

COVER STORY

Mike Noll has taken research by the Ohio Soybean Council and the National Biodiesel Board to heart.



From Beans to Biodiesel

Mike Noll has big plans to put biodiesel and other new uses for soybeans to work. ■ By Tim White

He's never grown a single soybean. He does not have a degree in chemical engineering. And yet, Mike Noll may be the right person, in the right place, at the right time, when it comes to turning soybeans first into biodiesel and later into other products.

Noll is a marketing specialist — a retired salesman of electronic controls for mechanical engineering. “I’m not afraid to talk to people. That’s for sure,” he says. “And I know I will hear the word no five times before I make the sale.”

“Mike Noll has talked with everyone involved in the soy biodiesel industry,” confirms John Lumpe, director of new products for Ohio Soybean Council. “He’s done his homework.”

Some of that homework was studying the Soybean Processing and Biodiesel Production Feasibility Study generated with \$50,000 of input from the Ohio soybean checkoff. “I read that plan backwards and forwards for three days,” Noll says. “It easily saved me two years of research.”

RAPIDLY EXPANDING INDUSTRY

“I think Mike’s timing is very good,” says Rod Frazier, president of Frazier, Barnes and Associates in Memphis, Tenn., the firm that wrote the feasibility study. “He has the opportunity to be on the front end of a rapidly expanding industry.”

Frazier says the role renewable fuels play in the energy bill that comes from Congress will be the key to how

quickly biodiesel moves in the marketplace. “Biodiesel is on the cusp of becoming the companion to ethanol in meeting renewable fuel standards.”

If the Congressional conference committee passes the Senate version of the bill, it would call for national use of 5 billion gallons of renewable fuels (including biodiesel and ethanol) by 2012.

Noll is following the study’s recommendation to build a 13 million-gallon a year plant in Fayette County at a cost of \$30 to \$35 million. He is calling the business Alternative Liquid Fuel (ALF) Industries. The proposed plant would have capability to expand production to as much as 30 million gallons.

Noll announced in August he has arranged to buy a parcel in Washington Court House owned by Bergman Reality. It is in the city’s industrial park near Lowe’s and has access to the CSX Railroad lines.

It’s a good site, Frazier says, because it is in an area of dense soybean production with little competition from nearby soybean processors. It has good highway and railroad access. Frazier and Barnes is doing a business plan for ALF Industries.

There is also land available to build a crushing facility. Noll hopes

that a group of farmers will step forward to develop the crushing enterprise. “Crushing is a separate business and I want to focus on the biodiesel and by-products,” Noll says.

WHO WILL BE THE CRUSHER?

Some farmers are talking about the possibility of building a crushing plant, says Steve Miller, chairman of the Ohio Soybean Council and a former member of the National Biodiesel Board.

“I really like the location, Mike has chosen,” says Miller, who farms near Marion. “The only difficulty I foresee for him is the strong demand for

Steve Miller likes Noll's chances of bringing biodiesel into the fuel pipeline in Ohio.



cooking oil from consumers in the East. With a partner to crush soybeans, he has a steady supply of beans and he's a little exempt from the competition from big crushing plants. I don't foresee those plants giving him any breaks," Miller says.

An identity-preserved crushing business that could cater to the special requirements of food processors might be the most profitable kind of venture, Miller says. However it might cost as much as \$30 to \$40 million.

First build the biodiesel plant and then the opportunity to build a crushing plant will be clear, Miller says.

"I see Mike as extremely optimistic person whose strong background in sales take him over most of the bumps in the road. I firmly believe the market in Ohio is ripe," Miller adds. "And I agree with his projection that Ohio will ultimately have two or three biodiesel plants."

Actually, Noll is predicting Ohio will soon have three to four plants and eventually might have five to ten plants. He points out that the state has some 500 petroleum blenders some of whom are already using the product. More would be eager to add

soy biodiesel to their fuels if the law made it attractive, he says.

California, Arizona, Nevada and Minnesota have all come up with air-quality requirements that all but mandate a B-20 blend in diesel engines. South States has built several biodiesel plants in California to meet the need.

"Even the trucks coming from Mexico are burning a blend," Noll says. "It will come to the Midwest and East Coast, too."

BIODIESEL BYPRODUCT BENEFIT

Noll claims biodiesel will drive the market at first, but the many other products like soap and building materials will be the most profitable. "It's all in the packaging and distribution," Noll says. In particular he sees value in the glycerin solution that comes from biodiesel processing.

"I'm a dreamer who gets caught up in the big picture," Noll admits. "I will definitely rely on the team of experts that I gather together to do the job."

Noll retired once from sales about three years ago. Moving to his wife's family farm near Carroll steered him in new directions including toward "Mother Earth News." That's where



Dependence on Middle Eastern fuel is a prime reason for biodiesel support, says Noll.

he read about home brewing biodiesel from vegetable oil by Joshua Tickell. Noll brewed his own vat of biodiesel in a 55-gallon drum in his garage two years ago. "I used oil from a doughnut shop. It smelled delicious," he says.

Soon he was at Tickell's Web site (www.veggievan.org) where he learned about the "veggie van." Tickell traveled across the country in a vehicle powered by biodiesel made from vegetable oil purchased as needed from fast food restaurants.

Eventually Noll met John Lumpe and learned about the projects being done by the Ohio Soybean Council. He was also introduced to Larry Thompson with Heartland Agdeavers, a group dedicated to helping ag-minded entrepreneurs explore their vision.

"Mike has burned a lot of shoe leather," says Larry Thompson coordinator for Heartland Agdeavers. "I see a lot coming out of this. The soybean is very versatile. There's lots of room for growth."

This month Noll will be in Germany for a five-day visit including a tour of the manufacturing facility for the plant he hopes to install in Washington Court House. ♦

Biodiesel buses OSU students

The Buckeye Clean-Air Bus recently kicked off a one-year pilot project to reduce air pollution on campus and promote soybeans as a fuel.

During the pilot program, about 20% of the Ohio State University Campus Area Bus Service will be powered by a B-20 blend of biodiesel. Changing fuels is expected to reduce carbon dioxide emissions by 15%.

With the move, OSU becomes the largest university in the country to be using biodiesel. The system carries about 4 million riders a year.

"As you know soybeans are a very important crop in Ohio and to have OSU involved in a project that just adds value to soybeans is very exciting," says Bobby Moser, dean of the College of Food, Agricultural and Environmental Sciences. "It's an environmentally friendly product and its going to help Ohio processors and farmers."

The change not only improves air quality but also brings increased lubricity to bus engines, notes Susie Turner, executive director of the Ohio Soybean Council.

"The soybean checkoff works on behalf of Ohio's soybean farmers to find new markets for soybeans, such as building demand for soy biodiesel. By working with OSU to utilize biodiesel in their fuel, more soybeans will be used in the production process.

"The more soy biodiesel is used by high-profile organizations like OSU, the more valuable the crop becomes for the farmers," she says. ♦