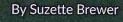
TRIBES MAKE MILLIONSIN CARBON CREDITS CONSERVING THEIR FORESTS

Top Right: Yurok Chairman Joseph James

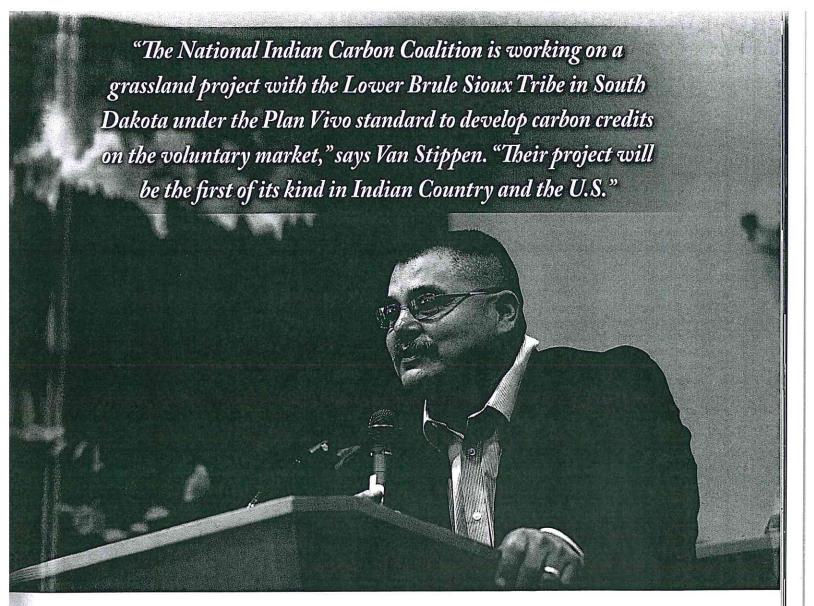




t's an idea so simple that it sounds almost too good to be true: Tribes are using their forests and grasslands to generate income by selling carbon credits in the California emissions trading industry. Meanwhile, they're preserving their lands for future generations.

"A few years ago, I couldn't get anyone to talk to me, but now more and more Tribes are beginning to ask important questions about greenhouse gases, climate change and adaptation plans, and how this process works," says Bryan Van Stippen, a member of the Oneida Nation of Wisconsin and program director for the National Indian Carbon Coalition. "Carbon sequestration projects and the offset credits they produce focuses on the preservation of Tribal natural resources while still being able to derive revenue even if a Tribal entity has a commercial logging operation."





Over the last 150 years, the negative environmental and health impacts of railroads, mining, dams, deforestation and drilling on Tribal lands have left many Tribes risk-averse and even opposed to extractive industries, says Van Stippen. So the notion of making money while conserving their natural resources is big news for land-based Tribes, who control hundreds of millions of acres in forests, wetlands and grasslands from Alaska to Maine.

In fact, according to the Washington, D.C.-based Rights and Resources Initiative (RRI), it is estimated that indigenous communities manage approximately 300 million metric tons of carbon stored in trees, roots and soil worldwide.

Into the Woods

In 2013, the Yurok became the first Tribe in the country to participate in California's carbon trading program, an environmental initiative launched with the goal of reducing greenhouse emissions to pre-1990 levels by 2050.

The Yurok, who are the largest Tribal nation in California with over 6,000 members, once owned over a million acres of prime land in Northwest California. During the Gold Rush that began in 1849, nearly 75 percent of the Tribe was decimated due to disease and massacres by white settlers. Subsequently, the Tribe's land holdings were substantially whittled away by the federal government to approximately 3,000 acres in the late 20th century.

Since joining the carbon trading market, the Yurok have obtained over 2 million offset credits, the income from which the Tribe has used to buy thousands of acres of their original homelands, protect their salmon habitats, improve water quality in the creeks and rivers, create jobs and preserve their culture.

"We are a natural resource-based Tribe and we manage our lands in the traditional way, so this is a program that has worked well for us," says Yurok Chairman Joseph James. "We are reinvesting the income from our carbon credits into our roads, our infrastructure, our land management, our businesses, as well as our cultural and language preservation programs, which is the backbone of who we are as a Tribe."

Ultimately, however, James says the Tribe intends to reacquire all of its original homelands—over a million acres—in northwest California.

"We are determined to exercise our economic sovereignty," says James. "We don't want to depend on the federal government. It is our job to continue the way of life that our grandparents and parents passed down to us so that we can pass it on to our children."

Currently, eight Tribes from Alaska to Maine have received approval to participate in the program.

Ahead of the Curve

California, which has the fifth largest economy in the world, modeled its program on the European Union Emissions Trading System (EU ETS) that was enacted in 2005 to fight global warming. That same year, then-Governor Arnold Schwarzenegger

signed an executive order setting emissions reduction targets for California, including responsibilities, implementation and reporting requirements for state agencies.

In 2006, California—which is also the 12th largest producer of greenhouse gases in the world-passed its landmark Global Warming Solutions Act, which requires sharp reductions in greenhouse gas emissions from all sectors of the state's economy.

"It will begin a bold new era of environmental protection in California that will change the course of history," Schwarzenegger said at the time. "We simply must do everything we can in our power to slow down global warming before it is too late."

The state's carbon trading industry was subsequently launched in 2012, which allows big polluters to purchase carbon offset credits. Known informally as "cap and trade," the market-based system is designed to reduce pollution in the atmosphere by "capping," or limiting, the harmful emissions of fuel companies and other big polluters that emit

25,000 tons of carbon dioxide per year or more.

These companies have to obtain permits for each metric ton of greenhouse gases (such as carbon dioxide, methane, nitrous oxide and flourinated gases) they pump into the at-

mosphere. They can then buy carbon off-set credits from Tribes and other entities to help meet their required reduction goals.

Conversely, Tribes must adhere to a strict set of standards in managing their forests in order to obtain verified credits, which are issued by the California Air Resources Board (CARB). Forest management in carbon offset projects may include afforestation (or establishing new forests), reforestation, the avoidance of deforestation, as well as sustainable practices including managed burn plans, thinning diseased trees, managing brush or other competitive vegetation, and allowing tree populations to age without harvesting them for logging.

Critics of the program allege that the carbon offset market allows big polluters, such as coal plants and manufacturing industries, to "buy" their way out of compliance. Proponents, however, point out that these companies are only allowed to purchase up to eight percent of their total carbon certificates which will go down to four percent in 2020.

These deadlines give companies time to find more efficient ways to operate their businesses. Moreover, as the carbon credits become more limited (and expensive) over time, polluters will become more motivated to reduce their carbon footprint, according to CARB.

The ultimate goal of the initiative, according to the legislation, is to establish a comprehensive program to reduce greenhouse gas emissions, promote renewable energy sources and build sustainable, longterm solutions for a healthier communities. The economic impact is also notable: California receives more clean energy venture capital than all other states combined, which has resulted in green technologies, new initiatives and the creation of thousands of jobs. In fact, "green" jobs are the fastest growing sector in the California economy, according to CARB.

In recent years, Oregon and Washington State have struggled to pass similar legislative efforts; however, both states will take up cap and trade bills in 2019, which are expected to pass. Additionally, they will be modeled on California's market.

Ultimately, however, the notion of selling carbon credits to preserve Tribal lands aligns with Tribal values of environmental conservation and a sustainable way of life.

> According to CARB, carbon offset credits are sold at the state's quarterly cap-andtrade auctions. Each offset is equal to one metric ton of carbon dioxide and sells for approximately \$11 to \$14 per credit, depending on market rates.

> The Passamaquoddy Tribe of Maine, for example, used nearly 100,000 acres of their forest lands to generate 3.2 million credits which have been valued at between \$35 and \$45 million that they used to invest in other business projects.

A Fork in the Road

Currently, there are two markets in the carbon credit industry: The compliant markets in California and the Canadian province of Quebec, which have joined together to allow businesses to buy credits issued within those jurisdictions; and a voluntary market which is used by companies, individuals and governments to purchase carbon offsets. In August 2018, the Ouebec government announced that it had raised \$215 million, selling approximately 90 million units for an average of \$19.67 per unit for both current and future credits.

The compliant markets have certain restrictions and requirements for Tribes-including a 100-year commitment and a limited waiver of sovereign immunity-which have dissuaded many Tribes from participating in the program due to concerns over how their needs may change over time and what that may mean in regards to their sovereignty and control over their lands.

Troy Eid, who is the co-chairman of the American Indian law practice group at Greenberg Traurig LLC in Denver, Colorado, worked with a Tribe to secure a carbor. credit agreement with a major corporation through the California carbon trading market. He says that there were many concerns that came up as the Tribe considered its options.

"There were many passionate arguments regarding the 'hundred year' clause," says Eid. "Granting a limited waiver of the Tribe's sovereign immunity for a century binding several future generations—was a

> Moreover, says Eid there were those who believed that there was no way to anticipate how the Tribe's needs would evolve in the forseeable future in regards to how they would use their lands.

"They might grow and need to develop it for housing, for example, or they might want to do other things with it," he says. "Ultimately, however, they decided to use a portion of their lands for conservation and income from the carbon credit markets."

In the voluntary emission trading markets, the airline industry is poised to become a major purchaser of carbon credits, according to Ecosystem Marketplace. In 2016, for example, the International Civil Aviation Organization (ICAO) adopted the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to meet the global cap on airline emissions.

As the first market-based effort to regulate carbon emissions for the global airline industry, any airline that operates international flights must monitor, verify and report their emissions starting in January 2019. According to the report, voluntary carbon markets have helped reduce over 437 metric tons of carbon emissions-more than all of Australia's energy related emissions in 2016.

Additionally, other well-known companies like Disney have also entered the voluntary carbon trading market. In addition to buying carbon credits, the company also charges its businesses for the emissions they generate, which goes into the Disney Climate Solutions Fund (DCSF). With these resources, the DCSF invests in forestry projects around the world. According to the company's website, Disney has invested \$48 million in carbon offset projects since 2009.

With many Tribes leery of committing to restrictive agreements that they feel may impede their sovereignty, groups like the National Indian Carbon Coalition are working with Tribal leaders to find alternative solutions.

"We are trying to develop projects working within the voluntary market, because it does not require as many restrictions as compared to the compliant market," says Van Stippen. "Timeframes on the voluntary market usually run no longer than 40 years but can be even shorter and would not require a limited waiver of sovereign immunity."

Across the Plains

Van Stippen says that although the carbon trading industry has focused primarily on forests, Tribes that reside on grass and range lands can also benefit from offsets. According to the Environmental Defense Fund, a recent study from UC Davis found that grasslands and rangelands are more resilient carbon sinks than forests [because] grasslands lock carbon into the soil and do not release it during wildfires. Therefore, efforts to explore carbon sequestration projects have been renewed, which may be a benefit to Tribes with more grass and rangelands than forests. By preserving grasslands under the Grassland Project Protocol, for example, landowners can generate carbon credits and the credits can be sold on the voluntary carbon market at competitive rates, according to the Climate Action Reserve.

The Plan Vivo Foundation is a Scottish-based charity that established and administers the Plan Vivo Standard, a certification framework for supporting rural landholders' and community groups' transition towards sustainable land use, forest management, biodiversity and enhanced ecosystems. Through this performance-based system, Tribes and other communities can gain access to a range of funding sources and markets, including voluntary carbon credits.

Van Stippen is currently working with

Plan Vivo to bring its certification process to Indian Country.

"The National Indian Carbon Coalition is working on a grassland project with the Lower Brule Sioux Tribe in South Dakota under the Plan Vivo standard to develop carbon credits on the voluntary market," says Van Stippen. "Their project will be the first of its kind in Indian Country and the U.S."

These and other projects now coming into Indian Country could provide an additional source of income from carbon credits to Tribes that may reside on vast tracts of grasslands.

Ultimately, however, the notion of selling carbon credits to preserve Tribal lands aligns with Tribal values of environmental conservation and a sustainable way of life.

"Carbon sequestration projects on Tribal lands focus on sustainable land management practices that avoid the exploitation or extraction of natural resources," says Van Stippen. "We at the NICC are committed to working with Tribal nations to provide resources and support to ensure the preservation of their lands while reducing the effects of climate change and generating a sustainable income for generations to come."

