



Planting trees = green (as in) \$\$\$

While planting trees helps ensure wood for lumber and other forest products in the future, there could be more immediate financial benefits through a developing market in trading carbon offsets.

By Tony Kryzanowski

Taking action to save the planet goes way beyond a “feel good” act these days. With growing interest in trading carbon offsets—largely fueled by government regulations that set hard caps on greenhouse gas (GHG) emissions for certain industries—the economic future looks rosy for individuals and companies not only interested in living green, but also those interested in the financial benefits of activities such as planting trees for profit.

However, the offset trading industry is in its infancy, and there is considerable confusion among carbon offset sellers because of the variety of emissions trading systems available. For example, the US uses the Cap and Trade System, where a regulator sets the amount of reduction it wants to achieve within a specific timeframe and then allocates a percentage of that overall emissions reduction target to various industries. Individual industries can meet regulated caps by reducing emissions—or by purchasing offsets. In 2007, BC announced that it was joining a Cap and Trade System being promoted by

California Governor Arnold Schwarzenegger, which also includes five Western US states.

The Alberta government and federal government use the Baseline Credit System. The government has an idea of what has historically been emitted by particular sectors and projects, and if individual industries are able to reduce their GHGs below those historic levels, they can earn a credit.

Alberta has since developed legislation aimed at forcing large emitters to become more energy efficient by demanding that they reduce their energy intensity per unit of production. This is seen as a way to battle climate change without curbing investment. However, critics argue that as production increases, the amount of GHGs produced under this system could actually increase.

Ontario operates a Cap Credit Trade Hybrid, which is a combination of the above two systems. The good news in Alberta is that carbon offset developments involving afforestation—reforesting land that has not been forested for a lengthy period of time or seeding land that has never been forested— established as far back as December 31, 1989 could qualify as a carbon credit asset. However, actions required by law, such as reforestation on harvested



Tanya Maynes, program manager for Alberta's Climate Change Central, is one of a growing number of facilitators helping to educate the general public on how to take a more active role in cutting energy consumption and how to possibly benefit financially from participating in offset trading.

She also helped to design and develop Alberta's offset trading system. Alberta is the first province in Canada to introduce legislation requiring large industries to reduce greenhouse gas emission intensity within an established timeframe.

"Emissions trading systems are actually considered a fundamental part of a lot of international initiatives in tackling climate change, although they can be used for more than just climate change," says Maynes. In the US, for example, emission trading systems are used to control troublesome air pollutants such as nitrogen dioxide and sulfur dioxide.

Maynes acknowledges that taking an active part in offset trading requires commitment and an open mind. Part of the problem is the nature of the offset itself. "It's an abstract kind of concept," she says. "An offset is never anything where a piece of paper will be issued saying you are the owner or creator of an offset. When you sell an offset, what you are doing is relinquishing the right and title to an emission reduction that has been verified. Buyers are purchasing that right or title. They will use that for reporting during their compliance period."

She says that offset trading allows jurisdictions to end up with the same environmental benefit as if they had drafted legislation requiring industries to achieve specified emissions targets, but at a lower cost.

Climate Change Central is a non-profit organization and a private/public partnership created in 2000 to work on climate change solutions through the delivery of energy efficiency and conservation programs. Based in Calgary, it has grown from four to 21 staff members, reflecting the growing public appetite for programs aimed at combating the problem of global warming.

Climate Change Central is governed by a multi-stakeholder board consisting of representatives from forestry, the oil and gas industry, agriculture and municipalities. The organization leverages funding from a variety of private and public sources to operate programs like a furnace and washing machine replacement program that encourages homeowners to purchase more energy efficient furnaces and appliances, as well as a vehicle scrapping program.

Part of the organization's role is to educate individuals and organizations connected to entities and industry sectors such as forestry and agriculture about carbon offset trading opportunities because they will become potential suppliers of offsets in future.

Maynes explains that offset buyers are not interested in dealing with small offset sellers directly. So a system has evolved where a number of facilitators help to connect the offset buyer with the offset seller.

The first player is the developer, or the person actually marketing the offset. This can be, for example, a private woodlot owner. Maynes points out that the offset sale can occur at any time. It can happen before trees are planted, after tree planting, or after verification that an offset has actually been created.

“Pricing is going to be worked out in the contract,” she says. “It’s a process.” The terms of the contract will specify the developer’s risks and responsibilities, which to a great extent will determine when it makes sense to sign an offset contract. The process may involve an aggregator, or a person who facilitates the grouping of smaller developer projects together to create a larger offset package.

A key player in the offset trading process is the broker. That individual plays a matchmaking role in bringing together different buyers and sellers. The developer has the option of using a validator—an individual who evaluates the offset plan and project to see if it makes sense. They will generally validate for the developer whether the project will result in the offsets that are being claimed.

A mandatory player is the verifier. After the developer has completed work on the project, such as planting a specified number of trees in a specified area, the verifier will verify that the trees have been planted, they are growing, and may in fact take some measurements and samples to determine if the project is storing or sequestering as many carbon credits as the developer claims.

The final key player from the developer’s standpoint is the buyer. Alberta has set an individual facility threshold of 100,000 tonnes of annual GHG emissions. A total of 101 facilities have been identified as emitters above that threshold because industry has been reporting its annual GHG emissions since 2003. Another player is the regulator, which in Alberta’s case is the Environment Department. It is the entity that the GHG emitters report to in terms of meeting their emissions cap requirements. As of July 1, 2007, all facilities emitting more than 100,000 tonnes of GHGs annually are required to reduce their emissions intensity by 12 per cent per unit of production. Industries unable to reduce their emissions intensity initially have the option of paying \$15 per tonne in excess of 100,000 tonnes to a technology fund that will be used to develop infrastructure to reduce emissions or to support research into innovative climate change solutions.

They can also purchase carbon offsets from Alberta-based developers. Because the per-tonne amount payable to the technology fund has been established at \$15, Maynes says developers should not expect to make more than \$15 per tonne selling their carbon offsets at the present time. Current projects are marketing carbon credits at about \$10 per tonne. Alberta has established 13 carbon offset protocols related to developments that qualify, and one specifically relates to afforestation.

More information is available at www.carbonoffsetsolutions.ca. So are there opportunities to make money in carbon offset trading? Yes. However, it has its risks. It may make sense to plant trees now to take advantage of a more stable and established trading market in future, particularly since offset trading contracts can be negotiated at any time.

