

## An Introductory Guide for New Market Participants in Trading Carbon Credits and Offsets - Client Alert

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### Overview

This article gives an outline of the compliance and voluntary carbon markets, the differences between carbon credits and offsets, developments in the Exchange-traded markets, as well as recent market initiatives.

The aim is to provide a helpful introduction for in-house lawyers, compliance professionals and other relevant functions who may be new to these markets.

### Compliance Carbon Market

The compliance carbon market is regulated and is compulsory for those operators that are legally required to participate in it.

Mandatory compliance schemes have been implemented by various national governments and regulatory agencies to reduce greenhouse gas (**GHG**) emissions from large operators in carbon-intensive industries. These are known as cap-and-trade or emissions trading schemes (I refer to these schemes as **ETSs**).

ETSs have two principal features. The first involves an annual cap on the amount of GHG that can be emitted by the operator in question. The second involves the grant by the national government or regulatory agency to the operator of allowances; these give the operator the right to emit a specified amount of GHG each year. Each allowance is equal to one metric ton of carbon dioxide (**CO<sub>2</sub>**) or its equivalent greenhouse gas (**CO<sub>2</sub>e**). The cap and the related number of allowances granted are decreased each year with the intention that over time the total amount of GHG emissions made by the operator will fall.

ETSs have been established in the EU, the UK, California, Canada, China, New Zealand, Japan and South Korea. The China ETS and the EU ETS are the two largest of these mandatory schemes.

### Voluntary Carbon Market

The voluntary market, although far smaller than the compliance market, plays an important part in climate goals being reached. Unlike the compliance market (and as the name suggests) the voluntary carbon market is not compulsory. The participants in this market comprise governments, corporates, and private individuals. Each of these participants is free to choose to purchase carbon offsets. This activity is known as voluntary offsetting. As explained in this alert (see the section on **Carbon Offsets** below), carbon offsets are generated from projects where actual GHG reductions or removals are made.

### Carbon Credits

A carbon credit or allowance is a certificate that represents the legal right to emit one metric ton of

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CO2 or CO2e. Carbon credits are issued to those operators that are legally required to participate in ETSs.

Under the EU-ETS, for example, the operator requires an ETS certificate for each metric ton of GHG emitted. If its emissions exceed the number of certificates allocated, the operator must purchase other certificates in the market (whether bilaterally or through auction) to avoid significant financial penalties. Conversely, the operator whose emissions are less than the number of certificates allocated can sell and trade its surplus in the market. ETSs therefore incentivise an operator to lower its emissions where the market price for carbon credits is higher than the cost of implementing operational measures to reduce its carbon footprint.

### Carbon Offsets

Unlike a carbon credit, a carbon offset is a certificate that represents an actual reduction or removal of GHG under a specific carbon offset project. Each certificate is equal to one metric ton of CO2 or CO2e. A carbon offset is over and above any reduction in emissions that may be achieved by operators participating in ETSs.

Carbon offsets generated by such projects are known as Voluntary Emissions Reductions (**VERs**). These projects, and the related VERs generated, are validated and verified by private organisations, using a variety of different methodologies and standards. However, uniformity and consistency are limited, and there is no common internationally recognised governance framework. The organisations involved in validating offset projects and verifying the VERs are private entities. These organisations set their own methodologies and standards. These issues pose risks and challenges for buyers given the difficulties in being able properly to assess the underlying authenticity, quality and market value of VERs.

Of particular significance to the quality of VERs generated under offset projects is the concept of “additionally”. Put simply, if an offset project would have existed anyway without the need to sell VERs, emissions reductions or removals made would be treated as coincidental but not “additional”. A key element, then, in determining the quality of an offset project is the certification (and its accuracy) given by the validating organisation as to additionality.

### Carbon Trading in the Exchange Markets

The two largest exchange-traded markets for carbon are the European Energy Exchange (**EEX**) and the Intercontinental Exchange (**ICE**). Both offer a wide range of carbon products.

EEX acts as the common auction platform for general EU allowances (**EUA**) and EU aviation allowances (**EUAAs**) on behalf of the EU Member States and the EEA EFTA States. EEX has also introduced a set of voluntary market products, which are currently listed on EEX’s US-based Nodal Exchange. (A similar listing is planned by EEX for Europe in 2023.) ICE acts as the common auction platform for UK allowances (**UKA**) on behalf of the UK government. ICE has also launched a global carbon futures index that serves as a benchmark for UKA, EUA, CCA and RGGI futures prices. EEX and ICE both offer spot, futures and options contracts relating to UKAs and EUAs, as well as futures contracts relating to California Carbon Allowances (**CCA**) and Regional Greenhouse Gas Initiative (**RGGI**) CO2 allowances.

Turning to Asia, first China and then Singapore. China launched its own ETS in July 2021. Initially covering over 2,000 coal and gas-fired power generators, the China ETS is the world's largest of these schemes. Over time, the scheme will be extended to other industries. Under the scheme, affected operators are assigned emissions quotas, with unused quotas capable of being sold to other operators who would exceed their own quotas. China's national trading platform for carbon quotas, operated by Shanghai Energy and Energy Exchange, was also opened in July 2021.

In Singapore, the AirCarbon Exchange (**ACX**) and the Climate Impact X (**CIX**) have established material business operations, with significant governmental and institutional support. In 2022, ACX launched the Global Emission Reduction (**GER**) contract, which aims to become a single global reference price for the voluntary market. The GER is made up of a basket of carbon offset sub-contracts covering renewables, forestry, agriculture and carbon capture projects. ACX also offers digital tokens (these involve the securitisation of carbon offsets). CORSIA Eligible Tokens (**CETs**) were the first of such tokens to be launched by ACX. Under the CORSIA CET contract, each CET is supported by carbon offsets recognised under the Carbon Offsetting and Reduction Scheme for International Aviation (**CORSIA**). (See the section below on **Other Initiatives in the Market** for more information about CORSIA). CIX itself is developing two platforms, the Carbon Exchange and the Project Marketplace. In 2022, CIX offered auction capabilities for carbon offsets from specific foreign nature-based projects. Furthermore, CIX is planning, in partnership with NASDAQ, the launch of a spot trading platform for financial institutions and institutional investors.

### Article 6 of the Paris Agreement

It is important to mention certain new rules agreed at COP26 and their relevance to the development of the carbon markets. The new rules under Article 6 of the Paris Agreement represent a set of high-level principles for countries to co-operate on a voluntary basis in meeting their own climate targets (known as Nationally Determined Contributions or **NDCs**). These new rules relate specifically to the compliance market.

Article 6.2 allows a country to trade emission reductions and removals credits (known as Internationally Transferred Mitigation Outcomes (**ITMOs**)) with another country through bilateral agreements. These rules allow a country that has exceeded its climate targets to transfer ITMOs to another country to meet the latter's own targets. The rules also establish an accounting framework requiring that "corresponding adjustments" be made to ensure there is no double-counting i.e., each credit only counts towards one country's climate targets. It should be noted that whilst these rules do not regulate the voluntary market, it may be that over time "corresponding adjustments" are required, or recommended, to be made for carbon offsets generated or traded in this market.

In this context Singapore, which has adopted a carbon tax scheme in place of an ETS, will allow affected operators to use verified international carbon credits to offset up to 5% of their taxable emissions from 2024. Further details will be released in 2023. This hybrid mechanism, combining as it does the use of international carbon credits with the imposition of a carbon tax, is one of the first examples of these rules being applied that allow the use of international carbon credits to meet (in part at least) a country's NDC.

Turning to Article 6.4, this establishes a new mechanism (known as the sustainable development mechanism or **SDM**) to help mitigate GHG emissions, allow the trading of emissions credits, and support sustainable development. The SDM will be under the supervision of a Supervisory Body. The SDM will allow countries, corporates and individuals to trade certain emissions credits (known as **A6.4ERs**). Eligible projects must be approved and validated by this Supervisory Body and by the country where the project is located before any A6.4ERs can be issued.

### Other Initiatives in the Market

The Climate Warehouse is an initiative led by the World Bank. The underlying goal of this initiative is to implement a global infrastructure for enhancing the transparency and integrity of both carbon offset projects and transactions conducted in the international carbon markets.

CORSIA is a global scheme, under the direction of the International Civil Aviation Organisation (**ICAO**), to cap CO2 emissions of international flights for the years 2021-2035 at 2020 levels. The scheme is split into three phases. The first two phases, from 2021-2023 and 2024-2026, are voluntary. The third phase from 2027-2035 will, with some small exceptions, be mandatory.

At the end of each phase, those airlines subject to or participating in the scheme must submit reports showing they have purchased eligible carbon offsets to offset their increase in CO2 emissions (above 2020 levels) for the previous three years of the relevant phase. Such carbon offsets, to be eligible, must have been approved by ICAO (known as **CORSIA Eligible Emissions Units**).

### Legal Due Diligence

Some of the areas of legal due diligence that we suggest are likely to be necessary for new participants in these markets include the following:

- Review of the rules of the relevant ETS, exchange or trading venue, including market access requirements.
- Review of the terms of issuance/transfer of carbon credits and offsets, and related carbon products.
- Consideration of the regulatory treatment of carbon credits or offsets in the jurisdiction where they are issued and where they will be traded (this may include consideration of their legal characterisation in order to assess how or if they are regulated).
- Review of OTC trading documentation used in the market.

### Conclusion

As this article demonstrates, there are exciting developments and initiatives taking place in the carbon markets which have wide-reaching implications for governments, corporates and individuals. But challenges remain, particularly in the voluntary market, where the transparency and integrity of carbon offset projects and the quality and authenticity of VERs are key factors its successful evolution and growth.

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