# Talk about an oversight.

The \$10 billion a year (and growing) voluntary carbon offset market is a critical part of the path to Net Zero yet lacks any formal regulation and controls.



Governments and organizations the world over have made commitments to limit climate change and achieve Net Zero carbon emissions by 2050 (or sooner) in order to deliver against the targets of the Paris Agreement. Carbon markets have a significant role to play in helping to achieve these commitments by enabling governments and organizations to manage emissions and emission reduction limits more effectively.

The voluntary carbon offset market developed in the 1990s at which time market participants were mostly committed amateurs who were happy to take each other's word about the quality and validity of the offsets they were trading. The market was loosely organized to enable bilateral sales but without transparency, price discovery, quality or consistency of product.

From an institutional standpoint the system is broken or more realistically a piecemeal assembly of unregulated components serving what's become a regulated world. Regulators are starting to say to companies, "do what you say" which can only be supported by a market with credible underpinnings.

From this starting point, regulators and standard setters are now taking steps to assess and potentially better control the growing offset trading activity. Given the fundamental need to reduce gross carbon emissions in order to manage the financial risks of climate change, it's inevitable and highly appropriate that financial sector regulation of carbon emissions, trading and disclosure will develop apace.

Entrex decided some time ago that the best way to bring order to the voluntary carbon market is to "financialize" it and use existing compliance mechanisms and organizations that govern the trading of financial instruments to regulate the market.



# How financialization works

Financialization can serve both the development/production and sales/distribution side of carbon trades. It does so by creating financial instruments that are governed by the Securities and Exchange Commission's rules and compliance mechanisms and, in particular, the 1933 Act which dictates how securities may be transacted.

On the development side, our NewLeaf instrument is a regulated short-term fixed income security that enables investors to participate in the development and production phases of carbon offset development projects. NewLeaf instruments can be dedicated to a single offset source, such as afforestation, wind, solar or blue projects, or can be geographically focused.

For the sales and distribution side of the trade, we developed CarbonEase, a CUSIPregistered instrument that represents a basket of carbon offsets that is tradeable and retireable at the holder's option.

We believe it's an elegant solution to a growing problem that brings substance and materiality to trading and affords greater confidence to market participants.

## Why earlier attempts failed

Financialization wasn't our first attempt to bring transparency and dependability to high value, unregulated marketplaces. In the early 2000s, Entrex developed Blockchain-enabled technology to manage the supply chain of Spanish olive oil from the tree to the bottle. We envisioned using similar methodologies to track voluntary carbon offsets from inception through trade to retirement. But the inherent strength of the blockchain — its avoidance of a single point of failure through mass redundancy and maintaining records in every node of a network — rendered it unsustainable as a regulating mechanism.



We estimated it would take the equivalent of a ton of carbon to manage each ton of carbon, making it not just unproductive but literally counterproductive.

Blockchain proved its mettle in other applications, of course, including our management of the first security to trade on the Blockchain: the 2015 Overstock.com private debt security which we managed through the Entrex broker/dealer network on our IBM blockchain-enabled platform.

### Time for the carbon market to get Street wise

Wall Street, that is. Little more than a dozen years following the founding of the United States, a group of 24 traders, stockbrokers and merchants agreed to certain principles, rules and regulations to make trading easier.

What became known as the Buttonwood Agreement, named for the tree standing on the site of what is now the New York Stock Exchange, set in place a series of guiding principles that aimed to bridge the trust gap between brokers and merchants.

The still nascent carbon offset market would be well served by embracing the wellproven, established mechanisms, principles and regulations of the financial markets and bringing them to bear on carbon trading for the benefit of all. After all, it was the credibility of the underlying regulated product that led to the tremendous efficiency of the global capital market we enjoy today.



#### Regulating neutrality needs regulated oversight

Today, it seems regulators are looking to oversee the achievement of the carbon neutrality goals of corporations without a regulated underlying infrastructure.

We believe the constituents participating in the carbon sector need to be regulated entities: registrars, transfer agents, custodians, banks and others who manage securitized carbon offsets traded by regulated brokers to regulated clients whose carbon neutrality can then be overseen through regulatory oversight.

