Biomass Program

Enerkem to use Sorted Waste as Feedstock in Biorefinery

ENERGY Energy Efficiency & Renewable Energy

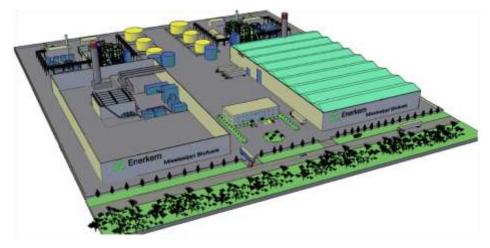
Enerkem's biorefinery in northern Mississippi will convert heterogeneous (mixed) sorted municipal solid waste into ethanol.

Enerkem will build a 300 short tons (300 metric tons) per day biorefinery in Pontotoc, Mississippi that will produce 10 million gallons of ethanol per year from the post-recycling municipal solid waste. Because the project is located on a portion of a regional landfill, feedstock for the project is already generated in the surrounding counties and delivered to the landfill each day. By converting this waste into transportation fuels, the Enerkem project will increase U.S. energy security, create jobs, reduce greenhouse gas emissions, and extend the life of the landfill by diverting incoming volume. More information on Enerkem can be found here: www.enerkem.com

Project Description

Enerkem uses a three-step thermochemical process for converting the carbon in waste into fuel. Enerkem's proprietary gasifier and gas cleaning/conditioning system breaks down feedstock and turns it into a synthetic gas ('syngas'') essentially composed of hydrogen, and carbon monoxide. This clean syngas is catalytically converted to methanol and subsequently to ethanol and biochemicals.

The process reduces the volume of waste ultimately going into a landfill



CAPTION: 3D Rendering of Enerkem's Pontotoc, Mississippi Biorefinery

by over 90% and at the same time extracts all useful energy from the waste used as feedstock. Enerkem has been developing its technology platform since 2001, and has built and operated both a large pilot plant in Sherbrooke, Quebec, Canada, as well as a demonstration-scale plant (50 tons per day) is Westbury, Quebec, Canada. The project is the first in the U.S. for Enerkem, which intends to build biorefineries throughout the U.S. after the technology is demonstrated at full scale in this project.

Potential Impacts

The project will create a significant number of construction and permanent jobs while increasing energy security, reducing greenhouse gas emissions and extending the life of the regional

Prime	Enerkem Corporation
Location	Pontotoc, Mississippi
Feedstock (s)	MSW and wood residues
Size	300 short tons (300 metric tons) per day
Primary Products	Ethanol
Capacity	10 million gallons per year
Award Date	March, 2010
GHG Reduction	83.4%
Anticipated Job Creation	210 construction jobs, 131 permanent jobs
Company Point of Contact	Mr. J. Auger, Vice President & General Counsel, 514-875-0284

landfill on which the facility will be located. Furthermore, the deployment of this commercial-size facility will remove remaining barriers to commercialization of this technology throughout the U.S.