# CARBON MARKETS:
## AN INTRODUCTION AND UPDATE

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## Introduction: How the Carbon Market has Developed

Carbon markets have substantially developed over the last 25 years, and more recently in the MENA region. The carbon market was formally created during the Kyoto Protocol in 1997, as its enforcement was required to make up shortfalls in emission reduction targets through the purchase of emission credits. The European Union was one of the pioneers in establishing a regulated compliance carbon market, with its introduction in 2005 of the European Union Emission Trading Scheme (EU ETS). Since then, the EU ETS has become the largest emission compliance market in the world, while many other countries have subsequently created their own national compliance markets. Other notable examples of mandatory carbon markets can be found in Australia, Brazil, China, the UK, and, at a state level, in the US. Those programmes have the purpose of reducing national carbon emissions by actively managing the supply of the allowances to pollute, while letting the market find an equilibrium price.

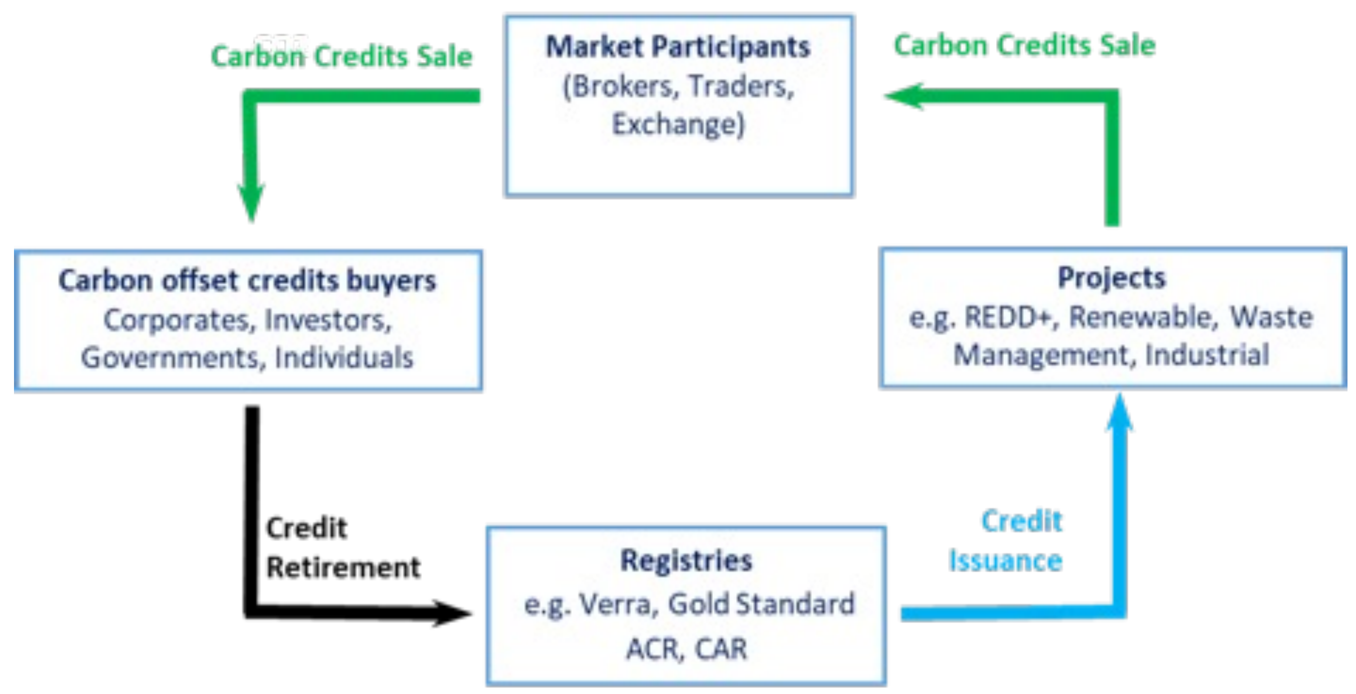
## Compliance vs Voluntary Carbon Markets

Alternative solutions to reach emission targets are to set a price to pollute via carbon taxes, or the creation of venues where polluters take voluntary actions to reduce emissions by buying carbon offsets from projects that remove or avoid carbon emission, in the so-called voluntary markets. While both voluntary and compliance markets use the market mechanism for price discovery, there are notable differences. First of all, participants in compliance markets are typically exchanging allowances to pollute, issued by a national entity according to their emission targets. In voluntary markets, carbon offsets are instead linked to projects that actively remove or avoid carbon emissions, such as reforestation, afforestation, carbon sequestration technologies, green energy projects that use carbon-free renewable sources, or social projects that help developing countries' populations to reduce their emissions and improve efficiencies (such as by providing cooking stoves in areas where wood fires were previously used).

The voluntary market benefits from being unrestrained by boundaries set by national programmes, and voluntary carbon offsets can be exchanged virtually by every sector of the economy, rather than being limited by the industries that fall under the scope of a mandatory trading scheme. However, voluntary carbon markets are still very fragmented, as they lack global standards to verify their quality. Currently, there are more than 20 global independent standards for issuing carbon offsets, and each one has its own rules, making it harder for participants to compare carbon offsets issued by different standards.



## The Voluntary Carbon Market:




*Source: FAB*

In the voluntary carbon markets, the starting point of the lifecycle is an emission reduction or removal project (REDD+, Renewable, Waste Management, Industrial, Household and Community, Chemical Processes). The project will approach one of the registries that track offset projects and issue offset credits. The registry will determine the volume of CO2 or equivalent gas that has been removed, avoided or reduced over one year and issue a correspondent amount of credits. Verra, Gold Standard, Climate Action Reserve (CAR) and American Carbon Registry (ACR) are the four largest registries globally. Once the project has carbon credits on its registry account it can sell them to polluters looking to offset their emissions. The lifecycle of a typical carbon offset trade involves more participants than the credit issuer and the end-buyer. An important source of liquidity is offered by banks and financial institutions, which buy and sell credits to their clients that need to offset their emissions. The most liquid credits can also be listed on exchanges, creating trading venues where buyers and sellers can find liquidity on electronic markets via screen trading or voice markets, typically via brokers. Investors and speculators are also an additional source of liquidity, as they take a view on the direction of carbon markets by buying or selling credits. The final stage of the carbon credit lifecycle is the credit retirement. Polluters looking to offset their emissions will retire the credit and claim those offsets against their carbon footprint. This means the credit will cease to exist and is taken out of circulation.

## Carbon Initiatives in the Region

The MENA region has witnessed growing interest in voluntary carbon markets. In the UAE, Abu Dhabi Global Market (ADGM) partnered with AirCarbon Exchange (ACX) in early 2022 to create the world's first fully-regulated carbon trading exchange. In November last year, ADGM became the first jurisdiction to regulate carbon credits and offsets as environmental instruments, a class of financial instruments, and to license exchanges and clearing houses that operate both spot and derivatives markets. The move is part of a broader pledge made by the UAE to become net-zero by 2050, with the federal government having announced it will invest USD 165 billion in clean energy to reach the target. Last October, the Public Investment Fund (PIF) in Saudi Arabia announced it would partner with Saudi Tadawul Group to establish the Regional Voluntary Carbon Market Company. Shortly after being created, the company auctioned off 1.4 million tons of carbon credits during the 6th edition of the Future Investment Initiative conference in Riyadh. As many as 15 regional firms across various industries and countries participated in what was labelled the biggest-ever carbon credit sale. In Egypt, the Egyptian government launched the first African voluntary carbon market in November, during COP27.

## FAB as a Carbon Counterparty

As part of the evolving carbon ecosystem in Abu Dhabi, the UAE and the wider MENA region, FAB has begun its own carbon journey. FAB's offer today includes products linked to the European Carbon Emission Allowance (EUA) for hedging or financing purposes, and the bank plans to extend this offering to the UK Carbon Allowances (UKAs), California Carbon Allowances (CCAs) and the voluntary carbon markets in the near future. FAB, thanks to its high credit rating (AA-) and large balance sheet, is uniquely placed to offer competitive solutions for its clients looking for EUA financing solutions, or looking to take advantage of the EUA forward structure and the positive carry between spot and deferred prices.

Perhaps the biggest opportunity of all for carbon trading in the region exists in the voluntary carbon offset market. FAB, now very much part of the fast-growing Abu Dhabi carbon ecosystem, and with its excellent relationships with key regional stakeholders, is able to provide its clients with full access to a wide product offering in this fast-growing space.