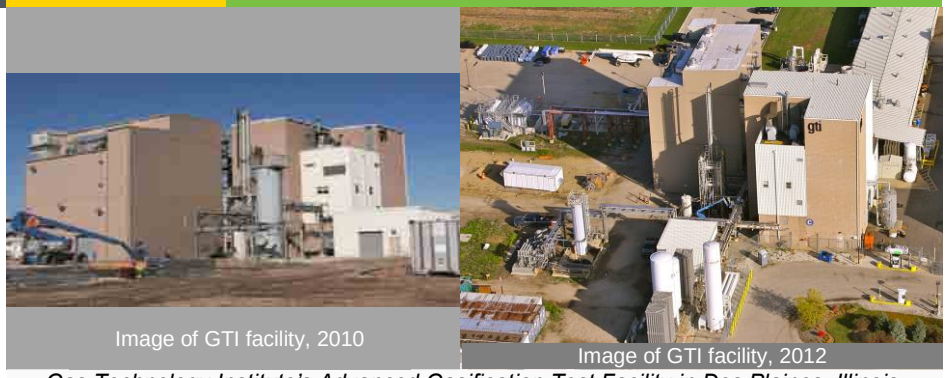
Green Gasoline from Wood Pilot Biorefinery Demonstration Project

Haldor Topsoe, Inc. will integrate the Carbona Gasification and the Haldor Topsoe TIGAS (Topsoe Integrated Gasoline Synthesis) proprietary processes to produce renewable gasoline from woody biomass.



Gas Technology Institute's Advanced Gasification Test Facility in Des Plaines, Illinois.

Haldor Topsoe, Inc.'s project will be located within Gas Technology Institute's Gasification Testing Complex in Des Plaines, Illinois. The goal of this integrated pilot facility is to process an estimated 20 tons of pellets per day to produce 22.5 barrels of "green" gasoline per day. For more information, visit the Haldor Topsoe, Inc website.

Project Description

Haldor Topsoe, Inc. will demonstrate a new, economical thermochemical process for the conversion of wood waste and woody biomass to gasoline.

Haldor Topsoe, Inc. will source the feedstock wood from UPM-Kymmene, a pulp and paper company. UPM will begin deliveries in 2012. All wood supplies are the result of milling processes and have been harvested from non-federal lands in Minnesota, in accordance with the Minnesota Harvesting Guidelines.

The objectives and the value proposition of the project promote the national goals of energy independence, greenhouse gas reduction, and green job creation and retention. They include the following:

- Beginning operations of the pilot-scale Carbona Gasification and Haldor Topsoe TIGAS (Topsoe Integrated Gasoline Synthesis) processes by early 2013
- Demonstrating the effective use of pulp mill wood waste and non-merchantable wood for gasoline production
- Gathering metrics for the construction and scale-up to a commercial-size facility.

Potential Impacts

The Haldor Topsoe, Inc. pilot plant is planned to startup in early 2013. Once the TIGAS process has been demonstrated to work at pilot scale, it can be expanded to produce "green" gasoline in amounts large enough to allow the United States to reduce its dependence on imported oil. This approach brings a carbon-neutral fuel to the existing fleet of 300 million gasoline-powered vehicles without the need for yet-to-be-proven vehicle technologies or extensive changes to the fuel delivery infrastructure.

Other Participants

Haldor Topsoe, Inc. has collaborative agreements with Gas Technology Institute, Andritz-Carbona, UPM-Kymmene, and Phillips 66.

Prime	Haldor Topsoe, Inc.
Location	Houston, Texas (US HQ), Des Plaines, Illinois (Project Site)
Feedstock (s)	Wood pellets
Size	20 tons per day (6% moisture content)
Primary Products	Renewable gasoline
Capacity	345,000 gallons per year (approximate)
Award Date	December 29, 2009
GHG Reduction	92% reduction versus fossil product at commercial scale
Anticipated Job Creation	35 jobs during peak construction and 25 sustained jobs during operation
Company Contact	Niels Udengaard, 281-228-5065, nru@topsoe.com

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