

A satellite image of a tropical coastline, showing a mix of green land and blue water. The image is partially obscured by a dark green overlay that covers the lower two-thirds of the frame. The text is centered on this overlay.

# A comprehensive guide to jurisdictional REDD+



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# Executive Summary

**REDD+ credits are generated from activities that prevent deforestation and forest degradation. This is the largest category of credits in the Voluntary Carbon Markets (VCMs), and is currently seeing a fundamental shift in how these activities are undertaken. REDD+ is moving away from a standalone project approach and moving towards so-called ‘jurisdictional REDD+’.**

This transition is not simply the introduction of a new type of carbon credit, but represents an inflection point in the market for 4 reasons:

- Jurisdictional crediting presents the opportunity for massive scale issuances, flooding the market with supply.
- New approaches to baselining and additionality address some of the fundamental concerns about REDD+ credit quality and project design.
- Issuances at the national or subnational scale require a central role for governments and politics.
- These approaches are likely to service a lot of the demand for credits under the Paris Agreement’s Article 6.2 mechanism, creating direct competition between governments and corporates.

For these reasons, JREDD+ is one of the biggest changes imminently approaching voluntary carbon markets. As with any change, it presents both opportunities and risks.

JREDD+ demand is already large and is only likely to grow in the coming years. This will continue to be driven by market initiatives and regulators placing ever higher scrutiny on credit quality and the integrity of corporate climate claims. Forest conservation is seen as a ‘no regrets’ choice for companies to invest in climate impacts beyond their own value chains. The first mover advantage could be particularly large as demand is likely to outstrip supply for some time while JREDD+ scales.

Conversely, failure to understand and act on this transition opens market players to risks, and not only missed opportunities. JREDD+ is a nuanced topic and as this resource explores, not all units for sale on the market are of equal quality or value. Understanding the key concepts of JREDD+ and how this links to credit quality and climate claim integrity will be ever more important as the VCMs and climate strategies move towards becoming regulated.

## A user’s guide

**You’re welcome to read this cover to cover, but we’ve also designed this to be used as reference material, so each section is stand-alone.**



# 1. REDD+ 101



# What is REDD+?

**REDD+, or Reducing Emissions from Deforestation and forest Degradation, refers to activities that reduce greenhouse gas emissions from deforestation and forest degradation, alongside wider activities including sustainable management of forests, and the conservation and enhancement of forest carbon stocks.**

The sale of REDD+ credits raises valuable funds to support the protection of forests and the many co-benefits that come with this to both people and biodiversity. However, REDD+ has not yet achieved its full potential as a large-scale funding mechanism to pay tropical forest countries and communities for avoided forest emissions. In part, this is due to the challenges that traditional, project-based approaches to REDD+ have faced and the reputational damage this has caused. It is hoped that the new approaches to REDD+ discussed in this report will address these challenges.

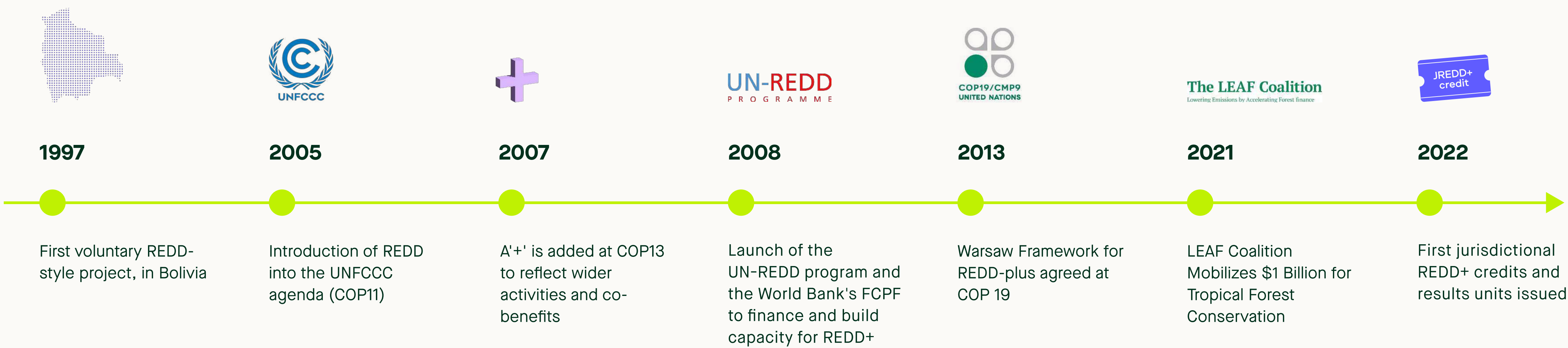
The term ‘RED’ (reducing emissions from deforestation) first came to prominence in UNFCCC talks in 2007. Since then another ‘D’ (reducing emissions from forest degradation) and a ‘+’ (to represent the wider activities described above, as well as the co-benefits of forest protection) have been added.

REDD+ is now a key component of UNFCCC discussions. REDD+ was excluded from the Clean Development Mechanism, the main market-based mechanism under the Kyoto Agreement. However, the Paris Agreement, successor to the Kyoto Protocol, explicitly recognizes the importance of REDD+ in Article 5, and REDD+ will also be included in market-based mechanisms under Article 6 (see page 27)..

Although REDD+ was originally a UNFCCC term, it has also been adopted by the voluntary carbon markets (VCMs). This report explores REDD+ in the context of VCMs, although these are increasingly overlapping with compliance markets and the UNFCCC.



# A history of REDD+



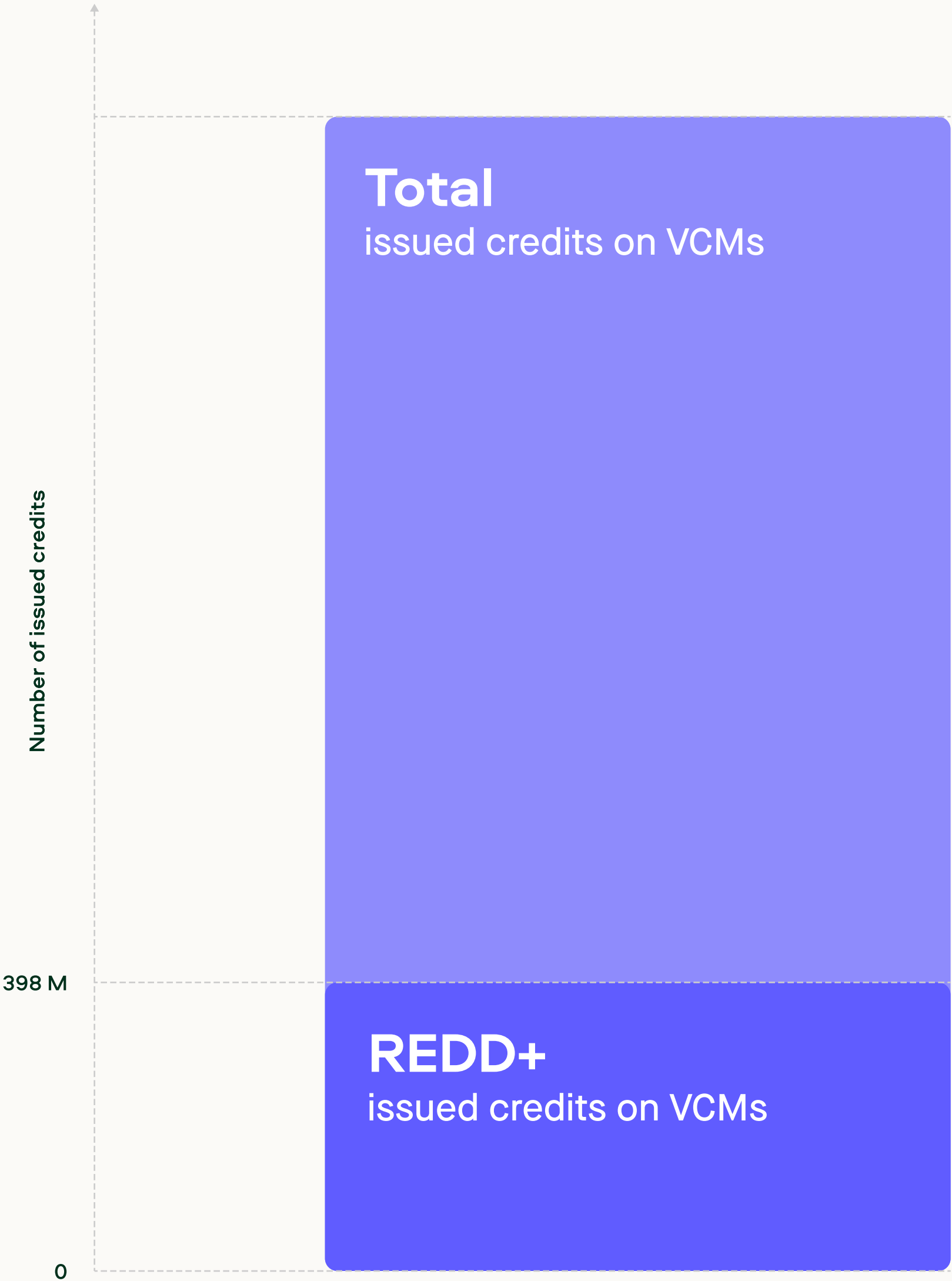


# Why do we need REDD+?

There is no route to limiting global temperature increases to 1.5°C, or even 2°C, without halting emissions from forest loss. Apart from aggravating the climate crisis, forest loss poses serious threats to biodiversity and affects the livelihoods of an estimated 1.6 billion people who depend on forest resources.

Taking action to protect forests is an urgent priority, but requires significant sums of money, hundreds of billions of dollars more than we currently spend each year. However, it is still relatively a very cost-effective way of mitigating climate change.

REDD+ activities are currently paid for either by results-based financing, usually from national governments or multilateral organizations, or through revenues from sales of credits to carbon markets. As of 2022, over 398 million REDD+ credits have been issued on VCMs, representing a quarter of all voluntary credits ever issued.





# REDD+ projects across the world

2%

Central America  
6 Projects  
8,253,263 Issued Credits

40%

South America  
44 Projects  
155,964,595 Issued Credits

29%

Sub Saharian Africa  
19 Projects  
115,306,225 Issued Credits

29%

Asia-Pacific (APAC)  
9 Projects  
117,800,424 Issued Credits

Number of projects  
high low

Source: Berkeley Voluntary  
Registry Offsets Database  
(March 2022)



# The challenges of REDD+

Our in-depth analysis of REDD+ projects currently on the market shows that many REDD+ credits represent verifiable, additional, and long-term carbon emission reductions, with measurable co-benefits. However, there are also a number of projects which fall short.

Why are there poor quality credits in the market? Largely it's because developing REDD+ projects is an incredibly complex task.

Firstly, the rights of local communities and indigenous people who live in and around the project area must be respected. It is not always clear who has rights to the land, and the extent to which project revenues are shared among the various stakeholders is often contested. Clearer frameworks and safeguards to guide this have been developed as REDD+ has become more established, but implementing these effectively takes time, money, and expertise.

Secondly, it has historically been very hard to monitor remote forests and the carbon stored in them. This means credit buyers have not been able to reliably verify that the emissions reductions they have paid for have really happened. New technologies deployed by companies such as Sylvera, including satellite data, machine learning, and lidar scanning, have improved our ability to monitor forests and the carbon stored in them. But these technologies are expensive and require significant expertise, meaning they are not always accessible.

Thirdly, working out how many REDD+ credits are allowed to be issued is an incredibly complex process that requires a number of assumptions and is dependent on factors far beyond just the project area. These challenges are explored in more detail in chapter 2.

As this final category of challenges is more fundamental to the nature of REDD+ projects, it has prompted interest in a new approach: jurisdictional REDD+. This guide digs deep into what this term means, how it helps address the problems with project-based REDD+, and what the future holds for REDD+.



Sylvera's field team using LiDAR to scan carbon stored in forests



## 2. Different approaches to REDD+



# Project-based REDD+

Until this year, all REDD+ credits on the VCMs have been issued by individual projects. This is when REDD+ activities are focused on a defined area of forest (sometimes small, sometimes hundreds of thousands of hectares).

Individual projects have been a successful approach to get REDD+ credits to market. However, there are fundamental issues with a project-based approach to REDD+ that make it a challenge to completely prevent poor quality credits.

An integral step in the development of a REDD+ project is calculating how many credits can be issued. 1 credit represents 1 tonne of CO<sub>2</sub>e emissions avoided, so the project developers need to work out how many tonnes of emissions have been avoided as a direct result of their project. A simple concept perhaps, but actually finding this number is very, very far from simple. Amongst other things, we need to know:

1. What would have happened without the project? The challenge: this is a hypothetical scenario, so it must be a best guess based on historical trends, what is happening nearby in similar reference areas, and the natural and human threats to the forest. We call this counterfactual the baseline. Unreliable baselines are one of the most common contributors to poorly rated REDD+ projects that Sylvera analyses.
2. Exactly how many trees are still standing, and how much carbon they store. Monitoring, reporting, and verification (MRV) of forest carbon has historically been extremely challenging, and relied on sample-based approaches, where random areas of the forest are selected and the trees there are meticulously counted and measured, and basic equations based on the diameter of tree trunks.
3. How long will these trees remain standing and storing carbon? This is referred to as the permanence of a carbon credit. It is a critical component of credit quality, as paying to protect a forest this year will have minimal positive impacts for the climate if it burns down in a wildfire next year.

Making reasonable estimates of these factors is an incredibly complex process. As REDD+ projects have become more established, effective solutions to some of these challenges have been developed.

For example, the challenges of MRV (point 2) are being successfully addressed through the effective deployment of emerging technologies, including high resolution, multi-model satellite imagery, machine learning, Lidar, and real-time data transmission. Sylvera contributed to a recent World Bank report exploring digital approaches to MRV (dMRV).

The development of buffer pools, where a percentage of credits from each project are kept aside in case of forest loss or degradation, has also been a partially effective solution to concerns around permanence (point 3).

But there has still been no systemic solution to avoid inaccurate baselines, or leakage of deforestation from the project area to other areas of the forest. These are two of the issues that proponents of jurisdictional REDD+ hope it can address.

**If you're interested in digging deeper into the intricacies of project-level REDD+, check out our REDD+ White Paper.**

[Download](#)



# Jurisdictional REDD+

Jurisdictional REDD+ is not a new idea. However, until recently, jurisdictional approaches to REDD+ have not been used to issue carbon credits to the VCMs. Instead, it has been used as a basis for results-based finance agreements, either between countries or with multilateral organizations such as the World Bank (e.g. through their Forest Carbon Partnership Facility).

The fundamental difference to project-level REDD+ is that all the forest in a national (i.e. whole country) or subnational (e.g. state or province) jurisdiction must be considered when setting a baseline and monitoring deforestation. With the advent of remote sensing in recent years, this can realistically be done to a high level of accuracy.

**The big advantages of jurisdictional approaches to REDD+ are:**

**Reduced risk of inflated baselines and over-crediting**

By considering deforestation across the whole jurisdiction, using methodologies that must be aligned with international reporting standards, the risk of baseline deforestation being misrepresented is lower. This helps ensure that all credits issued genuinely represent a tonne of CO2 prevented from reaching the atmosphere.

**Leakage monitoring**

Leakage is when deforestation simply moves from inside the project area to another area that is not being monitored, with no overall reduction in deforestation. Monitoring deforestation across a whole jurisdiction means that displaced deforestation will still be detected and accounted for.

**Economies of scale**

Investing in accurate MRV is expensive and can be a barrier to developing REDD+ programmes. National or subnational coordination allows more efficient use of resources, and can also improve access to upfront sources of financing.

**Incentivizing changes to policy and regulation**

Because the programmes are state - or nation-wide, and overseen by the government, jurisdictional approaches directly incentivize using tools of politics, policy and regulation to tackle forest emissions, going above and beyond what is feasible for project-based REDD+.

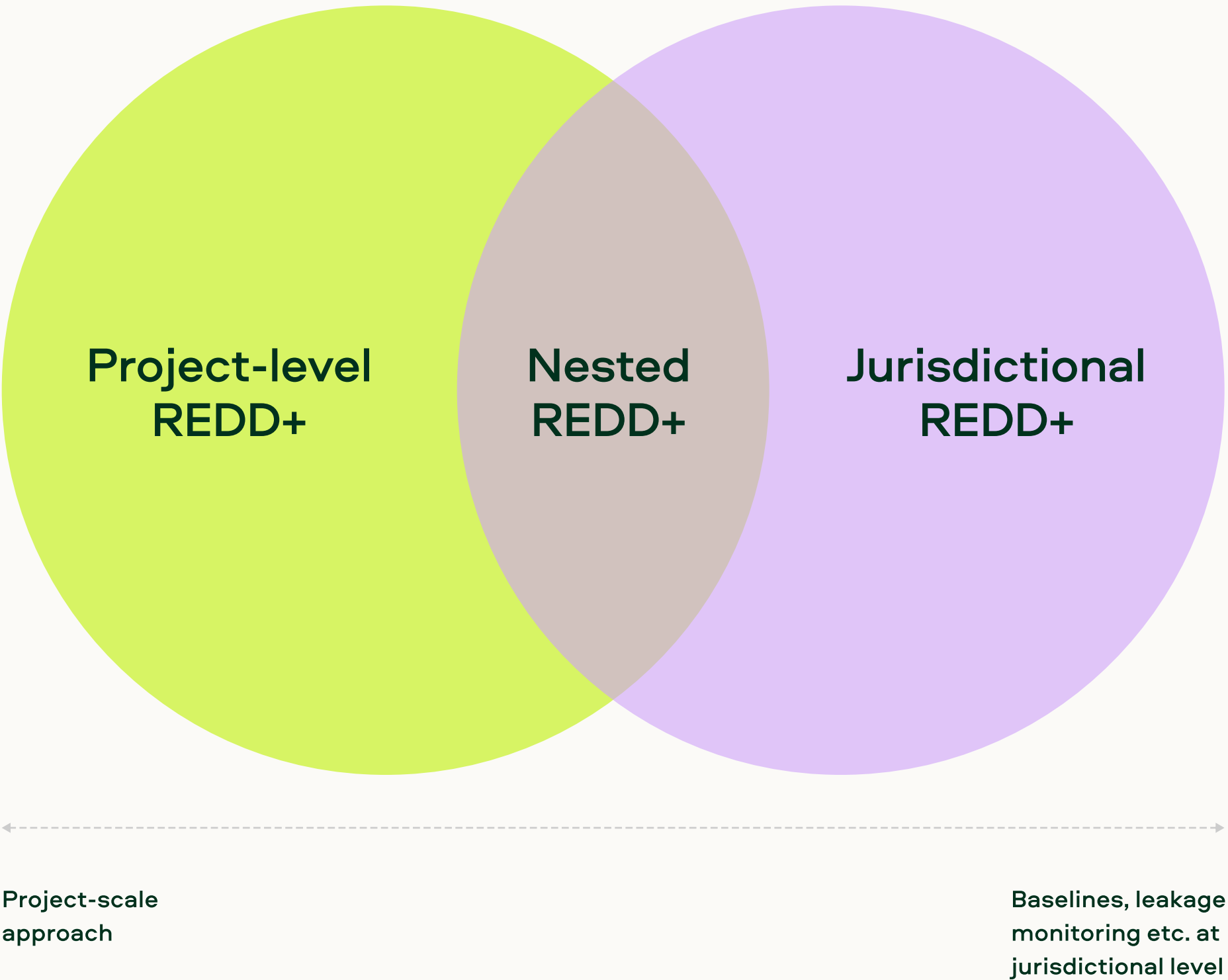


# Nested REDD+

Nested REDD+ projects are aligned with jurisdictional baselines and deforestation monitoring. Essentially, this is an intermediate step between the two approaches previously discussed, and may offer a practical solution to the criticisms of project-level REDD+ while smoothing the transition to jurisdictional approaches.

Nesting is still in its infancy and does not have a widely accepted definition or approach when implemented. How a country structures REDD+ nesting approaches is linked to its carbon ownership rights. While many countries are willing to transfer the right to generate mitigation outcomes/carbon credits to private entities, this is not always the case.

Hence, countries' nesting approaches will differ widely on the degree of autonomy that the individual projects have outside of the jurisdictional approach. Some countries might require individual projects to transition fully into a jurisdictional REDD+ program with no separate accounting or crediting system. Others might allow individual projects to keep crediting independently. Several countries are including nesting approaches in their REDD+ strategies.



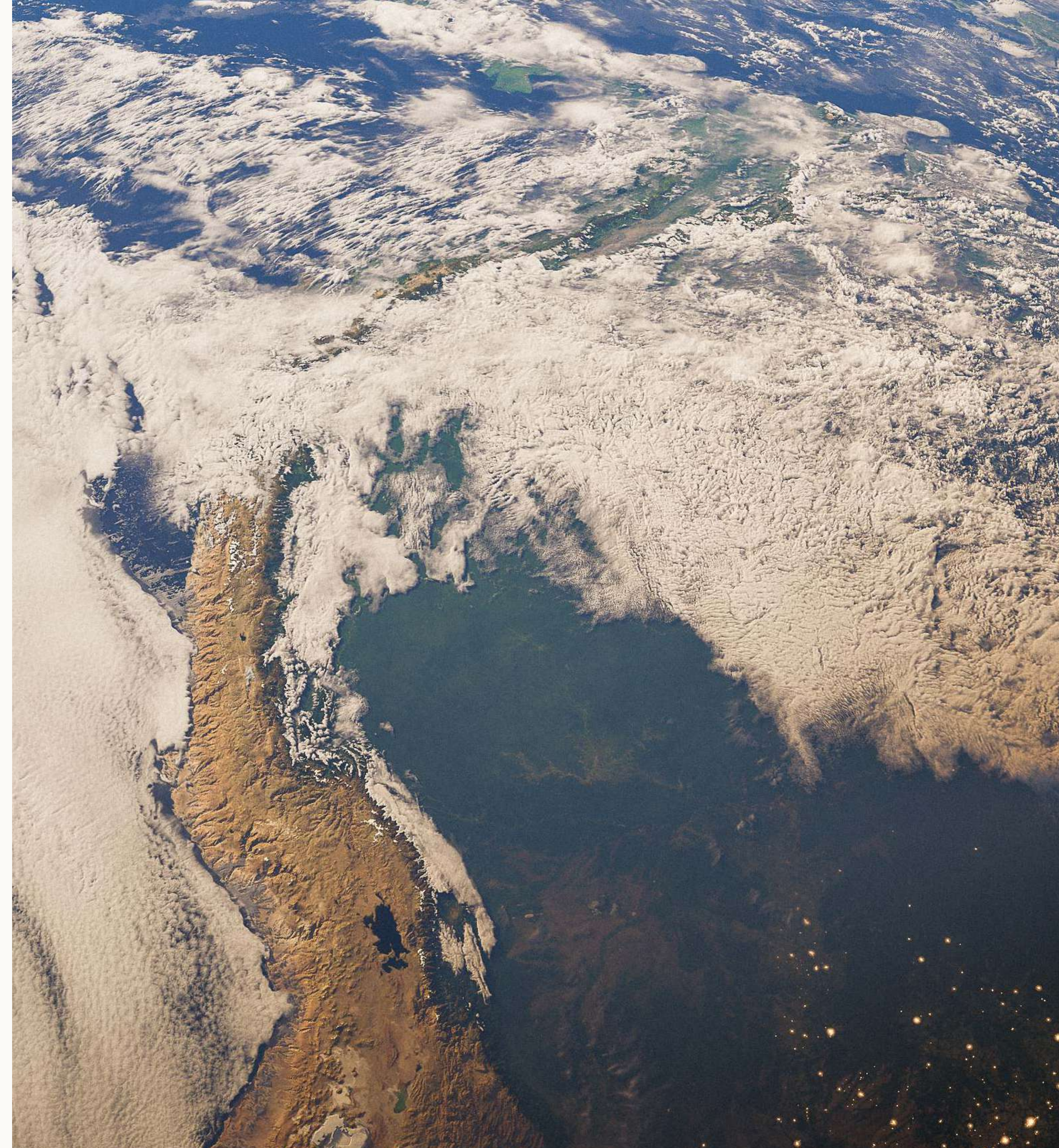


# The future of REDD+

A move towards jurisdictional and nested REDD+ certainly seems to be the direction of travel for the market. For example, Verra's proposed updates to their avoided deforestation methodologies adopt an approach aligned with nesting, and the IC-VCM explicitly considers jurisdictional approaches in its Assessment Framework.

A big driver of this move is the international policy context. Unlike the Kyoto Protocol, the Paris Agreement expects all participating countries to track their national greenhouse gas emissions and commit to targets. Countries set mitigation and adaptation national goals (called Nationally Determined Contributions or NDCs) and establish plans to achieve them. This is new for developing countries, which happen to host most of the world's tropical forests.

Under this new scenario, developing countries have become much more interested in using all available options to meet their NDCs. This includes emissions reductions from existing and future individual REDD+ carbon projects, and so some host countries are designing ways to integrate them into a broader jurisdictional program.





# Comparison of REDD+ approaches

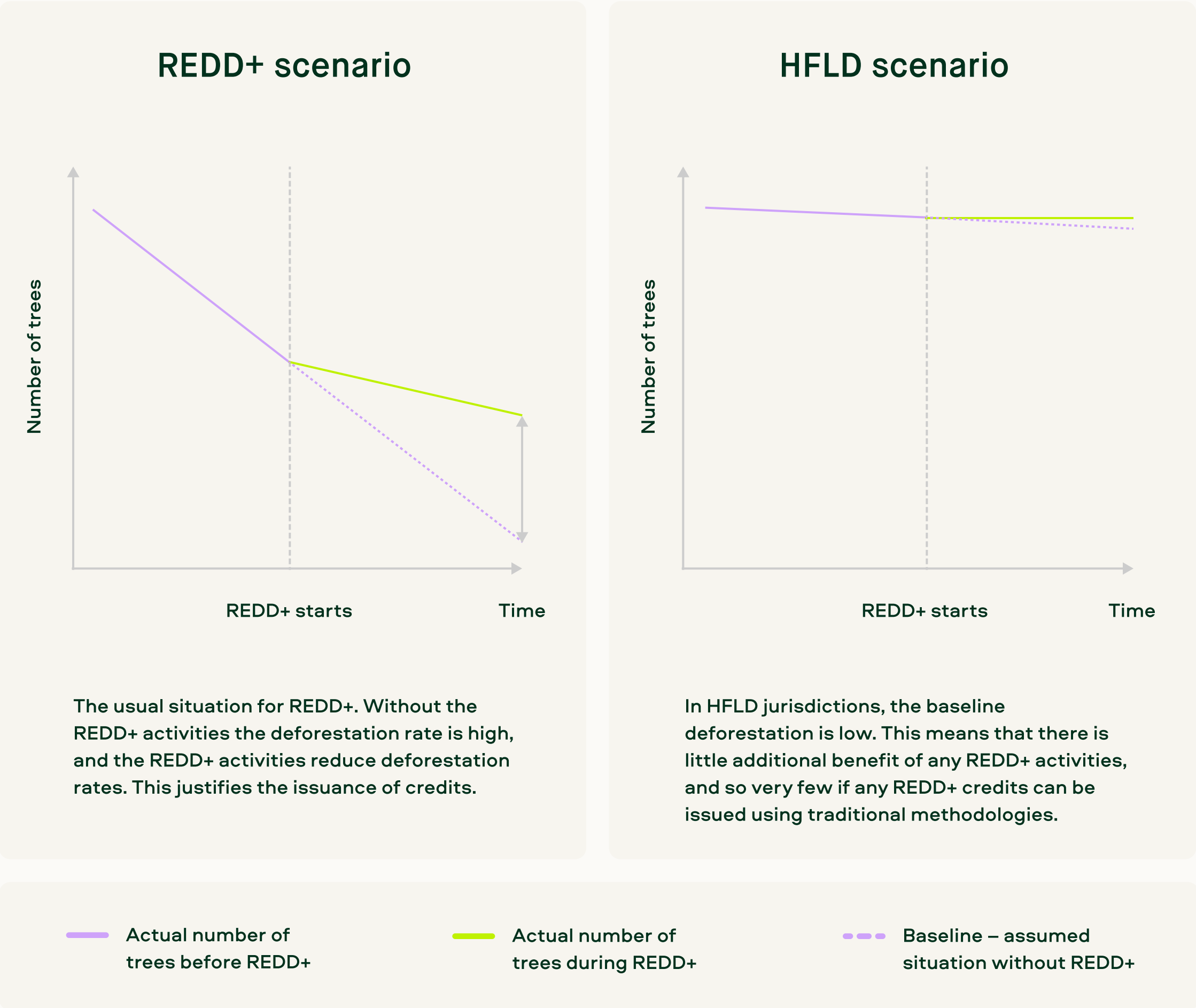
	Project-level REDD+	Nested REDD+	Jurisdictional REDD+
Scale	Defined area of forest	Defined area of forest	Entire jurisdiction (national or subnational)
Baseline	Independently set for that specific area	Variety of approaches	Average deforestation across the whole jurisdiction, aligned with international reporting standards
Framework	Independent standards (e.g. Verra) or national methodologies	Independent standards (e.g. Verra JNR)	To date mostly national or international frameworks (e.g. World Bank's FCPE); Independent standards emerging (e.g. ART TREES)
Funding	To date, mostly through VCMS	Nested projects are only beginning to be developed	To date, mostly result-based financing; Imminent plans to access VCMS
Pros	<ul style="list-style-type: none"><li>• Often easier to implement smaller scale</li><li>• Established track record</li><li>• Local context and needs considered</li></ul>	<ul style="list-style-type: none"><li>• Better monitoring of leakage</li><li>• More reliable baselines</li><li>• Easier transition than implementing jurisdictional approaches</li></ul>	<ul style="list-style-type: none"><li>• Economies of scale e.g. MRV costs</li><li>• Leakage automatically considered</li><li>• More reliable baselines</li><li>• Land rights can be more clearly addressed</li></ul>
Cons	<ul style="list-style-type: none"><li>• Baselines often inflated</li><li>• Hard to monitor leakage</li></ul>	<ul style="list-style-type: none"><li>• Methodologies yet to be proven</li><li>• Ignores local drivers of deforestation</li></ul>	<ul style="list-style-type: none"><li>• Complex to manage</li><li>• Challenging to obtain enough samples to set baselines</li><li>• Benefit sharing risks</li></ul>



# HFLD - High Forest Low Deforestation

Jurisdictional REDD+ also offers new opportunities to countries that have not previously been able to access climate finance through REDD+.

HFLD, or high forest low deforestation, jurisdictions like Gabon or Guyana have very high forest cover as a result of historically low rates of deforestation. These low deforestation rates are great for the climate and biodiversity, and should be maintained. But it also makes it much harder for these countries to issue and sell REDD+ credits. Why? Because, as discussed on page 11, calculating the number of credits that can be issued relies on a baseline deforestation rate that is then reduced through REDD+ activities. If deforestation was low to start with, then it's very hard to achieve any improvement to justify the issuance of REDD+ credits.





# HFLD - High Forest Low Deforestation Continued

HFLD jurisdictions argue that it is unfair that as a result of their past efforts and success in preventing deforestation (thereby missing out on the economic opportunities of deforestation) they now cannot access climate finance through REDD+ credits. A lack of historical deforestation doesn't necessarily mean that forests in HFLD jurisdictions face no threats today. And as long as these forests are still intact they are storing and sequestering carbon that would otherwise be released into the atmosphere and worsen climate change.

For this reason, some jurisdictional REDD+ standards include separate methodologies for issuing HFLD credits that do not rely on deforestation baselines to calculate the permitted issuance.

There is an ongoing debate around the nature of claims that buyers of HFLD credits can make. For example, HFLD credits' different approach to additionality means that many argue they cannot be held as equal to other credits in the market and should not be used for offsetting. However, the inclusion of ART TREES HFLD credits in CORSIA, seen as shorthand for recognizing credit quality by many VCM players, suggests a measure of legitimacy in the market. The issue of claims and credit quality is a hot one in the VCMs, and HFLD is just one area where it is too soon to tell what the eventual consensus will be.

Pros	Cons
Forest in HFLD countries accounts for >10% of tropical forest carbon and a disproportionate amount of biodiversity	HFLD credits do not meet the usual criteria for additionality - it's very hard to prove that income from credits is needed to ensure that forest is protected
HFLD credits reward historical forest protection and avoid perverse incentives of requiring high baseline deforestation	There are other mechanisms to reward HFLD jurisdictions e.q. results-based finance or payments for ecosystem services, which some argue are more appropriate than selling HFLD credits in VCMS



# 3. JREDD+ standards & approaches







# An overview

In the VCMs, standards set and enforce the requirements for carbon projects to issue credits. There are several international standards operating in VCMs, the best known of which are Verra and Gold Standard, and many more standards operate at a national level.

These standards fulfill a number of roles: setting the general rules, procedures and specific methodologies to issue credits, regulation, and validation and verification of projects. Standards are often linked to registries, which provide a platform to list and sell carbon credits issued by that standard.

A number of organizations have started to provide these services for JREDD+. Some are fully blown standards, which include detailed methodologies to follow, while others only provide higher-level guidance. This chapter reviews the different standards and adjacent organizations which currently issue JREDD+ credits.

					
Project Type	Project REDD+	✓	✗	✗	✗
	Nested REDD+	✓	✓	✓	✗
	JREDD+	✓	✓	✓	✓
	HFLD	✗	✓	✓	✓
Market figures	Number of projects/ programs	> 1,800 projects	15 programs	15 programs	5 programs
	Total credits to date (MtCO <sub>2</sub> e)	> 900	33	2.6	9
	JREDD+ credits to date	0	33	2.6	9
Acceptance	ICROA endorsed	✓	conditional	✗	✗
	CORSIA eligible	Only some methodologies	✓	Partially approved	✗ Rejected twice



# Verra Jurisdictional and Nested REDD+



Verra's Verified Carbon Standard (VCS) is the largest standard in VCMs and has led to the issuance of project-level REDD+ credits. Their Jurisdictional and Nested REDD+ (JNR) Framework was one of the earliest methodologies for integrating REDD+ projects with jurisdictional-level approaches to carbon accounting and wider policies. The guidance is now on its fourth iteration, having been in development since 2012.

VCS JNR covers four different scenarios, ranging from a REDD+ project nested in a jurisdictional baseline to a fully jurisdictional programme where credits are only issued at the national (or subnational) level.

There are yet to be any credits issued through VCS JNR, but this is likely to change in the near future. Additionally, all other VCS REDD+ methodologies were recently updated and will require alignment with jurisdictional-scale baselines and reference areas, meaning all VCS REDD+ projects will move much closer to being nested REDD+ over the next couple of years. Currently, VCS JNR methodologies do not allow for the issuance of HFLD credits, but this is believed to be in development by Verra.

Verra's VCS methodologies are generally well regarded by the market, although there are some notable examples of poor quality projects using Verra methodologies. VCS is approved by ICROA and JNR credits using certain approaches can be used for CORSIA.



# ART TREES



ART TREES, or the Architecture for REDD+ Transactions - The REDD+ Environmental Excellence Standard, is a standard specifically for jurisdictional REDD+. ART TREES rose to prominence as it is the standard used by the LEAF Coalition, a group of national governments and large companies who together have pledged to spend over \$1 billion on tropical forest conservation.

To date, 15 jurisdictions have listed programs with ART TREES, but the only issuances as of January 2023 have been 33.47 million HFLD credits from Guyana. Issuances are expected to increase rapidly, as jurisdictional projects with a combined total of 665 million credits are currently listed among approved LEAF Coalition host jurisdictions.

As a new standard that is not yet fully operational, ART TREES is yet to be fully endorsed by ICROA and is currently only conditionally endorsed until it has sufficient registered projects and issued credits. All ART TREES credits are eligible for CORSIA. This has received pushback from some market players who argue that ART TREES HFLD credits should not be eligible (see page 18). The adoption of ART TREES by the LEAF Coalition is a strong endorsement by all members of the Coalition including the governments of the US, UK, South Korea, and Norway.



# World Bank Forest Carbon Partnership Facility



The Forest Carbon Partnership Facility was established by the World Bank alongside a global partnership of governments, the private sector, civil society and indigenous groups as a climate financing mechanism, mainly for results-based payments for forest conservation. There are two distinct funding mechanisms, the second of which is called the Carbon Fund and delivers payments for REDD+ activities implemented through jurisdictional programs. Most of this funding is non-market based, but a small proportion (~5%) is used to buy carbon credits issued by jurisdictional REDD+ programs supported by the FCPF.

To date, only 2.62 million FCPF credits have been issued. It is not yet clear if these credits will be CORSIA eligible, as currently they are partially approved subject to some changes. The FCPF is also not ICROA endorsed.



# REDD.plus



REDD.plus is a platform for countries to sell REDD+ Results Units (RRUs). RRUs are issued by a sovereign government and results are assessed following the UNFCCC REDD+ guidance. Thus, REDD.plus is not a carbon standard (like the VCS or ART TREES); it is a platform through which countries can register REDD+ results and make them available to voluntary buyers.

REDD.plus was created and is led by the Coalition for Rainforest Nations, a non-profit organization based in New York that acts as a single-issue negotiating bloc in international climate negotiations, with over 50 member countries.

REDD.plus builds directly on the UNFCCC's REDD+ framework, as set out in the table below. Host countries follow the UNFCCC REDD+ guidance to account for REDD+ activities results, which is completely independent of REDD.plus. It is only at step 6 that REDD.plus comes in by creating and serializing the RRUs on a registry, which is run by IHS Markit. REDD.plus claims it will track the life cycle of each RRU from issuance to the moment in which businesses and individuals can purchase and retire RRUs on the REDD.plus platform.



# REDD.plus Continued

RRUs, like carbon credits, nominally equate to 1 tonne of CO2e reduced or removed. However, the UNFCCC REDD+ framework was designed to guide countries in measuring REDD+ results and accessing results-based payments, not to issue carbon credits, and therefore the framework misses some of the essentials to qualify as a carbon standard. Thus, RRUs should not be treated as carbon credits, nor be used for offsetting purposes.

	Carbon standards	REDD.plus
Unit	Carbon credit	REDD+ Results Units (RRU)
Methodology	Methodologies that apply to all participants and ensure baselines and results are assessed under a certain level of rigor	There is no fixed methodology, instead, the UNFCCC system through which RRUs are created gives countries the flexibility to build their own ways of measuring results.
Validation / verification	Carbon standards establish validation and verification processes carried out by approved third parties. This process ensures carbon credits represent the tCO2e of emission reduction/removal that meets the requirements of the carbon standards	The technical assessments done by the UNFCCC check the methods that countries have used to calculate their REDD+ results.
Additionality (i.e. the requirement that emissions reductions or removals associated with a credit would not have happened without that credit being produced and bought)	<p>To date the presence of additionality has been a fundamental requirement for carbon credits.</p> <p>However, it should be noted that this concept is being reassessed in the context of the new jurisdictional crediting approaches, such as through ART TREES and Verra JNR, which are soon expected to reach the market</p>	<p>No measures in place to ensure that any purchases of RRUs represent additional emissions reductions.</p> <p>RRUs may ultimately meet a new jurisdictional standard for additionality (sometimes referred to as ‘performance-based additionality’), if or when this is adopted by at least a significant part of the market. However, one key distinction between RRUs and the new generation of jurisdictional credits is that the latter can go back no more than five years, whereas Gabon’s RRU issuance goes back up to 12 years.</p>



# REDD.plus Continued

To date, the only issuances through REDD.plus have been 9 million RRUs from Papua New Guinea. However, REDD.plus is expected to begin some very large issuances in the near future. In the summer of 2022 Gabon announced that it would issue 90 million RRUs, which would equal around 20% of all credits ever issued in the voluntary carbon markets (VCMs). After receiving approval of its baseline and REDD results for the years 2010-2018, Gabon's RRUs are expected to be available on the platform shortly. Honduras, Belize and Ghana have also expressed intentions to issue RRUs.

The market reaction to Gabon's RRU issuance was initially one of surprise at the huge scale, then confusion as people got to grips with what REDD.plus actually is. Now it seems to be hardening into a view that RRUs are not carbon credits. This view was affirmed in mid-October when the Head of Markets for Xpansiv, the world's largest VCM platform, which had planned to sell RRUs, confirmed that they would not be doing so, "for technical reasons, as well as a lack of product-market fit and customer demand". However, it is worth noting that one large bank has endorsed the issuance.

At a technical level, some key bodies have also been wary of RRUs. REDD.plus is not ICROA endorsed and CORSIA declined to accept RRUs in both 2020 and 2021, noting both times that "key elements of an emissions unit program... were not in place".



## 4. Intersection with the wider market and international policy



# Article 6

Article 6 is the section of the Paris Agreement that covers carbon trading and international cooperation to meet climate goals. For a refresher on what this includes, check out our ebook [here](#).

In the biggest market mechanism established under the previous international climate accord, the CDM, REDD+ was excluded. This has led to much interest in the status of REDD+ in the new market-based Article 6 mechanisms.

## Article 6.2

Article 6.2 covers bilateral cooperation between countries. There is no fixed list of approved methodologies and so the countries agree between them on how to measure and verify the emissions reductions/removals they are trading. REDD+ is therefore an option as long as there are interested buyers. Some buying countries including Japan and South Korea have already expressed interest in REDD+ 6.2 deals, and it is likely that countries with well-established jurisdictional REDD+ programs and infrastructure will attract more deals.

## Article 6.4

Article 6.4 establishes a new centralized market mechanism to replace the CDM, with specified methodologies. Some of these methodologies will roll over from the CDM, others will have to be written. REDD+ has not been excluded, but as it wasn't in the CDM it will need a methodology to be written. This means it may take some time before we see in exactly what form REDD+ is included, for example, whether project-level, nested and jurisdictional REDD+ are all included.



# Mitigation contribution, offsetting, and corporate claims

One outcome of COP27 was the introduction of a new term: ‘mitigation contribution’. In the specific context of Article 6, a ‘mitigation contribution 6.4 emissions reduction (ER)’ is a credit generated by the 6.4 mechanism that does not have a corresponding adjustment (CA) applied. A CA means that when a credit is sold, the carbon it represents is no longer included in the selling country’s carbon accounting and is only reflected in the buying country’s carbon accounting. This ensures that there is no double counting of emissions reductions, but also means that engaging in carbon markets will make it harder for selling countries to achieve their emissions reduction targets.

Mitigation contribution 6.4 ERs has been a controversial topic, as there are concerns that credits without CAs have lower environmental integrity due to the risks of double counting. The newly adopted term, mitigation contribution, aims to reflect the fact that these credits cannot be used by the buyer for offsetting, but reflect a meaningful contribution to reducing emissions in the selling country.

It is early days for ‘mitigation contributions’ and too soon to see if it is a term that will be adopted by the wider market beyond Article 6. For example, VCM credits without CAs might also start to be referred to as mitigation contribution credits.

As regulators and industry bodies such as the VCM Integrity Initiative (VCMI) publish guidance on the climate claims that can be made by organizations and sanctions for greenwashing become more widespread, terms like ‘mitigation contribution’ are likely to become more popular. They more accurately describe what is being achieved through buying carbon credits, and are less likely to be seen as misleading.

So what does this mean for REDD+ and especially jurisdictional REDD+? Firstly, accurate language and claims are needed to scale a high integrity market and ensure ongoing demand for high quality credits, ensuring a future for REDD+. Secondly, providing a role for credits without CAs will allow large-scale issuances from jurisdictional REDD+ programs without compromising the host country ambition. Thirdly, this will feed into the ongoing debate surrounding REDD+.plus REDD+ Results Units. They are not credits and cannot be used for offsetting, but perhaps a new term like mitigation contribution will be applied to reflect how they can be used and claimed.



# What Sylvera is doing to help

Sylvera has been supporting customers in their engagement with the jurisdictional market. This has been split into 4 core offerings:

## JREDD+ Credit Ratings

Sylvera is a carbon intelligence and ratings provider. Assessing the quality of carbon credits in the voluntary carbon markets using rigorous, proprietary frameworks and high-quality data is our bread and butter. As jurisdictional REDD+ credits appear in the VCMs, we will begin rating them and adding these assessments to our platform. Check out this [white paper](#) to understand what our ratings cover and how they are calculated.

## JREDD+ Country Assessments

An evaluation of the viability, risk, and readiness of JREDD+ programs. This includes analysis of the potential impact to existing projects located in host countries.

## JREDD+ Methodology Comparison

A comprehensive analysis of each standard and its associated methodology, assessing relative quality, eligibility, and loopholes that could be exploited.

## JREDD+ Programs Tracker

An aggregated project-level tracker, giving an overview of the supply landscape and outlook. This provides buyers with the visibility required to optimize portfolio planning in line with JREDD+ issuances.



# Future predictions

What will the future look like for REDD+? Although we can't guarantee the specifics, it is clear that the direction of travel both from the demand and supply side is a move away from project-level REDD+ and towards jurisdictional and nested REDD+.

The largest standard currently issuing project-level REDD+ credits, Verra's VCS, is transitioning all its REDD+ methodologies towards nested approaches. The largest fund raised for forest protection, by the LEAF Coalition, will require jurisdictional approaches to crediting. Market initiatives such as the Integrity Council for VCMs (IC-VCM) and the Science-based Targets Initiative (SBTi) are calling out the importance of jurisdictional REDD+ in particular to protect natural carbon sinks.

Ultimately, regardless of the approach to REDD+ that is chosen, credits still need to be high quality. No one approach is a total guarantee of good quality. Although nested and jurisdictional approaches might help address some systemic risks, scrutiny is still important to ensure credits deliver on their claims. The factors that identify quality will be diverse and complex, and buyers should undertake thorough due diligence, drawing on independent ratings providers, on any credits they purchase.

**To learn more about how Sylvera can support your organization with our suite of JREDD+ products.**

Contact us



# Glossary

Term	Abbreviation	Definition
Additionality		A carbon project is additional if the emissions reductions or removals would not have occurred without revenue from the sale of carbon credits.
ART TREES		One standard that issues JREDD+ credits, see page 21.
Baseline		The level of deforestation expected if the REDD+ project had never happened.
Corresponding adjustment	CA	The accounting mechanism built into Article 6 to avoid double counting. The amount of emissions traded is subtracted from the buyer's NDC and added to the seller's NDC.
Clean Development Mechanism	CDM	The largest market-based mechanism under the Kyoto Protocol, the precursor to the Paris Agreement.
The Carbon Offsetting and Reduction Scheme for International Aviation	CORSIA	The global scheme for offsetting in the aviation sector. Inclusion in CORSIA is seen by some as a proxy for high quality credits.
Forest Carbon Partnership Facility	FCPF	A World Bank program supporting jurisdictional REDD+ preparedness and results-based payments. See page 22.
High Forest, Low Deforestation regions	HFLD	High Forest, Low Deforestation regions. See page 16.
International Carbon Reduction and Offset Alliance	ICROA	A respected voice on the quality of carbon standards.
Monitoring, reporting, and verification	MRV	The multi-step process of calculating and checking the emissions reductions achieved by a REDD+ project.
Permanence	OMGE	How long the carbon dioxide emissions avoided by the REDD+ project will be kept out of the atmosphere.
Reference area		An area of forest nearby but outside a REDD+ project, with similar deforestation threats, that can be used to help model the baseline.



# Glossary

Continued

Term	Abbreviation	Definition
The Kyoto Protocol		The first major international climate-related treaty signed as part of the UNFCCC in 1997 and in force from 2005-2020.
The Paris Agreement		The latest UNFCCC treaty, agreed in 2015 at COP21 to replace the Kyoto protocol, and implemented from 2020.
United Nations Framework on Climate Change	UNFCCC	An international treaty signed between governments, with the ultimate aim of preventing “dangerous” human interference with the climate system.
Warsaw Framework		The complete methodological and financing guidance for the implementation of REDD+ activities agreed by the UNFCCC.
6.4 Emissions reduction	6.4 ER	Carbon credit generated by the Article 6.4 mechanism.





## Who trusts the Sylvera platform?

Our customers and partners span corporate buyers, traders and exchanges. They are often large institutions who have made net zero commitments, and who are the biggest buyers of carbon credits in the market.



Contact us to learn more.

Sylvera's mission is to be a source of truth for carbon markets.

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