

May 8, 2007

Sale of Carbon Credits Helping Land-Rich, but Cash-Poor, Tribes

By [JIM ROBBINS](#)

LAPWAI, [Idaho](#) — On the Nez Perce reservation here, land that was cleared in the 19th century for farming is being converted back to forest, in part to sell the trees' ability to sequester carbon.

"These forests are a carbon crop," Brian Kummert, a forester for the Nez Perce tribal forestry division, said as he surveyed a vast field studded with recently planted ponderosa pine, Douglas fir and larch saplings. "We can sell the rights from the time the forest is planted to the time it's harvested, 80 or 120 years down the road."

The market for carbon credits promises to be a boon for some land-rich but cash-poor tribes. Selling carbon sequestration credits early in the growth of a forest lets the tribe realize some money more quickly, rather than waiting for decades for the harvest.

Carbon is a constituent of heat-trapping gases like carbon dioxide. Trees can pull carbon dioxide from the atmosphere and store the carbon in their tissue. Companies may be able to offset the carbon dioxide they send into the atmosphere by paying for projects that pull carbon out of the atmosphere.

The Nez Perce are participating in an Indian tribe "carbon portfolio" being created by the National Carbon Offset Coalition in Butte, Mont., an organization supported largely by the Energy Department.

"They have a long-term management, large acreage and trained staff," said Ted Dodge, executive director of the coalition.

Bob Gruenig, senior policy analyst for the National Tribal Environmental Council in Albuquerque, said the tribes "see [climate change](#) as a really big issue."

"They are seeing changes in the land, changes in plants and changes in the migration of wildlife," he said.

New forests are just part of the carbon credits that are being sold on reservations and at other places. In the last few weeks, the Chicago Carbon Exchange has approved selling carbon sequestration credits on rangeland and no-till agricultural fields.

An acre of pine forest captures and holds one to two metric tons of carbon dioxide per year, which it uses for photosynthesis. Untilled cropland holds a third of a ton of carbon per acre, and rangeland holds up to a fifth of a ton. The sequestered carbon dioxide is measured by soil tests before and after the planting.

The market for carbon sequestration in the United States is voluntary. As a result, the demand has been low compared with Europe, where emissions are now restricted by law. The market also lacks uniform

standards, prompting some environmental campaigners to question its credibility. Tribal carbon sales have had mixed results since the first such sale in the 1990s, when the Confederated Tribes of the Colville Reservation in Washington sold rights to its land for 25 cents a metric ton.

The Nez Perce had a major deal fall through a few years ago. It would have paid the tribe \$1.50 a ton for 200,000 tons over 50 years and would have been worth nearly \$500,000. Experts estimate that a project of that size would offset carbon equivalent to a year's emission from 500,000 cars.

Other tribes have found reason to grow carbon crops. In Washington and Oregon, new coal-fired power plants are required to offset their emissions. So the Lummi in northwestern Washington bought 1,700 acres that had been logged, reforested the land and sold sequestration rights to a power company.

Officials say studies showing that recent warming is almost certainly caused by accumulating greenhouse gases are increasing support for "cap and trade" rules that limit the carbon dioxide a site can emit. If a factory produces less than the cap, it can sell the surplus rights to emit carbon to other companies. If a plant exceeds the limit, it has to buy the right to emit more gases from another company or find other methods to sequester carbon equal to what it is releasing.

Carbon dioxide credits now sell for about \$4 a metric ton. Mandatory restrictions, experts say, could increase the price to \$12 or higher. In Europe, the cost of a credit sold for sequestering carbon dioxide has reached \$20, and even \$30, a ton.

"We need \$12 to \$15 carbon to really make this work," Mr. Dodge said. "We're doing it on small margins. But to bring in a lot more landowners, you need better prices."

Even so, "Things are changing," said Sean Clark, director of offset programs for the Climate Trust, a group in Portland, Ore., that buys and sells carbon credits. "The last 12 months have been growing exponentially."

The Nez Perce tribe has 4,000 acres that it has planted with trees in 29 projects across the 75,000-acre reservation. The tribe had hoped to sell its carbon-fixing rights to European companies. But because the United States has not signed the Kyoto Protocol, it cannot, even though it is considered a sovereign nation.

The sale of carbon sequestration rights has enhanced land conservation. Plants on rangeland where carbon rights have been sold, for example, have to be kept healthy to assure that they hold carbon. That means that they have to be grazed by a specific number of cows in a certain way. Forests have to be managed sustainably.

In most cases, third parties inspect and verify terms of the sale.

Carbon purchasers do not rely on one type of carbon sequestration, but a portfolio of different types sold by aggregators like the Offset Coalition or the Climate Trust. A company does not buy just one forested area, for example, but several, along with, perhaps, rangeland and cropland. In addition to biological sequestration, they might pay to capture methane at landfills, switch from diesel to other less polluting emissions or pay for energy efficient light bulbs.

“It’s like a mutual fund,” Mr. Kummert said. “You spread out your risk.”

Because the market for carbon fixing is being sorted out, “uncertainty is the name of the game,” Mr. Clark said.

Many rules depend on how well the contracts are written and what the plans are for problems. “If a beetle infestation hits your forest stand and all the tree are killed, all of the carbon gets re-emitted,” Mr. Clark said. “Then what?”

Something like that happened to the Confederate Salish and Kootenai Tribes in Montana. In 2001, they sold the sequestration rights to 250 acres to a company in London. The trees died from drought and had to be replanted.

Part of what gives tribal sequestration rights their value is low “permanence risk.” Commonly held by a tribal government, the land will not be sold, and long-term leases are more secure.

One day geological sequestration — pumping captured and liquefied carbon dioxide into the ground — will probably replace biological sequestration. But at this point, biology is the only affordable alternative.

“Biological sequestration credits are a bridge,” Mr. Dodge said. “We can bring them to the table now, but technology may pass us by.”

[Copyright 2007 The New York Times Company](#)

[Privacy Policy](#) | [Search](#) | [Corrections](#) | [RSS](#) | [First Look](#) | [Help](#) | [Contact Us](#) | [Work for Us](#) | [Site Map](#)
