

**Wednesday, March 10, 2010**

<b>Growing the Margins/Canadian Farm and Food Biogas Conferences Joint Plenary #1</b>		
8:30am – 10:00am	<p><b>“Green Energy Today – Progress Made and Initiatives Underway”</b> Chair: George Zegarac, Deputy Minister, Ontario Ministry of Agriculture, Food and Rural Affairs</p> <ol style="list-style-type: none"> <li>Sue Lo, Assistant Deputy Minister, Renewables and Energy Efficiency, Ontario Ministry of Energy and Infrastructure</li> <li>Christopher Voell, AgSTAR Program, EPA Climate Change Division, US</li> <li>Daniel Ciolkosz, Penn State Agricultural and Biological Engineering Department, US</li> <li>Jens Bo Holm-Nielsen, Esbjerg Institute of Technology, Aalborg University, Denmark</li> </ol>	
10:00am – 10:30am	Refreshments – Exhibition and Posters Open	
<b>Biogas Joint Session</b>		
10:30am – 12:00pm  <b>Concurrent Session #1</b>	<p><b>B1 Biogas Joint Session: <i>Biogas New Developments</i></b> <b>Chair: Don Hilborn, Ontario Ministry of Agriculture, Food and Rural Affairs</b></p> <ol style="list-style-type: none"> <li>Designing your Biogas System Under FIT, Green Energy Act, Renewable Energy Approvals, and Nutrient Management, Chris Duke, Ontario Ministry of Agriculture, Food, &amp; Rural Affairs, Guelph, ON</li> <li>Biogas Systems and Programs Update Across Canada, Jake DeBruyn, Ontario Ministry of Agriculture, Food and Rural Affairs, Guelph, ON</li> <li>Advancing Biogas Use and Energy Generation in the Livestock Sector, Christopher Voell, USEPA - AgSTAR Program, Washington, DC</li> </ol>	
12:00pm – 1:30pm	<p style="text-align: center;"><b>Lunch</b> <b>60 second poster flashes</b></p>	
	<b>Biogas D</b>	<b>Biogas E</b>
1:30pm – 3:00pm  <b>Concurrent Session #2</b>	<p><b>B2D Energy Crops and Other Plant-Based Co-Substrates</b> <b>Chair: Jean-Claude Frigon, National Research Council</b></p> <ol style="list-style-type: none"> <li>What Type of Yields do We Need to Make Biogas Energy Crops? Genetically Modified Energy Crops. Annual Versus Perennial Crops – Sustainability, Donald Hilborn, Ontario Ministry of Agriculture, Food and Rural Affairs, Woodstock, ON</li> <li>The Benefits of Triticale and the Potential Energy Content of Triticale Based By-Products through Anaerobic Digestion, Earl Jenson, Alberta Research Council, Vegreville, AB</li> <li>Improvement of Anaerobic Digestion of Plant Biomass by Rumen Fermentation Technique, Ali Bayane, NRC/Biotechnology Research Institute, Montreal, QC</li> </ol>	<p><b>B2E Case Studies: Food Biogas Systems</b> <b>Chair: Phil Dick, Ontario Ministry of Agriculture, Food and Rural Affairs</b></p> <ol style="list-style-type: none"> <li>The Anaerobic Membrane Bioreactor (AnMBR) Process and the First Year of Full-Scale Operation Treating Salad Dressing Wastewater, Scott Christian, ADI Systems Inc., Fredericton, NB</li> <li>Anaerobic Digestion in the Agri-Food Business, Robert La Roche, Valbio Canada Inc., Montreal, QC</li> <li>The Seacliff Energy Case Study, Dennis Dick, Seacliff Energy, Leamington, ON</li> </ol>
3:00pm – 3:30pm	Refreshments – Exhibition and Posters	

	Biogas D	Biogas E
3:30pm – 5:00pm <b>Concurrent Session #3</b>	<b>B3D</b> <b><i>Doing Things Safely</i></b> <b>Chair: Chris Duke, Ontario Ministry of Agriculture, Food and Rural Affairs</b>  1. APAO Grid Connections Project, Jennifer Green, AgriEnergy Producers' Association of Ontario, Ottawa, ON  2. Preventing Accidents in Biogas Plants - Experiences of an Expert Witness for Biogas Plants, Torsten Fischer, Krieg & Fischer Ingenieure GmbH, Göttingen, Germany  3. Rules and New Developments of On-Farm Biogas Safety, Terrence Sauve, Ontario Ministry of Agriculture, Food and Rural Affairs, Alfred, ON	<b>B3E</b> <b><i>Biogas Upgrading / Purification</i></b> <b>Chair: Ed Seaward, Union Gas</b>  1. Water Scrubbing for Biogas Upgrading - An International and Canadian Overview, Sean Mezei, Flotech Services NA Ltd., Burnaby, BC  2. New Kinetic Pressure Swing Adsorption (kPSA) Technology Delivers Higher Performance to Upgrade Digester Gas to Biomethane, Donald Beverly, Xebec Adsorption Inc., Blainville, QC  3. Delivering Biogas to the Natural Gas Distribution Network - a Utility Perspective, Ken Ross, Terasen Gas Inc., Surrey, BC
5:00pm – 6:30pm	<b>Reception (cash bar)</b>	
<b><u>Poster Presentations</u></b> <b>Wednesday, March 10, 2010</b> <b>10:00 am – 6:30 pm</b>		
<ol style="list-style-type: none"> <li>1. Biogas Plants to Power Plug-in Electric/Hybrid Vehicles, Eric Camirand, Electrigaz Technologies Inc., Trois-Rivieres, QC</li> <li>2. Farm Scale Feed and Bio-Fuel Production – Revolutionary Approach Allows Farmer to Regain Control of Input Costs, Jasmin Hofer, Energrow Inc., Newton, ON</li> <li>3. Energy Conversion Issues For Woody Crops, Fernando Preto, Natural Resources Canada, Ottawa, ON</li> <li>4. Use of Microwave Pre-Treatments on Agro-Industry Wastes for Improvement of Anaerobic Digestion and Increase of Biogas Production, Thierry Ribeiro, Institut Polytechnique Lasalle Beauvais, Beauvais, France</li> <li>5. Integrating Biomass Energy Production in Sustainable Mixed Farming, Subbu Kumarappan, Michigan State University, Lansing, MI</li> <li>6. Myco-Bacteriosphere Biotechnology as a New Tool to Remediate Contamination in the Brownfields Using Biomass Production, M. Ali Khalvati, German Research Centre for Environmental Health, Neuherberg, Germany</li> <li>7. Nutrient Harvesting From Digester Dewatering Liquors: The Sows Ear Really Can Be A Silk Purse, Kenneth Haggerty, 3XR Inc., Woodbridge, ON</li> <li>8. Analysis of Small-Scale Biogas Systems Using Activated Carbon Derived from Anaerobic Digestion By-Products to Purify the Biogas, Andrew White, Department of Chemical Engineering, University of Toronto, Toronto, ON</li> <li>9. Modifying the Owen Biochemical Methane Potential Test to Accurately Estimate Chicken Manure Methane Production, Victoria Hilborn, University of Guelph, Guelph, ON</li> <li>10. Bio-Energy Potential from the Bio-Fixation of CO<sub>2</sub> with Thermosynechococcus sp. CL-1 in a Continuous Cultivation, Hsin Chu, National Cheng Kung University, Tainan, Taiwan</li> </ol>		
6:30pm – 8:30pm	<b>Banquet (optional ticket)</b>  <b>Over coffee debate:</b> <b>"By 2020 – should farms generate 20% of income from green energy?"</b> <b>Panel and Audience</b>	

**Thursday, March 11 2010**

**Growing the Margins/Canadian Farm and Food Biogas Conferences  
Joint Plenary #2**

8:30am –  
10:00am

- “New Frontiers – and What Needs to be Done to Realize Opportunities”**  
Chair: Dianne Cunningham, Director, Lawrence National Centre for Policy and Management, Richard Ivey  
School of Business, University of Western Ontario
1. Bob Slater, Member, National Round Table on the Environment and Economy
  2. Gord Surgeoner, Principal, Agri-Technology Commercialization Centre
  3. Don McCabe, Vice-President, Ontario Federation of Agriculture

10:00am –  
10:30am

Refreshments – Exhibition and Posters

**Biogas D**

**Biogas E**

10:30am –  
12:00pm

**Concurrent  
Session #4**

- B4D**  
***Economics and Policy***  
**Chair: Marc-Andre Ouellet, Québec Ministry of  
Agriculture, Fisheries and Food**
1. Developing a Biogas Facility Under Ontario's Feed-in  
Tariff Program, Jonathan Cheszes, Ontario Power  
Authority, Toronto, ON
  2. Mandatory Biomethane Mix in the Canadian Natural Gas  
Network (like ethanol in gasoline), Eric Camirand, Electrigaz  
Technologies Inc., Trois-Rivieres, QC
  3. Biogas Economics: Going Forward, Don Hilborn, Ontario  
Ministry of Agriculture, Food and Rural Affairs, Woodstock,  
ON

- B4E**  
***Genset Performance and Efficiency***  
**Chair: Bruce Bowman**
1. Utilization of Biogas in Gas Engines for Producing Electricity  
& Heat. What has to be Considered Regarding Technical  
Design & Feasibility, Gerhard Klammer, MWM Canada,  
Cobourg, ON
  2. Biogas Power Plant: Construction, Start-Up, Operations &  
Maintenance Experience, Michael Savel, GE Jenbacher,  
Concord, ON

12:00pm –  
1:00pm

**Lunch**

**Biogas D**

**Biogas E**

1:00pm –  
2:30pm

**Concurrent  
Session #5**

- B5D**  
***Case Studies: Farm-based Biogas Systems***  
**Chair: Jake DeBruyn, Ontario Ministry of  
Agriculture, Food and Rural Affairs**
1. Project 100 – Making Small Scale Biogas Work, Clare  
Riepma, PlanET Biogas Solutions Inc., St. Catharines, ON
  2. Next Generation Biogas in Ontario, Jens Tradsborg,  
Re-N Technology, Toronto, ON
  3. An Economic Digester for your Small Farm Business,  
John Hawkes, H.H. Angus & Associates Limited, Toronto,  
ON

- B5E**  
***Co-substrates and Mixed Inputs***  
**Chair: Chris Duke, Ontario Ministry of Agriculture,  
Food and Rural Affairs**
1. Broiler Chicken Manure as a Feedstock for Anaerobic  
Digesters, Victoria Hilborn, University of Guelph, Guelph, ON
  2. Measurement of Environmental Impacts from the Land  
Application of Raw and Digestion Manures, Anna Crolla,  
University of Guelph - Campus d'Alfred, Alfred, ON
  3. Lessons Learned Delivering Off-Farm Feedstocks to  
Ontario Anaerobic Digesters, Douglas Carruthers, Organic  
Resource Management, Inc., Woodbridge, ON

2:30pm –  
3:00pm

Refreshments – Exhibition and Posters

	Biogas D	Biogas E
<p>3:00pm – 4:30pm</p> <p><b>Concurrent Session #6</b></p>	<p><b>B6D</b> <b><i>Advances in Anaerobic Digester Processes / Technology</i></b> <b>Chair: Eric Camirand, Electrigaz Technologies Inc</b></p> <ol style="list-style-type: none"> <li>1. Low Temperature SBR to Achieve a Positive Energy Balance and Optimum Biogas Yield - Case Study of a 750 Head Dairy Utilizing a Flush System, Elise Villeneuve, Bio-Terre Systems, Sherbrooke, QC</li> <li>2. Assessment of Solid Anaerobic Digestion Technologies, Michael Muffels, Conestoga-Rovers &amp; Associates, Waterloo, ON</li> <li>3. Improvement of Cattle Manure Conversion into Biogas by Microwave and Thermo-Chemical Pretreatments, Thierry Ribeiro, Institut Polytechnique Lasalle Beauvais, Beauvais, France</li> </ol>	<p><b>B6E</b> <b><i>Integrated Biogas Systems</i></b> <b>Chair: Irene Coyle, Natural Resources Canada</b></p> <ol style="list-style-type: none"> <li>1. The First Anaerobic Digester for Agriculture in BC, and the Road Ahead, Christopher Bush, Catalyst Power Inc., Abbotsford, BC</li> <li>2. HorsePOWER: Development of a Multi Substrate Waste to Energy System for Woodbine, John Hawkes, H.H. Angus &amp; Associates Limited, Toronto, ON</li> <li>3. Microalgae Growth on Farm Biogas Effluents: Challenges and Scale-up Potential, Amarjeet Bassi, University of Western Ontario, London, ON</li> </ol>