Carbon Markets, Forests and Rights: An Introductory Series

A set of short explainers for indigenous peoples and communities
Note: These explainers represent a preliminary response to requests from communities for information on the topic of carbon markets. They are likely to be updated based on further feedback and questions, including when it comes to practical strategies for the defence of rights in the context of carbon market developments.
Background and Introduction

For decades, indigenous peoples and their representatives have demanded that all policies, funding and initiatives aimed at addressing the climate crisis must respect and protect their rights, cultures, livelihoods and knowledge. They have insisted on being treated as central actors – and as rights holders – in the design and implementation of climate solutions.

Indigenous peoples have historically been particularly active in trying to influence climate policies that relate to protecting forests. Such policies are often referred to by one catchphrase: Reducing Emissions from Deforestation and Degradation, ‘REDD+’ for short. ‘No Rights, No REDD+’ has become a famous advocacy slogan across the world.

In the past few years, a topic that has rapidly been gaining attention in climate discussions at all levels is ‘carbon markets’. Some of these discussions concern the role of forests in these markets, and whether carbon markets can bring in finance to pay for REDD+ activities.

Box 1: What is a carbon market?

What carbon markets are, how they work, and what they may mean for indigenous peoples’ rights is the focus of these explainers and is discussed in more detail throughout the document. This includes explaining the technical terms often used to talk about these markets, which you and your community may find strange or unfamiliar. These terms are discussed in Explainer 2.

At the most general level, a carbon market is a (non-physical) market where carbon credits are bought and sold. A carbon credit represents one ton of carbon dioxide (CO2) (or an equivalent amount of another greenhouse gas) that, it is claimed, is being saved from entering the atmosphere or is being removed from the atmosphere. One way to think of a carbon credit is as a piece of paper that symbolises this saving or removal of CO2. Carbon credits can be bought and sold for money.

Many indigenous communities around the world are currently considering what carbon markets might mean for them. The views on this vary widely. Some groups have chosen to completely reject and resist carbon markets. Others have chosen to engage with them on certain terms, including because they feel the money or other benefits generated through these markets can help them further their own priorities for the future. Many indigenous communities have not made any decisions about what they think. They have expressed that they need more information about carbon markets that can help them think this through, but the technical and complex language around the topic makes this difficult. This short series of ‘explainers’ is a first step in responding to this demand for clearer information. The explainers focus specifically on the link between carbon markets, forests and indigenous peoples’ rights.

b This does not mean that non-forest projects and programmes that create credits to be sold in carbon markets cannot also involve indigenous peoples or have an effect on their lives and rights.
Purpose of these Explainers

The goal of these explainers is to support indigenous peoples and communities to make informed decisions in relation to carbon markets. They explain key terms and ‘carbon market jargon’, introducing what carbon markets are and how they function. They also set out some of the key concerns around carbon markets and introduce the potential benefits and, especially, risks that these markets can entail for indigenous peoples and communities. They are intended as an introduction and are not a complete guide to carbon markets.

Since the information that communities have access to about carbon markets is often provided by actors who are proposing carbon credit projects or programmes in their lands or territories (such as NGOs, companies or the government in their country), communities may hear more about potential benefits than about potential risks. To balance this, these explainers put more emphasis on the potential risks, and critiques, of carbon markets. They also highlight some of the important questions that your people and community may want to think through in relation to carbon markets. However, these explainers do not aim to tell your people and community how they should respond to carbon markets. That is a decision for you as a collective to make.

Finally, while focusing specifically on indigenous peoples (as they self-define) and their rights as protected in international human rights law, the explainers may also be of interest to other peoples and communities that do not identify as indigenous, but who hold lands collectively and in accordance with their customary tenure systems and laws.

Structure

These explainers do not have to be read in the order they appear. If you as a reader are interested in understanding what carbon markets can mean for your community, rather than delving into the details of carbon cycles and carbon credits, you can jump straight to Explainer 3.

Explainer 1 introduces key concepts that are essential background to understanding carbon markets. It introduces what climate change is, what the carbon cycle and carbon dioxide is, and the link between carbon dioxide, forests and climate change.

Explainer 2 outlines what carbon markets and carbon credits are, and provides a brief introduction to why these markets are developing and how they function.

Explainer 3 focuses on indigenous peoples’ rights and carbon markets. It highlights some of the particular risks that carbon markets pose to indigenous peoples and communities. It also highlights key questions communities should ask themselves as they consider how to engage with or respond to carbon markets.

Explainer 4 provides an overview of the key environmental critiques and concerns around carbon markets.

Explainer 5 provides a short introduction to ART-TREES. ART-TREES is an institution and standard that is involved in ‘certifying’ carbon credits and that is gaining a lot of attention internationally.

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Many of the questions that communities would likely want to consider in relation to carbon markets will be similar for other nature markets (i.e., other markets selling the gifts that nature provides us with, which often in such markets are referred to as ‘ecosystem services’).
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Endnotes


d Publications of the Global Justice Clinic do not purport to represent the institutional views of NYU School of Law, if any.
Climate Change, Carbon Cycles and Forests

Our surroundings are changing. The winds blow less, they blow more. Rain comes more frequently and with greater force than before, or it does not rain for far too long. Over the past 150-200 years, human activity has upset the fine balance in the complex web of relationships between the sun, the soil, the oceans, the rivers and other waterways, the forests and the countless lifeforms on Earth. Humans are part of these relationships, and we need them to function harmoniously. When they do not, the consequences can be devastating. Food fails to grow or is destroyed by floods or drought. Wells and rivers dry out. Animals, birds and insects cannot be found where they normally are. Because of this, people also increasingly have to move. Scientists tell us this is happening because of climate change and say that the climate is changing because humans are letting too much carbon dioxide into the sky (often they use the word ‘atmosphere’ instead of ‘sky’).

Box 2: What is climate change?

Climate is the term used to describe weather patterns in a place over a long period of time. For example, many tropical climates are hot and humid with a lot of rainfall, while many temperate climates are cooler with cold winters. Climate change refers to the changes in the world’s climate patterns that we are experiencing and will continue to experience; for example, changes in how hot it is and how much it rains. These changes have serious impacts on life on Earth. The climate is changing because of human activity. In the past approximately 150-200 years, humans – especially large companies and governments in richer countries – have been extracting fossil fuels from the earth and burning them to run engines, create electricity or heat homes. This has led to the release of gases (often called emissions) that cause climate change. People and countries are not equally responsible for climate change. Over the past 170 years, the United States (US) and Europe have released almost half the total emissions that are responsible for climate change. While indigenous peoples have contributed almost nothing to creating climate change, they are among the groups in the world that are most affected by it.

What is carbon and what role does it play in climate change?

Carbon is a (chemical) element that is a very important building block of all living things on the planet. Plants, trees, animals and humans are made up of carbon. Carbon moves around between the land, the sky and the oceans and it takes on different forms. For example, when animals and people breathe, we let out some of the carbon we are made of into the sky in the form of a gas called carbon dioxide (or CO2). Usually when people talk about ‘carbon’ they are talking about carbon dioxide or CO2 specifically.
CO2 is the main gas that is causing Earth to warm.\textsuperscript{10} When it is in a gas form, we cannot see it. When plants and trees burn, they release CO2 into the sky. But CO2 is also absorbed from the sky and stored in plants, soils and oceans. For example, as plants and trees grow, they take back CO2 from the sky and use it as food to get bigger. This circulation of carbon between the soil, the oceans and the sky is known as a \textbf{carbon cycle}, and when carbon circulates in these ways, it is known as a fast or short-term carbon cycle.\textsuperscript{11}

When plants and animals on land and in the oceans die, some of the carbon they were made of is buried into the ground. Over millions of years, these once-living things are pushed deep into the earth’s surface and some turn into oil, natural gas and coal. Together these are referred to as fossil fuels. Other carbon has over time become absorbed into rocks through other processes. It takes a really long time for these forms of carbon to naturally return to the atmosphere (it can happen, for example, through a volcanic eruption). This is known as the slow or long-term carbon cycle.\textsuperscript{12}

When fossil fuels are extracted from the earth and burned – for example to generate electricity – and when forests are cut down – for example to make way for large-scale industrial agriculture – the carbon that had been stored underground or in the trees is released (emitted) into the sky. This is where the imbalance that creates climate change is coming from: all the extra CO2 in the air makes it easier for the atmosphere to trap heat. There are other gases that also have this effect and the general term that is used to describe all of them is \textbf{greenhouse gases}.\textsuperscript{13} The more greenhouse gases that are emitted into the atmosphere, the warmer Earth becomes. Even small changes in the average temperature on Earth can have huge impacts on the world around us.

**What role does reducing CO2 in the atmosphere play in addressing climate change?**

Scientists that advise governments on how to fight climate change say that greenhouse gas emissions must be reduced – by a lot. This means that we must \textbf{stop releasing} greenhouse gases. Not burning fossil fuels will be very important in this effort.\textsuperscript{14} Many scientists and governments also believe that even if countries manage to stop a lot of the gases from being released, it will still also be necessary to pull CO2 back out of the atmosphere and store it somewhere else.\textsuperscript{15} This is referred to as \textbf{carbon sequestration}. CO2 can be naturally sequestered by plants or in soil. Humans can also force CO2 to become trapped into rocks, soil and oceans through technologies, though many of these technologies are experimental and have not been tested for long-term effect.\textsuperscript{16}

\textbf{Forests play an important role in storing and sequestering carbon naturally}, because of the way plants and trees absorb CO2. Therefore, as a response to climate change, there are many efforts to protect forests (to make sure the carbon they store is not released by cutting down or burning trees) and plant more trees (so they can pull down and store CO2 from the atmosphere). Often these efforts fall into the category of REDD+ (Reducing Emissions from Deforestation and Degradation - see Box 3 below).\textsuperscript{8} It is vital to highlight that a growing body of research is confirming that \textbf{indigenous peoples are the actors that are best able to protect forests}.\textsuperscript{17} Forests managed and customarily owned by indigenous peoples and other communities with customary tenure systems are generally in better health than forests under any other type of management.\textsuperscript{18} Tenure security is an important condition that enables peoples and communities to challenge threats from external actors and to maintain respectful relationships with their lands, territories and forests, guided by their distinct cosmologies, livelihoods and traditional knowledge.

\textsuperscript{e} Even though there are many other natural ecosystems that also store carbon, in these explainers we focus specifically on forests, how they link to carbon markets and potential implications for indigenous peoples.
Box 3: The link between REDD+, carbon markets and indigenous peoples

The term ‘REDD+’ is often used to describe a broad range of activities (such as projects, programmes, national strategies, and agreements between two or more governments) that have an objective of reducing greenhouse gas emissions from deforestation and forest degradation in exchange for financial support. REDD+ is also sometimes used more narrowly to refer to the specific framework developed under the UN Framework Convention on Climate Change (UNFCCC) since the mid-2000s for how to include forests in strategies to address climate change.

A key part of the idea behind REDD+ is that ‘developing countries’ that protect their forests should be paid to do so. In 2013, countries that are parties to the UNFCCC agreed on systems and frameworks needed for forest countries to be able to receive payments for so-called REDD+ results. Since then, certain governments have supported REDD+ activities in tropical forest countries directly and through international funds, such as the Green Climate Fund. At the same time, within countries, smaller REDD+ projects run by private actors or NGOs have attracted money through the emerging ‘voluntary carbon market’ (voluntary carbon markets are discussed in Explainer 2). Today, national level efforts, and efforts within specific districts and departments within countries, are also starting to access funding for REDD+ activities from private actors (like companies) and public actors (like governments) through the voluntary carbon market. A framework and rules for an international carbon trading market regulated by the UN are also underway. However, it is still not clear whether and how REDD+ activities that seek to prevent or avoid emissions will be included in the UN market scheme (see Box 4 in Explainer 2).

Indigenous peoples across the world report differently on whether they see REDD+ as a threat or an opportunity. Some highlight that REDD+ has opened up additional political space in national policy-making and catalysed land titling processes. However, overall, 15 years of evidence from REDD+ ‘readiness’ and pilot programmes across Latin American, African and Asian tropical countries suggests that REDD+ protections for land rights and free prior and informed consent (FPIC) have often not been applied effectively. Further, evidence suggests REDD+ activities have had limited success in preventing deforestation.
The cycling of carbon

This graphic shows how carbon moves between sky, land and water. The carbon/CO2 is represented by the small bubbles. On the right hand side you see the generally naturally occurring carbon cycles (blue arrows). On the left hand side, a factory is burning fossil fuels which has been extracted from its long term storage underground. This adds extra CO2 in the atmosphere that is not all absorbed into the natural carbon cycles.

1. When animals and people breathe, we let out some of the carbon we are made of into the sky in the form of CO2.

2. When living things die, they let out some of the carbon they are made of. This happens also when trees and plants burn.

3. As plants and trees grow, they take back CO2 from the sky and use it as food to get bigger. When animals and people eat the plants they also incorporate the carbon.

4. When plants and animals on land and in the oceans die, some of the carbon they were made of is buried into the ground. Over millions of years, these once-living things are pushed deep into the earth’s surface and some turn into oil, natural gas and coal.

5. It takes a really long time for these forms of carbon to naturally return to the atmosphere. It can happen, for example, through a volcanic eruption.

6. When fossil fuels are extracted from the earth and burned – for example to generate electricity – and when forests are cut down – for example to make way for large-scale industrial agriculture – the carbon that had been stored underground or in the trees is released (emitted) into the sky. This is where the imbalance that creates climate change is coming from: all the extra CO2 in the air makes it easier for the atmosphere to trap heat.

Disclaimer: This depiction is a simplification of natural processes and is not intended as a scientifically accurate representation.
Further Resources:

  https://vimeo.com/54351554

  https://www.youtube.com/watch?v=U7DbEeBXQBQ

- Friends of the Earth International. (2016, November) Dirty energy is at the root of climate injustice [Video].
  https://www.youtube.com/watch?v=lOKvBF_4n4g
Endnotes


14 Intergovernmental Panel on Climate Change (IPCC), “The evidence is clear: the time for action is now. We can halve emissions by 2050,” IPCC Newsroom, April 4, 2022, https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/.


Introduction to Carbon Markets

A carbon market is a (non-physical) marketplace where carbon credits\(^f\) are traded. Since these markets do not exist in one geographical location, sellers and buyers are very unlikely to ever meet in person, unlike a market where people go to buy food, for example.

There are several different types of carbon markets, which use different terminology and have different rules and actors. The details are complex but in general, two main types are: (1) markets set up and governed by states (or a group of states), and (2) markets that do not have a central regulator. Before getting into what is bought and sold in carbon markets, let us discuss briefly what these different types of markets are. It may be useful for your people and community to know what types of carbon markets exist, because the type of market will determine what actors are involved, who is responsible for overseeing it, and what options your community might have to raise complaints if carbon credit projects or programmes encroach on your rights.

The first type of market is often referred to as a regulatory market. Some countries have set up regulatory markets to put limits on the amount of CO2 emissions by companies operating there. In many of these markets, each company gets an allowance telling them how much CO2 they can emit. If company A does not use its allowance, it can sell the extra allowance as a carbon credit to company B, who wants to emit more CO2 (these are often referred to as cap-and-trade markets, because there is an overall limit (cap) on emissions and the participants in the market trade between themselves to stick to that overall limit).\(^{28}\) Many regulatory carbon markets also allow for the companies that have obligations to reduce their emissions, such as company B, to buy carbon credits from actors that are not covered by the cap. Company B could then use the carbon credit to compensate for (offset) emissions it is releasing above its allowance.\(^{29}\) Carbon credits and offsets are discussed later in this explainer. In a regulatory market it would usually be the national government – or a group of governments – overseeing the market that is responsible for addressing any rights violations that are linked to the market.

The other type of market is a voluntary carbon market. Even if globally there is not really only one such overall market, it is very common to hear people talk about ‘the voluntary carbon market’. In the voluntary carbon market, those that buy carbon credits do not do so because they have an obligation to reduce their CO2 emissions, but because they choose to participate. There is no overall central regulator. Instead there are various carbon credit standard bodies who issue carbon credits – via carbon registries – that can then be bought by countries, organisations, companies or even individuals.\(^{30}\) Box 5 provides more information about the different actors involved in the voluntary carbon market. If violations of human rights occur in the voluntary carbon market, communities might be able to complain to the relevant carbon credit standard body (though in practice, these complaints processes can be hard to access or are ineffective).\(^{31}\)

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\(^f\) Depending on the type of market, other terms can also be used for what is sold, including ‘permits’, ‘allowances’ and ‘emission reduction units’. The idea behind each of these is similar.
Box 4: Article 6 markets

The Paris Agreement (2015) – adopted by most countries in the world – is a binding international agreement aimed at addressing and reducing the impact of climate change. A big focus of this agreement is to limit how much hotter the earth will get by reducing greenhouse gas emissions. Each signatory country must submit a plan to the UN explaining how they will contribute to reducing emissions. These plans are called *Nationally Determined Contributions*, or NDCs for short. For the purpose of these explainers, there is one article of the Paris Agreement in particular that is important to mention. That is Article 6.

Article 6 says that the signatory countries can ‘cooperate’ with each other to implement the climate targets they have set out in their NDCs. Article 6 establishes three different tools for cooperation. Two of these are carbon markets. One, often referred to as the Article 6.2 market, allows states who have reduced emissions more than they promised in their NDC to sell carbon credits to countries that are not able to meet their NDC targets through emission reductions in their own countries. This is a similar idea to the regulated cap-and-trade carbon market described above. The other, often described as the ‘sustainable development mechanism’ or ‘Article 6.4 market’, will allow for carbon credits generated anywhere in the world to be sold and bought by both states and private sector actors like companies, to fulfil their climate targets and commitments.

Even though there has been progress on defining the rules for these carbon markets, with an Article 6 ‘rule book’ finalised at COP26 in 2021, much still remains to be clarified when it comes to rules, methodologies and governance that will apply in these markets. For example, there are concerns that clear and robust safeguards for the protection of the rights of indigenous peoples – such as rules ensuring that carbon credits sold in these markets have not been produced in violation of indigenous peoples’ rights to lands, territories and FPIC – do not yet exist (as of July 2023).

In recent negotiations about how to implement Article 6.4 it has been decided that there will be one type of credit that cannot be used to offset the emissions of the buyer, but will represent a way for the buyer to contribute financially to activities that reduce greenhouse gas emissions. These credits are referred to as *mitigation contribution units*. This type of credit could potentially address some of the environmental concerns around carbon offsetting discussed in Explainer 4.
What are carbon credits?

Let us now come back to what is being sold in carbon markets. Carbon credits are claimed to represent a certain amount of greenhouse gas being removed, or prevented from being released, into the atmosphere that otherwise would have been in the atmosphere. As mentioned earlier, it might be helpful to think of each credit as a piece of paper that represents the amount of greenhouse gas that was removed or prevented from going into the atmosphere. Carbon credits are like a currency: they can be bought and sold on a carbon market for money. We cannot see or touch carbon credits because they are an idea rather than something physical.

There is more than one way to create a carbon credit. However, the type of credits that are most important for indigenous peoples and communities to know about are those that are created or ‘generated’ when someone (it could be a government or company, or even a community) makes a promise that they will take certain actions to keep or remove one ton of CO2 from the atmosphere (or another type of greenhouse gas). It is important for indigenous peoples and communities to know about these types of credits because the actions taken to generate them can affect you and your community’s rights. These kinds of credits are sold in the voluntary carbon market (they are also sometimes allowed in regulated markets – see example with company B above).

In the voluntary carbon market, the promise made by those who create the credits is supposed to be checked by a carbon credit standard body and by external actors (auditors or verifiers). If they agree the actions taken have kept or removed one ton of CO2 from the atmosphere, then a credit is created and sold. The buyer of the credit then uses it as proof that they are taking action to fight climate change.

When the carbon credit is used by the buyer to compensate for its own carbon emissions (for example by a company that is burning fossil fuels), then it works as an ‘offset’ and is often called a carbon offset credit. An offset credit is the idea that a ton of CO2 that will be emitted by the buyer can be cancelled out, or ‘offset’, by the credit that they purchase. It should be noted that carbon credits do not have to be used that way. Buyers can also simply buy carbon credits to support an action that someone is taking to fight climate change. But in reality, carbon offsetting is the most common reason buyers buy carbon credits.

There are many types of projects that claim to create or generate carbon credits, including those that produce renewable energy or use technology to capture carbon from the sky and store it in the ground. These explainers, however, focus specifically on carbon credits created from forests. These are often called forest carbon credits. Forest carbon credits are created through taking actions that seek to protect, restore or plant new forests. Some forest carbon projects claim to avoid or reduce greenhouse gas emissions that otherwise would have been emitted, others claim to remove emissions from the atmosphere.

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g As discussed in Explainer 4, in reality, carbon credits do not always represent such removal or prevention.

h In cap-and-trade markets, credits (they are often called allowances) are created when the regulator sets a limit on the overall emissions and distributes the allowances (credits) to the regulated companies that they can trade between themselves. We will not discuss these types of carbon credits in more detail because indigenous peoples and communities are unlikely to be impacted by these types of credits. That is because these credits are not created through taking actions to reduce or prevent greenhouse gas emissions.

i A credit can also stand for the avoided/reduced emission or removal of other greenhouse gases that cause the same negative impact on the climate as one ton of CO2.
One ton of CO2

This is one way to imagine a ton of CO2 that is claimed to be kept or removed from the atmosphere through an activity that creates a carbon credit.
As discussed later, in Explainer 4, the calculation of what volume of greenhouse gas emissions an activity actually avoids, reduces or removes is complicated and contentious. Whether credits are created in a way that respects the rights of indigenous peoples is another contentious topic that is receiving much attention in the global media. In response to some of these concerns, a lot of carbon market initiatives have developed that seek to define what ‘high-quality’ and ‘high-integrity’ credits should look like (‘high integrity’ is a way to say that the credits were generated in a way that respects rights and that does truly lead to climate benefits). Some of these initiatives include indigenous organisations or representatives.

Some initiatives do recommend to companies that serious cuts must be made in the emissions from their own operations and value chains before they can buy carbon offsets for emissions that they are not able to cut. However, it is up to companies themselves whether they want to align themselves with such guidance.

### Box 5: Who are the actors involved in voluntary carbon markets?

The buyers in the voluntary carbon market can be corporations, governments and individuals, among others. As mentioned earlier, in the voluntary market, the buyers do not buy credits because they are required to, but often instead because they have made a commitment or pledge to go ‘net zero’ or ‘carbon neutral’. This means that these buyers have promised to make sure that – on balance – they do not contribute extra greenhouse gases to the atmosphere. Importantly, this does not mean that they plan to emit zero greenhouse gases. In practice, most of the buyers in voluntary carbon markets are companies that emit a lot of CO2 from burning fossil fuels, including oil companies and airlines. ‘Net zero’ and ‘carbon neutral’ are key words because they indicate that the buyers are trying to balance out their emissions with offsets. This is so that they can claim they have not contributed to global greenhouse gas emissions overall, without necessarily having to reduce the emissions from their own activities to zero. As explored in Explainer 4, there are many critiques of carbon offsets.

The providers or sellers in voluntary carbon markets can be governments, companies, organisations or communities who have protected their forests, or otherwise developed projects or programmes that generate carbon credits.

In addition to buyers and sellers, there are other actors in the voluntary carbon market that are important to know about. As mentioned above, there are carbon credit standard bodies, who are the ones that ‘award’, ‘issue’ or ‘certify’ carbon credits to projects and programmes that they judge comply with the specific rules of their carbon credit standard. One such body that is getting a lot of international attention is ART (Architecture for REDD+ Transactions) (ART is discussed in Explainer 5). Before these bodies certify credits, it is also common that the seller’s compliance with the crediting standard is checked by a third-party body (often referred to as an ‘auditor’ or ‘verifier’). After credits are checked by this body, they are put on a carbon registry where buyers can see that they are for sale.

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j Some initiatives do recommend to companies that serious cuts must be made in the emissions from their own operations and value chains before they can buy carbon offsets for emissions that they are not able to cut. However, it is up to companies themselves whether they want to align themselves with such guidance.

k Sometimes these project developers sell carbon credits directly, and other times there are intermediaries who are responsible for actual sale of the carbon credits.
Actors and stages in the voluntary carbon market

This shows a simplified example of what types of actors are involved in the voluntary carbon market and at what stages. The page is best read from the bottom up: It shows that many carbon credits have their origin in indigenous peoples’ lands and territories (stored in their forests).

**BUYERS**
- Government
- Company
- Individual
- NGO

**INTERMEDIARIES**
(For example, actors that connect buyers and sellers)

**PREPARING FOR SALE**
(Actors that verify and certify carbon credits)

**PROVIDERS OR SELLERS**
(Actors that develop carbon credit projects or programmes)

**LAND OWNERS**
Lands and territories where carbon credits are created often belong to indigenous peoples and communities.
Why are carbon markets and carbon offsetting developing?

This question is answered differently by different actors. Advocates for carbon markets and carbon offsetting as tools to fight climate change argue that they enable cooperation between different actors. They argue that they make more funding available through the buying and selling of carbon credits. This, they reason, will make it easier, cheaper, quicker and more likely for the world to reach agreed climate targets, to avoid the most dangerous impacts of climate change.

When it comes to forest carbon specifically, advocates for carbon markets often argue that these markets are essential to provide the necessary financing for actions to protect forests. They argue that many countries have the possibility of taking actions that would protect forests, but they lack the resources to do so. Carbon markets could provide that financing, including financing from private actors like companies. Carbon markets, they say, also make it economically beneficial for countries and communities to protect forests. This happens when buyers in a carbon market pay sellers for carbon credits. All of this, advocates argue, helps fight climate change, while directing much needed money to protecting forests. Advocates also argue that carbon markets can benefit the communities whose land is being used to generate the carbon credits, by raising financial resources that can go, in part, to them.

Those who are sceptical or oppose carbon markets and carbon offsetting argue that they do not actually help address climate change or benefit those who protect forests. Instead, they allow countries or companies to continue the polluting activities that contribute to climate change. Critics argue that carbon markets that allow offsetting are developing because they are an easy way for companies and countries to look like they are taking action on climate change without really changing their behaviour. Instead of reducing the amount of fossil fuels they burn, or reforming the economic system that created the climate crisis, these companies and countries can claim they are ‘offsetting’ their pollution by paying for someone else’s efforts to cut greenhouse gas emissions. These critiques are discussed in more detail in Explainer 4, including the serious concerns that, in practice, carbon offsets are not actually reducing overall greenhouse gas emissions. Many opponents of carbon markets also raise concerns about the human rights violations carbon credit projects can cause, including of indigenous peoples’ right.

Of course, there is nuance in these positions. Many advocates for carbon markets acknowledge that some past carbon credit projects have led to human rights violations and failed to reduce greenhouse gas emissions. They may argue for higher standards in carbon markets in response to these problems. Those who oppose carbon markets and offsetting altogether, however, often stress that the problems are so profound that these markets should not exist at all.

Further Resources:

- Human Rights Watch. How Do Carbon Credits Work? https://www.youtube.com/watch?v=n30rj0--SgU&t=12s


Streck et al., Chapter 1, VCM Primer, Climate Focus, 2021, https://vcmprimer.org/chapter-1/.


Streck et al., Chapter 5, VCM Primer, Climate Focus, 2021, https://vcmprimer.org/chapter-5/.

Streck et al., Chapter 7, VCM Primer, Climate Focus, https://vcmprimer.org/chapter-7/. Note: sometimes projects seeking to create carbon credits are not checked in this way, but they still find actors that are willing to buy credits from them.


See for e.g., The Integrity Council for the Voluntary Carbon Market, “Meet the Team,” accessed September 13, 2023, https://icvcm.org/who-we-are-all/.

Streck et al., Chapter 9, VCM Primer, Climate Focus, 2021, https://vcmprimer.org/chapter-9/.


See for e.g., New Energy Economy, “Opposing False Solutions.”
What do carbon markets have to do with indigenous peoples?

Many of the projects creating carbon credits rely on land, including those that create forest carbon credits. The growing interest in using land for this purpose is involving the customary lands and territories of indigenous peoples in many places — and sometimes threatening territorial and other associated rights.

Many indigenous peoples and communities across the globe are currently thinking about carbon markets for one of the following reasons:

1. They have found out that their lands and territories have been included by states or private actors, like companies, in plans to generate carbon credits
   
   - while they still have no meaningful understanding of what these plans are;
   - without the external actors obtaining their FPIC;
   - without their customary lands being recognised by law in their country;
   - without knowing whether they will benefit in any way from these plans, and how; and/or
   - without knowing if the plans will limit their rights and way of life.

2. They have found out that their community has supposedly signed an agreement with an external actor for a carbon project to be carried out on their land even if this did not go through the legitimate community decision-making body and process.

3. They are wondering whether carbon markets can mean something positive for them and whether to get involved. Often carbon markets have become a topic after someone from the outside has come to the community suggesting that they do a project that can create carbon credits. However, the idea to consider developing their own carbon credit projects sometimes comes from within communities themselves.

Carbon credit projects or programmes can generate money and other benefits, that – if certain conditions and standards are met – could support communities to pursue priorities that they have for their own livelihoods and futures. Further down, this explainer sets out some questions that can help your community consider whether a carbon credit project or programme is likely to bring you benefits. However, it is also important to understand the risks that carbon credit projects and programmes can pose to your rights and livelihoods.

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1 As mentioned in Explainer 2, there are other types of carbon credit projects and some of them do not rely as directly on using land; for example, those that produce renewable energy from ocean wind farms, and those that focus on a transition to cookstoves that produce less CO2 emissions and other air pollution.
What are some of the common risks that carbon markets pose to indigenous peoples’ rights?

Many indigenous representatives – knowing that the customary land rights of their peoples are not adequately protected in national legal frameworks – have voiced concerns about the risks that carbon credit projects and programmes pose to indigenous peoples’ rights, including their right to self-determination, FPIC, and to lands, territories and resources.⁵⁸

There are already examples of carbon credits in the voluntary carbon market that are being created through projects that dispossess communities of their lands and territories.⁵⁹ This can happen, for example, because developers of carbon credit projects say they have to ‘protect’ the area that is being used to generate carbon credits and use this as a reason to evict the communities living there, or restrict communities’ access to, and use of, the area.⁶⁰ This disregards indigenous knowledge and governance systems, which have protected forests for thousands of years, and continue to do so today. Carbon credit projects may have also made it harder for indigenous peoples and communities to gain legal title to their customary lands and territories in some places.⁶¹

Some carbon credit projects have also violated indigenous peoples’ right to consultation and FPIC.⁶² This can happen when organisations, companies or governments set up projects or programmes to create carbon credits on indigenous peoples’ lands and territories without asking for, and getting, permission from the customary owners of the land.⁶³ Sometimes, they might ask permission, but from only one person, and not from the body that has a mandate from the people or community to make decisions on their behalf.⁶⁴ It is important to note that several communities have experienced that the topic of carbon markets has led to internal divisions.⁶⁵ This can easily be fuelled by inadequate FPIC processes, where people do not have enough or the same information.

It is also important to note that many of the risks carbon markets pose to indigenous peoples and communities can depend on context specific questions, such as what the laws of your country say about respect for indigenous peoples’ rights and customary lands, whether your people and community have legal title to your customary lands, and what rules your community is expected to follow if you participate in carbon markets.

You can read more about some of the human rights risks and impacts of carbon markets in the case study on the next page.
Case Study: the Kichwa People of the San Martin Region, Peru

In 2001, the Peruvian government established the Cordillera Azul National Park (PNCAZ), in an area of the Amazon forest overlapping with the customary territories of the Kichwa and other indigenous peoples. The decision to establish the park affected at least 28 Kichwa communities, but the government did not obtain their FPIC before establishing it, nor did they compensate communities for the unlawful dispossession of their ancestral territories. In 2008, the PNCAZ began to generate carbon credits. The affected Kichwa communities were not consulted about the carbon credit project and have not meaningfully participated in implementing it. Affected communities have consistently raised concerns that they have received no information about agreements made between companies buying the carbon credits and the organisation managing the park. It later came to light that the buyers included Shell and Total, two of the largest oil companies in the world. The communities even had to go to court to obtain information about the carbon deals.

Under the guise of needing to protect the PNCAZ, the Peruvian government has reportedly imposed significant restrictions on the Kichwa people’s right to use, access and control their ancestral territories. Kichwa communities report having been prohibited from carrying out their traditional practices such as hunting and rotational farming in the PNCAZ. They have had to request permission to enter the park, which has limited access to their customary lands and their ability to care for them. Reports underscore that Kichwa people have been displaced, had their property destroyed, and faced legal threats for trying to use their lands and access culturally significant natural resources. These interferences have negatively impacted their livelihoods, their sacred relationship to their ancestral territories, and their ability to exercise their cultural rights. According to community representatives, protected area authorities have historically opposed the demarcation of Kichwa ancestral lands inside the PNCAZ, in apparent violation of international and domestic law.

More than US$80 million has been raised from selling carbon credits from the PNCAZ. At the time of writing, Kichwa communities had received none of this money.
An indigenous community claiming their rights in the context of a carbon project proposal

In this scenario, a developer of a carbon credit project approaches an indigenous community with a proposed agreement for a project. (Note: the same principles would apply if a state representative were to approach the community about a national carbon credit programme).

I think we need a human rights impact assessment to understand what this proposal could mean for us.

What if you don’t stick to the agreement? Do you have a complaints mechanism that is aligned with international human rights law?

We decide what happens here in our territory!

We need independent legal advice to understand this!

Only a little part of our customary territory is formally recognised by the state. What does this proposal mean for our full collective territory?

I don’t understand what you are talking about. I need more information.

To do that, you need to meet with us on our terms and respect our own process for collective decision-making.

Before you can proceed with anything here, you need our free, prior and informed consent. If we say no, it means there will be no project.

We can also say yes on certain conditions. We need to shape the nature and terms of the agreement; we do not need to simply accept the first deal that we are offered.

Anyone promoting carbon credit projects or programmes in our customary lands must respect our collective rights.

Many of our rights that are protected under international human rights law are important in this context. For example our rights to:

- Customary lands, territories and resources
- Self-determination (to decide our own futures)
- Autonomy and self-government
- To give or withhold our consent to activities that might negatively affect us
- Cultural integrity

I don’t understand what you are talking about. I need more information.

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Why do human rights violations happen?

Violations of indigenous peoples’ human rights as a result of carbon markets can happen for a number of reasons.

**Weak and fragmented system of rules:** Projects or programmes set up to create carbon credits follow different rules depending on which carbon market or carbon market standard they are associated with. For example, each regulatory market that allows companies to buy carbon offsets has its own set of rules. Similarly, every carbon standard that certifies carbon credits for the voluntary carbon market has its own rules. What these rules say about protection of human rights vary between different markets and standards. In some cases, the rules are weak when it comes to protecting the rights of indigenous peoples. When this is the case, it is often described as there being ‘weak safeguards’ for indigenous peoples’ rights. On the other hand, if the rules were aligned with international law protecting indigenous peoples’ rights, there would be ‘strong safeguards’.

**Reliance on national laws:** In addition, the implementation of these rules or safeguards is influenced by how the different standards are interpreted through the application of the national laws of the country where a project or programme takes place. Many rules or safeguards rely on applying national level laws about the protection of indigenous peoples’ rights. This is a problem because national laws often do not protect indigenous peoples’ rights in line with international human rights law. For example, states can claim that they will respect indigenous land rights when developing carbon programmes (and thus comply with the rules of a standard that requires that), but they often are only talking about lands that the state has recognised as belonging to indigenous peoples – not the full extent of land and territories that indigenous peoples know to be theirs according to their custom and traditions.

**Weak verification:** The implementation of rules or safeguards is also influenced by the quality of the verification (checking) of how the rules are followed. Investigations into the track record of third-party verification of violations of land rights in the agriculture sector suggests these systems regularly fail to pick up or act on violations of indigenous peoples’ rights. Similar problems are now being seen in relation to carbon credit standard verification. You can read more about this in Explainer 5, in relation to certification in Guyana (see case study in Explainer 5).

**Lack of national level regulation of voluntary carbon market actors:** There is a general lack of frameworks and laws within countries to regulate the actions of companies and other non-governmental bodies (such as NGOs) that run projects that generate carbon credits, to make sure that projects do not violate indigenous peoples’ rights. There is also a similar lack of legal regulation of companies that buy carbon credits to ensure they avoid buying credits from projects and programmes that violate the rights of indigenous peoples.

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What key questions should a community think through in order to arrive at an informed opinion about carbon markets?

In light of these risks to your rights, it is important for your community to be vigilant and ask questions to weigh the potential risks and benefits of any carbon credit project or programme that may impact you:

- **Are our rights respected and protected?**

  In order to know if and how your rights to your lands, territories and resources will be respected and protected in a carbon credit project or programme, a community needs to fully understand the rules of the relevant carbon standard. However, it is not enough to know what the standard says on paper – the community should also understand how the rules will be implemented; who will check (verify) that the rules are followed; how they will check; and what grievance or complaint process exists if your community finds that your rights have been violated despite what the rules say.

  All of this is important because even strong rules can fail to protect indigenous peoples’ rights. For example, when verification and grievance processes are weak, they may fail to identify violations or provide a real check on problems that occur in practice. And, as discussed earlier, failings can happen when rules that govern the carbon credit project or programme are implemented by applying national level laws (which often do not protect indigenous peoples’ rights properly).

- **Will our way of life, cultural integrity and traditional practices be respected?**

  Linked to the above questions about protection of rights, it is important to understand if the carbon standard rules will restrict community members from moving freely in their territory and carrying out traditional activities central to your way of life. For example, will your community be stopped from doing its rotational farming or gathering food and materials from your forests because those activities could be considered to impact the amount of carbon stored in the forest? There are cases where communities have been affected in this way by carbon credit projects, like the case study of the Kichwa people shows.

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**Key questions**

- Are our rights respected and protected?
- Will our way of life, cultural integrity and traditional practices be respected?
- Are we treated as equal partners in carbon credit projects or programmes?
- Does the proposed carbon credit project or programme and wider carbon market comply with our own customary laws?
- What will we gain from participating in carbon credit projects or programmes? Can these projects or programmes contribute towards our self-determined priorities for the future?
- Will it help the climate if we sell carbon credits from our land?
- Are there any risks related to selling carbon credits ourselves?
- Is our process for internal decision-making clear?

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\[o\] Where a community is approached by a private sector actor asking the community to sign a carbon credit contract, it is vital that the community understands what the contract says. If they find it difficult to understand, it is important that the community is able to seek legal advice from a trusted ally.

\[p\] Or a contract that the community is asked to sign.
• **Are we treated as equal partners in carbon credit projects or programmes?**

In practice, indigenous peoples’ rights are only respected if your people are able to **give, or withhold**, your FPIC as to whether your lands, and carbon stored in it, are to be included in any carbon crediting project or programme. Since indigenous peoples have the right to **self-determination** (which means they must be able to decide what their political, economic, social and cultural future should look like), you must be partners in developing and designing carbon projects or programmes from the outset.

• **Does the proposed carbon credit project or programme and wider carbon market comply with our own customary laws?**

It is important that the elders, traditional authorities and cultural knowledge holders of your people and community are properly informed about carbon markets and their advantages and disadvantages in **culturally appropriate** ways, including through internal dialogues and valid **translations into your own language**. For a credible and good faith FPIC process to take place, it is essential that project or programme developers provide accessible and complete information to your people’s traditional authorities and spiritual leaders. Before your community takes a decision on a carbon project or programme proposal, you might also want technical and legal advice from trusted allies and to carry out an internal cultural analysis according to custom. Elders and traditional leaders will likely need to know what carbon offsets are, including how they do or do not help address climate change (see Explainer 4 for discussion about carbon offsets), and how this relates to indigenous laws. A key question to ask internally once explanations have been provided is: **is the carbon project or programme, and the wider carbon offset market, consistent with your customary law, belief system, cosmovision and cultural rules?**
What will we gain from participating in carbon credit projects or programmes? Can these projects or programmes contribute towards our self-determined priorities for the future?

Your community will likely want to consider what you may gain from participating in a carbon market project and programme; if any benefits fairly compensate you and reflect your ownership and stewardship of your lands and territories; and if you have been treated as an equal participant in determining what the benefits should be.

Since carbon credit projects and programmes generate money when credits are sold, a community may be able to access financial resources by participating. This could happen if the community participates directly as a seller of carbon credits, or through what is often referred to as ‘benefit sharing mechanisms’.81 ‘Benefit sharing mechanisms’ are likely to be relevant where actors external to a community (such as a company, NGO or government) are developing the carbon credit project or programme.

The purpose of these mechanisms should be to clarify what the community wants to see as compensation for allowing carbon stored in their land and forest to be sold on a carbon market. These mechanisms can set out agreements about what portion of the money generated from the sale of carbon credits goes to the community, and how. They can also specify other conditions that a community has set for their participation (often talked about as ‘non-monetary benefits’). Examples of these could be access to livelihood activities, technologies, or social services.82

Too often, however, external project or programme developers make arrangements for so-called benefit sharing without meaningfully talking to the customary rights-holders and landowners about what compensation or reward they want from their participation (see Box 6 in Explainer 5 for example).83 Further, many people note that the way the concept of ‘benefit-sharing’ is currently used by carbon project developers is backwards; it assumes that the external project developer is the one to ‘share’ benefits with the customary land owners. In reality, however, if a community decides to allow an external actor to develop a carbon credit project on their land, it is the community that is sharing with the developer.

Only if your community is able to meaningfully shape what the carbon credit project or programme should look like and how you will benefit, and has given your FPIC (including any conditions) to the final proposal, will you know if the project or programme can positively contribute to your self-determined visions for the future.
Case Study:
the Yurok People of California, United States

The Yurok people are the largest federally recognized Tribe in California, United States. Their customary lands were originally more than one million acres, but over time the US government took away almost all of that land, leaving the Yurok with only 5000 acres. In 2011, the Yurok people entered a direct agreement with the California Air Resources Board (CARB), the government agency that regulates California’s carbon market. Under the agreement, the Yurok earned one carbon credit for each metric ton of carbon they could show they sequestered in their forests. The Yurok people have used the revenue from carbon markets to help buy back their customary lands. By 2018, carbon credits had generated enough money for the Yurok people to buy back almost 60,000 acres of their lands.

The Yurok people’s experience with carbon markets is celebrated by many as a blueprint for indigenous groups seeking to reclaim their lands and resources. But their decision to participate in carbon markets reportedly remains contentious within the Tribe. Some Yurok people, for instance, have stated they are concerned that by participating in carbon markets they are enabling greenwashing and giving companies a license to pollute.

California has a regulated carbon market. Regulatory carbon markets are explained briefly in Explainer 2.
• **Will it help the climate if we sell carbon credits from our land?**

If your community sees sufficient benefits from engaging with a carbon credit project or programme, you might want to do so even if this will not help address climate change. However, your people and community might at least want to think through whether it is important to you for the specific project or programme to have a positive climate impact — especially since such projects and programmes are often presented to communities as a climate solution. There is increasing evidence that carbon markets that are based on carbon offsetting do not actually reduce overall global emissions. Some of the reasons for this are discussed in the next explainer, Explainer 4.

In considering climate impact, your community might be interested in understanding who will be buying the credits and what the buyers will do with them. For example, will they be used by a company that releases fossil fuels to offset their emissions, or are they not used as offsets by the buyer? A community might, for example, decide to only agree to a carbon project if there will be restrictions on who can buy the carbon credits or what claims the buyer can make when buying the credits. For example, the community can oppose a corporate buyer using the credits to say that it has reached its ‘net zero’ emission goal, but might be okay with taking the payment from the company as compensation for the community's longstanding effort to protect their forests.

• **Are there any risks related to selling carbon credits ourselves?**

If your community is considering participating directly in carbon markets as a seller of carbon credits, you will need to determine: which carbon credit standard bodies will allow you to sell credits as an indigenous community; what the rules are for generating the credits; and what obligations you may take on by signing associated agreements or contracts with project developers or buyers. An important consideration is what would happen if your community cannot for some reason fulfil its contractual obligations (for example, to deliver a certain amount of verified carbon credit units to a buyer company). Finally, your community should be aware of carbon offset-buying companies shifting to ever more sophisticated satellite monitoring systems for forest carbon project areas. In relation to this, the community should look out for contract clauses that give companies power to collect and sell information from your territories.

• **Is our process for internal decision-making clear?**

If your community finds it is interested in exploring engaging with a carbon market project or programme, it is important that the community agrees on what process this exploration should follow and how a final decision should be made. For example, who will be responsible for engaging with external actors on this topic; how often and in what circumstances must those who are responsible report back and consult with the whole community; how should a final decision to sign an agreement with an external actor be made and who must be present when this happens? These are important questions because there have been instances where communities have experienced miscommunication and internal divisions when carbon contracts have been signed without the knowledge of or agreement of the whole community. If your community has developed an FPIC protocol, this would likely provide guidance already agreed by the community about how such negotiations with external parties should take place.
Further resources:


Endnotes

57 Direct communication, on file with authors.


63 See for e.g., Counsell, “Blood Carbon,” 2023: p.49.


65 Bermudez Lievano, “Yurupari Jaguars,” 2022; Private communications with authors.


70 CERD, “Urgent Action Request,” 2022, para. 16.


74 CERD, “Urgent Action Request,” 2022; Private communication on file with authors.


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77 Rainforest Foundation, "Credits Where They Are Not Due," 2023.
78 Rainforest Foundation, "Credits Where They Are Not Due," 2023, p. 46.
81 Streck et al., Chapter 11, VCM Primer, Climate Focus, 2021, https://vcmprimer.org/chapter-11/.
82 Streck et al., Chapter 11, VCM Primer.
87 Discussion in UN Human Rights Council, “Green financing rights” Special Rapporteur 2023, para. 51.
89 See for e.g., Bermudez Lievano, “Yurapari Jaguars,” 2022.
Many people and governments advocate for using carbon markets that allow carbon offsetting as a tool to address climate change. They argue that they help the world cooperate and raise necessary finance to take actions to avoid the most dangerous climate impacts. They say that the buying and selling of carbon credits will make it more likely for the world to reach the agreed climate targets because it raises money that allows actions that reduce greenhouse gas emissions to take place where they are easier, quicker and cheaper to implement. They believe that the money countries or communities can make by selling carbon credits can encourage them to take actions to protect and rehabilitate forests. They argue this can avoid greenhouse gas emissions being released into, or remove greenhouse gases from, the atmosphere.

Critics, on the other hand, have concerns that the structure, assumptions and methodologies of carbon offsetting means that carbon offset markets do not help address climate change, and may even represent a serious threat to the climate.

As discussed in the prior Explainer, if your people and community see sufficient benefits from engaging with carbon credit projects or programmes, you might want to do so regardless of the impact of the project or programme in addressing climate change. This explainer presents some common environmental critiques and concerns about carbon markets and offsetting for your community to consider:

- **Distraction from real solutions**: Many critics are worried that carbon market offsetting takes away focus from other activities that are needed to reduce CO2 emissions, including supporting resilient, local, agroecological food systems and protecting the lands and traditional knowledge of indigenous peoples. Critics argue that carbon offsetting also lessens the pressure on large companies and rich countries, which are disproportionately responsible for climate change, to transition away from using fossil fuels. If companies can get away with continuing to emit greenhouse gases as usual just by paying for carbon credits, they argue, they have little incentive to actually reduce their own emissions. Indeed, currently, the biggest buyers of carbon credits are oil and gas companies, airlines, tech companies and other major polluters who use them as offsets and continue to invest far more money in sustaining their operations than reducing the material and energy they use. Many see this as a form of ‘greenwashing’, or making activities seem more environmentally friendly than they actually are, that encourages the continuation and even expansion of high-carbon emission activities.

Communities who are already facing harsh impacts from climate change may consider it important for any climate mechanisms they participate in to help reduce emissions, even if it is clear that the main responsibility for action lies with the actors most responsible for causing climate change.
• **Problems with offsetting in the context of forest carbon credit markets:** As discussed in Explainer 2, carbon offsetting is the idea that a buyer can 'cancel out' their CO2 emissions by buying carbon credits, because the carbon credits represent actions that are reducing or preventing the same amount of CO2 emissions somewhere else. Critics underscore however that from a scientific point of view, it is not possible to 'cancel out' one ton of CO2 that is released from burning fossil fuels by making sure one ton of carbon is stored in forests. This means that the logic of 'offsetting' fossil fuel emissions with forest carbon sequestration does not work in practice. Why? Because when fossil fuels are burned and released into the sky, this releases carbon that would otherwise be permanently stored under the ground in the fossil fuel. Trees that are planted to store carbon that was released from fossil fuels do not cancel that out because they will not store the carbon permanently. The life of a tree is not long enough to store carbon for the amount of time needed to make up for the release of carbon that would otherwise have been stored for millions of years. In addition, a lot of trees are not even left to live their full life – many are burned or cut down, releasing carbon back into the atmosphere, even when efforts are made for that not to happen. Trees planted to make up for burning fossil fuels also take a long time to grow, and younger trees do not store as much carbon. None of this is to say that protecting forests and planting trees are not important actions, or that money should not be directed towards those actions. The point critics of carbon offsets make is that doing so should not be used to 'cancel out' burning fossil fuels, because they argue that, in reality, offsetting does not work.

• **Flawed accounting:** The creation of some carbon credits is based on a prediction of how much CO2 would be emitted without the carbon credit project/programme and therefore how many tons of CO2 emissions the project/programme helps to avoid. The idea is that if the carbon credit project developer can show that they are saving or preventing one ton of CO2 from being released into the atmosphere, they can generate one carbon credit that represents that saving. Carbon credit project developers often do this by showing that the project is protecting an area of forest that would otherwise have been deforested. The problem with this is that evidence suggests that in many cases, projects or programmes have exaggerated the existing threats to forests and therefore the predicted future emissions of CO2 that would have happened without the project or programme. This means they end up creating carbon credits that buyers use to claim 'net zero' emissions even though additional sequestration of carbon actually does not take place. A recent study found that 90 per cent of the forest carbon credits certified by one of the main carbon credit standard bodies did not actually represent any emission reduction.

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5 The carbon certifying body in question, Verra, has disputed the findings from this study.
**Offsetting**

The below graphic seeks to show why, in the long term, it is not possible to ‘cancel out’ emissions from burning fossil fuels by planting or protecting forests.

It shows two simplified scenarios:

**Scenario 01**

The first scenario is where a company burns fossil fuels and makes a decision to plant trees to offset this. It shows carbon (represented by small bubbles) stored under ground; the carbon moving from the ground to the sky (when fossil fuels are burnt); a tree absorbing some of the carbon as it grows; and the carbon returning to sky when the tree dies.

**Scenario 02**

The second scenario is one where fossil fuels are not burnt (and no emissions offset). It shows the same starting point as the first scenario, where carbon is stored under ground. In this scenario, the carbon is still under ground since the fossil fuel was never extracted.

In summary, these two scenarios show that storing carbon in trees is not the same as leaving it stored under ground. The tree does not provide the same long-term storage as storing carbon under ground. Under ground, as part of a very slow carbon cycle (see Explainer 1), carbon will be stored for millions of years. This does not mean planting and protecting trees is not important. It is.

Disclaimer: This depiction is a simplification of natural processes and is not intended as a scientifically accurate representation.
Box 6: Flawed accounting - an example

A developer of a carbon credit project decides to protect part of the Brazilian Amazon forest. They plan to sell carbon credits based on the argument that if their project did not exist, that part of the Amazon would be cut down. The project developer does a mathematical calculation and predicts that their project will stop deforestation of 100 hectares of forest, and that this is equivalent to saving 40,000 tons of CO2 from being released into the atmosphere. The project is approved by a carbon credit standard body and checked by a third-party verifier, and the project developer sells the 40,000 carbon credits to an airline company. The company uses them to ‘offset’ its own carbon emissions from burning fuel during its flights.

Later, the project is analysed by researchers. They find that it is very unlikely that the part of the forest being protected under the carbon credit project would have been cut down anyway. As a result, the project was not responsible for preventing any carbon from being released into the atmosphere. The airline’s claim that it had offset its emissions as a result of the project is therefore untrue.

- **Double counting:** Since the actors within the voluntary carbon market are not always well coordinated and because there sometimes is a lack of transparency around how emissions are counted, there is a risk of double counting emission reductions or removals. This means that one activity to reduce or sequester carbon can be used twice as an excuse for other actors to release CO2. A lack of coordination between countries could also lead to double counting. For example, a country where a carbon credit project is being located can count the emission reductions or removals against their own climate targets while a country that buys the carbon credits also counts these against their climate targets. There is a lot of attention to this risk in negotiations around the UN carbon markets and there are efforts to find ways to make sure double counting does not take place.

- **Trying to fight the problem with the same system that caused it in the first place:** Some critics point out that climate change is directly linked to the dominant economic system of capitalism. Based on a concept of endless growth, this system pushes increasing natural resource extraction, pollution of nature and exploitation of people. These critics highlight that finding a solution to these harms through carbon markets, which are also based on the same system of capitalism and rely on putting a money value on nature, is contradictory. Critics have warned for example that some actors involved in carbon markets see it merely as a money making market, and are not motivated by addressing climate change or preserving forests. Some advocates argue that to address climate change, richer countries instead need to take a different approach to the economy overall: rather than using constant economic growth as their measure of success, they should aim for human and natural well-being. This, the advocates say, should include reducing unnecessary production and consumption in richer countries, and focusing on fair distribution so that wealth and resources are not held in the hands of a few people. This approach is sometimes called ‘degrowth’.
Further resources:


Endnotes


TREES is a forest carbon credit standard gaining a lot of attention internationally. **TREES stands for The REDD+ Environmental Excellence Standard.** TREES is getting noticed particularly because it is promoted as a high-quality or high-integrity standard – a standard that is addressing the well-known environmental and social problems that can arise from the production of carbon credits (see Explainers 3 and 4).\(^{109}\) In this Explainer, we focus mostly on what TREES and ART (the standard body overseeing TREES, which is discussed below) say and do to respect indigenous peoples’ rights.

**TREES and indigenous peoples**

When it comes to addressing risks of negative impacts from carbon credit projects and programmes on the rights of indigenous peoples, TREES has a set of rules, known as **social safeguards**, that are intended to protect the rights of indigenous peoples.\(^{110}\) These are based on safeguards that have been agreed at the level of the UN (called the Cancun Safeguards). TREES elaborates on these and explains what it means to respect and protect rights in more detail.\(^{111}\) It is clear that efforts have been made to develop strong protections for the rights of indigenous peoples. For instance, the safeguards require as an outcome that “Rights of indigenous peoples and local communities, or equivalent, have been identified and their respective rights have been respected, protected and fulfilled in the design and implementation of REDD+ actions”.\(^{112}\)

That said, there are serious loopholes when it comes to how this will be achieved; the country or **jurisdiction**\(^{113}\) producing TREES credits can choose whether they want to comply with both national and international law or just national law when it comes to protecting customary land tenure rights, ensuring participation and respecting FPIC.\(^{114}\) This can represent a problem for indigenous peoples in many countries where their rights are not adequately protected in national laws.
Box 7: A closer look at a loophole in ART safeguards

An example of the language in the ART safeguards that allow countries to apply their national level laws and avoid complying with international law obligations is safeguard B (Theme 2.3). While this safeguard states that participant jurisdictions must “have in place a legal framework, policies or programs for the recognition, inventorying, mapping, and security of customary and statutory land and resource tenure rights where REDD+ actions are implemented”, it then allows for these protections of customary and statutory rights to be “anchored in relevant ratified international conventions/agreements and/or domestic and if applicable, subnational, legal framework” [emphasis added].

The TREES is overseen by a body called ART (Architecture for REDD+ Transactions). ART is, among other things, responsible for certifying that countries (or sub-national jurisdictions) are complying with all of the rules of TREES (including the social safeguards) and then for issuing carbon credits. Before ART makes a decision about certifying credits, another external body must verify that all the rules have indeed been followed. ART also operates an electronic registry system where credits are registered once they have been issued. ART also has a grievance mechanism that receives community complaints, though as discussed in the example below, it is not clear how well it operates in practice.

The first country in the world to have forest carbon credits certified by ART is Guyana, where there are serious questions about the application of TREES in relation to indigenous peoples’ rights, as well as the verification process by the external body and the grievance process (see case study on the next page).
Case study:

TREES and its complaints procedure: The case of Guyana

Guyana's first set of TREES credits was certified by ART in December 2022.122 The certification has been controversial, in part because these credits were generated by counting all of Guyana's forests, including the forests on the titled and untitled customary lands of indigenous peoples.123 Critics say that Guyana did not ensure effective participation and consent of indigenous communities before submitting its application to ART1 and that therefore it failed to meet TREES requirements relating to indigenous peoples’ rights to land and FPIC.124 In March 2023, the largest indigenous peoples’ NGO in Guyana, the Amerindian Peoples Association (APA), submitted a complaint to ART's internal grievance mechanism about this.125

In its reports to ART, the government of Guyana argued that it complied with TREES' requirements to respect indigenous peoples’ rights. The government referred to laws and programs that aim to provide secure land tenure to indigenous communities.126 However, the APA complaint to ART argues that ART did not look beyond these descriptions to see how these laws and programs actually work on the ground—for example, international human right bodies have criticised Guyana’s laws and practice for insufficiently recognising and protecting the land rights of indigenous peoples.127 The complaint also notes that the external verification body failed to look thoroughly beyond the claims made by the government.128

Among the critiques of the ART-TREES certification are that the government and ART have treated a July 2022 endorsement by the executive body of Guyana's National Toshaos Council (NTC) as evidence of consent for all indigenous lands in Guyana to be included in the carbon credit programme, and to the government's proposed benefit sharing scheme.132 As stressed by the APA complaint, the NTC is an advisory body established by statute in Guyana and is made up of leaders from all indigenous villages in the country.131 Its executive body is composed of a small subset of village leaders.131 The complaint questions the NTC's legal authority to sign over rights to emissions reductions from indigenous lands to the government, as well as the legitimacy of the NTC's endorsement of the benefits sharing mechanism.132 Critics argue that using the NTC in this way has allowed the government to bypass indigenous peoples’ representative institutions while creating the appearance that rights to full and effective participation and FPIC have been respected.133

TREES reportedly provided limited information regarding ART's grievance mechanism, and the APA has expressed some concerns about the legitimacy and transparency of this mechanism.134 At the first stage of the complaint process, ART assigned an investigator from Winrock (the organisation that hosts the ART Secretariat) to look into the complaint.135 The investigation seemingly concerned the process followed during the certification process, rather than the substance of the TREES requirements.136 The investigator found no problems with this process.137 Unfortunately, this approach arguably ignored most of the issues raised in the complaint about Guyana's compliance with TREES. Around the same time as it published its decision on the complaint, the ART Secretariat released new guidance on complaints.138

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1 As discussed below, the Government has vigorously contested this critique, pointing to an endorsement of the carbon credit scheme by the National Toshaos Council, a statutorily established national indigenous advisory body.
In June 2023, the APA appealed the decision on its complaint. The new complaints guidance provides for an appeals process only if ART deems the appeal ‘eligible’ for review. Once deemed eligible, a committee would be formed to review the appeal.

ART accepted the APA’s complaint in July 2023, but changed the appeals process, informing the APA that the appeal committee would have to determine the eligibility of the appeal. The criteria for eligibility are not transparent. In addition, the committee that decides the appeal is made up of a member of ART’s board, a member of Winrock’s board, and a representative nominated by the complainant (who must be approved by ART). This design appears to give ART a great deal of power over the outcome of complaints, raising questions about whether indigenous peoples will be able to get a fair hearing through this mechanism.

**TREES and environmental integrity**

When it comes to what is often referred to as environmental integrity — in other words, whether the carbon credit actually represents a reduction, prevention or removal of CO2 emissions — TREES tries to address risks of credits not actually contributing to reductions in overall emissions. This includes the problems discussed in Explainer 4. It tries to ensure that carbon credit programmes do in fact create ‘additional’ reductions in emissions (this is often referred to as ‘additionality’) rather than simply selling credits for forest protection that would have happened anyway; address the risks that the avoidance, reduction or removal of emissions through carbon credit programmes can be reversed and are not permanent, for example, because the forest burns down (often talked about as ‘reversal’ and ‘permanence’); and address the risks that the saved emissions that a credit stands for are counted twice (often called ‘double counting’). Because TREES is a new standard, there is not enough information available to say whether, in practice, application of TREES rules successfully addresses these risks. However, some critics are concerned that ART’s approach of crediting high forest low deforestation (HFLD) areas does undermine environmental integrity.
**Box 8: What are high forest, low deforestation (HFLD) credits?**

High forest, low deforestation (HFLD) area credits represent a different approach to carbon credits. The HFLD approach is different because, originally, REDD+ finance was based on the idea of supporting a country or project that reduces deforestation in areas where there had been high levels of forest loss in the past. The HFLD approach, on the other hand, has been created to allow countries (or sub-national areas such as indigenous territories) that have **high forest cover and historically very low deforestation rates** to also earn money from protecting their forests in the future. Some people are critical of this approach. They ask, if there is low deforestation in the first place, how can it be known that the credits produced actually are linked to protecting forest that would have otherwise been cut down? How can it be shown that this project is actually leading to a reduction in emissions? Could it not in fact lead to negative impacts on the climate if the area would never have been deforested anyway but the credits are being used to offset other greenhouse gas emissions? Those who support the HFLD approach say there is a lot of evidence showing that deforestation will increase in most of the tropics in the next 15 years, so the fact that forests have been intact up to now is not a signal of what will come.

**Can indigenous peoples participate in ART as sellers of carbon credits?**

In order for a country or sub-national jurisdiction (for example, a province) to be able to participate in ART, the size of the total forest area must be at least 2.5 million hectares. ART says that indigenous territories meeting that requirement can participate, and if one territory is not big enough on its own, different territories can join up if together they are 2.5 million hectares or bigger. However, ART documents suggest that only lands that national governments recognise as owned by indigenous peoples can be counted. The registration must still happen through the government. It is unclear how this registration would happen in practice. Additionally, sub-national jurisdictions, such as indigenous territories, will only be able to participate independently in ART until 2030. After that, ART will only approve credits for countries as a whole.
Endnotes


113 A jurisdiction is a territory or geographic area that is governed by a given sovereign entity. An example of a sub-national jurisdiction would be a state, province, or region.

114 ART, “TREES Environmental”, 2021, Theme 2.3, p. 14; Theme 3.3, p. 18; Theme 4.1, p. 18; Theme 4.2, pp. 19-20.


121 Rainforest Foundation UK, “Credits Where They Are Not Due”, p. 43.


APA, Complaint Letter, 2023; APA appeal to ART TREES, June 16, 2023, on file with authors.


APA appeal to ART TREES, June 16, 2023, on file with authors.


ART-TREES letter of response to APA Appeal, July 16, 2023, on file with authors.

ART-TREES letter of response to APA Appeal, July 16, 2023, on file with authors; ART Complaints Guidance, May 2023, sections 1 and 2.


Streck et al., “We must protect intact forests,” 2022.

Streck et al., “We must protect intact forests,” 2022.


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