

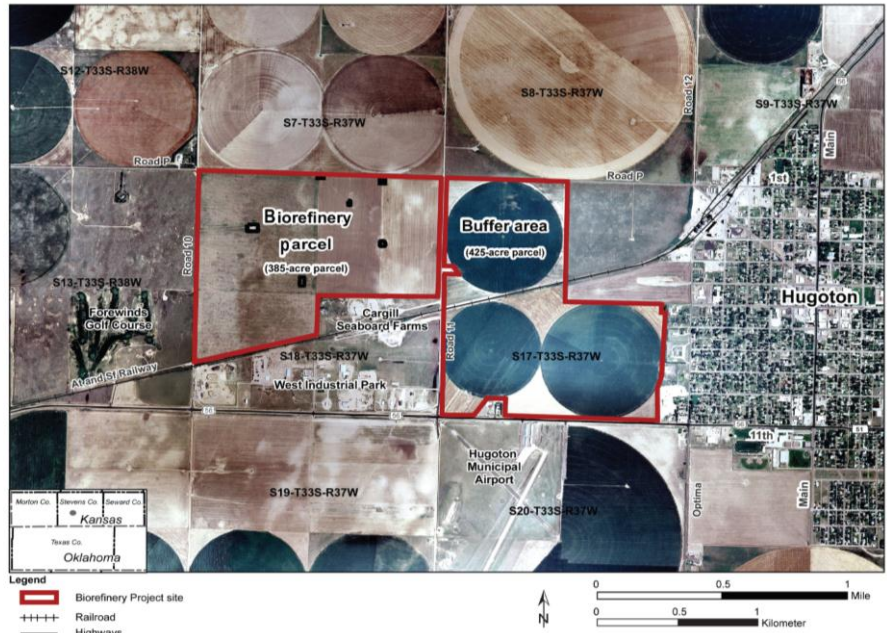
Abengoa Bioenergy Biomass of Kansas (ABBK)

Integrated Biorefinery for Conversion of Biomass to Ethanol, Power and Heat

Abengoa Bioenergy's efforts involve the construction of a 1,200 tons per day commercial biorefinery producing cellulosic ethanol and also power and heat to operate the facility.

Project Description

The Biorefinery Project site would be located adjacent to and west of the city of Hugoton, in Stevens County, southwestern Kansas. The Project site comprises approximately 810 acres of row-cropped agricultural land. The biorefinery facilities would be developed on 385 acres of the Project site, and the remaining 425 acres would remain agricultural and act as a buffer between the biorefinery and the city of Hugoton. About 1,000 tons per day of agricultural residues would be converted via enzymatic hydrolysis to sugars and fermented into cellulosic ethanol. An additional 200 tons per day of agricultural residues along with ethanol plant residual solids and waste water treatment biogas, will be used to generate the necessary heat and power to make the facility energy self-sufficient.



The Abengoa Integrated Biorefinery will convert biomass feedstocks to fungible liquid transportation fuels and green power.

Potential Impacts

An Environmental Impact Analysis has been conducted for this site and project. The Record of Decision was issued January 12, 2011 and a supplementary analysis was issued July 2011. This can be accessed via the following site: http://www.biorefineryprojecteis-abengoa.com/Home_Page.html.

Positive impacts include job creation, production of green power, reduction in GHG emissions compared to coal fired power plants and use of cellulosic ethanol to replace petroleum-based gasoline.

Other Participants

- Abengoa Bioenergy New Technologies
- Abengoa Bioenergy Trading
- Abener - Teyma General Partnership

Prime	Abengoa Bioenergy US Holdings, LLC .
Location	Hugoton, Stevens County, Kansas
Feedstock (s)	Agriculture residues
Size	1,200 tons per day
Primary Products	Cellulosic Ethanol, Green Power
Capacity	25 MM gallons ethanol, 20 MW power
Award Date	September, 2007
GHG Reduction	70% reduction versus fossil fuel equivalent when using E100 Proportionally less for E85-E10. Lower S compared to coal.
Anticipated Job Creation	250 peak construction jobs and an average of 65 sustained per year during the operation of the facility
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