Amyris Biofuels Break through Trade Barriers

REESE EWING, Reuters

SAO PAULO | (Reuters) - Most people have never heard of the product manufactured by biotechnology company Amyris, but that may actually boost its business by helping it transcend established trade barriers that face other farm-based products such as ethanol.

California-based Amyris produces farnesene, an oily hydrocarbon, from sugar cane in a fermentation process using genetically altered yeast. Its production operations are focused in Brazil, the world's biggest and cheapest grower of cane.

The farnesene goes through a handful of conventional finishing steps -- such as the addition of a hydrogen molecule for example -- to adapt it for any number of end consumer products including diesel, jet fuel, gasoline, soaps, cosmetics, pharmaceuticals, lubricants and plastics.

The biggest market in which Amyris is establishing itself is renewable transport fuels.

"It's not totally clear yet whether it will be classified as a biofuel, in a legal or trade sense," Paulo Diniz, the chief executive of Amyris's Brazil operations, told Reuters.

The company has operations in Brazil, the United States and Europe.

Brazil has been producing ethanol from sugar cane commercially on a broad scale for more than 30 years. But it is a market plagued by government intervention locally and trade barriers abroad which have hobbled investments in the sector.

"Our end products are selling at a premium because they are renewable and we estimate we are competitive with petroleum-based alternatives even without that premium," said the executive who worked for 25 years in finance, most notably in ethanol companies Cosan and Bunge.

There do not appear to be any trade restrictions on farnesene or end products made from it -- not yet, anyway -- unlike biofuels such as cane-based ethanol and biodiesel derived from vegetable oils.

After Amyris transforms sugarcane syrup into farnesene through its patented method, it sells specific farnesene-based products to companies at home and overseas which then make them into end consumer goods such as lipstick, tires and jet fuel.

Amyris has partnered with local milling groups such as Cosan and Sao Martinho as part of its strategy to tap into cane supplies without the multimillion dollar investments needed to construct their own milling operations.

But the deal, which allows Amyris to set up its plants adjacent to the mills, gives mill owners a more complete portfolio of products besides just sugar and ethanol.

The company has another advantage as the sole commercial pioneer on the market.

"While all other next generation biofuels ventures are still three to five years away from commercial production at best, our maturation time is today," Diniz said. "We are already commercial, before we expected."

Amyris is negotiating with major global household brands to sell them a renewable product. It has already signed a deal with Cosan and BR Distribuidora -- the distribution arm of the state oil company Petrobras -- to supply feedstock for industrial lubricants.

Amyris plans to produce 1 billion liters of farnesene, equivalent to 20 million tonnes of cane, by 2015. Brazil produces around 580 million tonnes of cane annually.

"We could easily double this plan, if demand merits it," Diniz said. "The big challenge is educating the public about the product, how it is renewable and can be marketed to environmentally concerned consumers."

Reporting by Reese Ewing; editing by Jim Marshall *[1]*

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