

Article 6 Explainer

**QUESTIONS AND ANSWERS ABOUT THE COP27 DECISIONS
ON CARBON MARKETS AND WHAT THEY MEAN FOR NDCS,
NATURE, AND THE VOLUNTARY CARBON MARKETS**

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Feedback

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Acronyms

A6.4ERs	Article 6.4 Emission Reductions Units
AFOLU	Agriculture, Forestry and Other Land Use
ART	Architecture for REDD+ Transactions
CA	Corresponding Adjustments
CDM	Clean Development Mechanism
CER	Certified Emissions Reductions (Kyoto Protocol)
CO₂eq	Carbon dioxide equivalent
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
DNA	Designated National Authority
ER	Emission Reductions
ETS	Emissions trading systems
FCPF	Forest Carbon Partnership Facility
FREL	Forest Reference Emission Level
GCF	Green Climate Fund
GHG	Greenhouse gas
HFLD	High Forest Low Deforestation
IC-VCM	Integrity Council for the Voluntary Carbon Market
IPCC	Intergovernmental Panel on Climate Change
ITMOs	Internationally Transferred Mitigation Outcomes (Article 6.2 units)
JCM	Japan Credit Mechanism
LEAF	Lowering Emissions by Accelerating Forest Finance
LULUCF	Land use, land-use change and forestry
NbS	Nature-based Solutions
NCS	Natural Climate Solutions
NDC	Nationally Determined Contribution
OMGE	Overall Mitigation of Global Emissions
OIMP	Other international mitigation purposes
RBP	Results-based payments
REDD+	Reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks
SOP	Share of Proceeds
TREES	The REDD+ Environmental Excellence Standard
UNFCCC	United Nations United Nations Framework Convention on Climate Change
VCM	Voluntary Carbon Market
VCMi	Voluntary Carbon Markets Integrity Initiative

Executive summary

The Paris Agreement paved the way for a new era of carbon trading with the establishment of Article 6, which enables countries to collaborate in achieving their Nationally Determined Contributions (NDCs) by trading mitigation outcomes. At its best, Article 6 offers countries a way to invest in actions outside their borders and raise global ambition to limit temperature rise to 1.5C. However, this is only possible with clear and transparent accounting around what is traded and how countries plan to meet their NDCs.

Countries first established the framework for international carbon trading through Article 6 in late 2021. One year later, in Sharm el-Sheikh, additional light was shed on the process through the establishment of reporting rules, registries, governing bodies, etc. However, uncertainties around the operationalization of Article 6 and domestic implementation held countries back from conducting any trades to date.

Why have countries not yet started trading under Article 6? Is nature included in Article 6? What about REDD+? How does Article 6 impact the Voluntary Carbon Market (VCM)? Will all offsets require a corresponding adjustment? What are the decisions yet to be made around carbon trading? This paper offers straightforward guidance on what was decided at COP27 and dives into the complex implications of Article 6 for NDCs, nature and the VCM.



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What is Article 6?

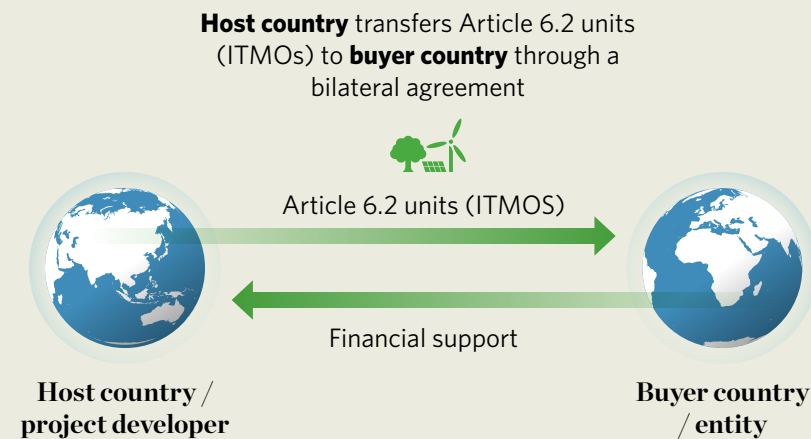


Figure 1: Article 6.2

Article 6.2 (market)

Countries can trade Article 6 units bilaterally or multilaterally. Article 6.2 enables a **host country**, that is on track to exceed its NDC target, to trade units to obtain investments, support for capacity building, and access to technologies not available through domestic resources. The **buyer country** purchases these units, known as **ITMOs** (Article 6.2 units), to address any gaps in meeting its own climate goals. Several Article 6.2 pilots have been signed, but no bilateral trades have been completed yet. This is partially due to host countries still lacking domestic frameworks to operationalize Article 6 and partially due to the need for more guidance on reporting and tracking from the negotiations.

[\(See section on Article 6.2 pilots\)](#)

Cooperation between countries is expected to take different forms: project-based units generated by private developers, jurisdictional units generated by governments, and international linking of emissions trading systems (ETS). There are currently no limitations on the types of units that can be traded (including sectors, gases, methodologies, and standards), as long as they comply with Article 6 guidelines. It will be up to each country to design its policy mechanisms to operationalize trades.

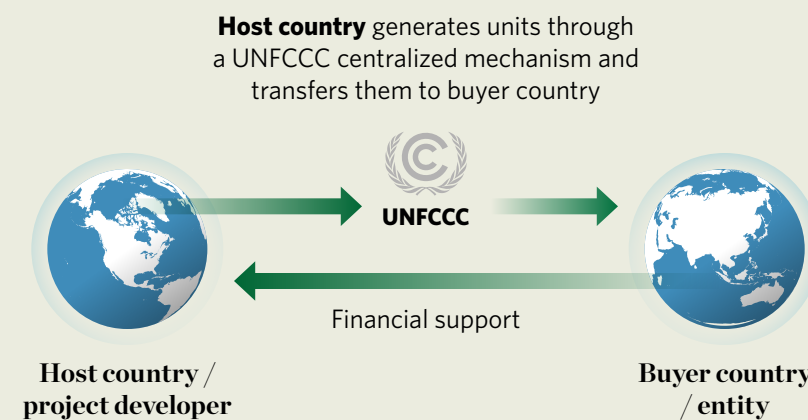


Figure 2: Article 6.4

Article 6.4 (market and non-market³)

Countries can also trade units approved by a **centralized mechanism**. Article 6.4 trades are supervised by a United Nations (UN) body, called Article 6.4 [Supervisory Body](#), which is similar to how the UN's Clean Development Mechanism ([CDM](#)) worked for the Kyoto Protocol.

Article 6.4 can serve both market and non-market purposes, depending on how the units are used. In 2022, for the first time, a new type of unit was defined under Article 6.4 called "**mitigation contribution**". These units are non-authorized, do not require a corresponding adjustment and may be used for various purposes, "inter alia, for results-based climate finance, domestic mitigation pricing schemes, or domestic price-based measures, to contribute to the reduction of emission levels in the host party".⁴ This opens the door for use in other markets, such as in the voluntary carbon markets or domestic markets. [\(See section on the VCM and Article 6\)](#)

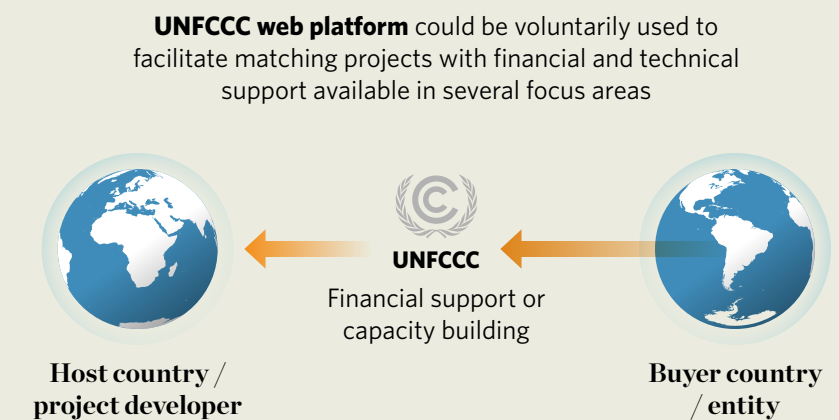


Figure 3: Article 6.8

Article 6.8 (non-market)

Finally, countries may decide to support (financially or technically) other countries without any expectation of trading carbon units (non-market approach). Article 6.8 established a framework for the creation of a UNFCCC centralized website where countries and other stakeholders could submit mitigation projects that are being planned and outline where support is needed. This online platform could be voluntarily used to facilitate matching projects with financial and technical support available in several focus areas. Article 6.8 is less defined and there is not much clarity on how the mechanism will work.

Terminology Box 1: Article 6 units

“Carbon credits” can be referred to in different ways in the Article 6 context. For simplicity and when possible, we will use **Article 6 units** as a general term, which will encompass the following concepts:

Mitigation outcome:	1 tonne of CO ₂ eq	Under the Paris Agreement, the term Mitigation Outcomes replaces most forms of international carbon credits. Mitigation Outcomes generated in a country could be transferred to another country, thereby becoming Internationally Transferred Mitigation Outcomes (ITMOs) ¹ .
ITMOS:	1 tonne of CO ₂ eq	Internationally Transferred Mitigation Outcomes (Article 6.2 units)
A6.4ERs:	1 tonne of CO ₂ eq	Article 6.4 Emission Reductions Units (Article 6.4 units)
Emissions reductions and removals:	1 tonne of CO ₂ eq	Human interventions to mitigate climate change according to the Intergovernmental Panel on Climate Change(IPCC) ² , which may generate Article 6 units

What are the pros and cons between Articles 6.2 and 6.4?

Article 6.2 is based on bilateral agreements, which provide countries with more flexibility to design their preferred rules and establish quality controls and safeguards, as long as they comply with the Article 6.2 guidance. For instance, all bilateral agreements signed with Switzerland exclude non-greenhouse gases (GHG) metrics. Moreover, countries that aim to move quickly may prefer to use Article 6.2, as the Article 6.4 mechanism may take longer to be up and running. Also, Article 6.2 has no mandatory fees, while Article 6.4 has mandatory monetary contributions and automatic cancellations.⁵ **On**

the other hand, establishing bilateral agreements under Article 6.2 comes with a transactional and political cost, which requires additional time and capacity compared to a more standardized mechanism. All units generated under Article 6.4 go through a centralized body with pre-approved methodologies, making the process and eligibility of these units more predictable. Lastly, the Article 6.4 framework is an update from the Kyoto Protocol's CDM, so some countries could use an updated version of already existing infrastructure to engage. For example, many countries established domestic authorities in the past to approve participation in CDM projects (designated national authorities - DNAs) and could use similar institutional frameworks for Article 6.4 trades.⁶

Authorization and corresponding adjustment: How is double counting addressed?

Article 6 of the Paris Agreement addresses double counting through **corresponding adjustments**, an accounting measure that prevents two countries or entities from counting the same emissions reductions twice. When a credit is sold to another country or a company internationally, the host country must subtract that unit from its own accounting as the buyer adds the **same units** to its commitments. This ensures that

emissions reductions are counted only once and prevents the overestimation of mitigation outcomes.

What is an “Authorization” under Article 6? It is a concept first introduced by Article 6.3 of the Paris Agreement which requires countries to “authorize” the use of ITMOs (Article 6.2 units) towards NDCs. The concept was further developed at COP26 to become a key component of Ar-

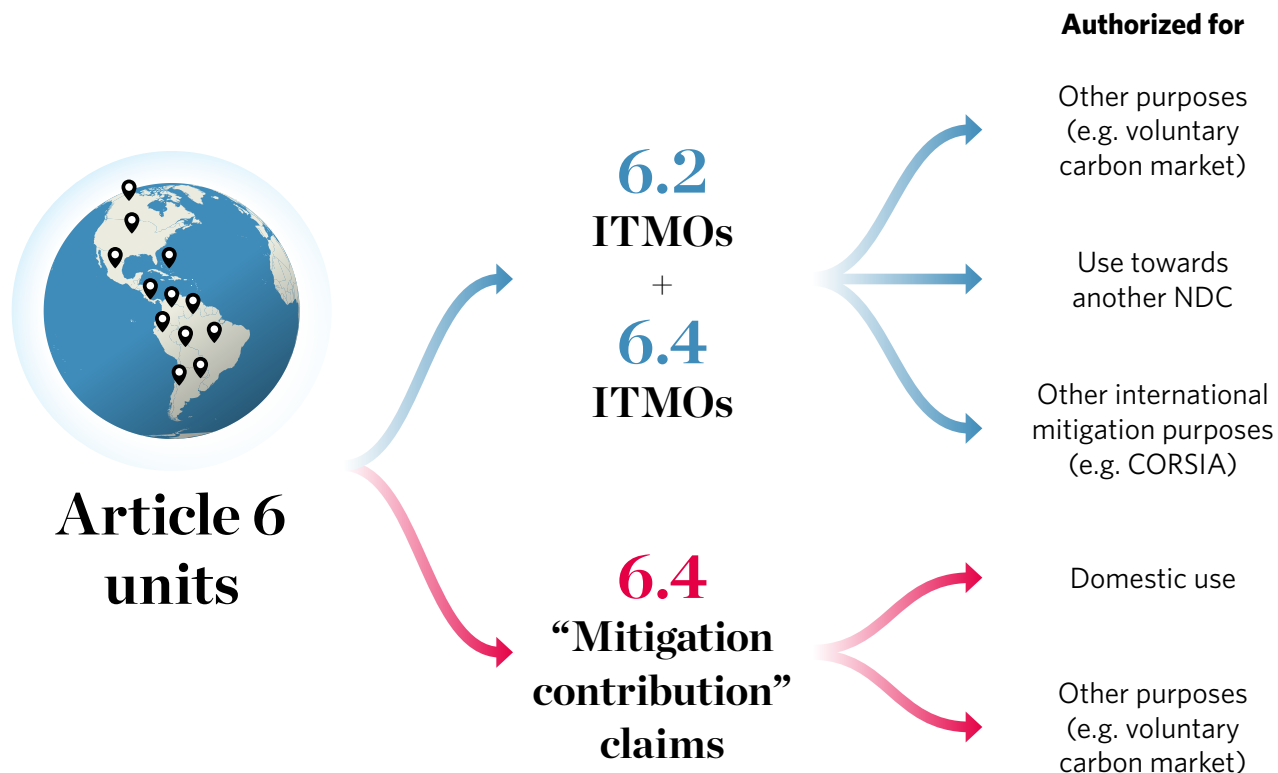
Article 6, as it triggers a commitment by the host country to **apply a corresponding adjustment, as well as reporting requirements**⁷. However, there are still some open questions on exactly *what* an authorization entails: what needs to be authorized, what is the minimum scope and format of an authorization, when an authorization should be provided and when can it be amended or revoked. Most likely, many of these issues will be defined by national legislation.

When is a corresponding adjustment required?

A corresponding adjustment is required in Articles 6.2 and 6.4 and for all units authorized by the host country, including from sectors outside an NDC⁸. For example, countries must apply a corresponding adjustment for units transferred to the buyer country's NDC or for the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). There are a few exceptions to the application of corresponding adjustments in Article 6:

- **Pre-2020 units:** corresponding adjustments are not required for pre-2020 Certified Emissions Reductions (CERs), which may be transferred to Article 6.4 but only used to meet the host country's first NDC.⁹
- **Mitigation contribution (Article 6.4 only):** In 2022, for the first time, a new type of unit was defined under Article 6.4 for non-authorized units, called **mitigation contribution**. These do not require a corresponding adjustment and may be used, "inter alia, for results-based climate finance, domestic mitigation pricing schemes, or domestic price-based measures, for the purpose of contributing to the reduction of emission levels in the Host party".¹⁰ This opens the door for uses in other markets, such as in the voluntary carbon markets or domestic markets. At the moment, "mitigation contribution" can only be used for Article 6.4. ([See section on Article 6 and the VCM](#))

Figure 4: When is a corresponding adjustment required



Land use sector: Is nature included in Article 6? What about REDD+?

Yes, nature-based solutions, including REDD+ activities, are included in Article 6. As is the case for all sectors, the land sector is not explicitly referred to in the text, however, nature-based solutions could be eligible for Article 6 trades, provided the programs fulfill the Article 6 guidance.

Is nature included in Article 6.2? Yes. Nature-based solutions include protecting, restoring and managing natural ecosystems such as forests, mangroves, croplands, grasslands, and peatlands – all of which fall under the IPCC definitions of emissions reductions or removals. ITMOs (Article 6.2 units) explicitly include **reductions AND removals**¹¹, which is the legal basis for nature-based solutions to be eligible. It will be up to countries to define what activities to include in their bilateral agreements under Article 6.2 and some countries, such as Japan, have already included nature-based activities within the scope of potential trades.

Is REDD+ included in Article 6.2? REDD+ includes five activities: reducing emissions from deforestation, reducing emissions from forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stock. All of these activities fall under the definition of **emission reductions** or **removals** (see Figure 5), and therefore, within the scope of an ITMO (Article 6.2 units). As is the case for all sectors, host countries will need to demonstrate how their REDD+ programs fulfill Article 6 requirements, recognizing that the [Warsaw Framework](#) is a solid foundation for meeting these requirements. As is also the case for all sectors, not all REDD+ programs will meet the Article 6 requirements without additional steps. (See [section on the relationship between REDD+ and Article 6](#))

Terminology Box 2: Nature-based solutions vs. REDD+

Nature-based solutions (NbS) and Reducing emissions from deforestation and forest degradation (REDD+) are both approaches that aim to mitigate climate change and promote sustainable land use practices, but while **nature-based solutions** is a broader concept that includes a range of actions to protect, restore and manage a variety of ecosystems, **REDD+** is a specific UNFCCC mechanism that focuses on reducing emissions from deforestation and forest degradation, especially in tropical countries.

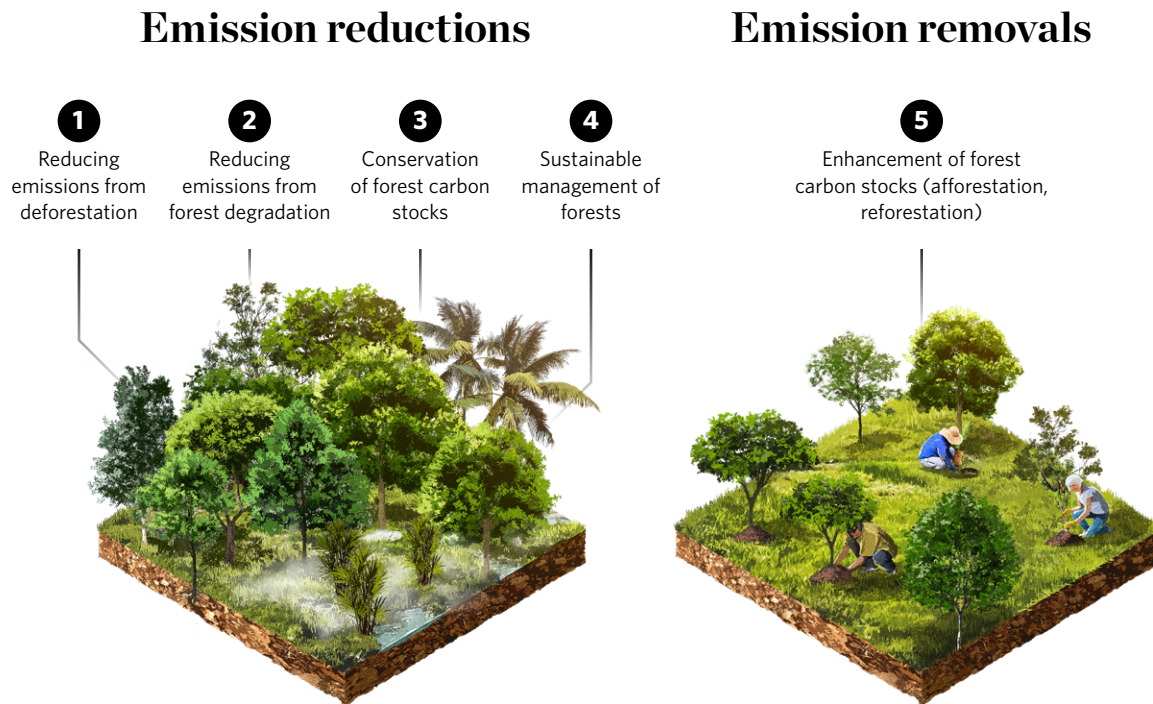
Nature-based solutions (NbS)

Refers to actions that include protecting, restoring, and managing natural ecosystems such as forests, mangroves, croplands, grasslands, and peatlands³¹. In the UNFCCC negotiations, nature-based solutions are generally referred to as **land use emissions; land sector**; land-use, land-use change and forestry (**LULUCF**); or Agriculture, Forestry and Other Land Use (**AFOLU**), following the IPCC. **For simplicity, we use these concepts interchangeably in this paper.** The term NbS was referred to for the first time in the UNFCCC context in 2022, in the cover text of COP27, which encouraged countries to consider NbS or ecosystem-based approaches for their mitigation and adaptation actions while ensuring relevant social and environmental safeguards.³²

REDD+

Stands for reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks, and is a specific mechanism under the [UNFCCC](#), established over several years of negotiations which resulted in the [Warsaw Framework for REDD+](#). It establishes a framework for financial incentives for developing countries to conserve and sustainably manage their forests, with minimum requirements for safeguards, monitoring and accounting.^{33, 34}

Figure 5: The five activities of REDD+



But wasn't REDD+ excluded from the Article 6 text?

No. At COP26, specific text on REDD+ was proposed to allow the recognition of **pre-2021** REDD+ units to be **automatically** included under Article 6.2. ITMOs, by definition, are generated in 2021 or later and ultimately, this text was rejected, largely to ensure that Article 6.2 has consistent rules across all sectors (including land use). As mentioned before, the Article 6.2 text does not explicitly mention any sectors, and the exclusion of specific text on REDD+ did not change the fact that all REDD+ activities fall under the concepts of emission reductions and removals and, therefore, are eligible for Article 6.2 trades. ([See section on the relationship between REDD+ and Article 6](#))

Is nature included in Article 6.4? It is unclear which methodologies will be approved by the [Article 6.4 Supervisory Body](#). However, there are no limitations on the sectors or activities for which methodologies can be submitted, opening the door for nature-based solutions. During the negotiations of the Kyoto Protocol's CDM in the

early 2000s, permanence concerns about forest carbon credits resulted in only two types of nature activities being eligible: afforestation and reforestation. After over **two decades of implementation** of these activities, it is expected that the Supervisory Body considers experiences and good practices in compliance and voluntary markets to define what activities will be eligible. The Supervisory Body is currently developing specific guidance on **activities involving removals**, which directly touch on some nature-based activities such as restoration of tree cover, improvement of forest management, enhancement of soil carbon sequestration in croplands and grasslands, and protection and restoration of peatlands and coastal wetlands, among others.¹² Nature-based removals can play a particularly important role in near-term action, not only for their mitigation benefits but also for their ability to enhance adaptation and resilience, as they can provide additional environmental and social benefits.

Is REDD+ included in Article 6.4? REDD+ could fit under Article 6.4, should the Supervisory Body approve

REDD+ related methodologies. The Supervisory Body is currently discussing whether jurisdictional methodologies (as opposed to only project-based methodologies), could be part of the Article 6.4 mechanism. Although there are no final decisions yet, the fact that jurisdictional scale implementation might be considered by the Supervisory Body may open doors for jurisdictional REDD+ standards, such as The REDD+ Environmental Excellence Standard ([ART/TREES](#)).

What about Article 6.8? Although Article 6.8 is less defined than Articles 6.2 and 6.4, and there is not much clarity on how the mechanism will work, all nature-based activities and REDD+ programs under the Warsaw Framework meet the 6.8 requirements.

- **Article 6.8 as a testing ground for future market activities:** Article 6.8 could serve as testing grounds for nature activities that could eventually become market-based approaches but are not yet ready for markets: For example, most historical payments for REDD+ came from bilateral deals and multilateral funds, such as the World Bank. These non-market payments helped countries to improve their REDD+ programs and now many REDD+ countries can apply for market-based funding through programs like the [Forest Carbon Partnership Facility's](#) (FCPF) Carbon Fund and [Lowering Emissions by Accelerating Forest Finance](#) (LEAF).¹³
- **Article 6.8 and High Forest Low Deforestation (HFLD):** Article 6.8 could also serve as a source of finance for non-market approaches that may never transition into a market, due to a limited volume of credits, but may offer higher co-benefits and strong equity components, which could be funded through non-market approaches. Article 6.8 stipulates a timeline for implementation in 2025-2026. Once implemented, Article 6.8 could be a way of regulating international investments in preserving ecosystems, including those under the Glasgow Forest Declaration. For example, through Article 6.8, financing of HFLD

forests could happen through grants and results-based finance, rather than with carbon credits.

What is the relationship between REDD+ (Article 5.2¹⁴) and Article 6 of the Paris Agreement? Article 6 could be a source of finance for REDD+ programs, as long as host countries demonstrate that they meet all Article 6 requirements.

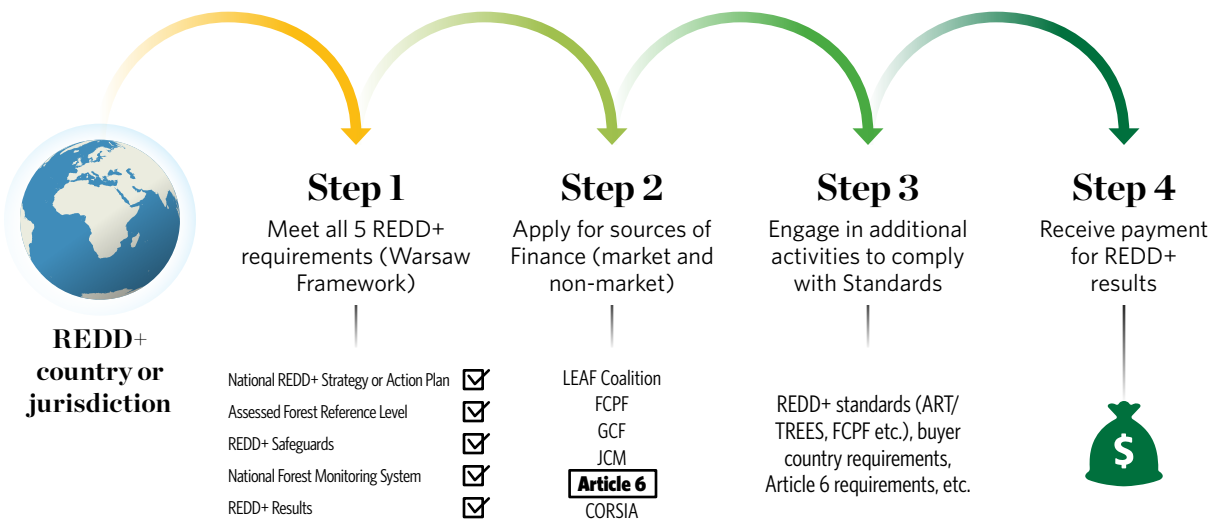
Article 5.2 of the Paris Agreement encourages countries to implement and support policy approaches for REDD+. This recognition builds on several years of UNFCCC negotiations which resulted in the [Warsaw Framework](#) for REDD+, with rules for tropical countries to be **financially compensated** for reducing deforestation and forest degradation.

To access finance for REDD+, forest countries need to, **first**, meet all the [Warsaw Framework minimum requirements](#): Develop a national REDD+ action plan, a forest monitoring system (MRV), comply with REDD+ safeguards, have an assessed Forest Reference Emission Level (FREL), and generate REDD+ "results".¹⁵ If all these requirements are met, countries **are eligible to seek payments** for their efforts in reducing deforestation.

A **second step** of the process is to apply for a specific source of finance to receive payments for reducing deforestation. In the past decade, different [funding mechanisms for REDD+](#) have been made available to countries, both under market (e.g. LEAF) and non-market approaches (e.g. Green Climate Fund). Each funding mechanism has specific rules and standards to enable payments, which may go beyond the Warsaw Framework requirements.

Therefore, as a **third step**, countries might need to engage in additional activities to access payments for their REDD+ results. For example, some market standards require countries to establish a buffer pool for leakage and reversals, and have third party verification process to verify emissions reductions, all of which are not required by the Warsaw Framework.

Figure 6: Relationship between Article 6 and REDD+



To be eligible for Article 6 finance, countries developing REDD+ programs will need to demonstrate how their REDD+ activities **meet Article 6 specific guidance**. This will require additional elements on top of the Warsaw Framework requirements, such as providing authorizations for the application of corresponding adjustments and complying with Article 6 rules on registries, tracking, reporting, addressing inconsistencies, etc.

What is “emission avoidance” and how is it related to Nature? Both Articles 6.2 and 6.4 state that further work will be done to consider whether “emission avoidance” could be eligible.¹⁶ This sparked some debate around the concept of emissions avoidance and whether it included nature-based activities. The term **emission avoidance** is not officially defined by the UNFCCC nor the IPCC, and it is not even referenced within the IPCC’s definition of mitigation of climate change.¹⁷ Emissions avoidance has been used informally in the context of UNFCCC negotiations to reference a proposal from the Government of Ecuador from 2012 regarding compensation for its Yasuni initiative to keep oil reserves in the ground.¹⁸ For most, emission avoidance refers to policies and measures that explicitly forgo the opportunity to **develop fossil fuel resources**. The **CDM** has also characterized [methodologies](#) under **emissions**

avoidance defining it as “various activities where the release of GHG emissions to the atmosphere is reduced or avoided, for example, avoidance of anaerobic decay of biomass and reduction of fertilizer use”¹⁹. However, not only these activities do not include the land sector, but they refer to activities where a mitigation intervention would **reduce** the rate of existing emissions, ultimately falling under the concept of **emission reductions**. Regardless of the lack of clarity around emissions avoidance, **nature-based solutions** include protecting, restoring and managing natural ecosystems such as forests, mangroves, croplands, grasslands, and peatlands – all of which fall under the definitions of emissions reductions or removals.

Is “emissions avoidance” the same as “emissions from avoided deforestation”? No. These are two distinct concepts. Interventions to avoid emissions from deforestation aim at preventing the release of GHG gases that would have occurred if such interventions have not been deployed. Therefore, emissions from avoided deforestation are recognized as a type of emissions *reduction* by the UNFCCC²⁰. The majority of countries in the Article 6 negotiations have confirmed that understanding and clarified that emission avoidance does not include emission reductions or removals.

Article 6.2 Pilots: Why have countries not yet started trading?

What it takes for an Article 6.2 trade to happen? After COP27, countries agreed on enough rules to enable trades. But while progress has been made at COP27 on registries, reporting and tracking rules, there are still challenges that need to be addressed before these trades can become a reality. For example, host countries are still in the early stages of developing their domestic frameworks to comply with Article 6 requirements,

which included defining *what* they will authorize, *who* will authorize trades and establishing processes to comply with reporting requirements. Even when these domestic frameworks are in place, a more complex issue will rise as host countries to define *what sectors* and *how many* units they could transfer internationally without undermining the achievement of their NDCs. (See section on Article 6 and NDCs)

Figure 7: Examples of Article 6.2 Pilots

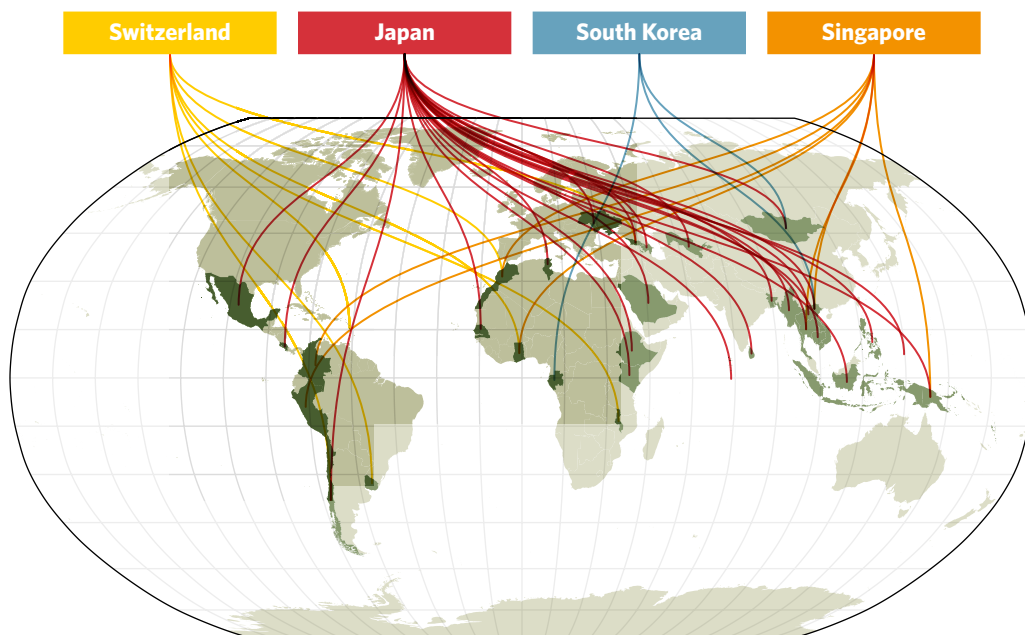


Table 1: Examples of Article 6.2 pilots

Buyer country	Host country
Switzerland	Chile, Ghana, Dominica, Georgia, Malawi, Morocco, Peru, Senegal, Thailand, Ukraine, Uruguay, Vanuatu
Japan	Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia, Mexico, Saudi Arabia, Chile, Myanmar, Thailand, Philippines, Senegal, Tunisia, Azerbaijan, Moldova, Georgia, Sri Lanka, Uzbekistan, Papua New Guinea
South Korea	Mongolia, Viet Nam, Gabon
Singapore	Colombia, Ghana, Morocco, Peru, Papua New Guinea, Thailand, Viet Nam

Buyer countries such as Switzerland had already started to develop [Article 6.2 pilots](#) even before the Article 6 rules were agreed upon at COP26 ([See Table 1](#)). However, a bilateral agreement is only the **first step** for an Article 6.2 trade to happen. After that, countries still have **several additional steps**, such as providing letters of authorization, complying with reporting requirements and, once the project is concluded, start monitoring and verification processes. Only after the first monitoring cycle is completed for these projects, the first issuance and transfer can take place.

At COP27, Ghana became the first country to ever issue an official [authorization letter](#) for the export of ITMOs (Article 6.2 units) of a climate-smart rice project to [Switzerland](#). The letter of authorization from Ghana came 2

years after the agreement between Ghana and Switzerland was signed in 2020, which illustrates that it may take time for host countries to develop their domestic frameworks to issue authorizations. More recently, [Thailand](#) authorized a project for the operation of e-buses in Bangkok under a cooperative agreement with Switzerland.

What about Article 6.4? For the Article 6.4 mechanism to be up and running, a separate body called the [Article 6.4 Supervisory Body](#) needs to develop rules on methodologies, baselines, safeguards, guidance on removals, etc. Even if the Supervisory Body develops such guidance quickly, the countries need to “approve” them at COP28 in 2023, so the best-case scenario is that these trades begin to take place in 2024. Likely, the first methodologies developed will be adaptations from the CDM.

Article 6 and NDCs: Can countries use carbon markets to advance their climate goals?

Yes. Countries are increasingly looking to use Article 6 to help achieve NDCs. According to an [analysis by the International Emissions Trading Association \(IETA\)](#), 80% of countries signaled an intention to use Article 6 to achieve their NDC targets and 24% have already started to engage with pilots and/or bilateral agreements²¹. However, any international transfers will involve trade-offs: the more a host country exports emission reductions, the less mitigation can be claimed against its own NDC target. Host countries and buyer countries are in the early stages of examining the opportunities and costs that Article 6 offers and there are a range of factors to be taken into consideration:

- **NDC achievement:** Successfully achieving a host country’s NDC is essential if the country plans to trade Article 6 units with a corresponding adjustment.

Host countries, in particular, must balance NDC achievement against the investment opportunity offered by Article 6, as the more a host country exports carbon units, the less mitigation can be claimed against its own NDC target. Uncertainty around trading prices and progress toward NDC targets set for 2030 can complicate this difficult decision even further. **Buyer countries** will have to navigate the risk that the host country’s willingness to sell may change depending on progress towards their NDC targets and bear the risk of host countries underperforming and not being able to transfer these units.

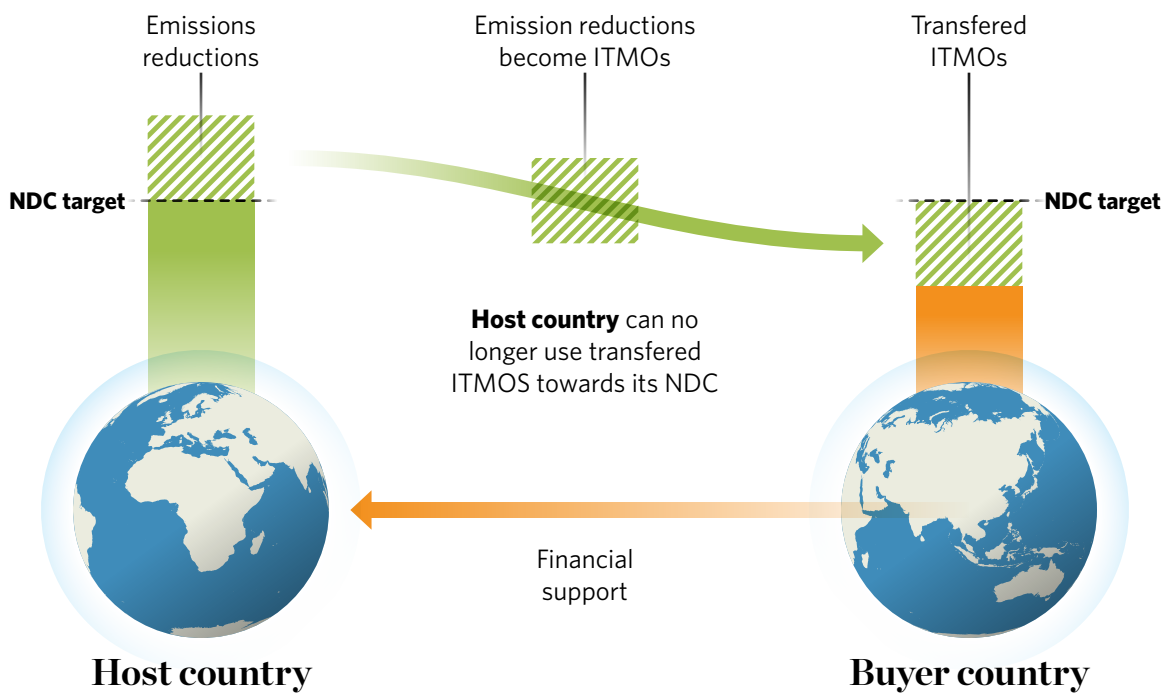
- **Price implications for corresponding adjustments:** **Host countries** may want to keep the cheapest, easiest mitigation and count it to meet their own NDC target. This mitigation likely would not be traded, because the

price would not cover the true cost of a corresponding adjustment. Instead, countries may either wish to trade “easy” mitigation activities at a higher price or prioritize or only trade “difficult” mitigation activities. To limit the risk of overtrading, host countries could establish domestic criteria to limit the number of years, technology types, and/or sectors authorized for Article 6 trades.²² However, this will require a thorough understanding of NDC targets, NDC implementation plans, and future NDC updates²³.

- **National legislation:** Host countries need to develop their domestic frameworks to issue authorizations, define *what* they will authorize, *who* will authorize trades, establish processes to comply with reporting requirements, etc. - all of which will take time. Once these frameworks are in place, countries need to develop processes to monitor their progress toward their NDC.

- **Reversing and revoking authorization:** Recent discussions during COP27 on whether authorization may be changed or revoked, which is slotted for a decision at COP28, could add additional risk and uncertainty to buyer countries.
- **Sectors “outside” of an NDC:** Host countries could authorize activities outside of their NDCs. Per the Article 6 rules, transfers from sectors outside of NDCs must also include a corresponding adjustment. However, exactly when host countries will apply such an adjustment is uncertain, as the unit must be subtracted from the NDC, even though the sector was never included in the NDC. The Article 6 text has not clarified this process, and it remains to be seen if additional guidance will appear in the future – or if individual countries will figure out their own system for ensuring adjustments.

Figure 8: Article 6 and NDCs



Article 6 and the VCM: How does the Paris Agreement impact the private sector?

Did Article 6 regulate the VCM?

The Paris Agreement does not have the mandate to regulate the voluntary carbon market. However, Article 6 rules might indirectly impact its development. The concept of **corresponding adjustments** has sparked a debate within the VCM about whether voluntary credits could be counted toward the host country NDC, while also **claimed as an offset** by companies' net-zero targets. Although there's not a definitive answer to how Article 6 will impact projects on the ground, the following elements should be taken into consideration by VCM players to better align with the Article 6 mechanism when it is fully operational:

- **Host country requirements:** Ultimately, it will be up to the host country to determine whether to regulate how Article 6 rules would apply to the VCM, including corresponding adjustments.²⁴ Many countries do not yet have a position on whether a corresponding adjustment is required for VCM credits, which led some countries to err on the side of caution: for example, Indonesia, before finalizing its legislation in 2023, placed a temporary freeze on any issuance of VCM credits from 2021-2022.²⁵ India has indicated a similar approach. To make these decisions, host countries must balance their NDC achievement against the investment opportunity offered by the VCM and Article 6, as the more a host country exports carbon credits, the less mitigation can be claimed against its own NDC target. ([See section on NDC and Carbon Markets](#)).²⁶
- **Market requirements:** Even if corresponding adjustments are not required by countries, corporate demand could drive the market towards credits with corresponding adjustments. Over the last few

years, standards like Verra and Gold Standard, and guidelines like the Integrity Council for the Voluntary Carbon Market (IC-VCM) and the Voluntary Carbon Markets Integrity Initiative (VCMI) have sparked debate around the need for corresponding adjustments for the VCM.

- **Article 6 requirements:** The new **mitigation contribution** concept under Article 6.4 refers to units for which the host country will not apply a corresponding adjustment. These units do not require a corresponding adjustment and may be used, "inter alia, for results-based climate finance, domestic mitigation pricing schemes, or domestic price-based measures, for the purpose of contributing to the reduction of emission levels in the host party".²⁷ Although it does not regulate the VCM directly, it provides more for VCM participants to consider, including whether these units could be used as a contribution to climate action and/or an offset.

Will corresponding adjustments be required for all VCM offsets?

No. As previously mentioned, Article 6 does not directly regulate the VCM and it is expected that voluntary transactions will continue to exist in parallel to Article 6 cooperation between countries. The expectation is that not much clarity regarding private transactions will come out of the negotiations. However, outside of the negotiations, some countries might choose to regulate the VCM or restrict carbon exports, which might affect projects on the ground. In addition, corporate demand could drive the market towards credits with corresponding adjustments by standards like Verra and Gold Standard, and guidelines like the IC-VCM and VCMI if they require a corresponding adjustment for offsets.

CDM transition: What was decided?

The [Clean Development Mechanism](#) (CDM), under the Kyoto Protocol, was one of the world's first international carbon finance schemes. Eligible projects can earn certified emission reduction (CER) credits, equivalent to one ton of CO₂. Developed countries purchased these credits to meet their targets under the Kyoto Protocol.

Can CDM projects transition to the Article 6.4 Mechanism?

Yes, but only for certain time windows: Projects must request to transition from the CDM to Article 6.4 by the end of 2023 and the transition needs to be concluded by the end of 2025. Host countries are expected to exert significant control over the transition process and must apply corresponding adjustments on the units generated by transitioned projects. If approved by the host country, projects may continue to use the original CDM methodology until the end of the current crediting period or December 31, 2025 (whichever is earlier). After this date, these projects will have to follow Article 6.4

methodologies. Operational procedures will be developed by the Supervisory Body.

Can CERs be used towards NDCs?

Yes. CERs from projects registered (not issued) after 2013 can be used for the first NDC compliance *without* a corresponding adjustment by the host country. However, these transfers will only occur until a date limit, which will be negotiated in the future.²⁸ According to the [New Climate Institute](#), between 320 and 341 million CERs could transfer from the CDM with the 2013 registration cut-off. This is a significant decrease compared to [almost 4 billion](#) units that could have been transferred without the 2013 cut-off. This was one of the negotiations' "sticking points" for years, over concerns that these pre-2020 units would "flood" the market and not be considered additional. It is important to consider that CERs used toward 1st NDC are not considered ITMOs (Article 6.2 units). ITMOs by definition are generated in 2021 or later, whereas eligible CERs are from 2013-2020.

OMGE and SOP: What discounts and fees apply to Article 6?

What are the various discounts and fees in Article 6 and who pays for them?

There are two: Share of Proceeds (SOP) and Overall Mitigation of Global Emissions (OMGE). Both SOP and OMGE are **required** for all Article 6.4 issuances but are

only **encouraged** for Article 6.2 trades "on a voluntary basis". However, some countries may require the use of OMGE and SOP as part of their Article 6.2 bilateral deals. For example, Switzerland and Singapore announced this intended requirement in all their Article 6.2 pilots. One important nuance is that both SOP and OMGE are due at issuance by

the host country, not at transfer. As a result, the burden of these fees and discounts falls on the host country, rather than the buyer. Host countries could pass on the cost to the buyer, but this will only be clear once trades start to happen.

SOP is applied as both a volume of issued units and a monetary contribution (\$): For all units issued under Article 6.4, a levy of 5% **in volume of issued carbon units** will be transferred to a new account established in 2021 within the [Adaptation Fund](#). This requirement is similar to what happened under the Kyoto Protocol, where [2% of CERs issued for a CDM](#) project activity would go to the Adaptation Fund to [be sold](#) by the Fund’s Trust (World Bank). At COP27, it was clarified that the 5% cancellation applies to all Article 6.4 units, whether they

are authorized or not²⁹. The **monetary contribution** was defined by the Supervisory Body and approved at COP27 as a set of 5 different fees whose level depends on the project size and other factors ([see Table 2](#)). These fees are used to pay administrative expenses.

OMGE is an automatic cancellation in volume (not \$): For all Article 6.4 issuances, 2% of the units will not be eligible for sale. Instead, they will be redirected to a **cancellation account** that the Supervisory Body will set up. This is intended to increase ambition by ensuring a net reduction in emissions, rather than just 1-to-1 offsetting CO₂ released in one country with savings elsewhere. At COP27, it was clarified that the 2% cancellation applies to all Article 6.4 units, whether they are authorized or not³⁰.

Table 2: OMGE and SOP

Name	Destination and purpose	Type	Values
SOP	Adaptation Fund (for all activities)	Automatic transfer of issued volume	5% of Article 6.4 units at issuance ³⁵ , whether they are authorized or not.
	Adaptation Fund (for specific activities)	\$	3% of the issuance fee paid for each request for issuance of Article 6.4 units and transferred annually to the Adaptation Fund ³⁶
	Supervisory Body for Administrative expenses	\$	Set of 5 different fees charged for registration, issuance, renewal, inclusion of CPAs, and approval of a post-registration change. ³⁷ The Supervisory Body defined the levels for each fee, which have been approved at COP 27. ³⁸
OMGE	Cancellation account to increase ambition	Automatic cancellation of issued volume	Minimum 2% of the issued Article 6.4 units ³⁹

Endnotes

- 1 World Bank. Lessons from creating mitigation outcomes: <https://blogs.worldbank.org/climatechange/lessons-creating-mitigation-outcomes>
- 2 IPCC, 2018: Annex I: Glossary [Matthews, J.B.R. (ed.)]. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 541-562. <https://doi.org/10.1017/9781009157940.008>
- 3 For the purposes of this paper, we define **non-market approaches** as international cooperation between countries to achieve the goals of the Paris Agreement when there is **no expectation of trading carbon credits**.
- 4 Decision -/CMA.4, para 29 (b)
- 5 Article 6.4 trade requires an automatic cancellation to deliver an Overall Mitigation in Global Emissions (OMGE) and the transfer of a proportion of units to the Adaptation Fund for Share of Proceeds (SOP). Both OMGE and SOP are only required on a voluntary bases for Article 6.2 trades.
- 6 While infrastructure may be re-used (like having a Designated National Authority), all methodologies will need to go through a re-approval process by the Article 6.4 Supervisory Body.
- 7 OECD/EIA - The birth of an ITMO: Authorisation under Article 6 of the Paris Agreement: <https://www.oecd-ilibrary.org/docserver/3d175652-en.pdf?expires=1669744163&id=id&acname=guest&checksum=7EC7B35BC4EC376F5710F63D3234C8E7>
- 8 Decision 2/CMA.3, para 14
- 9 Decision 3/CMA.3 para 75d.
- 10 Decision -/CMA.4, para 29 (b)
- 11 Decision 2/CMA.3, para 1b
- 12 IPCC WGIII Report, page TS-97. https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SPM.pdf.
- 13 For more information, access: <https://internationalreddstandards.org/>
- 14 Paris Agreement, Article 5.2: *Parties are encouraged to take action to implement and support, including through results-based payments, the existing framework as set out in related guidance and decisions already agreed under the Convention for: policy approaches and positive incentives for activities relating to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while reaffirming the importance of incentivizing, as appropriate, non-carbon benefits associated with such approaches.*
- 15 Results = emissions reductions or removals
- 16 Decision 2/CMA.3, cover text, para 3c and Decision 3/CMA.3, cover text, para 7h
- 17 IPCC, 2018: Annex I: Glossary [Matthews, J.B.R. (ed.)]. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 541-562. <https://doi.org/10.1017/9781009157940.008>.
- 18 **Emissions Avoidance** has been used informally to reference a proposal from the Government of Ecuador regarding compensation for its Yasuní initiative to keep oil reserves in the ground. See related articles [here](#) and [here](#).
- 19 See also: [Table VI-2](#), Methodology Categorization Other Sectors
- 20 Decision 1/CP.16, para 70.

- 21 Many countries have said they will not rely on Article 6 to meet their NDCs, including, the European Union (Ireland, however, announced they wish to use credits, and Sweden and Finland have been piloting Article 6 trades to potentially go beyond their NDC commitments); Iceland, Malaysia, Marshall Islands, Tonga, United Kingdom, and the United States.
- 22 OECD/EIA: - The birth of an ITMO: Authorisation under Article 6 of the Paris Agreement: <https://www.oecd-ilibrary.org/docserver/3d175652-en.pdf?expires=1669744163&id=id&acname=guest&checksum=7EC7B35BC4EC376F5710F63D3234C8E7>
- 23 Perspective Climate Group; Climate Focus - Promoting Article 6 readiness in NDCs and NDC implementation plans: <https://ercst.org/wp-content/uploads/2021/08/20210630-Promoting-Article-6-readiness-in-NDCs-and-NDC-implementation-plans-.pdf>
- 24 Article 6 establishes countries' right to authorize any units for international trades under Article 6.2 or 6.4, or for **other international mitigation purposes** (OIMP). These other purposes include an umbrella of objectives, including use in CORSIA, domestic markets, and the VCM. At COP26, it was decided that it is up to host country to define "other international mitigation purposes" what will determine whether A6 rules (including corresponding adjustments) apply for credits used by VCM.
- 25 Carbon credit issuances from Indonesia on hold, developers await clarity (S&P Global): <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/040722-carbon-credit-issuances-from-indonesia-on-hold-developers-await-clarity>
- 26 See CA PAPER for more info
- 27 Decision -/CMA.4, para 29 (b)
- 28 Decision -/CMA.4, para 20
- 29 Decision -/CMA.4, para 40
- 30 Decision -/CMA.4, para 40
- 31 Leavitt, S.M. et al. (2021). Natural Climate Solutions Handbook: A Technical Guide for Assessing Nature Based Mitigation Opportunities in Countries. The Nature Conservancy, Arlington, VA, USA. https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_Natural_Climate_Solutions_Handbook.pdf
- 32 Natural Climate Solutions (NCS) is another common term which can be used to refer to the land use sector. For some, NCS refers to only mitigation measures, while NbS refers to both mitigation and adaptation. For simplicity, we will only use nature-based solutions. See more information at: https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_Natural_Climate_Solutions_Handbook.pdf
- 33 For more information on REDD+ please access: TNC and CI (2022): International REDD+ Standards and Finance. <https://internationalreddstandards.org/>
- 34 For most of the past decade, and before the adoption of the Paris Agreement, developing countries prepared to participate in the REDD+ framework (i.e. readiness) under the UNFCCC. REDD+ finance was restricted to public finance channeled through bilateral agreements and multilateral funds (e.g. Green Climate Fund, Amazon Fund, REDD+ Early Movers Program, World Bank's Forest Carbon Partnership Facility). With the adoption of the Paris Agreement, and the inclusion on REDD+ in its Article 5.2, the landscape has been shifting considerably, with new sources of finance available (e.g.C LEAF Coalition) and new possibilities especially after COP26 in Glasgow where countries agreed on rules for Article 6.
- 35 Decision 3/CMA.3, para 67a
- 36 [Decision -/CMA.4](#), para 15
- 37 Decision -/CMA.4, para 50
- 38 [Decision -/CMA.4](#), para 14
- 39 Decision 3/CMA.3, para 59 and 69; Decision -/CMA.4, para 40.