



Edmonton Waste-to-Biofuels Project

Chronology

First of a kind waste-to-biofuels project initiated

In 2000, the City of Edmonton initiated a project aimed at converting waste into electricity or biofuels. This search was mainly initiated to advance Edmonton's sustainable waste system. Specific targets included:

- Increase Edmonton's landfill diversion rate from 60% to 90%
- Reduce Edmonton's need for landfilling, without going to mass-burn systems

Enerkem selected as the industry partner

Following the City of Edmonton's rigorous selection process, which included an independent review of gasification and pyrolysis technologies around the world, Enerkem was chosen. Enerkem's flexible and innovative technology platform promised the best compatibility with the current and future needs of the City of Edmonton. In addition, Enerkem's ability to clean its synthetic gas made it one of the few companies capable of converting waste into fuels and green chemicals in a clean and efficient manner.

Pilot project launched

In 2004, Enerkem initiated a pilot project with the EWMC and the Alberta Energy Research Institute (now Alberta Innovates- Energy and Environment Solutions (EES)) aimed at adapting Enerkem's technology to convert municipal solid waste into clean synthetic gas. Parallel to this joint effort, Enerkem was developing its first commercial demonstration plant in Quebec, which started operating in 2009, and is transforming treated wood residues into ethanol.

Waste-to-biofuels commercial facility announced

In June 2008, the Edmonton waste-to-biofuels facility was announced by Doug Horner, Minister of Advanced Education and Technology; Stephen Mandel, Mayor of Edmonton; Vincent Chornet, President and CEO of Enerkem; and Donald Price, President of GreenField Ethanol's Advanced Biofuels Group.

EAB awarded environmental permit to build the biofuels facility

In 2009, Enerkem Alberta Biofuels (EAB) was granted a permit to commence construction of the biofuels facility by Alberta Environment, under the Environmental Protection and Enhancement Act of the Province of Alberta. The project successfully met or exceeded all the required regulatory environmental standards, including air emissions.

Advanced energy research facility formed

In addition to the biofuels production facility, the three partners decided to jointly form an advanced energy research facility. The research facility was announced in July 2009 and its sod-turning event was held in September 2009.