Biomass Program

INEOS Bio Commercializes bioenergy technology in Florida

Project produces renewable biofuels and clean energy from waste

INEOS Bio and its joint venture partner, New Planet Energy Florida, are investing millions of dollars to build a third-generation ethanol facility, bringing clean energy jobs to Florida. The Indian River County BioEnergy Center, near Vero Beach, Florida, will produce eight million gallons of third-generation bioethanol per year from renewable biomass including vegetative, yard, and municipal solid waste. The Center will also generate 6 megawatts (gross) of clean renewable power to run the facility with the excess exported to the local community. The total project investment will be more than \$100 million dollars and will create 175 construction jobs over the next two years with 50 full time jobs once the center is operational. More information on this project can be found at: www.ineosbio.com

Project Description

The BioEnergy Center will be the first commercial scale facility employing the INEOS Bio Bioenergy technology. The project is targeted for completion and start-up in Q1 2012.

Utilizing a unique combination of gasification and fermentation processes, the facility will demonstrate key equipment at full commercial scale using vegetative, yard, and municipal solid waste as feedstock. Through a proprietary process, the feedstock will be heated to produce a synthesis gas that is



cooled and cleaned before being fed to naturally occurring bacteria. These patented bacteria convert the synthesis gas into ethanol, which is purified for use as fuel in the transportation market.

This unique "feedstock flexible" process has been in development for over 20 years with seven years of pilot plant testing. In addition to building their own plants, INEOS Bio will enter into licensing agreements with third parties to build similar commercial bioenergy plants to supply ethanol and clean energy around the United States and the world.

Potential Impacts

This project will have significant positive impact on the local community. Building and operating the facility will provide green jobs in a region with a substantial unemployment rate and redevelop a

former agricultural industrial site. The biomass gasification process produces clean energy from a steam turbine, which will run the plant and deliver green power to the local community.

The availability of ethanol for fuel in the region significantly reduces the costs and environmental impacts of transporting ethanol across the country to fulfill Florida's E10 ethanol standard, while providing energy security to Florida and the Nation.

Other Participants

Key participants in this project include INEOS Bio, New Planet Energy and EPC firm AMEC.

Prime	INEOS New Planet BioEnergy
Location	Vero Beach, FL
Feedstock (s)	Vegetative & Yard waste, MSW
Size	300 Dry tons per day
Primary Products	Cellulosic ethanol, renewable power
Capacity	8 million gallons per year and 6MW (gross) of electricity generation
Award Date	March, September, 2010
GHG Reduction	> 90% GHG Reduction compared to gasoline
Anticipated Job Creation	175 Construction jobs and 50 full-time jobs
Company Contact	Dan Cummings, (630) 857-7165