

# Iogen Announces New Drop-In Cellulosic Biofuel

Ottawa, Canada, January 22, 2014 - Iogen Corporation today announced it has developed and patented a new method to make drop-in cellulosic biofuels from biogas using existing refinery assets and production operations.

The company estimates there is refining capacity in place to incorporate 5-6 billion gallons per year of renewable hydrogen content into gasoline and diesel fuel. Iogen will initially commercialize the approach using landfill biogas, and then expand production using biogas made in the cellulosic ethanol facilities it is currently developing.

The production method involves processing biogas to make renewable hydrogen and incorporating the renewable hydrogen into finished fuels in selected refinery hydrogenating units.

The overall greenhouse gas emissions are reduced by more than 60%, meeting the threshold for cellulosic biofuel in the USA. Iogen said it is actively consulting with the EPA and CARB to gain pathway approval for cellulosic RIN and LCFS credit generation.

“Biogas is produced today from landfills, wastewater treatment plants, waste digestion facilities, and farm digesters with well-proven technology,” says Patrick Foody, Iogen’s Executive Vice President, Advanced Biofuels. “We can now take biogas and make specification gasoline and diesel with renewable content using well-proven existing refining operations. It is a win for everybody.”

The company says it is planning to use the technology in association with two large-scale US cellulosic ethanol plants it is developing, resulting in increased overall cellulosic biofuel yields per unit of feedstock, lower unit capital costs, and lower water usage per unit of biofuel production. The company made the announcement at US EPA’s Landfill Methane Outreach Project Conference in Baltimore.

Iogen Corporation:

Iogen is a leader in cellulosic biofuel technology and implementation. The company has been in the cellulosic biofuel business for over 30 years, invested roughly \$500 million in research, development, and demonstration, and has close to 300 issued and pending patents. Cellulosic biofuel is a renewable alternative to gasoline that lowers greenhouse gas emissions, increases energy security, provides jobs and opportunity for rural communities, and can be used in today’s cars. It is made from the non-food portion of plant material, so there are abundant available supplies to make a substantial and sustainable difference in the world’s energy mix. Over the past nine years, Iogen has produced more than 2 million litres of cellulosic ethanol in its \$100 million demonstration plant using agricultural residues like wheat straw, corn stover and bagasse as feedstocks. Iogen has an active cooperation with Raízen, the world’s largest sugar cane crusher. Raízen is currently constructing a cellulosic ethanol facility in Brazil using Iogen technology and scheduled for start-up in 2014. Iogen is also actively screening and developing projects in other regions, offering partners a full range of technology and services to realize low-cost, reliable production of cellulosic biofuels. Iogen is a privately held company located in Ottawa, Canada. For more information, visit [www.iojen.ca](http://www.iojen.ca).