

Introduction

Carbon markets have evolved significantly due to changes in the international climate policy, economic conditions and growing recognition of the need to tackle climate change. From the Kyoto Protocol and the Paris Agreement to the present.

FairClimateFund will pay more attention to this in a series of four new articles. In this first part we will provide a global overview of the most important developments and in the following articles we will delve deeper into topics such as emission rights and emission reduction projects, climate-neutral claims and labels, and the price development of a ton of CO2.

Carbon Markets:

Compliance Carbon Markets

Mandatory systems regulated by government organizations to cap emissions for specific industries.

Voluntary Carbon Markets

Where carbon credits can be purchased by those that voluntarily want to compensate for their emissions.



Market size 2021 Compliance



Voluntary \$2B

Sources: Refinitiv, Ecosystem Marketplace

As demand to cut emissions intensifies, voluntary carbon market volume has grown **five-fold in three years.**

Kyoto Protocol 1997-2015

The Kyoto Protocol was adopted in 1997. The Kyoto Protocol is an agreement under the United Nations Climate Change Convention and entered into force in 2005 and expired on December 31, 2020.

The aim of the treaty was to reduce greenhouse gas emissions for developed countries (so-called Annex I countries) by introducing the concept of emission reduction targets. Annex I countries could achieve their emission reduction targets by investing in emission reduction activities at home, in other Annex I countries or through the Clean Development Mechanism (CDM). The CDM enabled projects that reduced emissions in non-Annex I developing countries to generate Certified Emission Reductions (CERs), which could be bought and sold on the global carbon market.

In addition to these regulated markets, there are also unregulated markets companies and individuals compensate their CO2 emissions on a voluntary basis. FairClimateFund operates in this so-called voluntary market and helps vulnerable people in the Global South to access climate finance through the voluntary carbon market. The voluntary carbon market followed the framework of the Kyoto Protocol.

Market	Compliance		Voluntary
Credit Type	Permits to Pollute	Project-based emission reduction credits	Project-based emission reduction credits
Description	A 'certificate to pollute' one tonne of CO2e	A carbon credit of one tonne generated from an emission reduction project	A carbon credit of one tonne generated from an emission reduction project
Issued by	National Govern- ments/ Agencies	E.g. Clean Development Mechanism (CDM)	E.g. Verified Carbon Standard (VCS) or Golc Standard
Examples	European Union Allowance (EUA)	Certified Emission Reduction (CER)	E.g. Gold Standard Verified Emission Reductions (GS VER)

Paris Agreement 2015

The Paris Agreement marked a significant change in international climate policy compared to the Kyoto Protocol. First, the scope of carbon markets expanded to include not just Annex I countries, but all countries. In addition, it adopts a more flexible and bottom-up approach whereby countries set their own climate targets, known as "Nationally Determined Contributions (NDCs)". These objectives are not legally binding, but are intended to be transparent and regularly updated using the same assessment framework.

AMBITION MECHANISM IN THE PARIS AGREEMENT



Carbon markets play a minor role in the Paris Agreement. After all, the intention is that all countries, companies and citizens primarily reduce their emissions to combat climate change, and not 'buy off' through compensation.

At the same time, carbon markets can make a useful contribution: after all, the emission of 1 ton of CO2 in country in Europe, then it is interesting to invest in it. Especially because this also has positive effects on the development of, for example, local farmers in India.

Article 6 of the Paris Agreement introduced the idea of 'cooperative approaches', which also includes international carbon markets.

It is a framework for countries to voluntarily cooperate in implementing their climate goals. The main mechanisms are:

- Article 6.2: Establishes a mechanism for countries to participate in emissions trading through bilateral or multilateral agreements. It allows a country with excess emissions reductions to transfer those reductions to another country that needs them to meet its NDC. We also call this "internationally transferred mitigation outcomes (ITMOs)".
- Article 6.4: Will create a global carbon market (Sustainable Development Mechanism SDM), comparable to the CDM under the Kyoto Protocol. The resulting carbon credits, known as A6.4ERs, can be purchased by countries, companies or even individuals.

The voluntary carbon market (VCM) will partly follow the framework of Article 6.4. The details of how Article 6 would work in practice would not be decided until 2021.

Compliance C	arbon Market	Voluntary Carbon Market
Article 6.2	Article 6.4	VCM
ITMO's	A6.4ER's	Carbon Credits

COP26 and the Glasgow Agreement

The Glasgow Agreement, reached at COP26 in 2021, provided crucial guidance for the implementation of Article 6 of the Paris Agreement. It established rules and guidelines for international carbon markets, addressing issues such as registration, reporting, the CDM transition under the Kyoto Protocol, double counting, environmental integrity and governance.

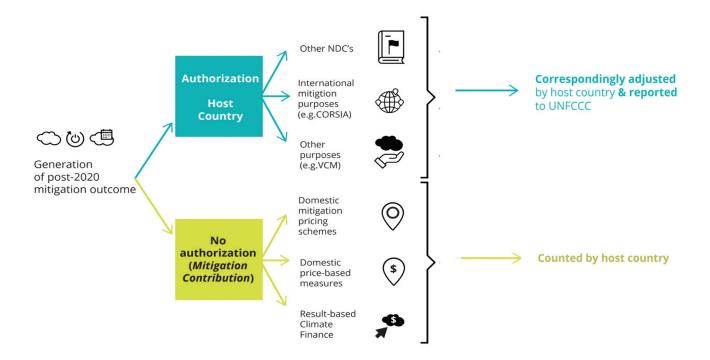
An important topic is the rules and guidelines regarding the transition of CDM projects to the Article 6.4 mechanism and the validity of old CDM credits. As long as old CDM projects and credits are still valid, this could significantly damage the credibility of the renewed carbon markets and efforts to achieve actual emission reductions.

Under the new system, national registers of emission reduction projects will be set up in the former 'non-Annex I' countries. Many countries choose to develop a national market for emission reductions as previously in the European Union (the Emissions Trading System, EU ETS). The aviation sector is also developing an emissions trading system, the so-called CORSIA.

The Glasgow Agreement sets out new rules to prevent double counting by applying so-called 'corresponding adjustments', which are required for all carbon credits in mandatory carbon markets. Similar to double-entry bookkeeping, this involves the country selling carbon credits and then deducting them from its own greenhouse gas inventory so that the country buying them can count them towards its own climate goals.

However, this obligation does not apply on the voluntary carbon market, because these credits do not run through the Article 6 system. In this case, the certification body (such as Gold Standard or Verra) decides for itself which rules it applies. If there is no "corresponding adjustment", the reduced tonne of CO2e is attributed to the NDC of the country where the project is located. In that case, buyers purchase so-called "contribution credits" with which they contribute to the CO2 reduction of the country in question. Carbon credits that do have a "corresponding adjustment" can be used to make your product or service climate neutral. Although these types of claims may no longer be used in the future.

This means that governments in countries where emission reduction projects are carried out determine whether a project may supply carbon credits or contribution credits to buyers abroad via a system of authorizations.



Conclusion¹

Overall, the evolution of carbon markets from Kyoto to Paris reflects a recognition of the importance of market mechanisms in tackling climate change with an increasing role of market regulation by governments. Market mechanisms are being refined and strengthened to better meet the goals of the Paris Agreement and global climate action.

Also, the focus of the offsetting mechanism, such as the CDM, has shifted to broader market mechanisms that include all types of mitigation activities. In the new world of the Paris Agreement, it is no longer just about offsetting your for CO2 emissions, but above all about actually (measurably) reducing emissions in one's own business operations and in the chain, and also investing in projects outside the chain that contribute to limiting climate warming. Whether these investments count as 'carbon offsetting' or as 'mitigation contribution' depends on the country where the project takes place and the rules applicable there. In both cases it always concerns:



1= It is worth noting that the implementation of carbon markets can be complex and subject to ongoing negotiations and refinement at international climate conferences.