

Texas Coastal Exchange Summary

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The Texas Coastal Exchange (TCX) is a non-regulatory, non-governmental and non-profit vehicle through which individual and corporate consumers are empowered to reduce their carbon footprint by harnessing the power of plants and the sun to remove carbon dioxide from the air and store it in the soil. This carbon dioxide removal system has significant capacity, is environmentally sustainable, scientifically sound and market-driven. It stands to revolutionize the United States' approach to climate change, while revitalizing the rural economy.

TCX offers the opportunity for “carbon emitters” (hereafter referred to as buyers) to offset their carbon footprint locally and for “carbon capturers” or “carbon farmers” (hereafter referred to as sellers) to benefit economically from applying their land toward removing carbon dioxide emissions from the air. Buyers include large corporations, small businesses, families and individual consumers - anyone interested in mitigating their carbon footprint. Sellers include private landowners such as ranchers, environmental organizations, and other entities that own property and are willing to store carbon and sell this storage capacity to emitters.

The TCX system is designed to be landowner friendly in that property rights are at the core of the system. If you store carbon on your land, TCX will allow it to be sold. Period. Further, TCX does not require sellers to dedicate their land solely to carbon sequestration, allowing sellers to utilize their land for other applicable commercial purposes compatible with carbon storage. In this way, TCX allows “stacking” of benefits to maximize the cash flow for landowners, which is a major goal of the TCX system.

While not all lands have a significant carbon sequestration capacity, the cumulative carbon sequestration capacity of U.S. lands has the potential to remove and store a significant portion of the U.S.'s carbon footprint. For example, restored prairies alone have the potential to store approximately one to two billion tons of carbon dioxide, representing at least 20 percent of the entire U.S. carbon footprint. TCX is setting an initial value for carbon sequestration services of \$20 per ton of carbon sequestered per year; this is well in line with values of both domestic and international markets. TCX will initially retain 15% of

transaction revenues to facilitate, manage, and expand the carbon credits marketplace, while the remaining 85% will go to the landowner.

A key goal of TCX is to be compatible with other carbon-related programs, such as the potential carbon tax being considered at the national level. This tax is proposed on carbon emissions from certain sources. The hope is that sequestered carbon – as in an emitter’s carbon dioxide stored on TCX lands –could be subtracted from the amount of that emitter’s “taxable” carbon emissions. In this manner, an incentive would exist for emitters to pay TCX or other similar programs to sequester carbon, thereby reducing their tax bill (assuming the TCX price were lower than the carbon tax rate), while removing carbon dioxide from the atmosphere, which the tax does not.

While TCX’s methodology for carbon trading is market-driven, many buyers will be attracted by the related positive environmental and social impacts of this carbon exchange. TCX emerged from research conducted by the Severe Storm Prediction, Education, & Evacuation from Disasters (SSPEED) Center at Rice University as a strategy for reducing flood damage on the Texas coast by making it economically beneficial for landowners to keep their coastal open spaces open, including also the more inland prairie tracts that enhance rainfall infiltration into the soil. If TCX and similar concepts are successful, they will revitalize rural farm and ranch economies where many landowners are struggling and often are forced to sell their land to pay inheritance taxes, to cover debts, or to generate income for heirs. Not only does storing carbon generate a new stream of revenue, the TCX approach supports the conservation of coastal wetlands and native prairie which have significant fish and wildlife value.

Over the long term, TCX will emerge as one of many ecologically-based components of an economy that is climate friendly and conforms with the physical and biological cycles of the Earth. The first step of this journey occurred recently when Kirksey Architects of Houston purchased 770 tons of carbon storage in the Galveston Bay marsh system from TCX, marking the first of what is foreseen as many carbon storage sales in Texas and the midwestern United States.