

Enerkem to Use Sorted Waste As Feedstock in Biorefinery

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

Enerkem will build a biorefinery in Pontotoc, Mississippi, that will produce 10 million gallons of biofuels per year (MMGPY) from separated municipal solid waste. The project is adjacent to a regional landfill; as a result, feedstock generated in the surrounding counties will be 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. For more information, visit the [Enerkem website](#).

Project Description

Enerkem uses a four-step thermochemical process for converting the carbon in waste into fuel:

1. Preparation of feedstock
2. Gasification
3. Cleaning and conditioning of syngas
4. Catalytic synthesis.

Enerkem converts mixed waste and residues into a pure synthesis gas (or syngas) that is suitable for the production of biofuels and chemicals using proven, well-established, and commercially available catalysts. With its proprietary technology platform, the company is able to chemically recycle the carbon molecules from non-recyclable waste to create a number of products.

The process reduces the volume of waste ultimately going into a landfill by more than 90% and, at the same time,



Enerkem's biorefinery in Mississippi will convert waste that is brought to a regional landfill into 10 million gallons of biofuel per year.

extracts useful energy from the waste used as feedstock. Enerkem has been developing its technology platform since 2000 and built and operated a pilot plant in Sherbrooke, Quebec, Canada, as well as a demonstration plant in Westbury, Quebec, Canada, which is producing methanol (1.3 MMGPY) and ethanol (1.5 liters per hour). Enerkem's first commercial-scale plant (10 MMGPY) and Pontotoc sister-plant is under construction in Edmonton, Alberta, Canada.

Potential Impacts

The project will create a significant number of temporary construction and permanent jobs while increasing energy security, reducing greenhouse gas emissions, and extending the life of the regional landfill near which the facility will be located. Furthermore, the deployment of this commercial-size facility will eliminate remaining barriers to commercialization of this technology throughout the United States.

Prime	Enerkem Mississippi Biofuels LLC
Location	Pontotoc, Mississippi
Feedstock (s)	Municipal solid waste and wood residues
Size	300 short tons (300 metric tons) per day
Primary Products	Ethanol and methanol
Capacity	10 million gallons per year
Award Date	March 2010
GHG Reduction	83.4%
Anticipated Job Creation	210 construction jobs, 131 permanent jobs
Company Contact	Mr. Jocelyn Auger, Vice President & General Counsel