## Agricultural Carbon Offsets

INFORMATION FOR ALBERTA'S OFFSET MARKET

Information Update

## NEW OFFSET OPPORTUNITY IN THE LIVESTOCK SECTOR

January 28, 2013

The recent approval of the Residual Feed Intake (RFI) carbon offset protocol by the Government of Alberta has opened up a new opportunity for farmers to get paid for making environmental improvements. The innovative practice highlighted in this new protocol reduces greenhouse gas emissions from beef cattle through advancements in genetic selection. This makes it possible to increase the efficiency of feed used by cattle.

"Low RFI or efficient cattle have lower maintenance requirements and consume less feed for the same level of production - such as growth, milk production or fat deposition," says John Basarab, beef research scientist at Alberta Agriculture and Rural Development's Lacombe Research Station. "This improved efficiency of feed use translates into a carbon offset when compared with normal feeding practices."

The first generation of cattle produced from animals with these genetic characteristics will be eligible to receive carbon offset credits of about 28 tonnes (T) of carbon dioxide equivalent (CO2e) per 100 head of cattle. This is like taking 5 or 6 cars off the road every year. The value would be close to \$340 per 100 head, assuming agricultural carbon offset prices of about \$12/T CO2e. Extra benefits from reduced feed costs will also be gained. Tests are currently being conducted at Olds College and Strathmore to identify the most feed efficient animals.

Carbon offsets are a way for producers and livestock operators to:

- Get paid to help reduce Alberta's greenhouse gas emission
- Increase production efficiencies
- Get familiar with the types of types of verifiable farm records that may be needed to access other emerging environmental market opportunities.

Buyers of offsets are companies regulated under Alberta's Specified Gas Emitters Regulation (2007). These companies can purchase carbon offsets in the Alberta Carbon Market as a way to meet their legal requirement to reduce annual greenhouse gas emission intensities by 12 per cent. Agricultural carbon offsets are created from farm practice improvements that have a proven scientific basis for reduced greenhouse gas emissions, are above and beyond business as usual, and can be verified by independent third parties.

"Although carbon offset payments are not large at this time, they provide a way to gain extra income from management improvements that increase efficiencies of production, while gaining experience with types of records that may be needed to access other environmental opportunities," says Sheilah Nolan, climate change specialist with Alberta Agriculture and Rural Development.

Initiated by Alberta Agriculture and Rural Development, funding for this Canada-Alberta cost-shared project was provided by Agriculture and Agri-Food Canada though the Agricultural Flexibility Fund, as part of Canada's Economic Action Plan.

More information will be available at agricultural meetings and tradeshows throughout Alberta this winter and on the Agriculture Carbon Offsets website: <a href="https://www.agriculture.alberta.ca/agcarbonoffsets">www.agriculture.alberta.ca/agcarbonoffsets</a>.

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