

The next lumber boom: the going green building movement?

By Tony Kryzanowski

A number of years ago when the energy industry was in a slump and oil prices were bumping along at around \$10 a barrel, the most popular bumper sticker in Alberta begged God for another oil boom.

There are probably plenty of Canadian lumber producers on their knees these days pleading for another housing boom in the United States. Many predict that the full brunt of the sub-prime mortgage crisis is still on the horizon, so a sudden increase in demand for new housing is not very likely in the short term. However, I believe that a lumber boom is on its way as a result of the growing green building movement. The Canadian forest industry seems to be doing all the right things to prepare to take advantage of the impending green explosion, if the recently announced Forest Products Association of Canada (FPAC) initiative on carbon-neutrality is any indication.

FPAC is the industry's advocacy group with government on trade and environmental affairs. It recently announced an initiative for the industry to achieve carbon-neutrality by 2015 without the purchase of carbon credits. It also announced a partnership with the World Wildlife Fund – Canada, which will make suggestions to industry on how to achieve carbon-neutrality.

FPAC president Avrim Lazar has it right when he talks about what's wrong with the approach of many existing climate change initiatives, and how the forest industry has chosen to take a different course. "We're not buying offsets by asking some guy in Ecuador to plant a tree for us or trying to hide the carbon dioxide in a hole in the ground."

If we are serious about stopping the overproduction of greenhouse gases (GHGs), all industries and consumers have to make a supreme effort to become carbon neutral in their own backyard, rather than try to "buy" our way into carbon neutrality.

My advice to those in the industry suffering because of the drop in US housing starts and the high Canadian dollar: hang in there. The "Wood is Good" campaign is about to get as hot as a Santa Ana wind-fueled fire on a California mountainside.

According to the Forintek division of FPInnovations, the value of the green building products and services market was worth \$7 billion (US) in 2006, representing a 37 per cent increase in growth over the previous year. This year, it is expected to increase another 71 per cent to \$12 billion (US).

Builders, largely being influenced by potential customers and public opinion, are asking architects and designers for buildings that leave a softer footprint on the environment. Several studies have demonstrated that the use of renewable building materials, such as wood, leave a softer environmental footprint than other building materials in a similar building design. Thus, there should be more wood used in building construction in future. For all the criticism that's been leveled against the forest industry, there is now clear evidence that we have been leaders in reducing GHGs and adopting sustainable forest management practices. Again, Forintek has done yeoman service to the industry by unearthing some highly complementary evidence from an unbiased source. It shows that the North American forest industry has been behaving responsibly by reducing its impact on the environment not only in how it manages its

forests, but also in how it manufactures its products.

Back in the 1970s when an oil crisis hit the United States, the US National Academy of Sciences initiated the Committee on Renewable Resources for Industrial Materials (CORRIM). The US was interested in examining the possibility of using renewable resources to help reduce dependence on foreign oil. CORRIM's job in 1970 was to gather production information from various industrial groups, and one of those groups was wood products, specifically, lumber, softwood plywood, and oriented strand board (OSB). The same production information was gathered and expanded upon in 2000.

What it showed is that between 1970 and 2000, lumber recovery improved by 22 per cent, while plywood improved seven per cent. Adhesive usage dropped 17 per cent by weight for OSB and 15 per cent for plywood. Energy used to harvest, transport and manufacture the products decreased by five per cent for lumber and 17 per cent for plywood.

While this outcome alone was impressive, the diminished impact on the environment was even more impressive. There was a dramatic decrease in GHG emissions due to the shift from fossil fuels to biomass as a fuel for energy production. The portion of manufacturing energy derived from residual wood is estimated at 76 per cent for lumber, 90 per cent for plywood, and 81 per cent for OSB. The shift to biomass represents a reduction of 148 kgs of carbon dioxide per 1,000 board feet of lumber and 190 kgs of carbon dioxide per 1,000 square feet of panels.

So what do all those positive indicators mean in tangible benefits? When Forintek projected the environmental improvements made by industry from 1970 to 2000 over the entire 1.28 million homes constructed in the US in 2000, manufacturing the wood products for those homes in 2000 compared to wood products from 1970 consumed 10 million fewer barrels of oil and emitted 4.4 million metric tons less carbon dioxide. While this study used US data, Forintek believes results from the Canadian forest industry are likely as good, if not better than those recorded south of the border.

The evidence is clear: The North American forest industry has learned its lessons well and is an industry leader in reducing its impact on the environment. The challenge now is to translate that effort into improved financial results for struggling forest businesses through expanded market share in all building construction sectors.

