Florida's Farmers to Grow Crops Towards Renewable Jet Fuel

St. Lucie County’s Treasure Coast Education, Research, and Development Authority (TCERDA) in collaboration with the Florida Energy Systems Consortium (FESC) had an USDA grant kick off meeting on Jan 6, 2016. The Commercial Aviation Alternative Fuels Initiative (CAAFI) is leading this Farm-to-Fly 2.0 initiative in cooperation with USDA Rural Development. Over 50 stakeholders including farmers, financiers, industry (processors), land owners, scientists, airlines, and FedEx attended the meeting.

The feasibility grant explores the economic viability of producing biofuels from sugar/starch crops and developing its supply chain in South Florida in collaboration with small farm growers, processors, and commercial airlines. The study includes sugar beets, tubers, sweet sorghum and sugar cane to produce renewable jet fuel, bio-ethanol, bio-diesel fuel, and bio-heating oil.

Feedstock cultivation and processing into biofuels creates significant job growth in South Florida rural communities and provide a diversification crop for small farmers. The region’s citrus industry has experienced a 75% loss in crops, due to the devastating effect of insect infestation. These alternative crops provides an option for small farmers and are essential for the region’s significant agricultural economy.

Industrial sugar crops are being tested as a possible alternative by the University of Florida’s Institute of Food and Agricultural Sciences and the USDA Agriculture Research Service at the TCERDA site. Preliminary results have been favorable and well-received by sugar-based alternative biofuels companies. This project includes the use of advanced science research of the FESC, which is comprised of highly experienced, highly successful innovators from the various energy-related research fields, education, outreach, industrial collaboration, technology commercialization, and economic development. FESC committed $50,000 for the development of a roadmap for the statewide bio fuel Feedstock EPA Certification Program which is critical for the success of this project. TCERDA leveraged this grant to get the USDA funding. FESC participation will accelerate the Florida specific feedstocks and processes EPA certified in tangible ways that will provide Florida with a competitive advantage in attracting such companies.