Biomass Program

Agricultural Mixed Waste Biorefinery Using Thermal Conversion Process (TCP)

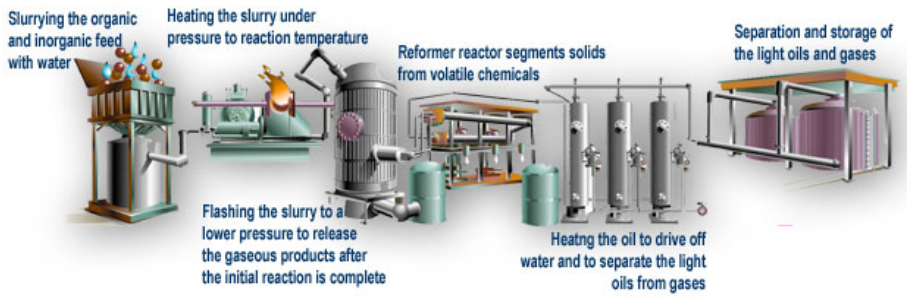
This Congressionally-mandated project is supporting efforts to develop a demonstration facility that will use the patented Thermal Conversion Process (TCP) to produce fuel, power and chemicals from poultry waste and agricultural wastes such as animal and vegetable grease and wastewater sludge. The goal is to develop a clean and reliable source of energy from renewable sources that is competitive with fossil energy resources and is environmentally sound.

Pioneered by Changing World Technologies, TCP uses mechanisms that emulate the geological and geothermal processes of nature to produce valuable products from a variety of wastes. Commercial TCP plants could provide an attractive alternative to landfilling or rendering of agricultural wastes, making productive use of these otherwise wasted resources.

Demonstration plants on the order of 200-250 tons per day are now being designed and constructed in the states of Alabama, Colorado, and Nevada. By constructing demonstration facilities, the partners intend to fine-tune and optimize the TCP process and further enhance commercial feasibility.

R&D Pathway

Partners in the project are going forward with biorefinery engineering and design, site preparation, and permitting. They plan to complete the construction of pilot plants during 2004 and 2005. By the end of 2005, work should be completed on system start-up and shakedown testing, and final assessment of the process. This timetable is contingent on timely completion of Environmental Assessments, when required.



Congressionally Directed Associated Integrated Biorefineries R&D

Benefits

- Provides alternative to landfilling
- Renewable energy resource

Applications

TCP technology uses agricultural wastes to create materials and products.

Project Participants

Changing World Technologies
ConAgra Foods, Incorporated
Gas Technology Institute
Society for Energy & Environmental Research
Kvaerner Process Systems, Inc.
Renewable Environmental Solutions, LLC
Resource Recovery Corporation

Project Period

FY 2001 – FY 2007

For more information contact:

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Visit the Web site for the Office of the Biomass Program (OBP) at www.eere.energy.gov/biomass.html

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