

Carbon Credits in the Canadian Pork Sector

Cedric MacLeod - Canadian Pork Council



Four Capstone micro-turbine engines operating on methane produced from liquid hog manure in Saskatchewan. Turning methane into electrical energy will likely be a practice capable of netting carbon credits.

On August 26th 2004, many of you may have heard about the latest development in the Canadian carbon credit trading system. Canadian energy giant TransAlta Corp. bought into the carbon market by purchasing credits developed on a Chilean hog operation, where technologies were implemented to improve hog production efficiencies. The deal saw a reported 1.75 million tons of carbon dioxide equivalent emission reductions trade hands from the large Chilean hog operator to Alberta-based TransAlta Corp. with a price tag of \$9-million US.

A Canadian system for trading domestic carbon has not yet been established. However, federal authorities are evaluating industry feedback, collected after a round of public consultations held in summer 2003, on a draft credit trading system. The release of the draft federal plan likely was not responsible for TransAlta's eagerness to enter the carbon market; rather, the province of Alberta has instituted a new set of greenhouse gas (GHG) emissions regulations for newly permitted power plants. Carbon credits must be in place to offset emissions produced in a new power plant, prior to its commissioning.

Throughout western Canada, a lot of interest has been generated by North American based carbon credit aggregator AgCert. Numerous hog producers have opted into the AgCert system, generating credits by emptying manure storages prior to them reaching warm summer temperatures. Manure methane production is a biological process, and warmer temperatures, which accelerates microbial activity, will result in increased manure methane production. Emptying storages prior to summer will, therefore, theoretically, reduce overall methane production.

AgCert is using emissions coefficients assigned to specific best management practices (BMP) by the Intergovernmental Panel on Climate Change (IPCC) to develop packages of tradable carbon credits. IPCC emission reduction coefficients assign values to specific farm practices for their potential to reduce GHG emissions if implemented. These IPCC coefficients are largely starting points for emissions trading, thus research efforts in specific climatic zones around the globe are encouraged by IPCC to further define these coefficients.

Canadian researchers have largely found that manure methane production on Canadian farms is already overestimated by IPCC coefficients. As a result, we haven't got as much to sell to potential buyers, but our total industry emissions are also potentially lower than the bar set internationally by the IPCC. As more players enter the carbon market, interest will be raised in the ability of the hog industry to provide credits for purchase. It will be important to have proper coefficients and farm operation baselines in place for this purpose. A baseline is used as a reference point

to which newly implemented BMPs are compared. Thus, the GHG emissions reduced by a BMP, compared to the baseline, will be the tradable portion.

Determining baselines and the carbon credit trading potential on your operation could be somewhat difficult given the complexity of the processes that produce GHGs and the validation that will be required for any credits offered for sale. In the interests of Canadian pork producers, a technical working group has been established, led by the Government of Alberta, to develop a protocol for evaluating the current state of GHG emissions on Canadian pork farms, and using Canadian research findings, assign GHG emission reduction coefficients to a host of specific BMPs. The Canadian Pork Council is represented on this working group to provide industry perspective to the process.

Interest in trading carbon credits will likely be stimulated by TransAlta Corp's recent credit purchase. However, caution is encouraged before entering into any agreement to supply credits into the carbon marketplace prior to the Government of Canada producing a concrete set of trading rules, due out in 2005. Potential liabilities for failing to deliver on contracted carbon may be more risky than waiting for the national system to be developed and potentially selling carbon at a reduced price.

For more information on the national protocol being developed for trading pork sector carbon credits, contact Cedric MacLeod at the Canadian Pork Council, 613.236.0011 or macleod@cpc-ccp.com

