



TEAMALBERTA

ADVANCING ALBERTA'S CROPPING SECTOR TO 2025 AND BEYOND

August 2, 2019

Honourable Jason Nixon
Minister of Environment and Parks, House Leader
Office of the Minister - Environment and Parks
323 Legislature Building
10800 - 97 Avenue
Edmonton, AB T5K 2B6

On behalf of Alberta's crop sector farmers, please find enclosed feedback from Team Alberta in response to the consultation on the proposed Technology Innovation and Emissions Reduction (TIER) system that is intended to replace the current Carbon Competitiveness Incentive Regulation (CCIR) on January 1, 2020.

We understand that other policies are also being reviewed by the government and the scope of this engagement is primarily focused on the TIER system development. Nevertheless, the following information is intended to provide comment on design considerations for the TIER fund as well as Alberta's Offset Emission System that would allow the agriculture sector to meaningfully contribute to the province's efficiency goals and its' resulting economic prosperity whilst minimizing the impacts on our sector's trade competitiveness.

Team Alberta represents a working collaboration between four of Alberta's crop commissions: Alberta Barley, Alberta Canola, Alberta Pulse Growers and the Alberta Wheat Commission. Together we work on behalf of our 20,000 farmers to provide input to policy makers, ensure long-term access to markets, promote sustainability of the crop sector, and advocate on behalf of farmers while enabling grass-roots advocacy by our farmer members themselves.

Alberta farmers play an important role in the carbon cycle through: the use of positive practices that sequester carbon (continuous cropping, conservation tillage or direct seeding); the adoption of carbon mitigating technologies such as GPS, autosteer, sectional control spraying and seeding technologies; and the uptake of programs such as 4R nutrient stewardship which helps to reduce nitrogen oxides (NOx) emissions from fertilizers. Further, the Alberta cropping sector exports millions of metric tonnes of carbon every year embedded in our grains, oilseeds and pulse exports.

Through systems like TIER, farmers are impacted when additional costs of energy, electricity, fuel, fertilizer and other input costs rise and are passed on to them, since as price takers, they are not able to pass this cost down in-turn. Farmers also participate through the carbon offset system by generating and selling carbon credits which allow the agriculture sector to meaningfully contribute to the province's efficiency goals and resulting economic prosperity.

Team Alberta's members are supportive of a return to carbon pricing for large final emitters. There are a number of changes proposed to the system that will yield positive results for farmers. We are hopeful that in its implementation, the changes to the system will also represent an increased recognition of Alberta farmers' positive contributions to the carbon cycle.

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COMMISSION

As part of the system development considerations, we would like to see a commitment from the government of Alberta to develop new offset protocols and maintain or update the existing protocols that farmers can leverage for their practices.

Furthermore, the new TIER system presents opportunities to improve and enhance Alberta's agricultural sector's emissions intensity performance through the funding of new technologies and practices via the TIER fund, as well as through enhancements to Alberta's Emissions Offset Protocols. It is important that the agriculture industry is considered in both the design of the TIER system as well as decisions related to the TIER fund and Offset Protocols. This will enable the industry to realize its full potential in terms of emissions reductions and economic contributions in the province. The agriculture sector is innovative, responsive, and primed to lead the province to a more sustainable and prosperous future.

TIER – Design Considerations: Impact on Agriculture

The following sections of the proposed TIER system discussion document are areas that stand to have an impact the agriculture industry.

Section 11 - Revenue Recycling

The first \$100 million of compliance payments, as well as 50 per cent of the remaining payments under the TIER system, will be allocated towards the TIER fund. The remaining 50 per cent of compliance payments that occur after the fund reaches \$100 million will be directed elsewhere, subject to consultation. The 2019 United Conservative Party campaign platform indicated that these remaining funds will be used to reduce the provinces' deficit (i.e. put into general revenues) while \$20-30 million will be used to fund the Energy War Room.

In order to maximize the funds available for innovative emissions reducing technologies in agriculture and other sectors, the TIER fund should be populated with as much of the TIER system's compliance payments as is reasonably possible. As such, earmarking 100 per cent of compliance payments for the TIER fund would be preferable to the proposed allocations. However, with nearly \$570 million projected to be generated by TIER in 2020/21, the TIER fund will be adequately funded with the proposed allocations, and will likely not cause significant roadblocks to innovation through the fund so long as the fund's disbursement is reasonably managed.

12.3.2 - Credit Usage Limit

The Credit Usage Limit impacts farmers that are selling carbon offset credits. Large emitters can comply with the regulations by purchasing credits. Large emitters can also comply by reducing emissions or paying into the Climate Change and Emissions Management fund (and into the TIER fund after January 1, 2020). The large emitter must stop purchasing credits once they have reached the limit for the year, and then pay into the TIER fund. This process allows for revenue recycling, maintenance of the credit trading market and encourages investment in greenhouse gas reducing projects and technologies.

A lower Credit Usage Limit reduces the opportunities for farmers to sell their carbon offset credits to large emitters but increases the total size of the TIER fund, while a higher limit increases opportunity to sell offset credits but decreases total size of the TIER fund. The credit usage limit should be set at a moderate rate which encourages widespread purchasing of offset credits for compliance and creates a robust and profitable offset market while also encouraging contributions to the TIER fund. The CCIR proposed limit increase to 60 per cent is an improvement; however, for farmers to maximize their benefits from the offset program it would be ideal for the markets for offset credits to function without any limitation to the use of offset credits.

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12.3.3 - TIER Fund Price:

The fund price was slated to be reduced from \$30/tonne under CCIR to \$20/tonne under TIER, although the government has announced that it is still open to adjusting the price after the consultation period.

The price of compliance under TIER will impact agriculture in two primary ways: through the effects on the price of energy dense on-farm inputs, and through the effects on the price of carbon offset credits. The price effects work in opposing directions. A lower fund price will result in lower costs for on-farm inputs such as fertilizer, while also reducing the amount received for the sale of an offset credit.

The carbon offset market in Alberta was operable under the previous Specified Gas Emitters Regulation (SGER) compliance price of \$20/tonne, and as such the TIER price of \$20/tonne is also likely sufficient to sustain the market. It is highly recommended that the price does not fall below this \$20/tonne threshold, or there will be a risk of crippling the offset market. A higher price would encourage more participation in offset credit generation through agriculture specific protocols.

All crop producers purchase fertilizer and other energy-intensive inputs, while only a small portion of producers are able to participate in the offset market. It is important that the price supports a functioning offset market, but it should be noted that a reduced fund price will likely benefit more producers through its reduction of input prices than it would harm through lower credit prices.

TIER Fund – Considerations for Agriculture

The Government of Alberta should recognize the agriculture sector's economic contributions and environmental stewardship, and this recognition should be reflected through dedicated funding and programming within the TIER fund for agriculture specific projects.

There are currently a number of technological advancements – ranging from applications of AI and data mining, to new fertilizers (ESN) and nitrogen inhibitors, to precision tools which prevent field overlap and reduce tillage – that have a large impact on farm-related emissions while improving farmers' profitability. However, many of these advancements have high capital costs, sometimes in the millions of dollars, that restrict producers' ability to adopt and implement them on their farm.

TIER funding dedicated to agriculture has the potential to allow producers to more readily adopt these innovative tools and that would have a major impact on the province's economic output while the agriculture sector continues to work towards reduced emissions.

Within the agriculture sector, TIER funding could be used for:

Scientific research: Research into new and improved genetics, innovative machinery and on-farm implements, beneficial management practices (BMPs), and modern applications of new data technologies.

Cost sharing: Reducing the burden of capital costs related to on-farm implementation of energy reducing and economy boosting technologies.

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Program development: Analyzing the relevant BMPs along with new technologies, and concluding which practices and technologies have the greatest potential for voluntary adoption on farm operations as well as the greatest potential to reduce GHGs (i.e. reduced tillage, fertilizer application, pulses in rotation, cover crops and perennials in rotation).

Education and extension: Increase awareness and uptake of existing protocols, new technologies, and other programs that could assist with the adoption of BMPs and encourage the implementation of more efficient tools.

Emissions Offset Protocols – Considerations for Agriculture

As carbon trading increases in major jurisdictions like California and China, a significant increase in global demand for carbon credits is projected. Alberta's Emission Offset System needs well designed and internationally recognized agriculture protocols in order to engage the crop sector.

Currently, farmer participation in Alberta's Emission Offset System program is limited and has been declining since 2012. Alberta-based industrial emitters that need credits will be forced to look in other jurisdictions or choose other compliance options.

With over 10-years of experience in carbon markets and offset protocols, Alberta is in a position to lead in the international carbon markets, which offers more opportunities for Alberta's agriculture sector.

Global potential: There is immense potential for made-in-Alberta emissions offset protocols to feed into an emerging global market for carbon offsets. Realizing this potential through well designed and functional agricultural protocols would demonstrate our sector's dedication to environmental stewardship while improving provincial economic outcomes.

- The global carbon market was valued at \$50 billion USD in 2016.
 - When China's market comes on it could represent close to \$100 billion USD.
 - Airlines will need \$7.8 billion carbon credits to offset international air travel.
- Most major multinationals are looking to offset or "inset" their emissions.
 - E.g. Walmart's project to reduce greenhouse gas emissions from their supply chain by one gigaton (the equivalent of taking more than 211 million passenger vehicles off of roads).
- Other markets (e.g. Western Climate Change Initiative) are looking to Alberta's protocols as a starting point for their offset market models.
 - International Emissions Trading Association (IETA) is working in California to make sure they recognize the biological sector for its potential in reducing GHGs.
- Alberta may have limited influence and economic standing in a future global carbon trading market if it does not have successful, long-term offset protocols for agriculture.
 - Of the over 47 million carbon credits in Alberta, over 14 million credits come from conservation cropping.
 - Currently, the Government of Alberta's Conservation Cropping Protocol will expire in 2021, leaving limited opportunities for the crop sector to participate in Alberta's offset program, while new science suggests that farms are still sequestering carbon.

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Current participation: Participation rates in the offset market are limited and have been falling in recent years. There is a need for a new and revitalized market along with new and improved protocols that incentivizes farmer participation.

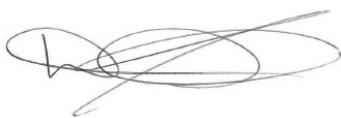
- Team Alberta conducted a study on participation in the carbon offset programs in 2016. We found that, while more than 7 in 10 (74 per cent) of operators were aware of the market, only 16 per cent were currently participating and 8 per cent had participated previously.
- Existing protocols need to be modernized and new protocols need to be developed. It was initially thought that carbon in the soil would have reached saturation by 2021. However, new science about the soil carbon balance (Robyn Anderson Chart, Brian McKonkey) indicates that farm soils are sequestering more carbon than when they were grasslands.
- Nitrous Oxide Emission Reduction Protocol (NERP) is unusable in its current form because the entire activity from the farm must be included in the project and 4R plans are required even though they do not impact the emission reduction. A signature from a land owner should not be a requirement for NERP or any other protocol since they are activity-based practices and not necessarily tied to the land.
- This protocol would be more useful if there were changes to how farmers can provide verification of their data (burden of proof). Yield data could be collected through crop insurance, instead of using physical weighing processes (i.e. weigh wagons) or complex yield monitoring. Increased cooperation from AFSC to allow farmers who are subscribed to crop insurance to download their yield data from the system could simplify the process and increase the usage of NERP for instance. Satellite imagery to identify crop type should also be a form of evidence, especially for farmers who don't use crop insurance.

Sincerely,

Dave Bishop
Chair, Alberta Barley



Don Shepert
Chair, Alberta Pulse Growers



John Guelly
Chair, Alberta Canola



Gary Stanford
Chair, Alberta Wheat Commission



cc:

Honourable Minister Devin Dreesen
Honourable Minister Sonya Savage

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