

## **Key Climate Change Messages from the Alberta Crop Commissions**

*Submitted by Erin K. Gowriluk*

On Thursday, September 17, 2015, we (Erin Gowriluk, Government Relations and Policy Manager with the Alberta Wheat Commission, and Nevin Rosaasen, Policy and Program Specialist with Alberta Pulse Growers') gave a presentation to the Government of Alberta's newly formed Climate Change Panel on behalf of Alberta's cropping sector. The panel has been meeting with representatives from a variety of sectors over the past few weeks and took time on the 17<sup>th</sup> to meet with stakeholders in the agriculture, forestry and waste sectors. The recommendations that the panel brings forward to Premier Rachel Notley at the end of this month will be considered as the government endeavours to develop a framework for climate change in Alberta. The Premier will present this framework at the United Nations Climate Change Conference which takes place in Paris from November 30<sup>th</sup> to December 11<sup>th</sup>, 2015.

In preparation for the consultation we have worked with representatives from Alberta Barley and the Alberta Canola Producers' Commission to ensure alignment in the messages brought forward to the panel. This type of collaboration continues to make sense as many of our farmers grow all four crops.

The presentation included an overview of the grains sector which started with an introduction to the all of the practices that Alberta farmers have voluntarily adopted over the years with the aim to reduce Green House Gas (GHG) emissions including: conservation tillage, precision agriculture, responsible fertilizer use (4R Nutrient Stewardship) and an increase in continuous cropping through the conversion of summer fallow acres (from 8 million acres in the 1970's to 700,000 today). These advancements are possible in part to the ongoing and significant financial investments into research and innovation made by Alberta farmers every year. In addition to the aforementioned practices, these investments have led to improved crop genetics using biotechnology as well as traditional plant breeding methods aimed at increasing yields, improving herbicide tolerance, developing resistant cultivars and improving water and nitrogen use efficiency.

In response to the issues outlined in the *Climate Leadership Discussion Document* (pg. 52 – 57), which cites nitrous oxide as the source of approximately 30% of agriculture's total emissions, we identified two opportunities: the sector could decrease its overall emission intensity, this can be achieved by either increasing input efficiency or increasing outputs (yields) or a combination of the two. This could be accomplished through broader adoption of the 4R Nutrient Stewardship, which has the potential to reduce emissions by up to 20%. This coupled with the increased adoption of precision agriculture and soil testing to ensure that only the required amounts of nutrients are being applied, represent opportunities for the sector to reduce emissions.

Closing messages reminded the panel that agriculture is a small contributor at only 7% of the provinces total GHG emissions (split between crops and livestock); that modern agriculture is a leader in sustainability, that Alberta farmers are driven to be better - voluntarily investing millions of dollars into research and development - and that any policy changes aimed at agriculture would have a minimal impact on Alberta's total emissions.

**Interested in joining the conversation!?** Tweet using the hashtag #abclimate and contribute to the live discussion at <http://alberta.ca/climate-leadership.cfm>

Commissions and associations also have the opportunity to make formal submissions to the panel before the end of September 2015.

Link to Climate Leadership Discussion Document: <http://alberta.ca/climate-leadership.cfm>

Link to video Alberta Crops Sustainability Certification Pilot Project Video:  
<https://www.youtube.com/watch?v=n3PizRN8NsM>

On Common Ground: Messages from the Agri-Environmental Partnership of Alberta – Issue #11, Sept 2015