



## MEDIA RELEASE

### CONSTRUCTION BEGINS ON ANAEROBIC DIGESTER FOR UNIVERSITY OF GUELPH'S RIDGETOWN CAMPUS

Construction begins on a multi-million dollar biogas plant in Ridgetown, Ontario

**October 14, 2010 – Ridgetown:** PlanET Biogas Solutions is pleased to announce it has begun construction on a new power plant at the Ridgetown Campus of the University of Guelph. The plant will soon be turning manure and other organic wastes into enough electricity to power approximately 300 homes.

In April 2010, the University of Guelph's Ridgetown Campus, part of the Ontario Agriculture College (OAC), received an investment of more than \$2.6 million for the construction of an anaerobic digester through the Federal Development Agency for Southern Ontario. OAC, with its Centre for Agricultural Renewable Energy and Sustainability (CARES), intends for this anaerobic digester plant to be a breeding ground for new methods and technologies that can be adopted throughout Ontario to add additional revenue streams to family farms. Ridgetown Campus Director, Art Schaafsma says, "The go ahead to construct this at the University of Guelph's Ridgetown Campus is a huge boost in stimulating the emerging bio-economy. This investment will provide commercialization, development, research, and training opportunities".

The plant will feature one anaerobic digester, one dry feeder system, one pasteurization unit, and a biogas engine to turn the biogas into electricity. The plant will produce biogas from several organic waste streams: dairy manure, swine manure, beef manure, corn silage, and other off-farm wastes that would typically go to a landfill. The construction began in late September and is targeted to be producing gas by February 2011. The plant was designed and will be built by PlanET Biogas Solutions acting as the design-build contractor.

Biogas is created as a result of complex microbiological processes. Manure and other agricultural byproducts are broken down by methane-producing bacteria through a four-stage process in an anaerobic (without oxygen) environment. Biogas consists of 50-60% methane, 40-45% carbon dioxide, and trace amounts of hydrogen sulfide (H<sub>2</sub>S). Anaerobic digestion captures the methane and carbon dioxide from the manure, reducing the greenhouse gas emissions of existing nutrient management practices. The biogas is burned in an internal combustion engine which produces electricity for sale back onto the local electrical grid through the province's Feed-In Tariff (FIT) program.

OAC identifies **Food, Agriculture, Environment, and Communities** as the four pillars of its research and education programs and this project is a great fit in all four areas. This project also supports the University of Guelph's BetterPlanet Project; initiatives to make the planet a better place to live through research and education.

#### **About PlanET Biogas Solutions**

PlanET (pronounced "plan-e-t") Biogas Solutions was incorporated in October 2006 as a joint venture between Martin Lensink, of St. Catharines, ON, and PlanET Joint Venture, based in Germany. PlanET specializes in the design, construction, and service of advanced biogas plants. PlanET is the Canadian market leader in providing solid-charging technology for feeding solid organic wastes into the digester. PlanET has constructed and commissioned five biogas plants in Canada and is currently beginning construction of a sixth plant in Ridgetown, ON.

#### **About University of Guelph – Ridgetown Campus**

The Ridgetown Campus has over 650 full time students and has been delivering research to Ontario's agricultural stakeholders for over 85 years. Ridgetown strives to be a leader in applied agriculture and environmental research and in life-long learning initiatives that are practical and relevant to society. As an extension of this research, CARES is a hub for

applied and adaptive research, training and education, technology transfer, and rural community development in bio-energy and the bio-economy. Through extended interaction with its constituent community, CARES will build on the historic background and current skills of Ridgetown Campus to support the agriculture and agri-food sector by integrating an applied research program. This program will advance innovation and adoption of bio-energy through risk minimization, bench-marking and creation of value added components.

Image:

*Anaerobic Digester Construction Continues at Ridgetown Campus.*



The construction team has an effective start on building the anaerobic digester which is planned to begin operation in February 2011.

## CONTACTS

**Dr. Art Schaafsma**  
Director, Ridgetown Campus  
Phone: 519-674-1545  
Email: [aschaafsma@ridgetownc.uoguelph.ca](mailto:aschaafsma@ridgetownc.uoguelph.ca)

**Matt Lensink**  
Application Manager, PlanET Biogas Solutions  
Phone: 905-935-1969  
Email: [matt.lensink@planet-biogas.ca](mailto:matt.lensink@planet-biogas.ca)