



## WRITTEN STATEMENT OF THE AMERICAN CARBON REGISTRY AT WINROCK INTERNATIONAL

Presented By: Jessica Orrego Director of Forestry

# TO THE SENATE COMMITTEE ON AGRICULTURE, FORESTRY, AND NUTRITION

Hearing: Federal, State, and Private Forestlands: Opportunities for Addressing Climate Change

May 20, 2021

#### Introduction to the American Carbon Registry (ACR)

The American Carbon Registry (ACR), a nonprofit enterprise of Winrock International, was founded in 1996 as the first private voluntary greenhouse gas registry in the world. Our mission is to create confidence in the scientific integrity of carbon offsets in order to accelerate transformational actions that reduce greenhouse gas emissions and create other environmental and social benefits. ACR has five forestry experts on staff, all of whom have advanced degrees in forestry and forest management.

The goal of well-designed and high-integrity carbon offsets is to create financial incentives that drive climate action and deliver environmental and social benefits that wouldn't have happened otherwise. This is where standard-setting bodies, such as ACR, come in. Our job is to operationalize climate finance though the implementation of science-based, peer-reviewed methodologies that accurately quantify carbon benefits and ensure transparency in reporting and credit tracking through retirement.

In both the voluntary carbon market and California's regulated carbon market, ACR oversees the registration and verification of carbon offset projects, following approved carbon accounting methodologies or protocols, and issues serialized offsets on a transparent registry system. Projects must undergo detailed audits by accredited, independent third-party verification bodies that review projects for eligibility and additionality, the application of requirements for setting baselines and for quantification and monitoring of emission reductions and, for forest carbon, ACR's rigorous requirements to maintain project activities for at least 40 years and to mitigate the risk of and compensate for reversals of forest carbon stocks. Each offset represents the reduction or removal from the atmosphere equivalent to one metric ton of carbon dioxide, which can be used to offset unavoidable emissions occurring elsewhere. More information about our methodologies and registry can be found on the ACR website.

Our objective is to maintain the highest integrity and to ensure that emission reductions are real, credible, verifiable and only counted once. As a pioneer in harnessing the power of markets to improve the environment, ACR has set the bar for offset quality that is the market standard today and continues to lead market innovations.

#### Project Types

The main forest project types in the U.S. are improved forest management (IFM), reforestation and avoided conversion. The vast majority of forest carbon offset projects in the U.S. are IFM, which includes activities that increase landscape carbon retention by incentivizing sustainable forest management practices, such as harvesting less frequently and selectively harvesting only portions of each stand. Reforestation includes planting and regeneration of trees on degraded or fallow land, and avoided conversion includes the protection of forest that is subject to a clear threat of conversion to a different, non-forest land use. For example, conversion to agriculture, or to a golf course.

## Size of Forest Carbon Market in the U.S.

The U.S. forest carbon market includes 200 projects on more than 7 million acres across the country that have issued close to 200 million tons of CO<sub>2</sub> emission reductions in the last decade. ACR has issued about three quarters of these credits, either for the California market or under our own ACR program.

#### Carbon Pricing

Per ton offset prices depend on a variety of factors including the project type, vintage and volumes purchased, as well as the standard under which the project is certified. According to a recent market publication by Ecosystem Marketplace that analyzed data from 2019, North American voluntary offset buyers have a strong preference for U.S.-based offsets and in 2019 purchased approximately 80 percent of offsets from U.S. projects at prices ranging from under \$2/ton to over \$5/ton, at an average of \$3.36/ton.

Forestry was one of the most popular categories with an average price of \$5.92/ton, and ACR's average offset price (including non-forestry projects) was \$6.37/ton. The voluntary carbon market, and particularly demand for forest carbon credits, has accelerated significantly since 2019, and we understand prices have increased accordingly and are close to, if not equivalent to, prices of \$12-\$15/ton in the California regulated carbon market. As a case in point, Microsoft's 2020 tender for removals credits in 2020 cited a benchmark price of \$15/ton.

Therefore, using a \$10/ton reference price, the U.S. forest carbon market has issued credits valued at almost \$2 billion for forest landowners in the past 10 years.

## Types of Landowners and Benefits

A vibrant U.S. forest carbon market exists, which is already delivering carbon finance to a vast diversity of landowners.

Projects are located in every heavily forested state and region of the U.S., and almost every type of forest ownership class is represented in the carbon market, including industrial landowners, conservation organizations, family forest owners and tribes. We are now seeing some state and municipal forests enter the market as well.

Carbon revenue is directly helping landowners meet a number of land management objectives, ranging from tribes using carbon finance to purchase ancestral lands and to improve fire management, to timber companies using the finance to help manage land more sustainably, or to assist in conservation goals, and even to help small landowners pay for insurance, taxes, or other family expenditures.

Here's an example of how forest offset projects help landowners undertake these actions and get rewarded for them.

The example is an innovative project that complements existing U.S. Department of Agriculture conservation programs, specifically the Conservation Reserve Program, or CRP, to give landowners access to the carbon markets. The CRP works by giving farmers yearly rental payment in return for removing environmentally sensitive land from agricultural production and planting species that will improve environmental health and quality. This is a wonderful initiative that supports millions of farmers around the country. However, as market conditions change, farmers can choose to cut down those trees and put that land back into agricultural use. A project led by GreenTrees, a U.S. project developer, leverages the power of carbon markets to incentivize farmers to maintain and increase their forest carbon stocks over the long-term. By committing to keep the trees they plant in the ground for at least 40 years, the project allows them to generate, quantify and sell carbon credits. The project has already aggregated more than 600 small landowners on over 130,000 acres across seven states. This is currently the largest reforestation project in the U.S. and has issued over 5 million tons of verified offsets. The project assists the participating

landowners with their reforestation efforts, including providing long-term carbon measurement, monitoring and verification and access to carbon market finance that they could not have obtained by themselves. In addition to the primary project outcome of increased landscape carbon sequestration, other co-benefits include habitat creation, timber income, and soil conservation. Several U.S. companies have purchased offsets from this project, including Norfolk Southern, Microsoft, Bank of America and Duke Energy.

## Growing Demand

Demand for carbon credits is rapidly increasing and will continue to rise, with U.S. forest landowners well positioned to benefit. But this growth must be built on integrity.

As companies strive to contribute to global climate goals, they are looking for opportunities to offset current and future unavoidable emissions with support for climate action elsewhere. More than 1,500 companies have now set net-zero targets, and demand for offsets is exploding.

At the same time, the International Civil Aviation Organization's Carbon Offsetting and Reduction Scheme for International Aviation, known by its acronym CORSIA, launched this year, requiring airlines to maintain emissions at 2019 levels or buy credits from approved crediting programs, including ACR. CORSIA is expected to generate a global airline demand for between 2.5 and 4 billion tons of offsets by 2035.

Finally, there is also demand emerging from Article 6.2 of the Paris Agreement for Internationally Transferred Mitigation Outcomes (ITMOs).

The science tells us that natural climate solutions to protect, restore and sustainably manage natural ecosystems can provide a third of the climate action the world needs by 2030 to stay on track to meet Paris Agreement targets and avoid the catastrophic impacts of climate change. So, it's no surprise that when companies are looking for offsets, they often look to forest-based projects. Many companies also like projects that have a relevant story to tell their customers, including place-based projects in the regions where they operate or service.

This is all good news for the U.S. forest carbon market. But as demand for offsets grows, so too does the demand for integrity. More and more companies want to know that their investment is leading to real results. When it comes to forests, integrity is rooted in science and innovation. Public access to data derived using replicable, peer-reviewed methods of measurement, together with reporting that is backed by independent verification, is essential. At ACR, we combine the best available data with systematic and conservative rules and processes to ensure the additionality and rigor of each carbon offset issued.

Helping both forest landowners and buyers distinguish what constitutes quality in the marketplace is critical moving forward.

#### Growing Market

The market, and related infrastructure, is also rapidly evolving and expanding to offer more opportunities for different kinds of landowners.

#### State, County and Local Lands.

Across the U.S., state, county and local governments own more than 80 million acres of timberland. That's an area larger than New Mexico, our fifth-largest state. Some of this land is managed as state parks or

nature reserves. However, large portions of it are considered "productive forests," which means they are often harvested for timber in favorable market conditions. By changing the way these forests are managed and incentivizing the retention of these forests, it's possible to increase landscape carbon stocks and reduce associated greenhouse gas emissions, representing huge potential for a new area of climate action.

For example, Michigan's Department of Natural Resources has begun implementing the first state agencyled carbon project on commercially managed state forest land anywhere in the U.S. The revenue from the sale of carbon offsets will reduce the financial pressure to harvest timber or participate in other natural resource extraction activities such as oil and gas, resulting in benefits to the climate and to the local economy.

## Tribal Lands.

Tribes have entered the U.S. carbon markets, with more than 20 indigenous groups directly benefitting from carbon finance. Most of these indigenous groups are participating in the California compliance market, and in fact, have received 40 percent of all forestry offset issuance in that market. More recently, tribes and Alaskan native corporations are entering the voluntary carbon market as well.

## Small and Family Landowners.

Another area for growth in the carbon market is small, non-industrial forest owners. According to the latest National Woodland Owner Survey data, less than 1 percent of these forest owners currently participate in the carbon market, even though they own nearly 40 percent of the forest in the U.S. This is due to known financial and institutional barriers associated with the scale and complexity of the existing market.

Luckily, this is changing. New approaches are emerging to streamline quantification and measurement, and to aggregate numerous small-scale forest owners to make the market more accessible to this important forest ownership class. A significant amount of private capital is ready to get behind the right approaches for bringing these forest owners into the market.

In fact, the American Carbon Registry recently concluded the stakeholder consultation for a new, innovative aggregation and quantification methodology for IFM activities on ownerships of non-industrial private forestlands between 40-5,000 forested acres. The primary carbon sequestration mechanism is the commitment to grow trees longer and to increase forest stocking. ACR will now begin a blind scientific peer review process before it is published and ready for use.

## Conclusion

To conclude, we would like to leave you with three key messages.

First, a robust market with existing infrastructure including standards, verification bodies, investors and technical experts is in place. Offsets that result from rigorous and science-based quantification approaches are being issued to forest projects.

Second, the demand for forest offset credits is exploding and is expected to grow, offering opportunities for forest landowners of all sizes and ownership classes. This includes emerging initiatives and approaches to aggregate small-scale landowners at scale. While this is just beginning to gain traction, it is backed by large amounts of private capital, and has potential to expand significantly.

Third, there is no need to start from scratch or re-invent the wheel. It is our hope that the government will support the growth and scaling of the forest carbon offsets market by working with the current market stakeholders and within the existing process and frameworks. Disruption to the existing carbon market could have adverse effects on investments, private capital, and on landowners and other stakeholders currently participating in this market. The government could play a role in supporting forest owners and enhancing their access to the existing market, and this may be particularly key for small-scale forest owners, who have faced both institutional and financial barriers related to sustainable forest management and reforestation. There may also be an opportunity for the government to support nursery operators to scale up production of seedlings, as we understand that to be a key barrier for scaling reforestation.

The carbon market offers an exciting opportunity for forest owners to both benefit from an additional revenue stream and to incentivize long-term, sustainable forest management practices that help combat climate change. Forest carbon projects include significant co-benefits including habitat and water projection, as well as recreational benefits. The demand for high quality nature-based offsets is at an all-time high, and is expected to dramatically increase. We look forward to working with partners to ensure that this growth leads to increased benefits for all kinds of forest landowners in the country, while also adhering to high standards and integrity.