

Government Tries To Bolster Biofuels Market

Critics point to hefty subsidies, demand for land as cause for concern

By [Dan Way](#)

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RALEIGH — The unprecedented goal of creating a biofuels sector in North Carolina, from the planting to the propelling of vehicles with the renewable fuel, “is astonishing and enormous,” Steven Burke admits.

Burke is president and CEO of the North Carolina Biofuels Center in Oxford, created by the General Assembly in 2007 as a tax-fueled catalyst to foster a cellulosic biofuels market from trees, grasses, and nonfood crops.

The legislature allocated \$4.5 million to the center in the current fiscal year, down from \$5 million in previous years, to solve the still prohibitively costly renewable energy riddle.

“North Carolina will use 500,000 acres of its land to produce 7.5 million tons of new [bio]mass that in \$4.3 billion worth of new facilities will make 500 million gallons of fuel” by 2017, Burke said of the legislature’s “colossal” policy directive.

Burke acknowledged “the audacity of our goal, which I characterize as not impossible, just very hard.”

But critics of this and similar projects argue that there would be no market for biofuels without taxpayer subsidies and government mandates. They see the project as a waste of public funds and an unwarranted diversion of cropland from the production of food to the creation of inefficient fuels.

The Biofuels Center is not a science agency, does not produce anything, and has no research labs of its own. Yet it expects to foster an industry that provides 10 percent of North Carolina’s future transportation fuel needs by 2017 and spins off bioplastics, biomaterials, and biopharmaceutical manufacturing.

The center is working with universities, companies, farmers, growers, counties, and municipalities to create the biofuels sector, Burke said.

The center has awarded nearly \$11 million in research grants, conducted education programs, and opened a research and development incubator on its campus.

The center has spawned 20 research projects statewide, and is exploring 17 potential feedstocks — three trees, six energy grasses, four oil-producing crops for diesel, and four starch-producing crops.

Burke believes the first showcase facility is on the horizon in Sampson County. Chemtex, a chemical technology and engineering firm, may be on track to open a \$170 million cellulosic ethanol processing plant in a few years to produce 20 million gallons of fuel annually.

Paolo Carollo, Chemtex international vice president at its U.S. headquarters in Wilmington, said the company hopes to finalize a loan guarantee through the U.S. Department of Agriculture and start construction in six to eight months. The plant could be in operation by the end of 2014 or 2015.

“The interest in the market is not something that worries us at all,” Carollo said. “One of the conditions for applying to USDA was to have a good part of the supply chain already in place, with agreements,” he said.

“What we are producing here is going to be used by an American fuel marketer that is already committed to us for a multi-year agreement” for fuel to be used in the Southeast, Carollo said.

Not everyone is as enthusiastic about the imminent promise of biofuels. That includes Brandon Scarborough, a Charlotte native and Appalachian State University graduate now working as a research fellow at the Property and Environment Research Center in Bozeman, Mont.

“There’s mandate after mandate” from government for ethanol, Scarborough said. “But people aren’t going

to buy it when it turns out to be more expensive than thought.”

Government sets arbitrary targets “to drum up support for the program, and the chances of meeting those are probably pretty slim,” he said. That includes a federal push to require ethanol to be 15 percent of the blend in gasoline to goose the market artificially.

There are mandates for cellulosic ethanol production and the amount that needs to be blended in gasoline. The federal Renewable Fuel Standard Program mandates use of 36 billion gallons of renewable fuel annually by 2022. But producers have been fined for not blending enough of the fuel.

“The reason they weren’t blending it was because there wasn’t any being made; there isn’t a market,” Scarborough said. “It just isn’t cost effective without massive subsidies.”

Biomass producers will get involved once government energy portfolio standards “create a pseudo market” for their crops by government mandate, not consumer demand, Scarborough said.

“Then energy producers are forced to go out and find that [supply], and they lobby governments to encourage people to produce those resources at cost-effective prices to them,” Scarborough said. “It simply cannot survive without some sort of economic incentives, which means taxpayers.”

Creating fuels from biomass is “an inefficient process” because the feedcrops are not energy dense. They require large amounts of land and, of concern for drought-prone North Carolina, lots of water, Scarborough said.

Ethanol delivers “roughly about 30 percent less energy” than gasoline, so even when it’s selling for less per gallon, it costs motorists more because they don’t get as many miles per gallon, he said.

“It’s a politically friendly story,” Scarborough said. “You tell people instead of getting oil from evil terrorists you’re going to grow it in your back yard” on local farms and keep the money in the state economy.

The problem with that is terrorists generally operate outside of government and are not affected by global energy politics, said Peter Van Doren, senior fellow at the Cato Institute in Washington, D.C.

Research shows every nation’s economy is shocked during crude oil market convulsions whether the country is a net importer or exporter of fuel, so more home-grown fuel won’t insulate the state economy, he said.

Still, politicians from both parties vote for renewable energy policies because voters favor them, usually without knowledge of drawbacks, such as the high tax-based subsidies and enormous land use.

“The calculations I see is you’d literally have to take all the land in the United States and plant it in grass to substantially reduce” reliance on crude oil-based fuels, Van Doren said.

North Carolina has construction and production tax credits and incentives for biofuels. Federal government assistance includes a tax incentive of up to \$1.01 per gallon for cellulosic biofuel producers.

To help create a market and to get the industry started, “more than incentives” are needed, including mandated commitments for biofuel targets from government, Carollo said.