



Canadian
Horticultural
Council

Conseil
canadien de
l'horticulture

The voice of **Canadian fruit and vegetable growers**

Standing Senate Committee on Agriculture and Forestry

The potential impact of the effects of climate change on the agriculture, agri-food and forestry sectors

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Good evening,

Chairman and committee members, thank you for the opportunity to appear today to discuss the impacts of climate change on Canada's horticultural sector.

Introduction

1. The Canadian Horticultural Council, or CHC, advocates at the national level on behalf of fruit and vegetable growers across Canada, and we have been doing so for almost 100 years.
2. We are one of Canada's largest agri-food sectors, as we generate over \$11.4 billion in real GDP out of \$4.7 billion in annual direct farm cash receipts.
3. Climate change is a global challenge that requires action on the part of governments, industries, businesses, communities, and individuals alike. However, horticulture, by nature, is subject to shifts in the environment and to weather, which makes our growers especially sensitive to issues like climate change.
4. Our growers' ability to produce safe, affordable food also affects the food security of Canadians across the country.
5. Today, we would like to provide an overview of climate change as it impacts horticulture, and highlight challenges and opportunities for various types of crop production.

Adaptability and resilience measures in the Canadian horticultural sector

6. Our sector is always looking for ways to address the issue of climate change.
7. Many consequences of climate change can be seen across our sector. For example, our growers are concerned with unpredictable and changing weather patterns, more frequent and more severe droughts, increased exposure to invasive pests, plant diseases that are costly to manage, and expensive renewable energy alternatives.
8. Because of these many issues, our sector often leans on research and innovation to ensure the sustainability of our environment and the safety of the food we produce. For example, grape growers now use wind machines to reduce the risk of frost and extend the growing season, and strawberry growers use irrigation and floating row cover technology to prevent frost. GPS

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technology allows field vegetable producers to minimize the use of pesticides by spot spraying. Improvements in crop varieties, such as the “ever-bearing strawberry”, and enclosed “high tunnel” shelters allow for a six-month strawberry harvest instead of just 2-3 weeks.

9. Access to water and advanced irrigation technology will be critical for fruit and vegetable growers to be able to deal with more severe and more frequent extreme events.

Sustainability efforts of greenhouse growers

10. Because greenhouse farming occurs in a closed, protected environment, many of the risks associated with climate change, such as climate control and invasive pests, can be more easily managed.
11. In general, greenhouse growers are early adopters of innovation. Many greenhouses have installed state of the art equipment to help reduce crop inputs, such as water, fertilizers and fuel, which results in an overall reduction of greenhouse gas emissions.
12. As an example of efficiency, many greenhouse farmers capture food-grade carbon dioxide from their hot water boilers, allowing this combustion by-product to be delivered to the crop during periods of high photosynthetic activity resulting in enhanced production.

Economic impacts of carbon pricing on horticultural producers

In general terms:

13. For fruit and vegetable growers, carbon pricing means an increase in the cost of fertilizer, packaging, and transportation, not to mention the increased costs of various types of fuel.
14. In 2017 alone, current estimates show that carbon pricing is expected to cost greenhouse vegetable growers up to \$20 million in out-of-pocket payments. Rebates as outlined by the BC or Alberta governments will provide some relief to those provinces’ growers.
15. Growers compete in a global marketplace against jurisdictions that don’t have a carbon pricing mechanism in place. These costs cannot be passed on to the consumer while remaining competitive.
16. In this instance, carbon pricing effectively acts as a non-tariff barrier to trade.

Allow us to explain:

Concerns over competitiveness

17. Currently, the greenhouse vegetable sector is the only horticultural commodity that has a positive trade balance with the United States, with exports totalling \$826 million in 2015. However, this balance could easily be upset if Canadian greenhouse farmers cannot remain competitive with their U.S. counterparts.
18. President Trump has recently cut the Environmental Protection Agency’s budget by 31% and climate change is no longer a priority for the U.S. government.
19. The lack of national carbon pricing policy in the U.S. results in a competitive disadvantage for Canadian growers, who cannot increase the price of their produce to offset their increased cost of production. Retailers will simply buy cheaper produce from the U.S., Mexico, or elsewhere to satisfy consumer demand.

20. This economic reality results in what is commonly known as “carbon leakage”, where companies choose to move their operations to jurisdictions that don’t have carbon pricing policies.
21. These farm and greenhouse closures also mean lost job opportunities for Canadians.
22. Each new acre of greenhouse represents an investment of approximately \$1 million. With such a significant up-front investment, it is critical that Canada’s business climate be conducive to continued growth.
23. We do however, recognize that B.C. and Alberta have worked with growers and offered an 80% rebate for carbon taxes applied to commercial greenhouses. On the other hand, this now leads to business conditions that vary greatly from province to province.

Carbon taxes impact food security

24. Carbon taxes will also negatively impact food security within Canada because we will be increasingly reliant on imported fruit and vegetables.

The role of governments in meeting greenhouse gas emission reduction targets

25. During consultations on the government’s Next Agricultural Policy Framework, or NPF, we outlined how we need its support to advance the environmental sustainability of our sector and help fight climate change.
26. However, the Canadian horticultural sector needs access to a clear envelope of targeted funds, beyond that of the NPF, to satisfy the government’s climate change initiatives.
27. We believe this can be achieved by aligning programming between the NPF and the Pan-Canadian Framework on Clean Growth and Climate Change. The aligned programming would support:
 - a. Long-term research into low-carbon or renewable energy technologies.
 - b. Recognizing activities to reduce greenhouse gas emissions, such as past upgrades by early adopters within the structure of the carbon credits system.
 - c. Continued policy incentives to reward greenhouse gas reductions.
 - d. Access to funds for knowledge and technology translation and transfer.
 - e. Growing practices and technology that protect the sector against the impacts of climate change, for all farm sizes.
 - f. A strategy for responding and adapting to the presence of new and increased pest and disease pressures.
 - g. The development of new plant varieties that require fewer production inputs (such as varieties that require less light, or that reduce the need for pest control products).
 - h. A collaborative approach to building public trust in Canadian agriculture with regards to climate change.
28. Specific to carbon pricing, our sector needs continued federal leadership in harmonizing policies across the country and within Free Trade Agreements, and relief for growers until such harmonization is achieved. Furthermore, by deferring the rise in carbon prices, currently targeted to reach \$50/tonne by 2022, the government would help to ensure the continued competitiveness of Canadian horticulture, until similar policies are reflected by our trading partners. We are looking to the federal and provincial governments to work together to address these competitiveness issues with funds generated by Canada’s new carbon pricing policy.

Conclusion

29. Canadian growers invest and operate in a unique and competitive market, producing a highly perishable product. Costs associated with carbon pricing cannot be passed on to consumers. We are therefore becoming less and less competitive on the global scene.
30. Our sector has a strong record of environmental stewardship, innovation, and sustainability, and we are eager to work with the government to build on this progress.
31. Thank you for the opportunity to testify. We hope our comments have been informative and helpful.