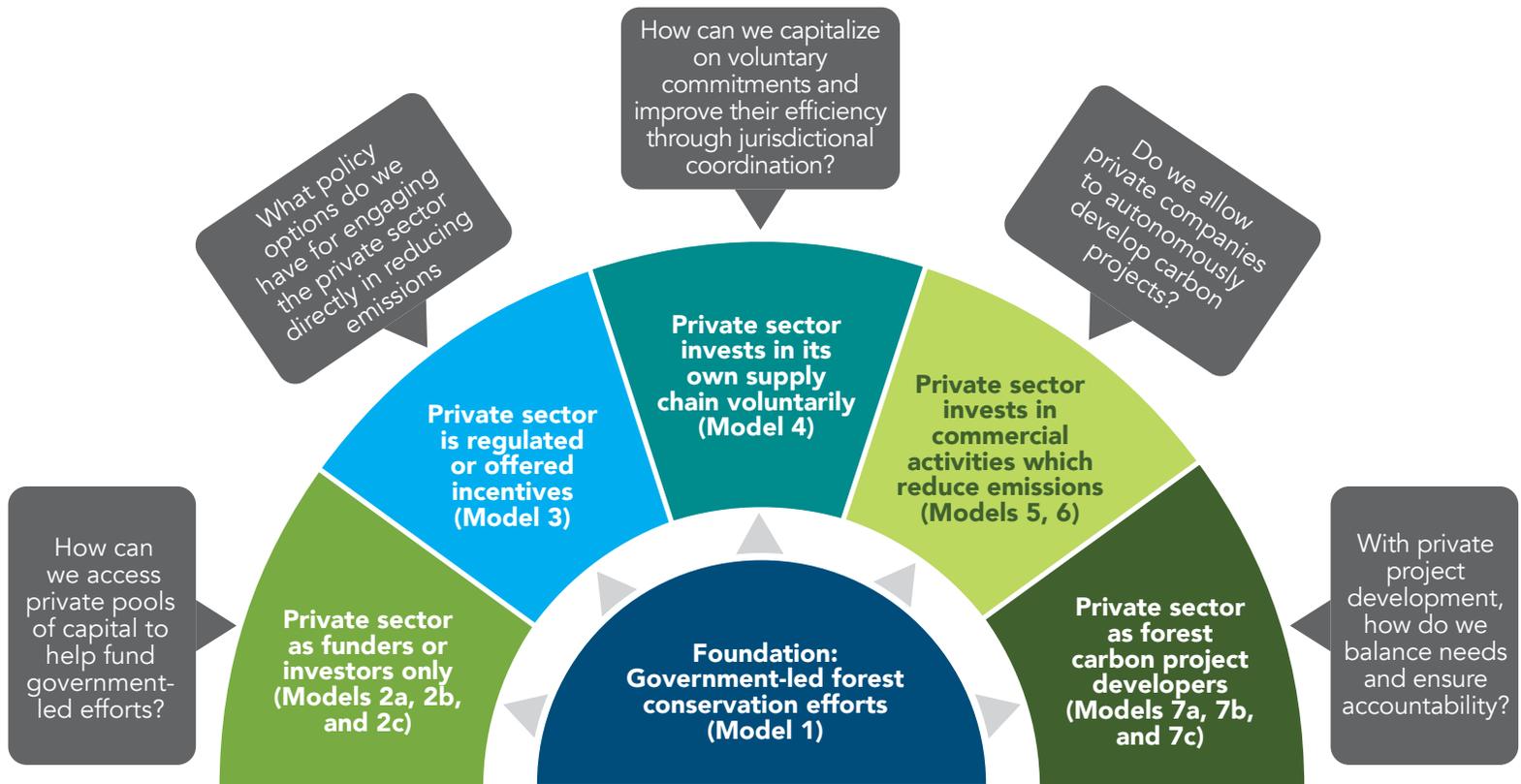
If a government participating in ART cannot demonstrate ownership or the right to receive payments for all of the credits, the jurisdiction would need to propose, and have validated and verified, an approach for allocating TREES Emission Reductions and Removals to lands not covered by agreement. This volume would be subtracted from the credits issued to the jurisdiction under ART to respect the owners' carbon rights or benefits.

## 4.0 Conclusion

**This paper has presented options for private sector involvement in the forest sector which vary greatly in nature and intensity.** In some cases, the government invites the private sector to be a full-blown partner in developing offset projects (Model 7). In others, the private sector is 'minding its own business' – both literally and metaphorically (as in 3 and 4), or simply buying credits and thus providing governments with much-needed revenue (Model 2a). A country's choice of models will depend on its needs and vision, as well as legislation and historical context which may limit the available options.

14 See e.g. [USAID Land Tenure REDD and Carbon Rights Lessons from the Field.pdf \(land-links.org\): Forests | Free Full-Text | Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance | HTML \(mdpi.com\)](#)

**FIGURE 1: AS GOVERNMENTS TURN THE DIAL ON PRIVATE INVOLVEMENT IN REDD+ THEY FACE CHOICES**



**Many of the models can – and indeed should - co-exist.** Most countries would benefit from regulating and incentivizing sustainable behavior in large commodity producers’ operations while simultaneously encouraging forest enterprises to generate incomes from local crops or carbon sequestering activities in forested areas. Private investors can, in parallel, support the government’s efforts by buying its bonds or investing in a national REDD+ credit generating company. And for many governments it will make sense to involve private companies in carbon projects whether to continue working on legacy offset projects or develop new ones under a national REDD+ umbrella.

**The options can be integrated under ART.** Successful private sector activities will result in emission reductions which can be accommodated within a national (jurisdictional) accounting system. For many, this will be a straightforward affair using a simplified crediting and compensation system. If independent projects are permitted, a nesting methodology can be applied.

**The starting point for most countries is a set of government-led conservation efforts. From this foundation, elements of private sector involvement can be introduced and with each turning of the dial governments will face choices.** As governments contemplate tapping into international and national capital markets to fund REDD+ efforts, they must ask themselves ‘Is a sovereign bond issuance a realistic and cost-effective option for us?’. ‘Do we have the institutional infrastructure in place and the necessary signs of commitment from international investors to form a REDD+ company?’. For some, the answer to these questions will be ‘no’, however almost all are likely to find that there is international interest in buying offsets and receiving funding that way.

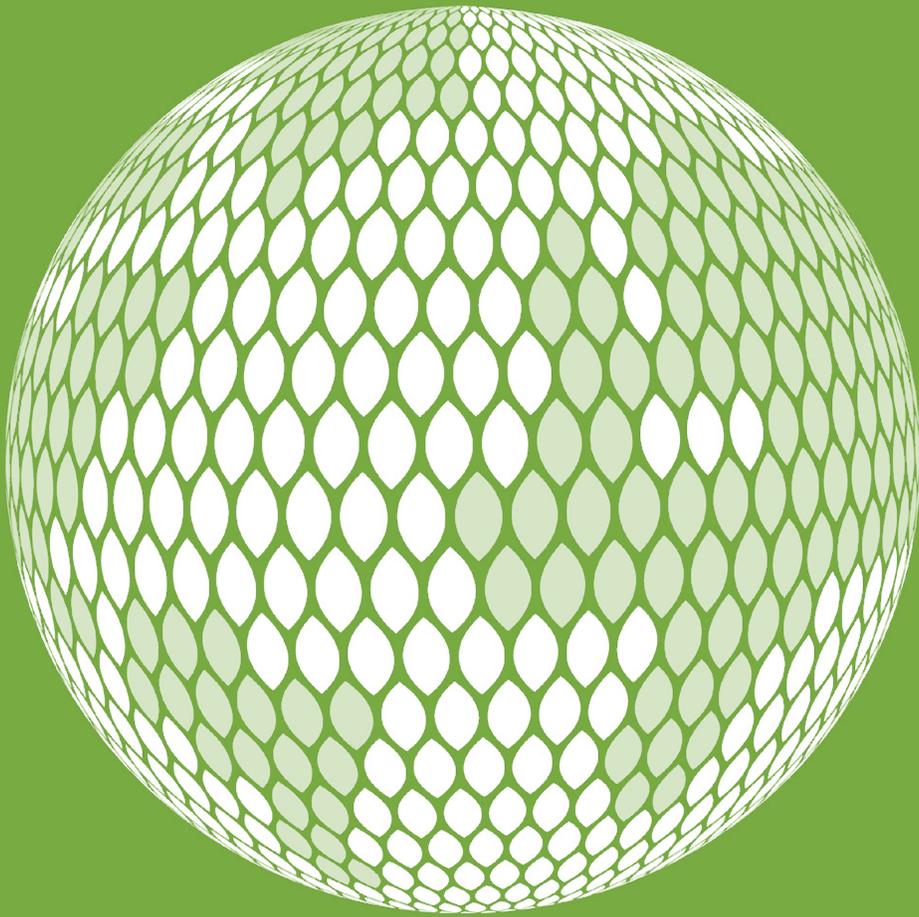


**Each turning of the dial represents an opportunity to engage more deeply with the private sector, not just by raising capital but by incentivizing behavior and ultimately inviting the participation of carbon project developers.**

As a country considers how to best change and engage private sector behavior on the ground, it will ask itself ‘what are our policy options: do we tax, mandate, provide incentives or all of the above?’ Fundamentally, a government wants to find the combination of policies which best enlist the support of all actors to reduce their emissions. Do we have the industrial base and regulatory strength to create a cap-and-trade system which can drive demand for national forest-based offsets? And how much autonomy do we give the private sector in pursuing forest conservation activities? Do we welcome ‘boots on the ground’ support – like in models 7, or prefer to involve the private entity merely as implementers of regulations or compensatory schemes – such as models 3 and 6?

**We close this paper by proposing that governments also keep in mind the following caveats:**

- **All private sector appetite is not created equal:** The interest of the private sector in REDD+ is by no means guaranteed and will depend on context and motivation. Is the private entity attracted by the potential to make money or by the opportunity to support Corporate Social Responsibility (CSR)/supply chain initiatives? A project developer may not be interested in participating unless it is permitted to directly sell offsets on the international markets. The potential high-reward, high-risk of the project development models in 7 will suit some while others will prefer to buy offsets once they are verified and registered or receiving a guaranteed compensation– both involving very little risk.
- **Realistic expectations:** Governments would benefit from consulting with key stakeholders to design a system that meets its needs but also incentivizes the private sector. A country may be blessed with a wide ecosystem of potential participants or may have a very limited choice of partners. Some countries may have a strong presence of international commodity producers who can help increase forest cover through improved supply chain management and a history of private carbon project developers ready to deploy. Others experience very limited interest from abroad, or limited prospects for developing local carbon markets which can create the demand necessary for a flourishing domestic offset system. A REDD+ strategy would have to reflect this reality to build the most relevant pipeline of options.





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Architecture for  
REDD+ Transactions

