

Mitigation of Agricultural Greenhouse Gases in the Livestock Industry: An International Perspective





Greenhouse gases (GHGs) emissions from human activity are significant contributors to global climate change. Major human activities contributing to GHGs are agriculture and livestock production.

Two perspectives are featured on reducing GHGs from agriculture industries from both sides of the Atlantic.

Greenhouse Gas Emissions and Agricultures Contribution – James Breen Managing Environmental Issues Related to Livestock – Tim McAllister

Some of the questions this webinar addresses:

- How is agriculture and livestock industry influencing climate change?
- How can greenhouse gases be mitigated in agriculture and livestock industry?
- What policies exist in regards to GHG and the livestock industry?
- Is everything the same everywhere in regards to GHG (international perspective)?
- What role is technology playing in the environment and sustainable agriculture?
- What are the policy implications?

FREE WEBINAR Wednesday, November 12, 2014 Time: 10:30 am – 11:30 a.m. (CST) For more information or to register adedirany@brandonu.ca | 204-571-8585 **RSVP by November 7, 2014**

Audience: Policy Makers, Environmentalists, Scientists, Ag Practitioners, Livestock Producers, Academics, Students, Mayors, EDOs, NGOs, CDCs and Decision Makers.





Together, these two presenters will provide valuable perspectives on GHG emissions, climate change, and policy implications giving examples from their wide experience and relationships with scholars in the field. Discussion will follow.

Greenhouse Gas Emissions and Agricultures Contribution – James Breen

In 2007, the European Commission made "an independent EU commitment to achieve at least a 20% reduction of greenhouse gases by 2020 compared to 1990 levels and an objective for a 30% reduction by 2020 subject to the conclusion of a comprehensive international climate change agreement" (European Commission 2008). Ireland is a significant net exporter of food, with a high ratio of bovine and ovine animals. Agriculture accounts for 29 percent of total greenhouse gas (GHG) emissions in Ireland, it accounts for more than 40 percent of Ireland's non-ETS emissions.

Agriculture's contribution to Ireland's GHG emissions is a reflection of the relatively small heavy industry sector within Ireland. Given the sizeable contribution to total GHG emissions made by agriculture, the sector is vulnerable to policy focussed on reducing GHG emissions. It is in this context that a wide variety of GHG abatement technologies are under consideration in Ireland.



Presenting is Dr. James Breen, lecturer in food chain management at University College Dublin. He completed his PhD in Agricultural Economics at the University of Missouri in 2011, his PhD research examined agricultures contribution to Greenhouse Gas emissions and the potential impact on farm profitability of reducing greenhouse gas emissions from agriculture. His research interests are predominantly in the area of farm-level modelling and specifically in the examination of the impact of alternative agricultural and environmental policies on Irish farmers.

Managing Environmental Issues Related to Livestock – Tim McAllister

The global human population is projected to reach 9 billion by 2050 with an increasing portion of this population living within urban communities. Growth of the economic middle class is projected to nearly double the per capita caloric and protein demand by 2050. Presently, livestock production for meat export occurs in few regions of the world and if these areas expand to satisfy future demands, their environmental sustainability will be questioned. Expansion of meat production will require sustainable intensification with more meat being produced using less land; as opportunities to expand arable land globally is limited. Steps are being taken to account for and reduce agriculture's contribution to greenhouse gas emissions (GHG) as well as consider its impact on water use and biodiversity.



Presenting is Dr. Tim McAllister, principal research scientist in Ruminant Microbiology, Nutrition and Biotechnology at the Agriculture and Agri-Food Canada Research Centre in Lethbridge, Alberta. Tim obtained his Ph.D. in rumen microbiology and nutrition from the University of Guelph in 1991. He has given presentations on aspects of greenhouse gas emissions in Norway, New Zealand, Australia, Japan and Canada. His participation on the Intergovernmental Panel on Climate Change was recognized by the awarding of the 2007 Nobel Peace Prize shared between the IPPC and former Vice President Al Gore.

