



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Environment and Sustainable Development

ENVI • NUMBER 136 • 1st SESSION • 42nd PARLIAMENT

EVIDENCE

Tuesday, December 4, 2018

—
Chair

Mr. John Aldag

Standing Committee on Environment and Sustainable Development

Tuesday, December 4, 2018

• (1535)

[English]

The Chair (Mr. John Aldag (Cloverdale—Langley City, Lib.)): All right, everybody, welcome to today's session.

I'd like to begin with a very important announcement today by acknowledging it's our colleague Will Amos' birthday. It's very important.

Voices: Oh, oh!

The Chair: Happy birthday, Will.

We're going to continue for about the first hour and a half, up until five o'clock, on the existing study, which is agriculture, forestry and waste. We were to have four organizations today, but unfortunately, there was a technical issue with First Carbon Credits Corporation. We're trying to see if we can get that resolved by next Tuesday to bring them in.

Today we have the Canadian Federation of Agriculture, the Canola Council of Canada and the Canadian Canola Growers Association. Each of the presenters will have 10 minutes, and then we'll go into a series of questions for six minutes each. Then at five o'clock we're going to go into a closed session to do committee business.

Mr. Warawa, do you have a point of order before we get started?

Mr. Mark Warawa (Langley—Aldergrove, CPC): I do.

Very quickly, in Bosc and Gagnon, on page 875, is says it's typical to include a minister as a witness regarding estimates and supplementary estimates. Chair, my understanding is that you invited the minister. Today is the last opportunity for the minister to come. The estimates will be deemed reported back, accepted, if we do not vote on this today.

I have two procedural questions. Did you invite the minister? Can you confirm the minister will not be coming today, and is today the last opportunity to interview the minister?

The Chair: We did invite the minister. She indicated she was not available. Now, given today is the final opposition day on the supply cycle, the estimates have already been reported back. The time was three sitting days prior to the last opposition day, and so the last day we could have done anything was last Thursday. Now, the supplementary estimates (A) will be reported back deemed adopted. The window we had to try to bring the minister in closed with today's opposition day.

Mr. Mark Warawa: Okay. So, Chair, there will not be a vote on whether or not the opposition agreed with the supplementary estimates—

The Chair: That's correct.

Mr. Mark Warawa: —because of what happened?

The Chair: Yes.

Mr. Mark Warawa: I think that is not transparent, not fair, and does not fairly represent where the opposition is, both on the supplementary estimates and also on the minister not appearing. I think it is very inappropriate.

The Chair: Okay, thank you.

With that, we're going to move now into today's session.

Does anybody want to go first?

You have a point of order, Mr. Godin.

[Translation]

Mr. Joël Godin (Portneuf—Jacques-Cartier, CPC): Mr. Chair, I would like to come back to my colleague's comments, considering that, in your response, you mentioned that the minister was not available.

We should set the record straight. In fact, the minister did not make herself available. We, the members of the committee, made ourselves available, and we were very open and flexible. We think it's very important—

[English]

The Chair: That's not a point of order, so I'm going to cut that off. I've answered. The minister was invited; the minister wasn't available in the time frame, and now it's closed.

We'll go into the session now with our witnesses before us. Who would like to go first?

Mr. Ben Lobb (Huron—Bruce, CPC): Can I just make a point of order?

The Chair: If it's truly a point of order, but not debate. We've heard the point, so—

Mr. Ben Lobb: No offence, Mr. Chair, but I think if you check with the clerk, if you give Mr. Godin the floor, you can't take it away until he's done.

The Chair: If it's a point of order, and truly a point order, but if it's debate, then I can rule that it's—

Mr. Ben Lobb: I don't know that it was a point of order. It doesn't matter. You ceded the floor to Mr. Godin. I don't know if he was done or not, but when you cede the floor to him, the discussion continues until he's done. I'll leave it at that.

The Chair: I can make the ruling if I decide it's not a point of order.

To your point, I'm willing to give Mr. Godin another few seconds to indicate that it is a point of order.

Mr. Godin, the floor is yours.

[Translation]

Mr. Joël Godin: I would like to thank my colleague Mr. Lobb for his remarks. He is better versed in the procedure than I am.

Mr. Chair, let the record show that we were available and that the minister did not agree to come and meet us. That is what should be written in the documentation.

Thank you, Mr. Chair.

[English]

The Chair: This is getting into debate, so bring it back to the ruling or the standing order or something that makes it a point of order, please.

Do you have a point of order?

• (1540)

Mr. Mark Warawa: Yes.

Page 870 of Bosc and Gagnon states:

Supplementary estimates are deemed referred to the appropriate standing committees immediately after their tabling in the House. The supplementary estimates must be reported back, or are deemed to have been reported back, not later than three sitting days before the final sitting, or the last allotted day, of the supply period in which they were tabled.

Could you share why they were already deemed reported back and approved before the end of today?

The Chair: According to Standing Order 81(5), as per the direction I've been provided by the clerk, the clarification is that we go back three sitting days prior to the last opposition day, which took it to Thursday. Essentially, Thursday would have been the last day that we could have done anything on them. With today being the last opposition day in the supply cycle, it's closed.

Mr. Mark Warawa: Chair, last Thursday was the last day and opportunity. Did you call a vote on that last Thursday?

The Chair: No.

Mr. Mark Warawa: Why not?

The Chair: We didn't know at that point that today was going to be the last opposition day.

Mr. Mark Warawa: Who calls the last opposition day? It's the government, is it not?

The Chair: It's a negotiation.

Mr. Mark Warawa: It's the government.

The Chair: I can't control that. We were hoping that with the Thursday question last week, we would have known when the last opposition day was going to be. I came to the meeting, and we still

didn't have confirmation at that time that today was going to be the last opposition day. That's how this transpired.

Mr. Mark Warawa: Thank you.

The Chair: That's done.

Who would like to go first for our 10-minute opening statements?

Mr. Innes.

[Translation]

Mr. Brian Innes (Vice-President, Public Affairs, Canola Council of Canada): Thank you, Mr. Chair.

[English]

Thanks, committee members, for your time.

I'm very pleased to be here today to speak on behalf of the Canola Council of Canada to share how the canola industry is contributing to clean growth and climate change mitigation for Canada.

[Translation]

Before I start, I would like to describe the Canola Council of Canada.

The Canola Council of Canada is a value chain organization representing the industry: the 43,000 canola growers, the seed developers, the processors who crush the seed into oil for humans and meal for livestock feed, as well as exporters who export canola for processing at its destination.

Canola is a Canadian-made crop. The canola industry contributes \$26.7 billion to the economy every year and ranks the highest in farm cash receipts.

[English]

Our industry is working very hard to meet the world's growing appetite for healthy oils and protein. Keep it coming 2025 is our industry's plan to increase demand for canola oil, meal and seed, and to meet this demand through sustainable production and yield improvement, achieving 26 million metric tons of production by 2025. With this plan, our industry is well positioned to contribute to the federal government's \$75-billion export target and the recently released agri-food economic strategy table target of \$85 billion by 2025.

However, the future for Canadian canola will not be bright if it is only about increased production. We must also be a partner in achieving society's environmental goals like preserving soil and water health, improving air quality, and maintaining biodiversity. That's why in my remarks today I'll outline the five bold environmental targets of the canola industry and explain how our industry is working to achieve them. These are bold targets that recognize the importance of leadership, leadership for the environment and leadership for greenhouse gas emission reductions.

Canadian farmers over the years have adopted numerous practices to improve their environmental footprint. Our 2025 sustainability targets complement this progress while charting a path towards continual improvement.

The first goal is to use less energy. Using less energy per bottle of canola oil is something the canola industry is making good progress on over time, but we're not done yet. As we increase yield on every acre of canola, we will increase production and we'll be able to use 18% less fuel for every bottle of canola oil.

The second goal is to increase land use efficiency. When we grow more on every acre, we're making more efficient use of the land, and this can have remarkable impacts over time. Our goal is to increase production without bringing more land into canola production. This means that by 2025 we'll achieve a 40% reduction in the amount of land that we grow one tonne of canola on. We'll do this by targeting our agronomy and research efforts, which the council executes in conjunction with the industry, to take cutting-edge science from the lab, from the science bench, and transfer this knowledge to farmers so they can implement these practices in their fields.

The third goal is about sequestering more carbon in the soil, something I understand the committee has talked a lot about. By sequestering more carbon in the soil, we will put five million tonnes of greenhouse gases into the soil every year. That's the equivalent of taking a million cars off the road. We're very excited about what the canola plant can do to take carbon dioxide out of the air, produce healthy oil for people and protein for animals, and turn those greenhouse gases into organic matter that helps enrich our soils. Recent research by Agriculture and Agri-Food Canada scientist Brian McConkey has highlighted how canola is the workhorse of Canadian crops when it comes to sequestering carbon.

We're not done yet. One of the research projects that we as an industry are funding is looking at how the canola plant can be adapted to sequester even more carbon.

• (1545)

Research that the Canola Council is funding is looking at how we can improve starch biosynthesis. It's a technique that has already been used to increase yields by about 400% in the model plant *Arabidopsis thaliana*. We're really excited about what this research can do, what it can do for canola yields and what it can do to take carbon dioxide from the air and turn it into organic matter that enriches our soils.

The fourth goal is about improving soil and water health. We're planning on improving soil and water health by having 50% of canola production under 4R nutrient stewardship by 2025. Nutrient stewardship is about putting the right crop nutrients or fertilizer in the right place, in the right amount and at the right time. The agronomy team of the Canola Council is committed to helping farmers make the best use of precision agriculture and to use new technology that makes fertilizer more stable.

Our fifth and final goal of the industry is to safeguard and protect biodiversity by keeping the 2,000 beneficial insects in the canola canopy and surrounding natural habitat. It may come as a surprise to committee members that farmers are keenly interested in having lots of insects in their canola, the beneficial insects, that is. Hopefully, members have had a chance to see the beautiful canola fields in July, when the sea of yellow flowers attracts pollinators, like honey bees and other sorts of bees and insects, to that canopy because of the quantities of nectar and pollen that canola produces. Our industry

wants to protect these beneficial insects and maintain the biodiversity in and around our canola fields.

While there are beneficial insects, there are also insects that can destroy a canola crop in as little as 36 hours. These insects destroy the crop for the farmer and for all of the other insects that may enjoy that crop. To control these insects, the canola industry requires access to safe crop protection products. The Pest Management Regulatory Agency of Health Canada ensures that crop protection products are safe, but unfortunately, the current approach to risk assessment does not consider how their decisions impact beneficial insects.

We would like that the PMRA risk evaluation process be broadened to consider both the risks and the benefits of the products they review. For example, broader environmental benefits from targeted crop protection products, like seed treatments, help protect the ecosystem and help maintain biodiversity in the canola canopy. These benefits should be considered by PMRA's risk evaluation process because safe and timely access to crop protection products is required to achieve our sustainability targets and maintain those 2,000 beneficial insects in and around the canola canopy.

I'd like to conclude my remarks by commenting on what the canola industry needs from the pan-Canadian framework to remain globally competitive. My colleague Rick will cover what's important to growers and what's possible with the clean fuel standard. I will focus my remarks on the processing sector.

For Canada to have a significant processing sector, we must remain a competitive place to invest and to operate facilities. Otherwise, our processing plants will go to other countries and we will ship our raw product and our jobs to somewhere else.

The output-based pricing system is very positive, but it needs to be designed carefully so that a trade-exposed sector like ours, which exports 90% of what it produces, remains competitive.

Regulations must be designed carefully to balance carbon pricing with competitiveness for all canola processors. It's very important that we take the time to get the design and implementation right.

In closing, the canola industry is working towards a bright and sustainable future. It will be a bright future, with more jobs, more prosperity and a future with improved environmental outcomes. We're really excited about how clean and sustainable growth can transform Canada.

Thank you. I look forward to answering your questions.

• (1550)

The Chair: Excellent. Thanks for those comments. That's right on 10 minutes.

I neglected to mention that, as we get into the other statements and questions, I have my handy cards here. When there is one minute left in the interaction we're having, I'll hold up the yellow card and when you're out of time, I'll hold up the red card. You don't have to stop, but just wind up your thoughts.

I also neglected to welcome Mr. Lobb to the table today. Thanks for joining us.

Mr. White, let's go to you. We'll hear your comments for 10 minutes.

Mr. Rick White (Chief Executive Officer, Canadian Canola Growers Association): Good afternoon, and thank you for the invitation to speak to the committee.

My name is Rick White, and I'm the CEO of the Canadian Canola Growers Association. CCGA is the national association representing the 43,000 farmers who grow canola. We are a member of the Canola Council of Canada, on whose behalf Brian spoke just now. Together, as Brian mentioned, we represent \$26.7 billion as an industry. The farm gate value of that to farmers is around \$10 billion. It's a big deal for western Canadian farmers.

Today I want to speak with you about the environmental accomplishments of canola farmers and about how their commitment to continue improving their environmental footprint will help the government achieve its goals under the pan-Canadian framework on clean growth and climate change.

Farmers, more than those in other businesses, are impacted by climate and dependent upon the environment for their success. As affected stakeholders, CCGA appreciates the opportunity today to provide our perspective to the committee.

I'd like to now talk about our environmental accomplishments. I'm going to go back a little way in history to focus on where we've come to.

Since it was first developed by Canadian plant scientists in the 1970s, canola's innovation journey has had a monumental impact on farming in western Canada. Advances in the canola plant and in the way farmers grow canola have successfully reduced agriculture's environmental footprint while improving farm profitability. Today, canola is seeded on about one-third of all the cropland in western Canada and is the number one commodity in terms of cash receipts. That's the \$10-billion number that I mentioned.

All Canadians should be proud of the fact that our farmers are world leaders in environmental stewardship and sustainability. In fact, canola production in Canada produces 42% less greenhouse gases compared with that of our international canola-growing competitors. Canadian farmers have become world leaders in environmental performance as a result of their willingness to rapidly adopt modern and innovative technologies that have both economic and environmental benefits. These technologies include no-till seeding, precision agriculture, and biotechnology.

Where possible, canola farmers practise no-till farming. This practice allows farmers to conserve moisture, reduce soil erosion, and keep carbon in the ground. In 1991, only 7% of western Canadian farmland was seeded with no-till practices. By 2016, this number had dramatically increased to 65%. This change was

triggered by the adoption of genetically modified herbicide-tolerant canola. When soils are left untilled, they sequester greenhouse gases. Because of such practices as no-till farming, Canadian cropland now sequesters 11 million tonnes of greenhouse gases every year.

Recognizing the positive contributions our cropland makes to Canada's national greenhouse gas inventory, canola farmers have specifically set a goal to nearly double their carbon sequestration, by a further five million tonnes a year by 2025, as Brian mentioned. We will meet this goal by maintaining current levels of no till and by investing in plant-breeding innovation and better management practices. Sequestering 16 million tonnes of greenhouse gases would be the equivalent of removing more than 3.4 million cars from the road every year.

Thirty years ago, the military was the only organization using global positioning systems, GPS. Today, GPS is an essential part of farming in Canada. This technology allows growers to farm with precision, applying fertilizer and pesticides exactly where they are needed and using resources in the most efficient way possible. This cuts costs and emissions associated with fuel use and also cuts fertilizer application. Over a 30-year period, these types of practices have reduced greenhouse gas emissions by 53% per tonne of canola. As Brian mentioned, farmers are committed to further reducing emissions through the adoption of this type of technology.

Canola growers were early and rapid adopters of biotechnology. Advances in breeding technologies have allowed farmers to make fewer passes over their fields, reduce the use of pesticides, use less fuel, and help our crops better withstand disease pressures in ways that were not possible 20 years ago. We are growing more canola with fewer carbon-based inputs and lower emissions, thanks to biotechnology.

Unfortunately, around the world today, some of the voices that are the loudest in demanding climate change policies are also the loudest in opposing the plant and agronomic science that is helping farmers produce more with less.

● (1555)

International leadership to facilitate the trade in biotech crops is not just an agriculture issue, it is a climate change issue. The Canadian government as a whole should embrace modern agricultural technologies and their benefits during their international climate advocacy.

No-till farming, precision agriculture and biotechnology have facilitated our environmental accomplishments to date. They are the platform from which we will achieve our ambitious environmental and sustainability goals in the future. As I've already mentioned, farmers have a history of rapidly adopting new technologies that reduce their environmental footprint. We have committed to strong environmental targets absent government intervention.

We are moving on our sustainability goals because they are the right thing to do. Farmers would rather be incentivized to help the government achieve its climate change goals rather than be taxed.

As I hope you can see, our farmers are not the problem. They can be part of the solution, if we do it right.

I'd like to talk a little bit now about opportunities.

One area within the pan-Canadian framework that would help further these goals is the development of meaningful offset protocols for both cropland sequestration and fertilizer application. Recognizing the important work canola farmers have done to increase cropland sequestration and reduce fertilizer emissions—and will continue to do by implementing these protocols—will go a long way.

Another area within the pan-Canadian framework where the industry stands ready to help is the clean fuel standard, or CFS, which is under development to encourage the use of low carbon fuels and technologies. The goal is to reduce emissions by 30 million metric tons of CO₂ equivalents by 2030. With canola being an excellent input into biofuels, there are considerable opportunities to increase the demand for Canadian canola with a well-designed CFS. Canola growers strongly support the government's decision to move forward with the CFS for only the liquid fuel stream portion at this time.

Currently there is a federal mandate to include 2% renewable content in diesel. Canola's contribution to this policy has resulted in a reduction of 800,000 metric tons of CO₂ equivalents each year. Canola represents roughly 40% of the feedstock to biofuel in Canada, which is using about 500,000 tonnes of canola seed. The new CFS could drive demand for Canadian input such as canola. Canola biodiesel emits up to 90% less greenhouse gas than diesel from fossil fuels. It is proven. It's ready and it's available.

If the mandate for biofuels was increased to 5% of the diesel fuel, Canadian canola production could easily fill this demand using 1.3 million metric tons of canola. This is easily accommodated within our growth targets to 2025, as Brian expressed. With a 5% mandate, based on current blend levels, canola would contribute reductions of 1.8 million tonnes of carbon dioxide equivalents annually.

I have some closing thoughts.

As Brian mentioned, canola is very trade dependent, with 90% of the crop being exported every year. Because canola farmers are price takers in a global market, any additional cost placed on them affects their profitability as these costs cannot be passed on.

Canola farmers must be able to compete internationally. This should be a key consideration as we move forward with the pan-Canadian framework. Additional consideration should include effective carbon offset programs and increasing the current federal mandate for renewable content in diesel.

In conclusion, CCGA remains optimistic about the future for Canada's canola farmers and their ability to continue to contribute positively to Canada's environment and climate change goals and the economy. Canadian agriculture should be viewed as a strategic partner in this dialogue.

Thank you again for the opportunity to appear before you today to discuss this topic of great importance to canola farmers.

I look forward to your questions.

● (1600)

The Chair: Excellent. Thank you for those opening comments.

Now we'll move to Mr. Bonnett from the Canadian Federation of Agriculture.

Mr. Ron Bonnett (President, Canadian Federation of Agriculture): Thanks for the invitation to appear before the committee.

For those of you who might not know, the Canadian Federation of Agriculture represents farmers from right across the country, through general farm organizations and a number of commodity organizations, and deals with a number of issues that cross commodities. This is one of those issues that does cross a lot of commodities.

One of the things I'll say at the outset is that I'm pleased to see that the committee is looking at what we really accomplish moving forward to deal with climate change, because farmers are the first to feel the impact of climate change with volatility in weather patterns. We've seen crop issues in P.E.I. this year with potatoes, and crop issues out west with some of the grains. There's a lot of support for looking at how we can contribute to dealing with climate change and how to mitigate some of the stuff that's coming along.

First, I'll mention the carbon sequestration potential. It has been mentioned by the previous contributors. Back in 1999, a paper published by the National Climate Change Process identified that agriculture would put down approximately 22 million tonnes of carbon annually. That was before some of the new technology and the new plant technology was in place. There's an immense amount of growth, and as Rick mentioned, we're sequestering between eight million tonnes and 11 million tonnes right now. We've implemented a number of methods over the last number of years to realize this potential: conservation tillage, elimination of summer fallow, crop rotation and strategic fertilizer application, to mention a few.

The other thing that should be recognized in the livestock sector is that the unit of carbon for every pound of meat has gone down dramatically just because of improvements in genetics and crop production at the farm level.

It presents that there's a clear need to figure out how to incentivize the carbon capture and storage properties of Canadian agriculture. To incentivize this capture, agriculture must be recognized as an eligible carbon offset sector under the pan-Canadian framework on clean growth and climate change. The framework will apply an ISO standard to select eligible carbon sinks. It does not have a restriction on project types, and as such, the CFA recommends that it recognize a full array of agricultural carbon capture processes.

To further incentivize carbon storage, we must have an appropriate approach to measurement. We recommend following the precedent set by programs in other countries, such as Australia's 2018 carbon farming initiative. This initiative allows farmers to earn credits under an increased range of activities, including pasture, crops, horticulture and mixed farming activities. It also allows for land management practices to be tailored to the specific region and farm in order to respond to changing market forces and climate during the crediting and permanence periods.

Next we must address one of the chief drivers of the incentive: investment in innovation. Ensuring that farmer families throughout Canada have funding to implement carbon sequestration activities is crucial to success. There is concern that farming families without means to transition to low-emission fuels will be forced into paying carbon surcharges in the long term. This money that would be paid into surcharges would be better spent on retrofits that would eliminate the use of some of those fuels altogether.

The onus must be placed on raising awareness of available programs, and where required, generating new federal funding to increase access to sequestration technologies. There is also immense carbon sequestration potential to be realized through incentivized conservation. Initiatives such as the alternative land use services program, or ALUS, provide an example of a framework that offers per acre annual payments to farmers engaged in conserving carbon sinks, such as wetlands and forest stands. It is recommended that the federal government work with existing organizations such as the Canadian Wetlands Roundtable to evaluate the carbon capture potential of conservation efforts in the Canadian agriculture, forestry and other natural resource sectors.

With respect to bioenergy and bioproducts, there is immense potential in these fields in looking at how you can commercialize those operations. Agricultural waste and purpose-grown feedstock can significantly reduce the carbon footprint of many products when it replaces oil and gas feedstock. This goes above and beyond fuels to include composites, fibre, specialty chemicals and sugars.

● (1605)

The challenge has been a lack of investment in the processing capacity and the building of the supply chains in most areas. It is therefore recommended that the federal investment be targeted to incentivize the development of the bioeconomy through increased funding for innovation.

It is also important to address the role of genetically improved productivity in reducing the per unit product amount of emissions in agriculture, which has been mentioned by the two previous speakers. The genetic approach may be one of the most tangible pathways to produce more food, fuel and fibre for a growing and more affluent global population while reducing emissions.

The Canadian Federation of Agriculture sees the need for a more holistic approach through climate smart agriculture; that is, one that sustainably intensifies yields, mitigates climate impacts and implements adaptation. I should mention that this does not just apply to crops. It also applies to livestock. If you take a look at the unit amount of grain that goes into producing a pound or a kilogram of meat, it has changed dramatically. By looking at genetic improvements in livestock as well as grains, you can reduce that carbon footprint.

In conclusion, our key recommendations are to recognize agriculture as an eligible offset sector, recognize the full range of on-farm carbon sequestering practices, implement regionally adaptive carbon sequestering measurements, and also look at the improvement in productivity in both livestock and crops.

Thank you for your time. We look forward to your questions.

The Chair: Thanks very much.

We'll now move to a rotating series of six-minute interactions.

First up, we have Mr. Peschisolido.

Mr. Joe Peschisolido (Steveston—Richmond East, Lib.): Mr. Chair, thank you.

I'd like to thank the witnesses for appearing.

Ron, I'd like to start with you.

You talked about a bioeconomy strategy. Can you talk a bit about what a national strategy would look like and what roles the various players—the provincial and federal governments, stakeholders and farmers—would have? Can you sketch how that would look?

● (1610)

Mr. Ron Bonnett: It ties in with some of the recommendations that were made by Industry Canada's round table on agriculture, which was looking at the potential. Part of that potential is looking at alternative uses for crops. The bioeconomy has started to take root, primarily in the area around Sarnia. Quite a bit of work has been done there.

We need to start looking at what is needed to foster the potential on that. Canola would be one of the crops that would be tied into that.

There are a number of things. Tax policy would be one and the other would be taking a look at the research needs and identifying the key ones. One of the bigger ones in Canada is taking a look at what type of investment strategy we have, because once you start into some of the bioproduct initiatives, the capital costs can be extremely high. When it's new and innovative, sometimes it's difficult to get the risk capital.

The strategy would encompass all of those: the production needs at the farm level, the research and development that's needed to grow the types of crops that are needed for biocrops—and that would include certain genetically modified crops that were specifically designed for the bioeconomy—and then the investment and market potentials of some of the different products that could be produced.

Mr. Joe Peschisolido: Outside of Sarnia, are there other examples, either in Canada or internationally, that we can look at as a template?

Mr. Ron Bonnett: The province of Saskatchewan is doing quite a bit of work now on the whole bioeconomy. They're one of the groups that's done it, and a number of different commodity organizations are looking at that potential as well.

Mr. Joe Peschisolido: Brian, you mentioned targets, or five goals. Agriculture can either be a carbon source or a carbon sink, either good or bad. Of your five targets, would there be one on each side that you can elaborate on that would, one, eliminate it as a source, and two, enhance it as a sink?

Mr. Brian Innes: Yes. Thanks so much for the question.

When we look at our sustainability targets, all of them are about lowering our environmental impact. Specifically to your question about which ones will have the greatest impact on sinking carbon into the soil, when we look at increasing production on every acre of land, that has a direct impact on the amount of greenhouse gases produced per bottle of canola oil, so that will certainly result in reduced emission intensity.

When we look at how we're able to reduce our emissions over time, we're really excited about the opportunities for research and to enhance what our plants do to sink more carbon into the soil. I mentioned one project, but there are others as well, where research into plant genetics and the way we farm can result in more carbon put into the soil.

The last thing I'll summarize is that, when we look at using nutrients or fertilizer in a better way, this is about reducing emissions. It's about taking those nutrients, whether it's nitrogen, phosphorus, potassium or sulphur, and using only the nutrients that the plant needs and putting those nutrients directly into the soil, so we prevent greenhouse gas emissions from the application of fertilizer.

For example, nitrous oxide is a greenhouse gas that can come from fertilizer application, if the nitrogen doesn't go from the fertilizer directly into the soil to be used by the plant. Ammonia gas volatilization is another one.

Therefore, when we do better fertilizer management through our nutrient stewardship, that means we're able to reduce the amount of emissions that are happening because the nutrients are going from the fertilizer, then into the soil and then into the plant, rather than into the air.

Mr. Joe Peschisolido: Thank you.

Brian, I represent the riding of Steveston—Richmond East, which is just south of Vancouver. In the greater Vancouver area, there has been a movement towards organic farming and towards a place-based agriculture. I'm trying to wrap my head around the whole concept of no-till seeding.

Mr. White, maybe you can jump in on this as well.

Regarding no-till seeding, fertilizer and organic farming, what are the pros and cons when it comes to a clean growth agriculture and also having a reduction of emissions? There are a few points there. Perhaps you could comment on the role of no-till seeding and how that relates to organic farming.

• (1615)

Mr. Rick White: Yes, I can take that.

You know, we're careful not to advocate for one system of farming over another, right? However, 99% of canola production in western Canada is genetically modified.

Ms. Julie Dzerowicz (Davenport, Lib.): I'm sorry, but what percentage?

Mr. Rick White: It's 99%.

A voice: So that question should have been for Ron.

Mr. Rick White: The issue with moving to no-till is how do you control the weeds. That was the key technology and the biological piece, when they invented genetically modified canola to be herbicide tolerant initially to Roundup and now there are several others that are being used. That fixed the weed problem, which allowed farmers to go into even the most weedy fields that they had. Typically, in the past, they would have summer fallowed that and just tilled it to keep the weeds down and then gone into it fresh a year after, but they lose a whole year of crop.

It's very difficult to organically go to zero-till because it's difficult to manage the weeds effectively in an organic system.

Mr. Joe Peschisolido: Thank you, Mr. Chair.

The Chair: Now, we'll move over to Monsieur Godin.

[*Translation*]

Mr. Joël Godin: Thank you, Mr. Chair.

My thanks to the witnesses for participating in this exercise. Once again, this afternoon, as a member of the Standing Committee on Environment and Sustainable Development, I am very pleased to hear some good news. There are measures, people regulate themselves, they take the initiative and they care about our environment. This is to your credit and, above all, to that of your members.

Mr. Innes, in your opening remarks, you mentioned that you must also partner in achieving society's environmental goals, such as preserving soil and water health, improving air quality and maintaining biodiversity. I think that's honourable. I want to highlight this mission you have taken upon yourself and congratulate the canola producers.

Now, I would like to understand one thing. Your Keep it Coming 2025 contains some very specific figures and objectives. I see that the verbs used are “we could” and “we want”. Is your position clearer? Do you have mechanisms and measures in place to achieve your targets? Are those targets achievable?

You are saying that you will be able to use 18% less fuel for each bottle of canola. You also said that you wanted to reduce the amount of land required by 40%. You also mentioned that you will eliminate 5 million tonnes of greenhouse gas emissions by 2025. In addition, you say you plan—which is the same kind of verb—to improve soil and water health by ensuring that 50% of canola production will be under the 4R nutrient stewardship principles by 2025.

So you have intentions and wishes and your members are taking the initiative. However, those are intentions. Is it more specific than that? Does this confirm that you would like to, but are not sure that your members will take part in achieving the objectives?

Mr. Brian Innes: Thank you very much for your question.

I appreciate the spirit of your comments.

I can give you some background on the goals we, in the canola industry, have had in the past, and our success in achieving those goals.

[English]

For example, as an industry we take the targets that we set very seriously. They're ambitious targets, but in the past we have had a very strong record of achieving targets, and we intend to achieve these targets.

For example, when we started to set targets as a canola industry in the early 2000s, it was a rough time for the industry, and we set a target of getting to seven million tonnes of production by 2007. We met seven million tonnes of production, and we asked ourselves where we wanted to be by 2015. We set a target of 15 million tonnes of production by 2015. We actually attained that level two years early, in 2013, and we asked where we were going now. That's when we set our 2025 targets of 26 million tonnes of production, based on 52 bushels per acre, by 2025.

As an industry, we have a record of coming together and including all links of the value chain. We look out into the future and set bold targets, to motivate change within our industry and to motivate change in the environment that we operate in, including the regulations around innovation and the practices that we need to get there.

When we look at the targets that were outlined, it's very much our intention to achieve these targets. We have a plan in place at the Canola Council.

[Translation]

For example, we have professional agronomists working with industry to address important issues.

• (1620)

[English]

One of the big issues is sustainability. Others are things like disease, and really transferring knowledge from the science bench to a farmer's field. We, as an industry, voluntarily invest in that through our agronomy and research program. There are many items that line up in the activities that we do to help achieve these targets. We plan on achieving them, and I hope you ask us in 2025 whether we have succeeded.

[Translation]

Thank you.

Mr. Joël Godin: In your answer, you said that the past is an indication of the future, that you can be trusted and that your members are responsible enough to protect the environment and put in place the measures to do so. Well done! Keep it up. My thanks to the people in your industry.

Do you think the federal government needs to put in place a carbon tax to force you to be even more stringent? Will the results be better if we impose a carbon tax instead of imposing very strict rules on you to achieve well-defined targets that will allow our country to achieve certain results?

[English]

Mr. Brian Innes: I can't speak to the forecasts of the impacts of a carbon tax, but what I would say is that government regulation has a real benefit, or a negative impact, on our industry. One area I'd highlight where it could be more beneficial is plant breeding innovation. We've heard about GM, but there is also plant breeding innovation coming forward.

In fact, in the fall economic update, there was a piece about enabling better plant breeding innovation regulatory frameworks in Canada. That is a key piece to help our industry adapt to changing climate conditions and adapt plants that sequester more carbon.

[Translation]

Mr. Joël Godin: If I understand correctly, for your industry, regulations are probably much more effective than imposing a carbon tax whose impact is unknown, and your experience shows that regulations are effective, allowing you to achieve your targets.

May I interpret your answer in this way?

[English]

Mr. Brian Innes: What I said was that we see some areas of regulation as really necessary. Changing the way we regulate plant breeding innovation is one area that we see as being very helpful for us in the future.

The Chair: Thank you.

I'll go to Mr. Stetski.

Mr. Wayne Stetski (Kootenay—Columbia, NDP): Thank you for being here today. I'll start with Mr. Bonnett.

I used to be the regional manager with the ministry of the environment for southeastern British Columbia. I left that job on a Friday and on Monday I started as the regional manager for the East Kootenay conservation program, which was private land conservation. I got to work with a lot of ranchers and farmers and realized how important they were to conservation.

There was a municipal tax of \$25 per property that went into conservation. One of the projects we used that money for was to pay ranchers, in essence, to leave marshes and areas that sequestered a lot of carbon alone.

How prominent is that across Canada, and is that a direction we should be going in?

Mr. Ron Bonnett: It's becoming more prominent. I mentioned the alternative land use services program.

The other thing, though, that has been in place for a number of years is the environmental farm planning process. Each province has different incentives they can provide.

I can describe what we did on our farm. We have a cow-calf livestock farm. We used some of that money to fence off all cattle access to any open water sources. We had a fairly wide flood plain that we fenced them out of. We purchased solar-powered water pumping systems. We actually fenced the property and moved to rotational grazing.

To give you an idea of the change in the carbon footprint, with the same base of land that we started with when we moved from dairy to cow-calf, we're carrying twice as many cattle and producing twice as much beef. At the same time, because we're using rotational grazing, we've reduced the amounts of fertilizer that we're putting on.

It applies to cropland, as well. There are some areas that are not suitable for farming. Looking at conservation-type programs and other ways to encourage some of those wetlands and more fragile areas to be set aside actually does work.

Another interesting thing we found on our farm was that once we had the cattle fenced away from the water sources and the rotational grazing system set up, the rates of gain on our calves went right through the roof, and the risk of disease loss of nursing calves from mothers that had their udders covered in mud just disappeared. Sometimes, a small incentive like that is enough to make a dramatic change.

I know we've been talking a lot about what canola is doing, but you can look at any number of crops or livestock operations. One of the key focuses has been productivity increases and utilizing the land for its best purpose.

Going back to your comment about conservation, there are certain areas of land that likely shouldn't be farmed. Trying to find a way to incent setting them aside is a worthwhile endeavour.

• (1625)

Mr. Wayne Stetski: This morning I had breakfast with a group called Renewable Industries Canada. I hope to actually see them come as a witness, because it was quite inspiring.

From your perspective, what are some of the agricultural by-products—I'll call them that, rather than waste—that potentially can be part of a biofuel future?

Mr. Ron Bonnett: If I were looking at a biofuel future, first there are going to be genetically engineered crops that will likely be specifically designed for oil or ethanol production. I think you're going to see some work done on that. The other thing is taking a look at some of the field crop waste. You look at crops that have been harvested—straw, stover; there are a number of those fibres that could be put into a system. I could see a future where farmers might be combining their resources with municipalities, of livestock manure, crop waste, municipal waste, going into methane digesters. Instead of feeding natural gas into the lines, we'd be feeding methane in. There's great potential for some of that, but that's going to take research, development, innovation and partnerships. Like Brian and

Rick, I see a very positive future for agriculture in the potential that we can move ahead on some of these.

The other thing is I think we have to take a look at the forestry sector as well and see if there are things we can do, particularly on the biofuels and bioproducts side, to see if there are opportunities to produce more products from renewable resources.

Mr. Wayne Stetski: When I asked them this morning about what the federal government should do to encourage more renewable, low-carbon fuels, they gave a couple of examples: one, by setting the E standard, which I guess is now at E5 for many gasolines—increasing that would put more low-carbon canola and other products into the fuel—or to do as Quebec did, which is to legislate that municipalities can no longer put any compost in landfills. Now they're using that for energy.

What do you think the role should be of government in trying to encourage a better, low-carbon fuel future?

Mr. Ron Bonnett: I'll let the canola people talk on the fuel content.

One thing I would say, and I was glad to see it in the fall economic update, is an accelerated capital cost allowance for investments in climate smart investments. I could see livestock barns, greenhouses, other types of agricultural production facilities taking a look at passive solar and other methods to create energy so that they're not using natural gas. There's opportunity there.

I'll let you comment on the fuel standards.

Mr. Rick White: Yes. Maybe I could just reiterate what I mentioned in my testimony initially.

We're at a 2% federal mandate for renewable content in diesel in particular, and that's why I focus on that, because it's where canola fits. We could do 5% very easily, and we could get a very significant environmental benefit out of it just by doing that. That would just take a federal mandate increase, strategically, from 2% to 5%. In some provinces it's already happening, but at the federal level, if we did it across Canada, it would be even more beneficial. To me that's low-hanging fruit.

• (1630)

The Chair: Great. Thank you.

Mr. Brian Innes: Could I add to that, Chair?

The Chair: Briefly, we're over time now.

Mr. Brian Innes: Very briefly, Canada's actually behind other major jurisdictions in reducing greenhouse gases by including renewable fuel in diesel. Europe has about a 6% to 7% renewable content in diesel. Some places in the United States have as high as 10% and 20%, in places like Minnesota, renewable content in diesel.

The Chair: Great. Thank you.

Now we're going to jump over to Mr. Amos.

Mr. William Amos (Pontiac, Lib.): Thanks to all of our witnesses.

We've also had the opportunity to hear from Mr. McCann in relation to canola, so I think our committee's getting a fairly good sense of where the canola industry stands in relation to climate. It's very helpful.

I want to ask all three of you something. I hear the request for additional support, particularly from the CFA, as regards innovation to enable different types of biofuels. In the most recent fall economic statement, the government stepped forward with accelerated capital cost allowances, which are a major incentive for any serious investor who has any equipment, machinery, clean technology to bring. Does this measure not answer the call for support for industry that wants to invest?

Mr. Ron Bonnett: I would say that on the accelerated capital cost allowance, we immediately responded. We thought it was a very good move on government's part to encourage investment. The other part of that, though, is the research and innovation, having the knowledge of the types of things they should be investing in. I think that's maybe where we could look at more coordination, likely, among federal and provincial resources as well as industry resources and taking a whole look at what the key research needs are going forward, looking at things from the window of a carbon footprint or carbon mitigation.

In the past, sometimes we concentrated strictly on the production side and we maybe didn't look at some of those broader ideas on sustainability and carbon. I think that's becoming more of an issue. That whole knowledge in the innovation side is good. The capital cost allowance really does help the investment side.

Mr. William Amos: Mr. Innes.

Mr. Brian Innes: I'll build on what Ron said with respect to research.

Research in agriculture has been an investment of the federal government for more than 100 years, since the country was founded. The reason we invest public money in agricultural research is that once we produce a result, it's really hard for any particular entity to capture the benefit of that. The benefits are spread to farmers all across the country, and indeed, farmers all around the world if they're farming in similar conditions.

Public investment in agricultural research around agronomic practices, things you can't capture the benefit from as a private enterprise, are really fundamental for helping our sector move forward to adopt best management practices, to understand what those best practices are in a changing world and in an environment where we're trying to reduce greenhouse gas emissions.

From our sector's point of view, I outlined some of the research we're funding. Our members contribute voluntarily. The canola growers contribute voluntarily to fund research. Some of that is matched by federal government funds. We haven't seen an increase in funding for the types of agricultural research that I'm referencing where we can see real benefits spread across the sector that can have real impacts on mitigating climate change and reducing emissions.

We are very fortunate to be able to have funding that encourages growers and industry to invest, but we're not seeing those funds increase over time at the same time as we're growing our economic footprint and really conscious that agriculture has a lot of land across

Canada and can have a real impact to mitigate emissions from Canada.

Mr. William Amos: Thank you.

Mr. White.

Mr. Rick White: On the capital cost allowance, yes, that will spur innovation and investment in innovation. I can only speak from the farm level. That would be very helpful to get farmers in a place where they can afford this innovation, which turns over pretty quickly.

Our success to date has relied on innovation in biology, innovation in chemistry such as chemical protection products, engineering, machinery and information technology such as computers, robotics, big data, mapping, drones, satellites and high-speed Internet everywhere in the rural areas.

In terms of those tools, if we can continue to innovate and encourage and make it affordable for farmers to implement, we will continue seeing these results.

• (1635)

Mr. William Amos: Mr. White, I appreciate those comments. I'll address each of your comments and invite your further thoughts.

At around page 57 of the fall economic statement, it goes specifically to data collection systems, computers, and buildings. The tax writeoffs that will be available in year one across the board for a number of those items that you've just mentioned, including fibre optic cable, will represent significant savings for our farmers.

I represent a very rural region in western Quebec. I have some canola farmers, not many but some. I truly believe what we're doing is enabling those who want to be the leaders, who want to innovate, so I'm really keen to hear more about what the most climate-forward, innovative canola farmers will be looking to invest in to take advantage of these measures. I leave that question open to you.

On research, I couldn't agree more. Our government, if anything, has been playing catch-up, effectively, in terms of investing, after 10 years of cutbacks in climate research. There are a lot of aspects of climate research that require investment. I agree that more partnerships are needed, although there are significant partnerships already enabled through the pan-Canadian framework.

Chair, I see you and I'll finish with this: It would be helpful to our committee if we went back to the Government of Canada and sought information specifically on the agriculture and climate research investments that have been made and how those compare to the decade prior.

The Chair: Great. Thank you.

Now we'll go to Mr. Warawa for six minutes.

Mr. Mark Warawa: Thank you.

I appreciate the witnesses being here.

Mr. Bonnett, you touched briefly on preserving farmland, wetlands and forest stands. There would be some type of incentive per acre, annual payments from a governing body to encourage that.

When the land is left and there are trees growing, the land is protected. It stays healthier and more diverse. I'm thinking of our boreal forest. I think you're recommending the same thing, the same principle, for Canada's boreal forest, which is the largest carbon sink in the world, that as part of international agreements there should be some type of credit for Canada's boreal forest. Would you agree?

Mr. Ron Bonnett: Yes, we'd agree that there should be some kind of a credit for that. What you could take a look at on the agricultural side, I think, is that wetlands and significant set-aside areas should be part of that as well. More and more, I think there's a recognition that it's that combination. It's interesting to see that you made that link between forestry and agriculture. I think sometimes we miss that link.

Mr. Mark Warawa: Yes.

Mr. White, you touched on how dramatically we have improved farming, particularly canola farming. You said that no-till was used for 7% of western Canada's farmland in 1991, and that has increased to 65% as of 2016. You now sequester 11 million tonnes of greenhouse gases.

On the Paris Agreement, which unfortunately we're not going to meet—the government has admitted that the 2020 and 2030 targets won't be met—hasn't your industry, the canola industry, had a reduction of over 20% or 30% from 2005 targets? I think the answer is yes, but have you calculated what kind of reduction you've had in GHGs since the 2005 level?

Mr. Rick White: I don't have those numbers from 2005 at hand, but the numbers I gave earlier about our historical success were measured between 1981 and 2011. Those numbers are that, during that time, the energy used to produce canola dropped by 43% and the land use efficiency improved by 25%.

We're going to 40% going forward, but as of 2011 we had increased land efficiencies by 25%. During that same time, we saw a 71% decrease in greenhouse gas emissions in growing the crop.

I don't have the numbers lined up for that particular benchmark that you're talking about, but those are from the time period of 1981 to 2011.

•(1640)

Mr. Mark Warawa: You've had dramatic increases.

I was talking to the airline industry two weeks ago. They said that they are at a 50% reduction, I think, compared to 2005. Their argument is why are they paying the carbon tax when they've already reached that target and then some. They would like to be exempt.

In your presentation, Mr. White, you touched on taxes. You said, "Farmers would rather be incentivized to help the government achieve its climate change goals rather than be taxed." Which tax are you referring to?

Mr. Rick White: I'm referring to the carbon tax. My point is that we've done all this without intervention, incentives or being taxed by government to do the behaviour. This is the economics of growing crops. There's no money in emitting carbon. There's a natural economics at play there to drive our cropping in this direction.

I'm just speaking quite frankly from farmers.... There are two ways of getting at incenting behaviour. Right now, our track record is

good. Our future looks bright. You can use a tax or you can use incentives. You can use either the carrot which are incentives, or the stick which is the tax.

At the end of the day, we're looking at what behaviour needs to be changed here. With regard to the carbon tax, what we're saying is that it can work, but if it's implemented, what we really have to watch for is to make sure that our farmers are not rendered uncompetitive in the international market.

Can it be done? Probably by smarter people than me, but at the same time, we need to make sure that our growers are not taxed, because there are no other carbon taxes in the world in which we compete. Our first and foremost ask is to make sure that whatever happens going forward on climate change farmers are not rendered uncompetitive in the global market, because 90% of what we grow is exported.

Mr. Mark Warawa: I have how long, Chair?

The Chair: You have about 30 seconds.

Mr. Mark Warawa: I'm sorry that the government is hitting you with the stick when you've already achieved the goal.

Mr. Innes, you've said that you don't want to move elsewhere. Industry is moving elsewhere. What would be the cause for farmers to be considering moving out of Canada?

Mr. Brian Innes: In my remarks, I was referring to our processing plants. In the canola industry, we have 14 processing plants across the country. For those processing plants to continue to be in Canada, they need to be competitive. Otherwise, the processing plants to turn canola seed into oil and meal will be built elsewhere, in places such as China, India, Pakistan or the United Arab Emirates.

When we think about encouraging value-added processing in Canada, what I was referring to is that our processing facilities need to have a competitive environment. If I could, Mr. Chair, I'll just briefly come back to the comment about the capital cost allowance. That is a major positive thing for our sector to encourage investment in that value-added processing that makes us competitive with the U.S., which has been a problem. When we think about measures to help our sector be competitive, the capital cost allowance is one that is very helpful for value-added processing.

The Chair: Thank you.

Now we're going to Mr. Fisher.

Mr. Darren Fisher (Dartmouth—Cole Harbour, Lib.): Thank you, Mr. Chair.

Thank you very much, gentlemen, for being here and for your expertise.

I want to congratulate the canola industry on its successes.

We often think about the climate as our generation's biggest concern, but too often we forget about the fact that it's potentially our biggest opportunity. You're seeing that, and that's great. Your goal is to decrease GHGs, use less fuel and increase production. You've shown that you've cut GHGs, increased your yield and increased your profits. It's astounding. I just saw on the Internet that there were 15 million tonnes for 2013 and there will be 26 million tonnes by 2026. I think I saw that on the Internet, or perhaps, Brian, you said it.

You were presented with a problem. You're providing the solution and you're reaping the economic benefits as far as your industry goes. I think that's fantastic.

I want to talk a bit about innovation. We talked about the fall economic statement and the government's funding of innovation. You've talked about some cool things like the no-till and the precision agriculture. What else is out there?

You've suggested, Brian, that with the fall economic statement, the capital cost allowance, you can innovate even more. Tell me more about some of the things you can do.

You could chime in as well, if you like, Rick.

• (1645)

Mr. Brian Innes: You're right. It's a really exciting world when it comes to what we can do with plants to make them be more productive and use nutrients more efficiently.

I'll give you an example. We've talked about using fertilizer most effectively. When we grow plants, we use nitrogen, which helps plants grow all of the green leaf and architecture required to make seeds that make oil and protein. When we look at nitrogen, traditionally we get that from nitrogen fertilizer. Some of the research is really exciting and would have a major impact on the amount of energy required to grow a crop. For example, instead of using that nitrogen, which is made in a factory, we would be using the bacteria around the root, the root microbiome, in order to take nitrogen from the air—which is about 78% of the air—and turn that into a form of nitrogen that the plant can use.

When we think about innovation, the plants and the technologies that we have in plant breeding and our ability to understand bacteria and how they can turn nitrogen from the air into nitrogen the plant can use, it's a really exciting time for plant agriculture. That's just one example.

Mr. Rick White: Yes, and maybe I can give you something completely different, because it excites me a little as a farmer as well. I'm very intrigued about the future of robotics and autonomous machinery, which are already out there to some degree.

For example, for a sprayer—yes, we do need to use chemical control of weeds—I see the day when these robotics will be so precise that there will be a dose for each and every single weed across that field. It will get the exact product needed on that exact plant, instead of this kind of broadcasting approach that we take today.

We're moving in that direction of being much more precise. That could cut down on even more of the pesticides and herbicides we use, which are expensive. Farmers only use them as they need them. I can see the day when the sprayer goes over, takes a picture of the weed, identifies it and sprays it with exactly what it needs and nothing more.

Mr. Darren Fisher: Canola is a Canadian success story. Ninety per cent of the world's supply comes from Canada. You've gone from 15 million in 2013 and you're going to go to 26 million in 2026. How high can you go? How much more canola can we produce for the world market out of Canada? Does this become one of the biggest industries in Canada?

Mr. Brian Innes: I'll start, and Rick, if you want to, you can add to it.

When we set our targets, we're looking at how much we can grow with the technology we have and with the land that we have in Canada. Our targets to 2025 take into account that it's not feasible for us to put more land into canola production. We have to increase productivity on every acre. The target we've set is 52 bushels. How high can we go? Right now, we know that we could produce 100 bushels per acre, not just 52 which is our target, but 100 bushels per acre under the right conditions.

I referenced the research we're sponsoring right now that shows how we can quadruple the number of seeds that are produced by a plant by just changing a starch-branching enzyme. We don't think that we're going to grow canola on more acres—

A voice: More per acre.

Mr. Brian Innes: —but as for the limit to how much we can grow, I think we're still discovering it. We really believe that we can achieve 52 bushels per acre by 2025, and in canola we're already Canada's number one source of income on the farm and a major source of export. We think there's a lot of room to grow through more innovation and moving that innovation from the science lab to the farmer's field.

Mr. Darren Fisher: How prolific is canola in cosmetics, toothpastes, sunscreens and industrial lubricants? Is that just a small segment of the usage? Is that something in which you could see growth in the future?

Mr. Brian Innes: I'll speak briefly, and maybe you will want to add something, Rick.

Canola is one of the healthiest oils. We've been sending all of our canola oil either to the food market or to biodiesel. We haven't explored opportunities like that, primarily because it's a relatively new crop and we can sell everything we produce, either to food or biofuel. It's a very versatile and healthy oil for those markets, and as a consequence, we haven't had to explore other markets for it.

• (1650)

Mr. Rick White: The world is a very hungry place, and it's getting bigger on the food side, so we're very much focused on food and fuel. We're there to feed the world, and the world is getting larger and hungrier.

Mr. Darren Fisher: Thank you.

The Chair: Thanks.

Now we'll go back to Mr. Warawa.

Mr. Mark Warawa: Mr. Innes, our time was cut short.

I have a question on the research and cutting-edge science that goes from the lab to the farmer. Would you suggest that Canada is the world leader, or one of the world leaders, in farming and canola?

Mr. Brian Innes: When it comes to canola, we are a world leader. We produce roughly 70% of all canola traded in the world. We're a big exporter of it. As Rick outlined, our farmers are some of the most efficient in the world, and some of the most environmentally friendly, certainly when compared to farmers in other regions, whether they are in South America or Europe, as an example.

We believe we're a leading sector. We're not content to rest on our laurels. We recognize that our customers in Europe, the U.S. and Asia are demanding that we improve. We want to keep improving, but we believe we have a good record.

Mr. Mark Warawa: You said that 70% of global canola comes from Canada and 90% of what we produce is export. There are other countries that could grow canola using our technology, but right now we're a world leader and a world producer. Is that correct?

Mr. Brian Innes: That's correct.

Mr. Mark Warawa: You're talking about other countries, or companies relocating to a country where they do not have the cost.... Mr. White highlighted that the carbon tax is a concern. It is a stick, so to speak, instead of a carrot.

I'm from British Columbia. We have a carbon tax. It's going up \$5 a year. It's \$35 a tonne. Next year on April 1, it will go up to \$40 a tonne. Do you have any idea of what that is as a tax? Is it 5%, 10%, 15%? Do you have any idea?

Mr. Brian Innes: Do you want to take this, Rick?

Mr. Rick White: I don't really know.

Mr. Mark Warawa: I know the answer. I was just wondering. Most people don't know.

It's 112%, and on April 1, it will go to a little over 155%. It's a horrendous tax, one of the highest in the world, yet we're one of the cleanest in the world. That doesn't seem to make sense.

I think policies and taxes, when used appropriately.... There are industries that the government exempts in order to help them. Would you suggest that your industry could be considered to be exempt from a carbon tax?

Mr. Rick White: Yes. We think that on fuel in particular, farmers should be exempt. There may be other ways to exempt farmers, but those get very difficult to find. It's embodied in machinery. It's embodied everywhere.

What we're really asking is, if a carbon tax comes in, that farmers be rewarded for credit, for the good work they've done and the good work they will continue to do. Hopefully, that would help to mitigate it, but again, it all depends on the design. We want to be in the room when, or if, this gets down to detailing.

Mr. Mark Warawa: That's an excellent suggestion.

Mr. Godin.

[Translation]

Mr. Joël Godin: Thank you, Mr. Chair.

My comments are for you, Mr. White. In your statement, you mentioned that Canadian farmers have become world leaders in environmental performance, to our credit.

You also mentioned another point that I would like you to explain further. You said that, unfortunately, around the world today, some of the voices that are the loudest in support of climate change policies are also the loudest in opposing the plant and agronomic science that is helping farmers produce more with less.

Could you explain that to me? Is this a misunderstanding? I would like to understand this resistance. I'm not sure what people are really saying here.

[English]

Mr. Rick White: I put it down to differences in philosophy. There are some groups that are against corporate entities, multinationals. They are against big business. They are against many things, and it's usually philosophical, right? Those are the ones who would be demanding policies and changes in the climate, etc. I think we could all say we're all concerned about it. But when we have solutions like biotechnology and chemistry and other inventions, whether they are from big business or not, they tend to dismiss them as well.

To me, it's just a difference in philosophy. They are not looking at the results, in my view.

•(1655)

Mr. Ron Bonnett: If you wouldn't mind, I'll just comment on that.

I think it all boils down to public trust. One of the challenges we have now with social media is that misinformation can get spread very quickly. I'm co-chairing—

[Translation]

Mr. Joël Godin: I apologize for interrupting you, Mr. Bonnett.

My question is for both of you. Is this ignorance of the situation and the benefits? It's ignorance. If I interpret your reactions correctly, it's a lack of knowledge on the part of those people, isn't it?

[English]

Mr. Ron Bonnett: Yes. It is a misunderstanding. As I say, particularly with social media, I think it is so easy for somebody to post something and have everyone say, "Yeah, that's right", and just keep hitting the resend button without stopping and taking a look.

We're doing quite a bit of work now looking at education in the classroom, training for teachers, looking at universities and making sure they have a broader discussion on these issues rather than just going with that 15-word sentence that says this is all wrong. It's about raising awareness.

[Translation]

Mr. Joël Godin: Would it be better to invest in awareness programs instead of implementing a carbon tax?

[English]

The Chair: I will have to jump in here. We're at the end of the time.

We had published that this part of the meeting would only go until five o'clock, so I'm going to give the last approximately three minutes to Ms. Dzerowicz. I will give you the one-minute signal. Then Mr. Stetski's not going to get his last questions. We will go in camera.

Ms. Julie Dzerowicz: Thank you, Mr. Chair.

Thank you for your excellent presentation. I'm sorry I only have three minutes and not six minutes, since I do have a lot of questions. I have a whole bunch of questions, but I'm going to follow on from Mr. Warawa's comments.

There are 181 countries that have signed on to the Paris Agreement. I would be very surprised if none of them actually end up having some sort of carbon pricing or a price on pollution that is going to be impacting the farmers. You're saying that, to your knowledge, there's none of that in place right now.

That question is for you, Mr. White, or you, Mr. Bonnett.

Mr. Ron Bonnett: I believe Australia is working on something. It's a type of credit program.

The reason our staff person is not here today is that he's in Poland at the climate conference. The World Farmers' Organisation has engaged a number of producer groups from around the world to take a look at how carbon is dealt with. They are not only looking at getting credit for carbon sequestration activities, but more importantly in some countries, it's how they mitigate some of the impacts that they are already feeling on climate change.

There is some communication taking place between farm groups now at the international level on taking a look at what could be done.

Another country I know that's really looking at the issue is New Zealand.

So there are some examples of different approaches to deal with the climate change issue.

Mr. Rick White: My comments were specific to canola and our competitors, which is soybeans, globally. When we look at that, we don't see any carbon taxes from South American or the U.S. soybeans, which are huge competitors for canola, so that's where my comments were focused. That's what makes us competitive or not against those competitors in the global market.

Ms. Julie Dzerowicz: My only other comment is that I know, for the price on pollution we have put on in those provinces that don't have their own system in place, there is a special category for rural Canada. My understanding is that it will accommodate the fuel costs, which is one of the key things you had mentioned.

I do want to say that is part of the current game plan. I think we're still working out the details. I'm fairly certain our department will be in touch with rural Canada to make sure it gets input on how we can be helpful.

Mr. Ron Bonnett: On the exemptions that were granted, Rick mentioned farm fuels. Natural gas for greenhouses was exempted. We do have a concern that some of the fuels for heating livestock buildings, such as propane and natural gas, weren't. We want to have a discussion to make sure that a tax like that doesn't put us in a non-competitive position. We're pleased to see the exemptions that were granted. However, they didn't quite cover all of agriculture.

• (1700)

Ms. Julie Dzerowicz: I think I'm over. Thank you.

The Chair: That takes us to the end of the session.

Thank you to all three of you gentlemen for being with us today. We've had a good discussion. I'm sure we'll find some information that will make its way into our report.

I'm now going to suspend as we clear the room for our in camera piece.

[Proceedings continue in camera]

Published under the authority of the Speaker of
the House of Commons

SPEAKER'S PERMISSION

The proceedings of the House of Commons and its Committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its Committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the House of Commons website at the following address: <http://www.ourcommons.ca>

Publié en conformité de l'autorité
du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Les délibérations de la Chambre des communes et de ses comités sont mises à la disposition du public pour mieux le renseigner. La Chambre conserve néanmoins son privilège parlementaire de contrôler la publication et la diffusion des délibérations et elle possède tous les droits d'auteur sur celles-ci.

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la *Loi sur le droit d'auteur*. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la *Loi sur le droit d'auteur*.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web de la Chambre des communes à l'adresse suivante : <http://www.noscommunes.ca>