

Preserving Tribal land, creating economic opportunity

Historically, there has been a lot of pressure on tribal nations and individual Indian landowners to earn income from their land through the extraction of natural resources, such as minerals, oil, natural gas, timber, and water. These activities primarily benefit non-Indian corporations and their shareholders and often make it difficult for tribal nations to retain a healthy environment and decision-making control over their land. As new economic opportunities emerge in response to climate change, tribal land which may have been underutilized has become more valuable and the opportunity exists for Indian people to reap the benefits.

Communities across Indian Country have been generating significant amounts of income (millions of dollars in some cases) while protecting traditional lands. From the Passamaquoddy Tribe in Maine to the Confederated Tribes of the Colville Reservation in Washington to the Chugach Alaska Corporation, tribal nations have embarked on projects that are expected to provide a reliable stream of income for generations.

The revenue generated by the sale of carbon credits has enabled tribal nations to purchase ancestral lands, provide services to their members, and reinvest in tribal infrastructure, all while protecting their lands and natural resources. The goal of the National Indian Carbon Coalition is to work with tribal nations to explore income opportunities generated by sustainable management of their natural resources.

Benefits to Indian Country

Because tribal nations control large amounts of land used for farming, ranching or forestry, many are uniquely positioned to benefit from participating in the carbon and other environmental commodities markets. The benefits to Indian Country include:

- Additional revenue-generation opportunities from land
- Preservation of tribal land ownership
- Promotion of land stewardship



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- Greenhouse gas emissions reductions
- Promotion of soil health, ecological diversity, and water and air quality

How much can tribal nations earn?

The value of carbon credits varies according to market conditions, which are driven by supply and demand. This impacts how much money tribal nations can earn from carbon sequestration activities. Assuming an average market value of \$10 per credit, and a 10,000-acre project, projected revenues are quite significant. Prairie restoration might generate \$100,000 a year, for example, while planting trees on grazing land could produce \$200,000 a year. These are just rough estimates, of course, but the potential is there.

Common misconceptions

Will every carbon project provide millions of dollars in revenue? No, they will not. These projects are complicated, and some have not performed as promised, leaving some tribal leaders wary of the concept and distrustful of those pitching new projects. That's why having a trusted source of accurate, independent information is so important. Can tribal nations make money in the carbon markets? Yes. Should tribal nations believe the pie-in-the-sky projections often offered by private project developers? No. Is the carbon credit market still worth exploring? It is, if it is done in an informed way with realistic expectations and the right partners. The National Indian Carbon Coalition is here to help.



National Indian Carbon Coalition

Formed by the Indian Land Tenure Foundation (ILTF) and the Intertribal Agriculture Council (IAC), NICC is an Indian-led non-profit program that helps tribal nations and individual Indian landowners take advantage of carbon credit and other environmental commodities markets through the development of carbon sequestration or offset projects. NICC views these projects as economic development opportunities that preserve tribal nation and tribal member land ownership while returning profits to reservations economies and communities.

NICC's mission is to preserve tribal land ownership and reduce the effects of climate change by conserving the natural resources of tribal lands in order to minimize human-caused greenhouse gas emissions

NICC's role is to be a trusted, independent source of information and guidance for tribal nations and tribal members considering the development of carbon credits on farmland, rangeland and forest lands. Carbon farming is a system of agricultural management that helps the land store more greenhouse gases (GHGs) than it releases into the atmosphere, a process also known as carbon sequestration. Sustainable forest management practices do the same thing. Carbon offsets represent a reduction in greenhouse gas emissions created by sequestration projects, and are sold to buyers who want to offset their emissions.



What Is A Carbon Footprint?

When tribal governments, enterprises, employees and members use energy or products manufactured with fossil fuels, there is generation of carbon dioxide and other greenhouse gas emissions (GHGs) that contribute to climate change. The combination of emissions caused by work, home, transportation and daily life is known as a 'carbon footprint.' Carbon offsets are a practical and effective way to address climate change and encourage the growth of renewable energy. Carbon offsets are also an excellent opportunity for tribal nations to protect their land and generate sustainable, long-term income. NICC provides the resources, training and support to assist with the development of carbon projects.



Lower Brule Sioux Tribe

11,000 acres grassland carbon sequestration project

Project Snapshot



Grassland Project



11,000
Acres

The Lower Brule Indian Reservation is located 60 miles southeast of South Dakota's state capital of Pierre. A little over 1,300 people reside on the reservation which occupies an area of more than 200 square miles (132,600 acres) on the west bank of Lake Francis Case and Lake Sharpe reservoirs. The lakes were created by the construction of the Fort Randall and Big Bend dams on the Missouri River that were built as a result of the U.S. government's Pick-Sloan Act in the 1950s. Lower Brule is adjacent to the Crow Creek Indian Reservation, which sits on the east side of the Missouri.

The construction of these dams along the Missouri River flooded 35 square miles of prime forests, hunting, fishing and gathering grounds, agricultural lands, and settlements. The recovery of lost lands has been an urgent priority for the Tribe, which has reacquired more than 20 percent of its land.

Working with the National Indian Carbon Coalition (NICC), the Lower Brule Sioux Tribe has embarked on a carbon project that involves avoiding conversion of grasslands to cropland. The focus of the project is on native mixed prairie habitats and grasslands (and associated wetlands) which are vulnerable to conversion to intensive row-crop till agriculture such as corn, alfalfa, soybean, and wheat. This conversion adversely impacts native wildlife populations and reduces the land's ability to sequester carbon.

The objective of this 11,000-acre American Carbon Registry project is to continue implementation of

a wildlife and mixed prairie habitat conservation program. The program is designed to:

- Enhance the viability of the native wildlife population through prairie habitat restoration and conservation and avoided habitat conversion to agriculture.
- Provide tribal hunting, gathering opportunities
- Increase soil carbon sequestration capacity through habitat conservation and avoided habitat conversion.

Implementation of the wildlife conservation program benefits current and future tribal members by connecting them more closely to their lands, reinforcing habitat conservation ethics and practices, and diversifying employment opportunities. The project is also expected to generate substantial income for the tribe over the long-term.



Lower Brule Reservation
South Dakota





What Is A Carbon Credit?

A carbon credit represents ownership of the equivalent of one metric ton of carbon dioxide that can be traded, sold or retired. If an organization is regulated under a cap-and-trade system, such as those in California or the European Union, it likely has an allowance of credits it can use towards its cap. If the organization produces fewer tons of carbon emissions than it is allocated, the organization can trade, sell or hold the remaining carbon credits. When a credit is sold, the buyer is purchasing the seller's allowance of emissions. A credit becomes tradeable because of a reduction in emissions.

What Is A Carbon Offset?

A carbon offset represents a real reduction of carbon dioxide in the atmosphere and results in the generation of a carbon credit. The difference is, the credit is generated as the result of a project with clear boundaries, title, project documents and a verification plan. In most cases, carbon offsets generate reductions outside of the organization and, more importantly, outside of any regulatory requirement. Common projects include building wind farms, supporting truck stop electrification projects to reduce tailpipe emissions, and planting trees or preserving forests. Because carbon dioxide has global, not local, impact, both credits and offsets have the same reduction in carbon dioxide emissions and have the same benefit to the planet in terms of climate change.

Carbon Markets Explained

Carbon markets aim to reduce greenhouse gas emissions enabling the trading of emission units (carbon credits), which are certificates representing emission reductions. Trading enables entities that can reduce emissions at a lower cost to be paid to do so by higher-cost emitters. By putting a price on carbon emissions, carbon market mechanisms raise awareness of the environmental and social costs of carbon pollution, encouraging investors and consumers to choose lower-carbon paths. There are two main categories of carbon markets: cap-and-trade and voluntary.

Cap-and-trade policies set a legal limit (a maximum or 'cap') on greenhouse gas emissions. Organizations that exceed these limits can purchase excess allowances to fill the gap or pay a fine. Cap-and-trade lets the market find the least expensive way to cut emissions while driving technological innovation and economic growth. As the cap is reduced for future years, total pollution declines. Electric utilities, refineries and large factories with excessive emissions must hold allowances (permits to emit one ton of carbon) or offsets (carbon credits) equivalent to their annual emissions. These organizations enter a compliance carbon market where carbon credits can be bought and sold.

Voluntary markets enable the trading of carbon credits outside of the regulatory environment. It is driven by corporate social responsibility and ethics and a desire to enhance their reputation. Voluntary carbon markets may be smaller than the compliance markets but they are more flexible and innovative in terms of finance, monitoring and methodologies.

Fond Du Lac Band Of Lake Superior Chippewa

8,197 acres forest carbon sequestration project

Project Snapshot



5.3
million
trees



480,000 MT
Carbon Offsets
over 10 years



8,197
Acres

The Fond du Lac Band of Lake Superior Chippewa (Fond du Lac), located in northeastern Minnesota, is striving to reduce its carbon footprint and adapt to the impacts of climate change. Among the key goals are sustainability, energy efficiency, and the development of renewable energy. Fond du Lac aims to protect its land and natural resources for the cultural, spiritual, and physical well-being of its people.

The Reservation covers 101,000 acres, including forested areas, undisturbed wetlands, and wild rice waters. Animals commonly found there include black bear, timber wolf, fisher, marten, bald eagle, owls, and white-tailed deer. Fond du Lac also retains treaty rights for fishing, hunting, and gathering in the Ceded Territories (areas ceded by the Band in 1854 and 1837), which consist of eight million acres in Minnesota's Arrowhead Region, resources that Fond du Lac believes need to be protected for all Minnesotans.

Experts predict that the climate in Minnesota will become warmer in the decades ahead, with greater precipitation extremes ranging from flooding to drought. As a result of warmer temperatures, air pollution is expected to increase. These changes could lead to greater threats from invasive species, such as the emerald ash borer. The loss of maple trees could mean a decrease in maple syrup collection, and flooding or drought could be harmful to the production of wild rice.

Traditional knowledge shows that climate change is now occurring in the area. The moose population has declined and the turkey population has exploded, tribal members speak of how deer are moving farther north. Fond du Lac recognizes what climate change could mean for their way of life and are committed to taking responsible action to slow or reverse the warming trends.

In 2007, Fond du Lac committed to reducing its carbon footprint by 20 percent, and signed on to the Kyoto Protocol. In July 2020, the Reservation Business Committee elected to enter the carbon market, enrolling 8,197 acres of forestland into the Tribal Land Conservation Initiative.

The project will extend over 40 years and is expected to deliver several million dollars in revenue to Fond du Lac.



Fond du Lac Reservation
Northern Minnesota





The Tribal Land Conservation Initiative

Protection. Preservation. Prosperity.

Climate change is real, and tribal nations are taking major steps to mitigate the short- and long-term effects. What if your tribe could protect its land, preserve important natural resources for future generations and achieve prosperity today? The Tribal Land Conservation Initiative enables tribal nations to do just that. A program of the National Indian Carbon Coalition (NICC), this initiative helps tribes implement sustainable management practices, develop carbon projects and partner with socially responsible organizations – not irresponsible industrial polluters – to achieve financial security for the tribe.

Traditional methods, contemporary knowledge

When tribal governments, enterprises, employees and members use energy or products manufactured with fossil fuels, they are generating carbon dioxide and other greenhouse GHG's emissions that contribute to climate change. The combination of emissions caused by work, home, transportation and daily life is known as a 'carbon footprint.' By employing effective land management practices that combine contemporary knowledge with proven traditional methods, tribes can manage their land to store more greenhouse gases than it releases into the atmosphere – a process called carbon sequestration. The most common methods used are forest management, grasslands conservation and renewable energy.

Healthy forests are a natural source of greenhouse gas sequestration. The same is true of native grasses and other vegetation, which absorb and hold carbon dioxide emissions produced from other sources. To reduce tribal emissions,

renewable energy technologies like wind or solar can replace the use of fossil fuels. All three methods can be used to develop carbon sequestration projects that generate income through the sale of carbon offsets.

Preserving tribal land for future generations

The voluntary carbon market is where socially responsible corporations make the choice to purchase carbon credits, not because they are compelled by regulations but because it is the right thing to do. By paying someone else to reduce greenhouse gas emissions elsewhere, the buyer of a carbon offset is compensating for their own emissions. By partnering with The Nature Conservancy, and the American Forest Foundation, NICC has developed a unique opportunity for tribes to enter the voluntary carbon credit market on their own terms while managing their land in a sustainable way and generating long-term income for the tribe.

NICC's role is to be a trusted partner for tribes, ensuring that tribal interests are protected and potential revenues are maximized. The first step is to evaluate the land and determine its potential as a carbon sequestration or emission reduction activity. NICC will help the Tribe estimate the project's costs and explore potential returns using multiple different scenarios.

Carbon projects offer a unique opportunity for tribes to protect their land, preserve it for future generations and generate long-term income for the tribe with minimal risk and maximum return.

Keweenaw Bay Indian Community

16,500 acres forest carbon sequestration project

Project Snapshot



3.5
million
trees



890,000 MT
Carbon Offsets
over 10 years



16,500
Acres

The Keweenaw Bay Bands of Lake Superior Chippewa Indians is a federally recognized Indian tribe and the successor in interest of the L'Anse Band of Chippewa Indians. Established under the Treaty of 1854, the L'Anse Reservation is the oldest and largest in Michigan. The U.S. Supreme Court has interpreted the Treaty of 1854 as creating permanent homelands for the Chippewa (Ojibwa Anishnabek) signatories to the treaty. The Treaty of 1842 was one of the largest land cession agreements ever made between the U.S. government and Indian tribes. It stipulates that the Chippewa retain their rights to fish, hunt and gather on the ceded lands.

The Tribe's constitution, by-laws and corporate charter were adopted on Nov. 7, 1836 pursuant to the terms of the 1934 Indian Reorganization Act which established tribal governments as we know them today. In 1966, Keweenaw Bay became one of four founding members of the Inter-Tribal Council of Michigan

The Reservation is located on pristine lands on the southern shores of Lake Superior (Gitchi Gumeew: Big Sea Water) straddling both sides of Keweenaw Peninsula. There are about 3,600 tribal members whose land includes both the L'Anse and Ontonagon Indian Reservations. The L'Anse Indian Reservation consists of approximately 59,000 acres, including 19 miles of Lake Superior shoreline, 3,000 acres of wetlands, and 80 miles of rivers within five watersheds. The historic means of subsistence for

Tribal members centered around fishing, hunting, gathering, harvesting of wild rice (Menomin: the good grain), maple-sugaring and lumbering.

In August 2020, KBIC Tribal Council voted to move forward with a carbon development project and enrolled 16,500 acres of tribal forestland, a decision that complemented the Tribe's sustainable timber management efforts. Ongoing carbon storage will be regularly monitored through forest inventories. The project is being developed as part of the Tribal Land Conservation Initiative and the plan is to use the funds generated to meet KBIC's environmental vision, which includes maintaining the pristine waters of Lake Superior, ensuring that the Tribe has a long-term land use plan and can implement sustainable management practices on its tribal homelands.



Keweenaw Bay
Upper Michigan



NICC Partnerships

Ecosystems Services Market Consortium

NICC is a Founding Circle Member of the Ecosystems Services Market Consortium (ESMC), a non-profit organization that works to compensate farmers and ranchers who improve the environment through agricultural practices that improve soil health, reduce greenhouse gas (GHG) emissions, and further efforts to protect and improve water quality.

BPC Farm & Forest Solutions Task Force

NICC is a member of the Bipartisan Policy Center's Farm & Forest Solutions Carbon Initiative, which is aimed at incentivizing farming, ranching and forestry practices that deliver both climate and economic benefits and position farmers, ranchers and forest managers as valued contributors to climate solutions.

Slipstream

Slipstream is a mission-driven nonprofit organization that partners with utilities, state and local governments, regulatory agencies and others to inspire creative solutions to big energy challenges by adopting new practices and technologies.



Contact us

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TiCO_{2e} Carbon Calculator

Protect the earth, preserve tribal land

Our carbon footprint is the total amount of greenhouse gases we generate through regular activities such as driving or flying or using electricity. Do you know what your carbon footprint is? You can find out by using the new TiCO_{2e} carbon calculator.

It's quick and easy to determine how your travel affects the environment, and to do your part to help offset the impact. Developed by the National Indian Carbon Coalition, the TiCO_{2e} carbon calculator generates donations that help support tribal carbon mitigation projects, protect the environment and preserve Indian land for future generations.

(phone view)

(computer view)

PRESENTED BY:
National Indian
Carbon Coalition

Access the TiCO_{2e} Carbon
Calculator here:

www.indiancarbon.org

Or scan the QR code with
your phone.

