Fort McMurray Today

Natural Oil Discovered in "Diesel Tree"

By Carol Christian
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One Alberta-based company is developing an alternative fuel source by planting one oil well at a time.

And that natural oil well is called the jatropha tree — nicknamed the diesel tree — as Bedford Biofuels develops sustainable biofuel plantations that supply the biodiesel market.

John Mitchell, general manager of Bedford Biofuels, explained the company has 160,000 hectares of prime development land for jatropha cultivation in the eastern coastal region of Kenya with 200,000 additional hectares being secured. Its plantation in Zambia is home to its research and development facilities. Currently, 100,000 hectares of prime land is being secured for jatropha cultivation.

"Most people don't have the hundreds of billions it takes to get in the oil business and because of the price of oil — we're not advocating the end of oil — we're just looking at the end of cheap oil."

As that cheap oil ends, there are certain plans in the world that don't have oil that could actually grow their own, predicted Mitchell.

Referring to the Kenya plantation, he acknowledged it's not as big as the oilsands, but it's a lot of land. "We plant a tree … called the diesel tree."

The tree bears a fruit about the size of an apple, likened Mitchell, and inside that fruit is three big seeds that are "40% diesel" -—hence the nickname.

"You just squeeze and you've got diesel you can put in a truck and run it. It's a very unique product."

The problem with most biofuels is they claim to be environmentally friendly, but they're not. They claim to be environmentally friendly, but they're not."

Take corn, for example, said Mitchell.

"You have to burn a gallon of diesel in harvesting machinery to get .7 gallons. As human beings, we want to do something, we're proactive, but it's like right now, recycling, it costs us more to recycle than we're actually saving and we think we're doing something; same thing with ethanol. It makes you think were doing something but we're actually harming it."

Biofuel is defined as a solid, liquid or gaseous fuel derived from recently dead biological material, according to Bedford's website. Therefore, in essence, biofuels can be produced from any biological carbon source. The most commonly used source is photosynthetic plants. These are known collectively as "feedstock."

When it comes to the Jatropha Curcas — described as a robust and relatively drought resistant, sustainable crop that can grow on several different types of land — Mitchell said the tree for 45 years.

"You only plant it once and you harvest it, and it doesn't take that much to harvest so it's got a way better pay back and it's way better for the environment."

Though it's easier to use for a basic diesel engine, Mitchell admitted it does need refining to use in the more hi-tech North American diesel engines.

"The upgrading and refining depend on what you want to use it for. If you bring it to North America there's a lot of refining because our diesel trucks here are higher tech but jatropha, as just crude jatropha oil, you squeeze a seed, you filter it and you can put it into any marine grade diesel of any pre-combustion engine diesel which means almost every mining equipment, railway, boat or truck on the African continent. That's what's unique about it: we don't have to spend the extra energy and everything to get it there. That's why it's so environmentally green ... and Boeing has found out and they do refine it but once they do refine it, it produces 78% less emissions than fossil fuel."

Mitchell said the company is Alberta-based because there is more investment money on the sidelines in Alberta than anywhere.

Go to Nevada or Arizona right now, and ask the realtors who is buying all the houses. The answer, Mitchell said, is Albertans because people here are still working, making good money but where want an investment that's going to give a long-term payback.

"Yeah you can buy into the oil patch as a shareholder and buy shares, but what we're doing with people is 'You invest with us, you're owning part of the lands.' We give our investors 75% of the profits."

Using investors' money to establish a plantation to plant an oil well. There is a one in 10 chance of striking oil when drilling an oil well, said Mitchell. In the oilsands, it's about 100%, but it's very expensive.

With Bedford's project, if the jatropha is planted in a climate where it grows, it's a 100% chance of lasting growth.

"So you get a 100% chance of getting oil. So we plant oil wells."

There are some local investors in Fort McMurray, said Mitchell explaining the company's philosophy is to offer the small investor the opportunity to take advantage and make great profits.

“If we were to go to a major company, they’d come to us and say ‘Yeah we’ll do it but we want control of the project.’ Our company doesn’t want to lose control of how we run things so we do it all with small private investors.” Investments range upwards from the lowest point of $8,000 which earns investors the equivalent of a hectare of land.

Mitchell invites anyone looking for more information to attend an open house Bedford is hosting on Aug. 17 at the Sawridge Inn. The Bedford crew will also be attending the trade show in late September.

In addition, Mitchell noted that 4% of Bedford’s budget is allocated to humanitarian work. That includes building homes, dental and medical clinics in the areas where the plantations are located. There’s also schools and food processing plants.

“We grow food on our land and feed the people.” Those people are also Bedford employees.

“The area we’re going into, unlike Fort Mac, we have 87,000 people live there, 95% unemployment, and half of the people are below the age of 25. So we’re going down there and employing the people.”

Mitchell noted that a company mandate stipulates Bedford only plant on land that has not or is not in agricultural production.

“It hasn’t been used for 50 years for anything.”

He acknowledged that in biofuels, it’s always the food versus fuel debate.

“What we’re telling people is it’s food and fuel because we can actually inter-crop with our product, take ground that’s not in production now, put our plantation in, run cattle on the same land, refertilize it. They can have the beef. We can run honey operations … because of the flowers on the trees. We’re actually getting more than just the fuel. We’re getting food and fuel.

“It’s really a cool project.”

As such a humanitarian-minded company, Bedford is one of a few invited to join former U.S. president Bill Clinton’s humanitarian group, the Clinton Global Initiative, said Mitchell. Membership in this invitation-only club includes the likes of Warren Buffet and Bill Gates.

“We want to be profitable for investors, but at the same time, we’re very humanitarian and environmentally responsible in what we’re doing.” ■

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