

THE CANADIAN FARM BUSINESS AND GREENHOUSE GAS EMISSIONS

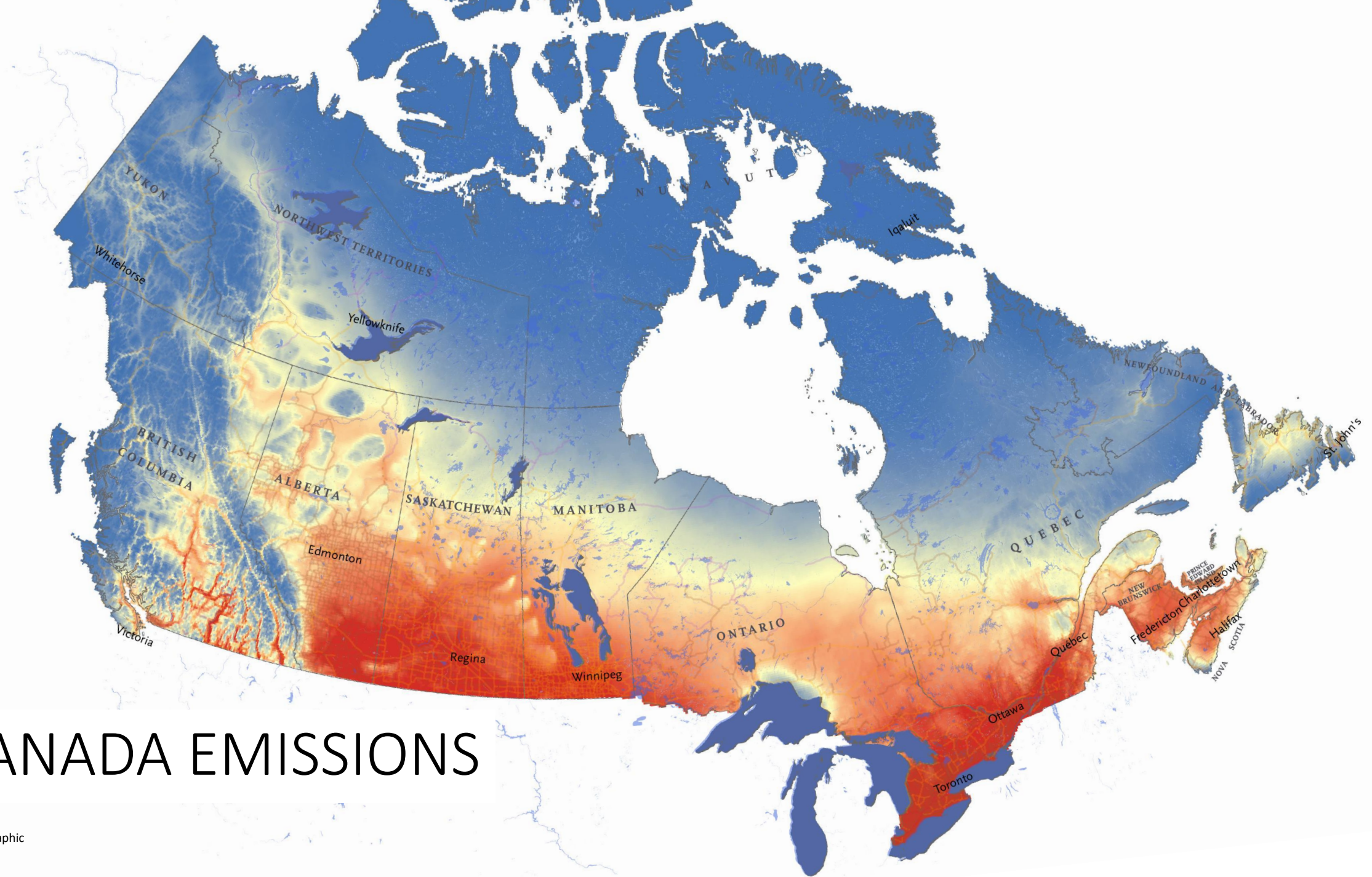
Presentation to the CFA 2021 Annual Meeting

Graham Gilchrist, P.Ag.

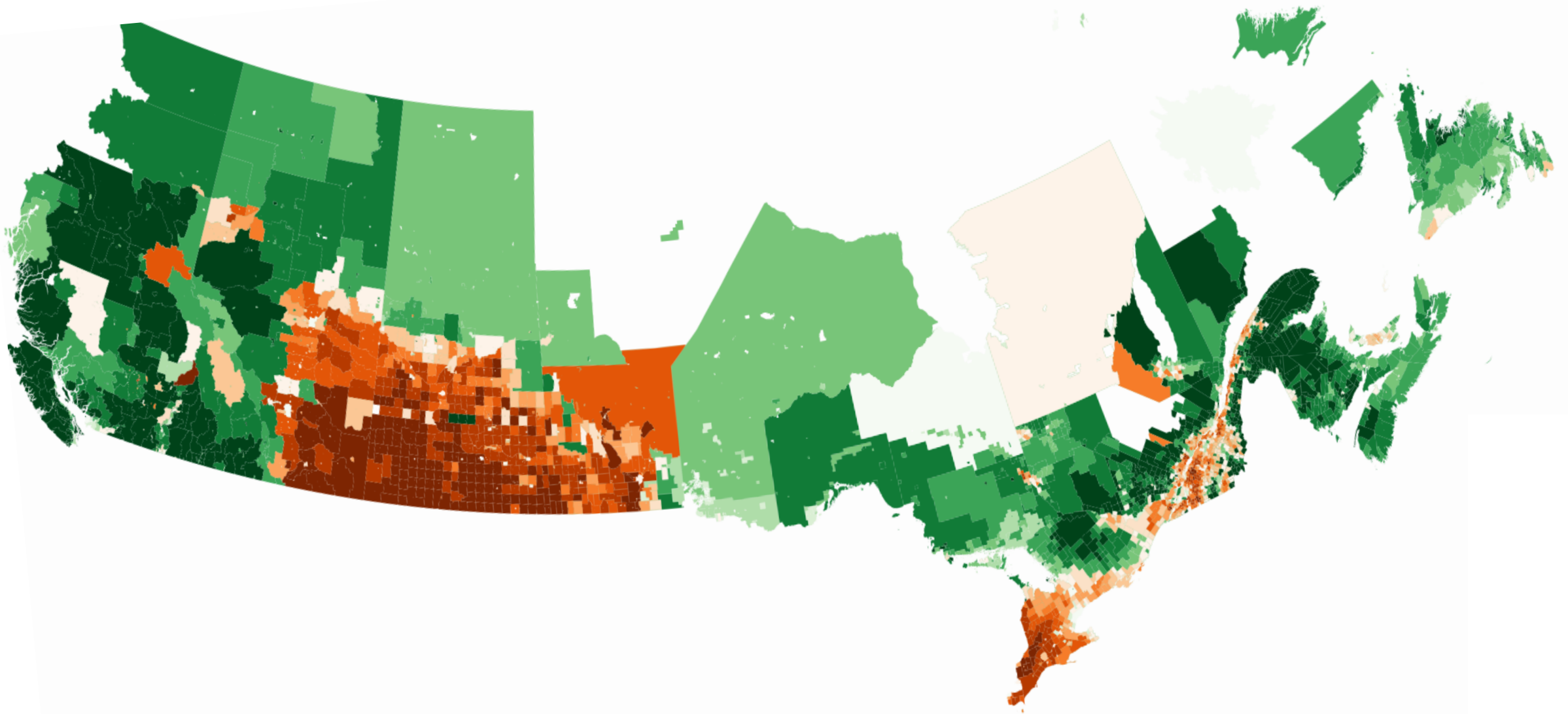


Yikes! Good thing the meteor just missed the visitor center!

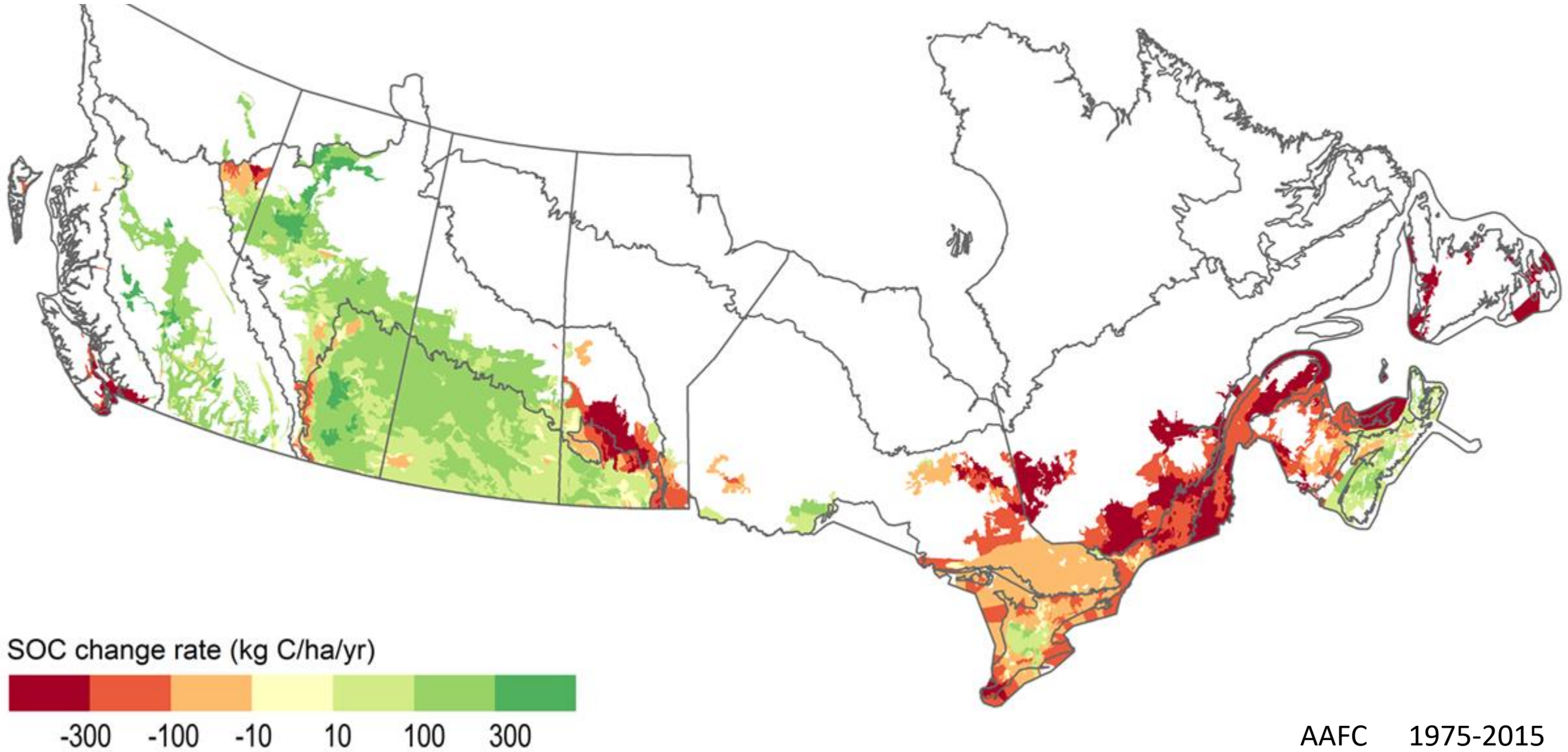
CANADA EMISSIONS



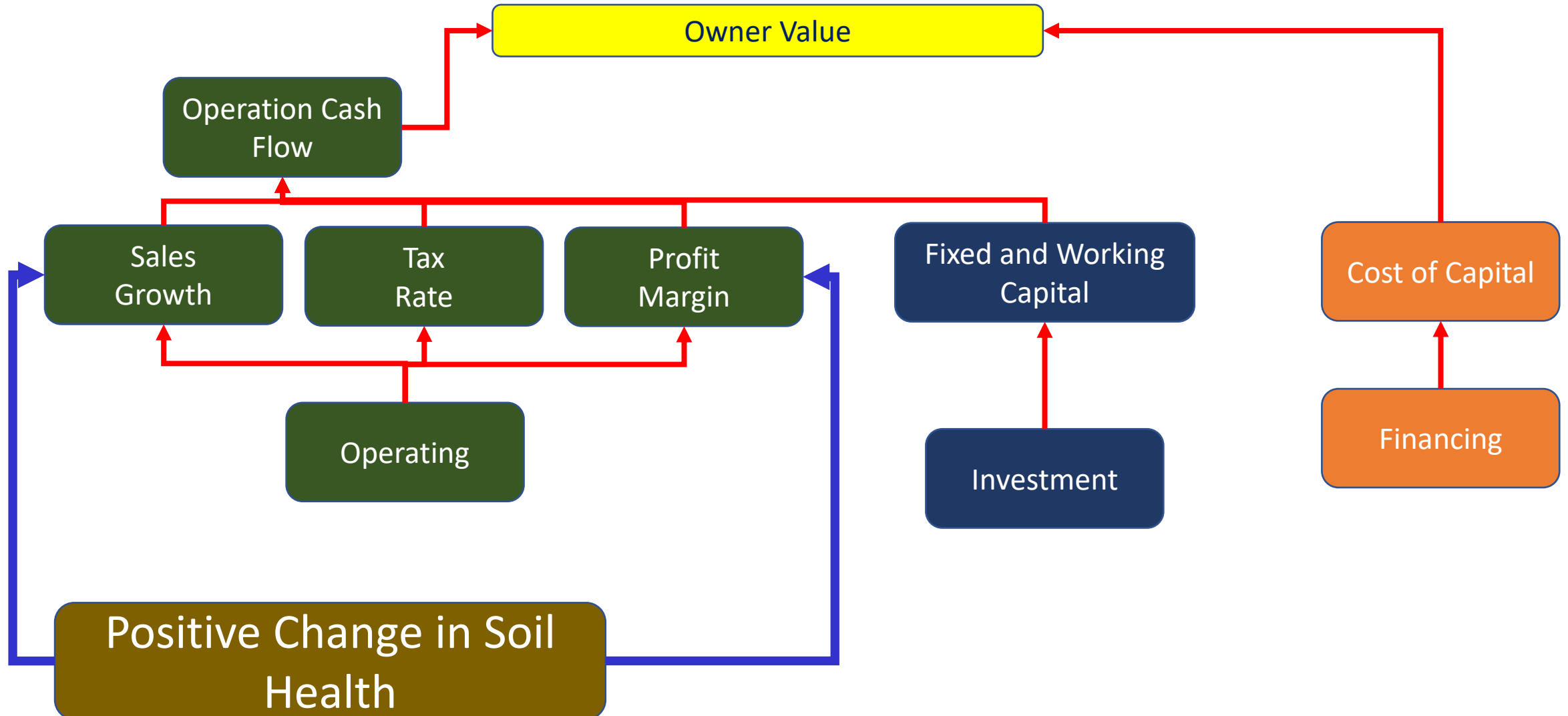
AGRICULTURE IN CANADA



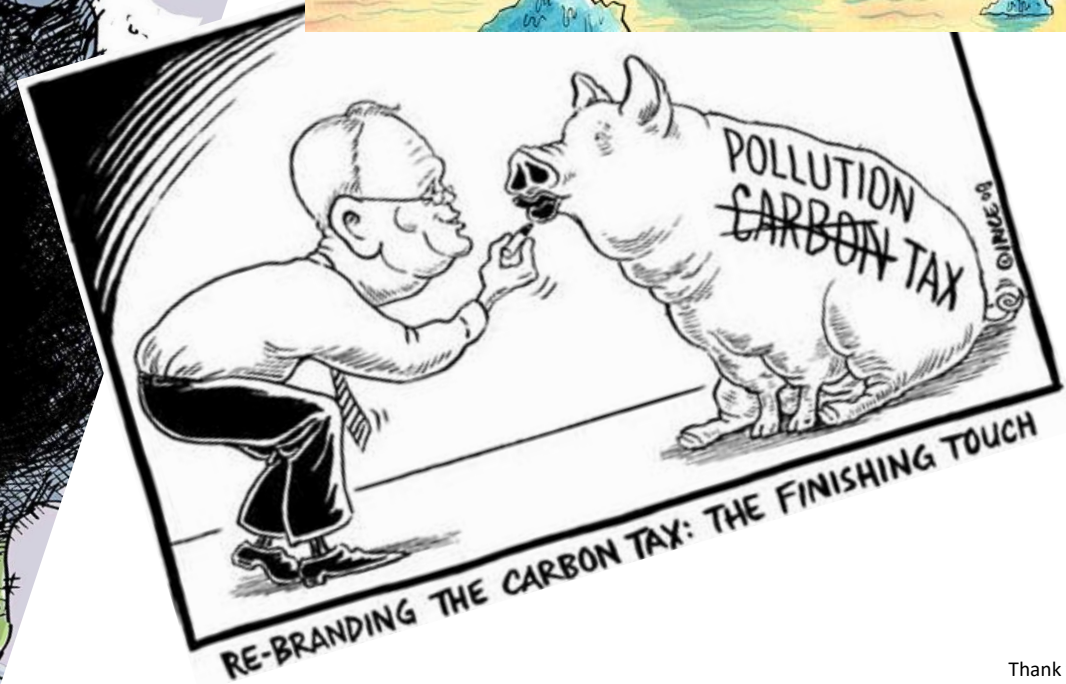
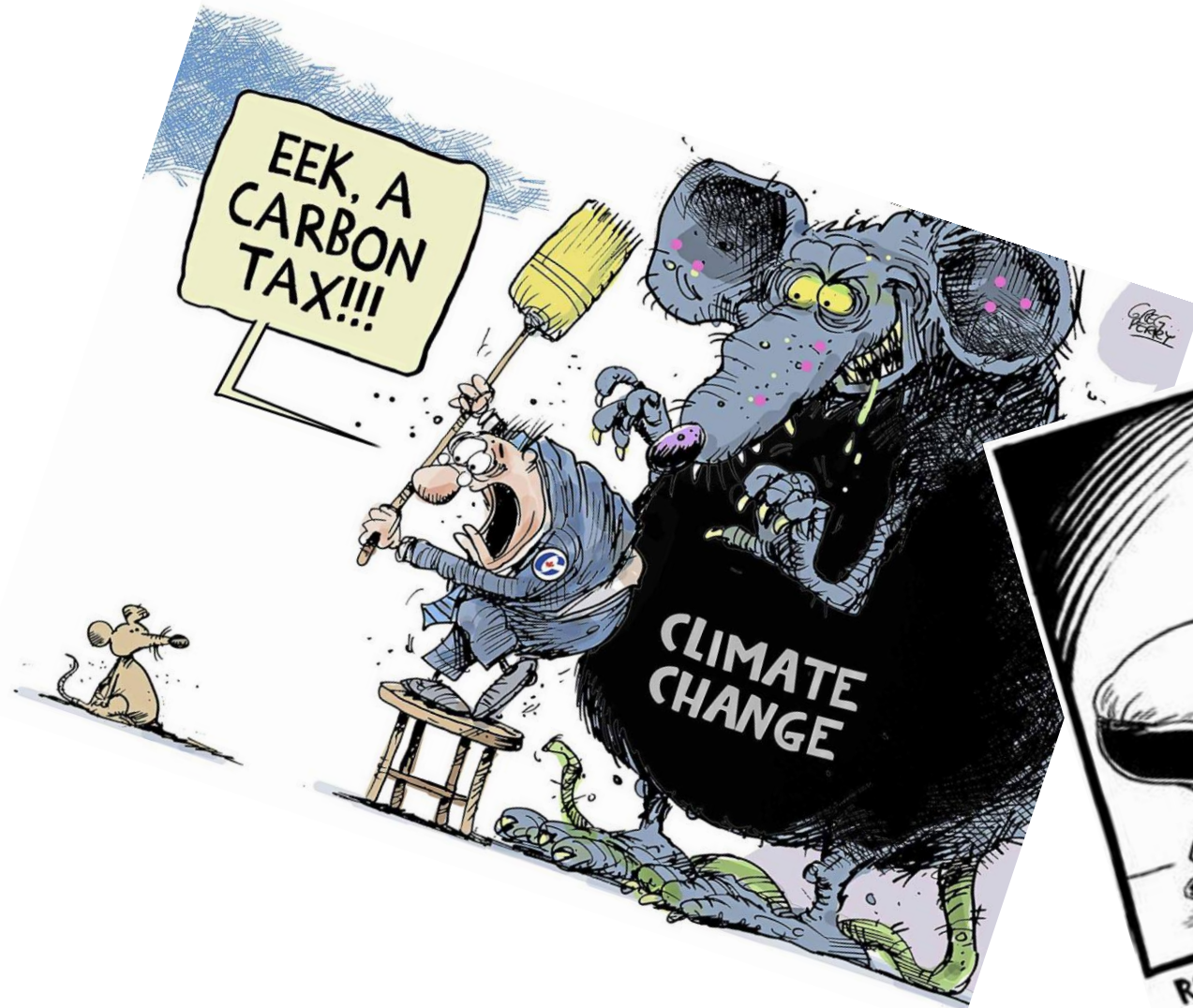
SOIL CHALLENGES



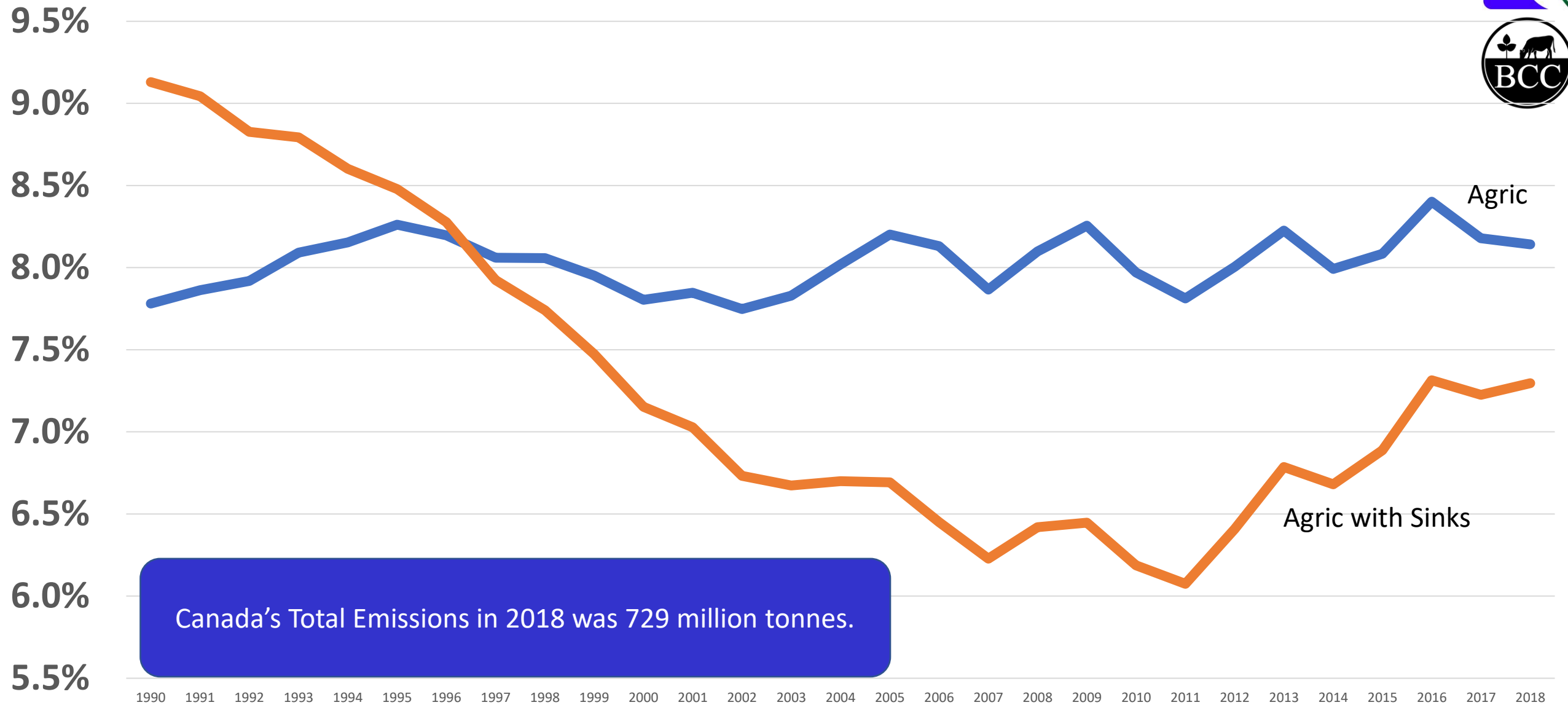
Soil Health is Business Health



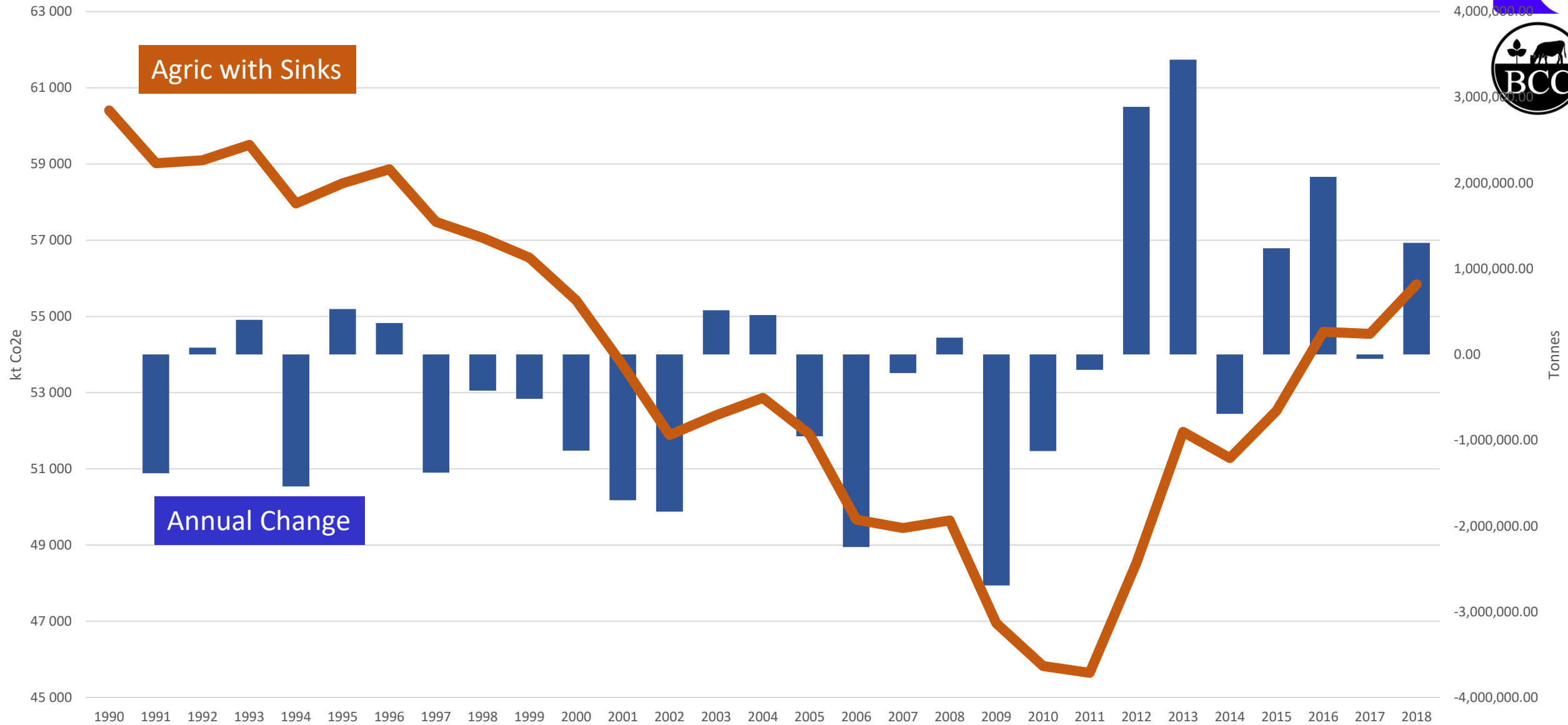
Debate



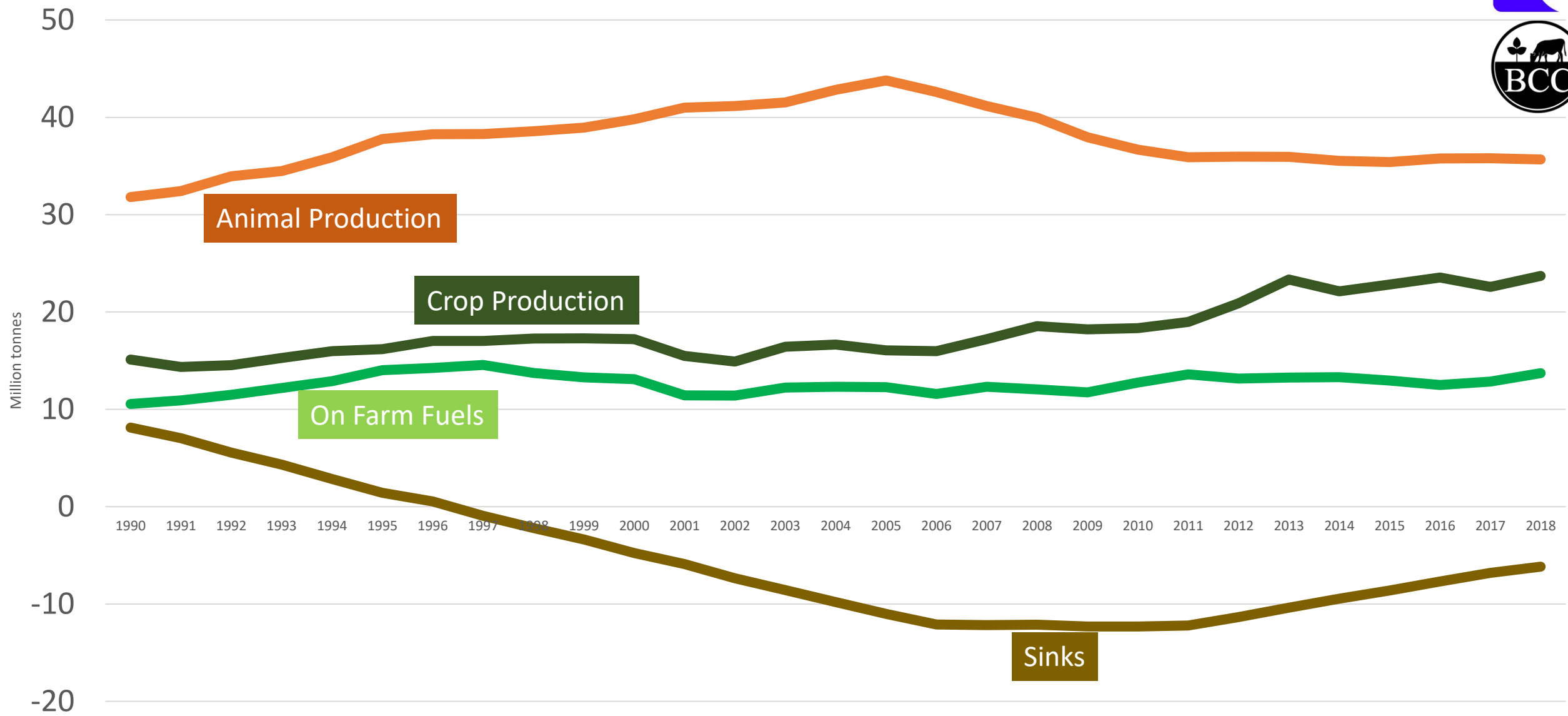
GHG Emissions Agriculture as a % of Canada's Total



Canada Agriculture Total Net Emissions

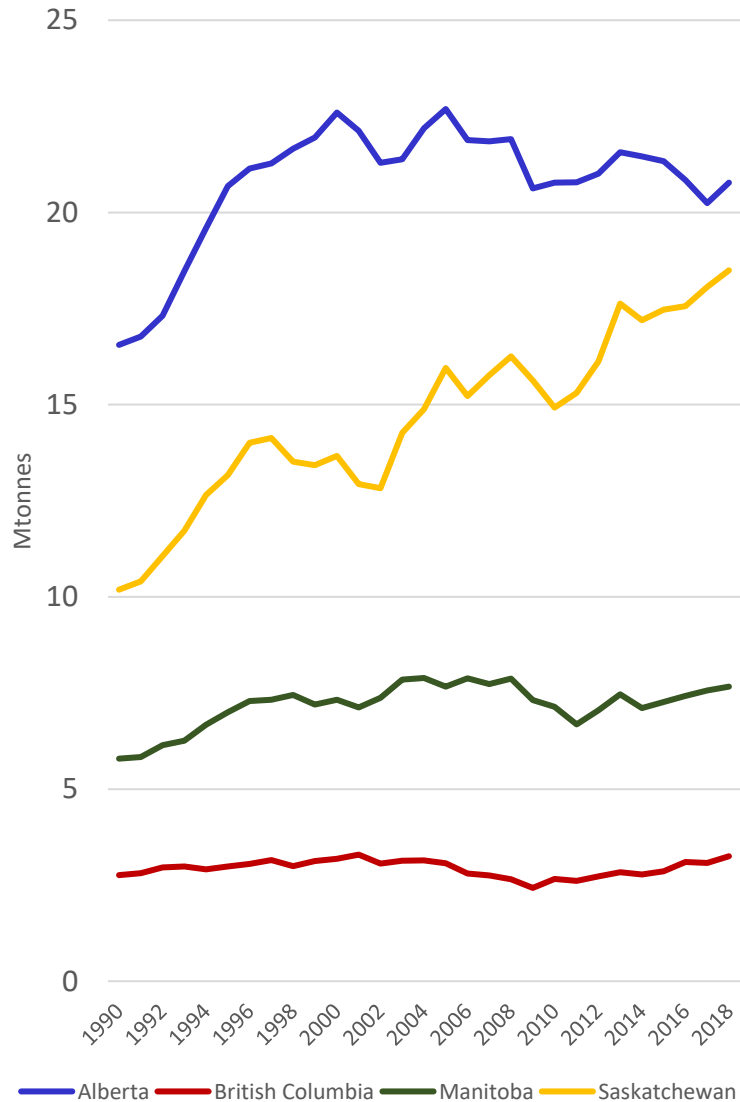


Canada Agriculture GHG Emissions



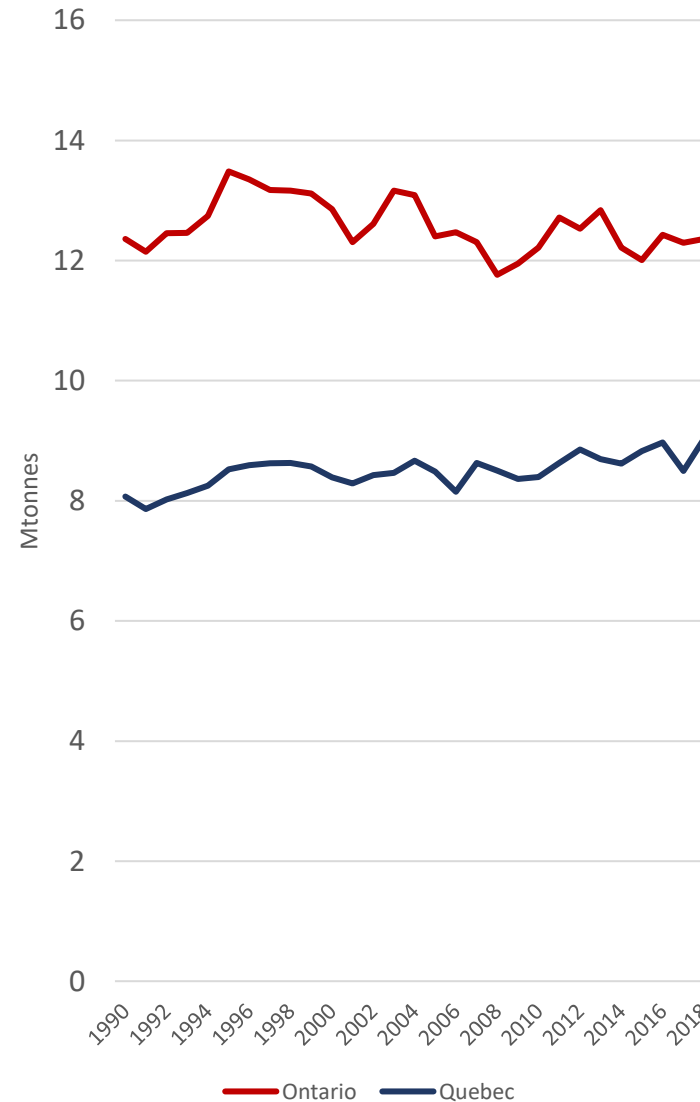
Western Canada

Agriculture GHG Emissions



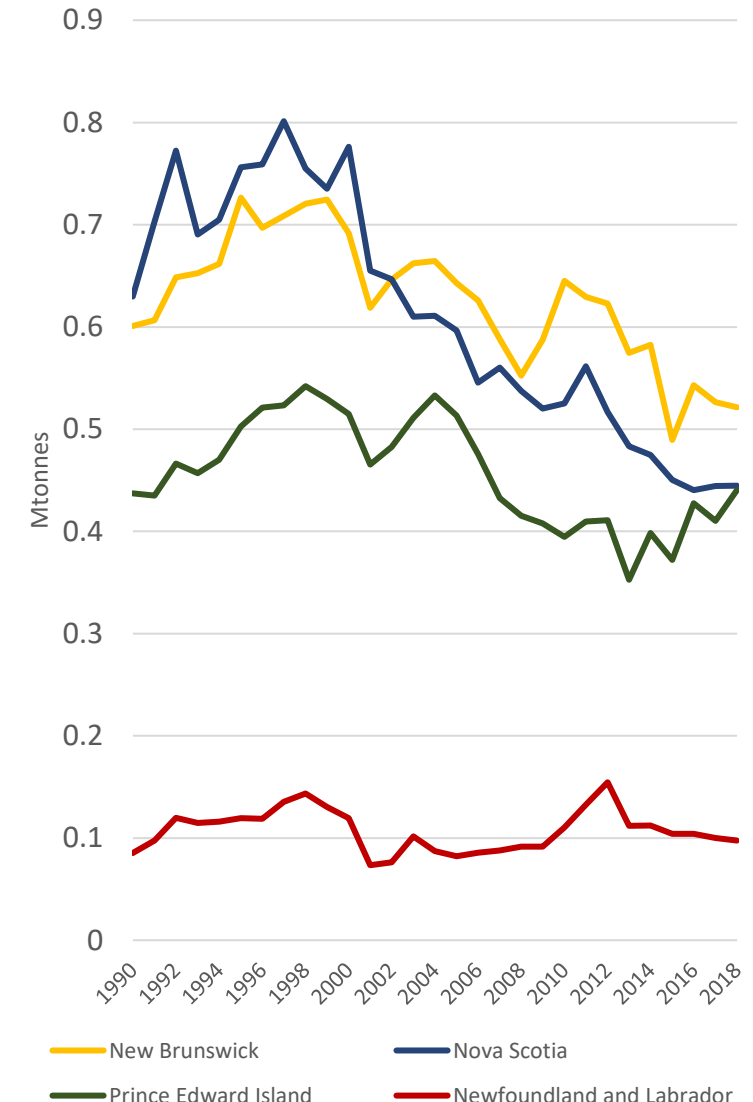
Middle Canada

Agriculture GHG Emissions

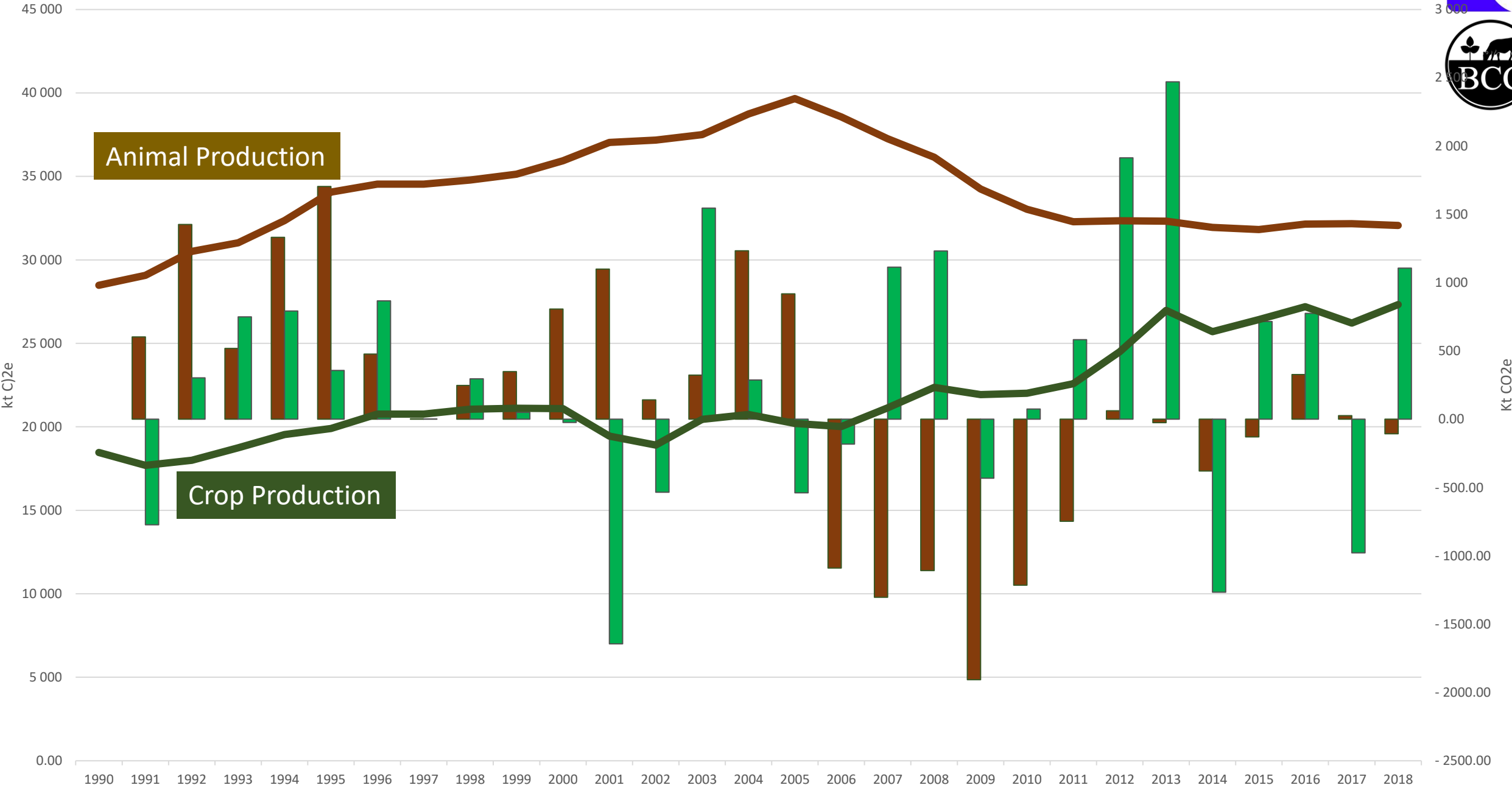
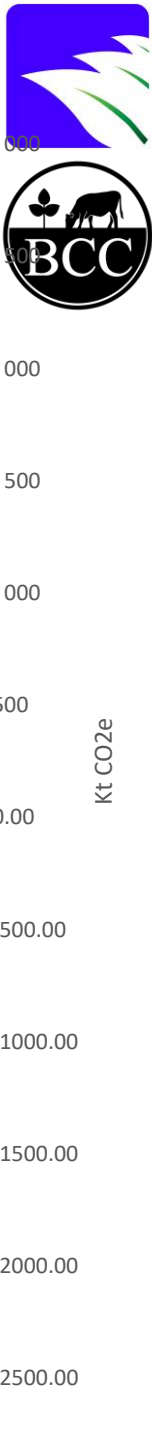


Maritimes

Agriculture GHG Emissions



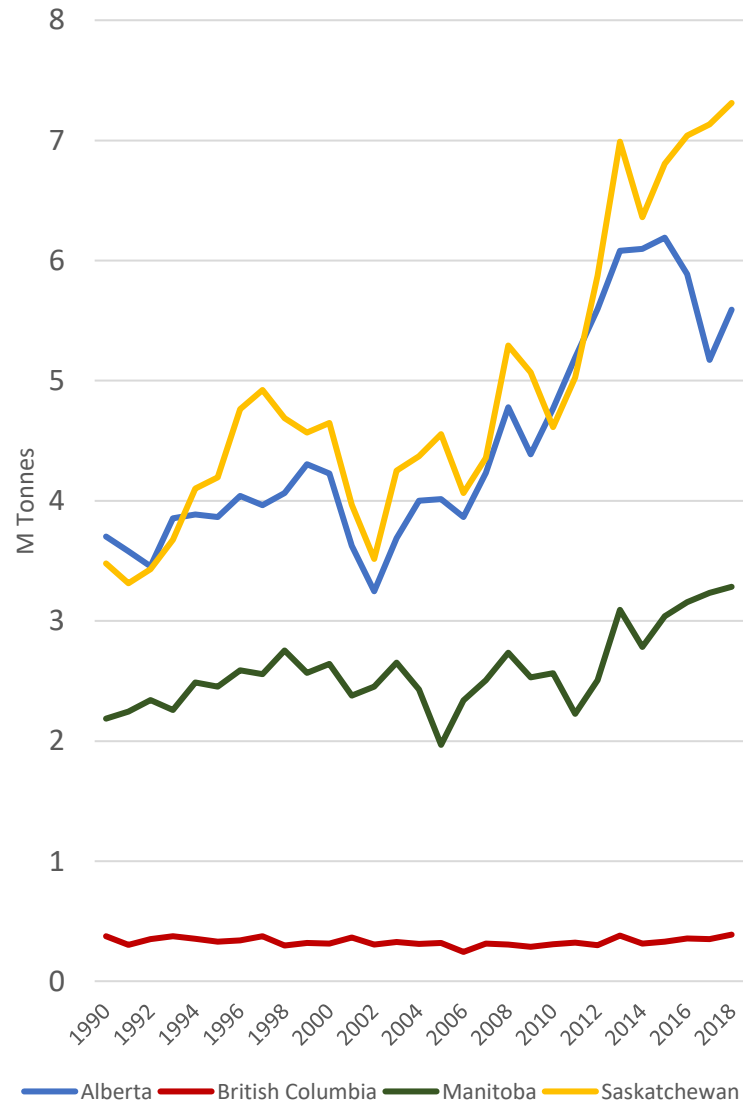
Canada Agriculture GHG Sources and Sinks 1990-2018 Production



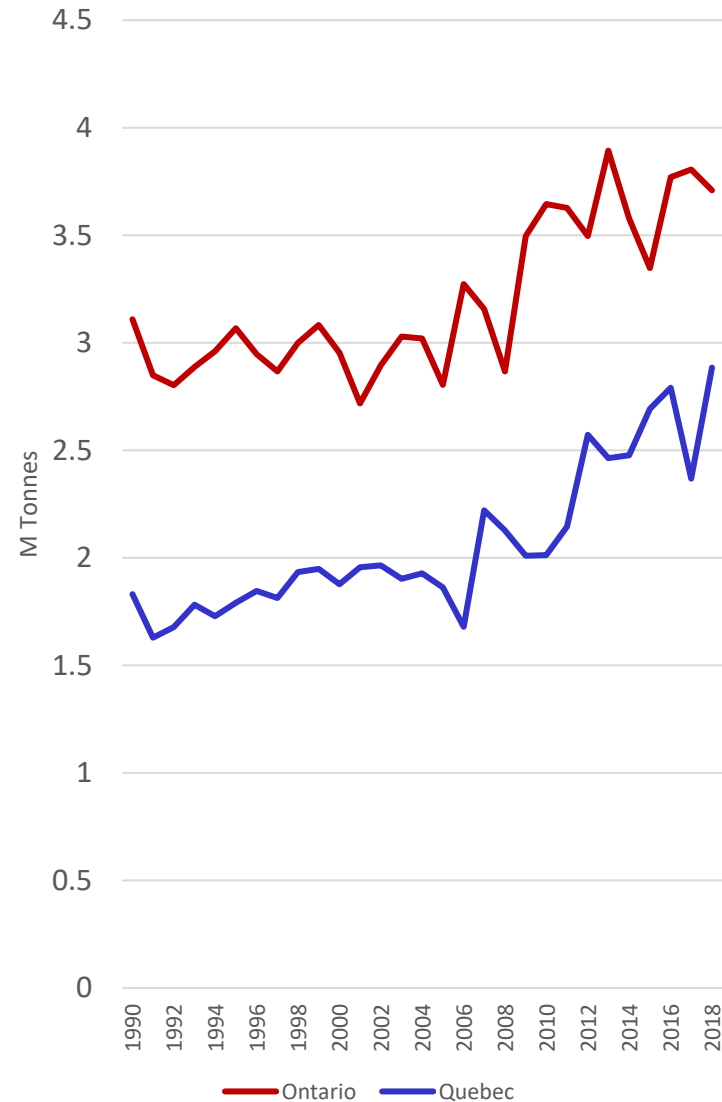
Cropping



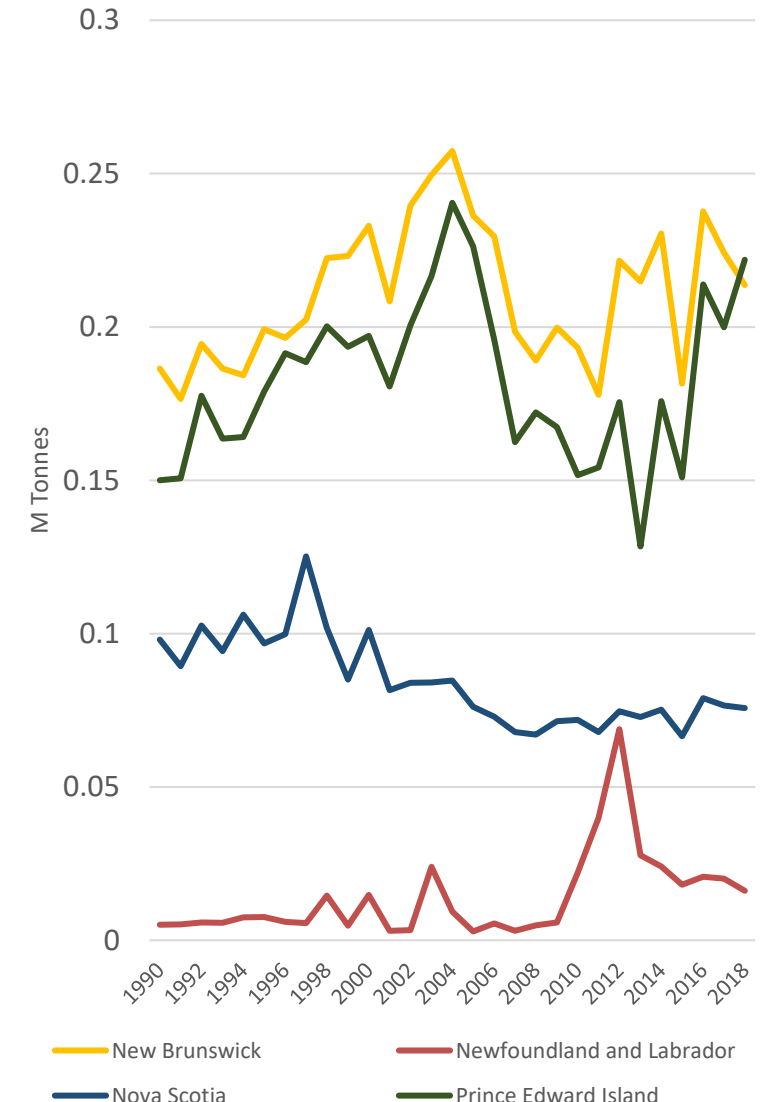
Western Canada Emissions Crop Production



Middle Canada Emissions Crop Production



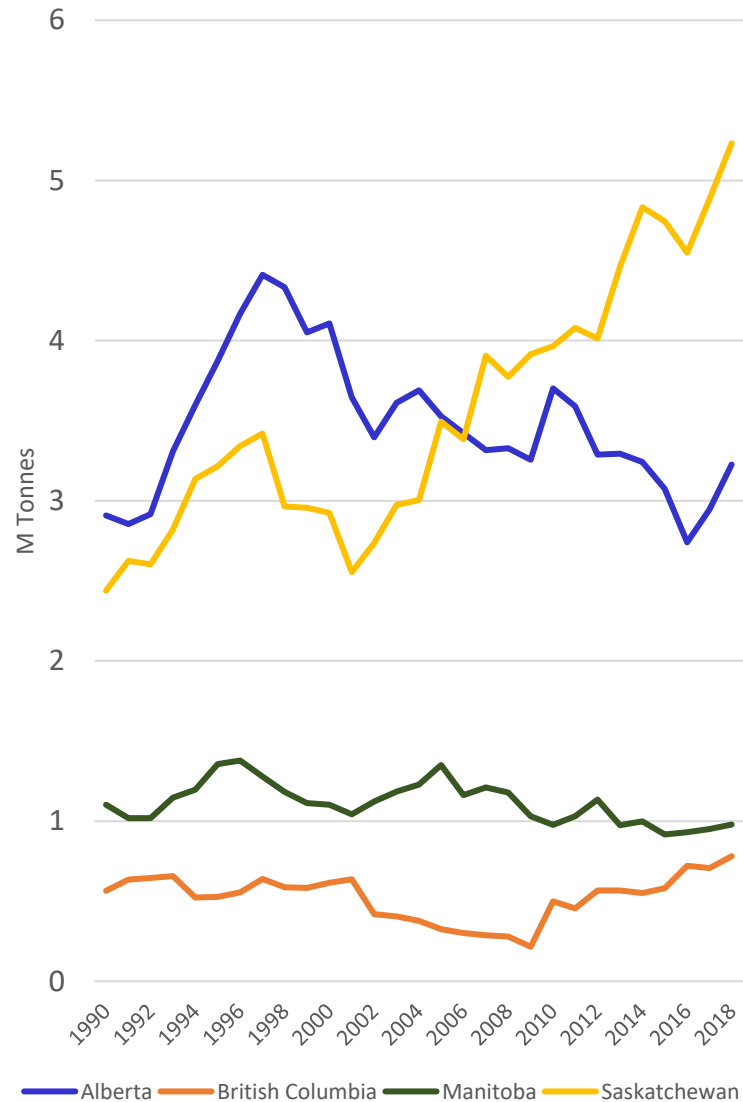
Maritimes Emissions Crop Production



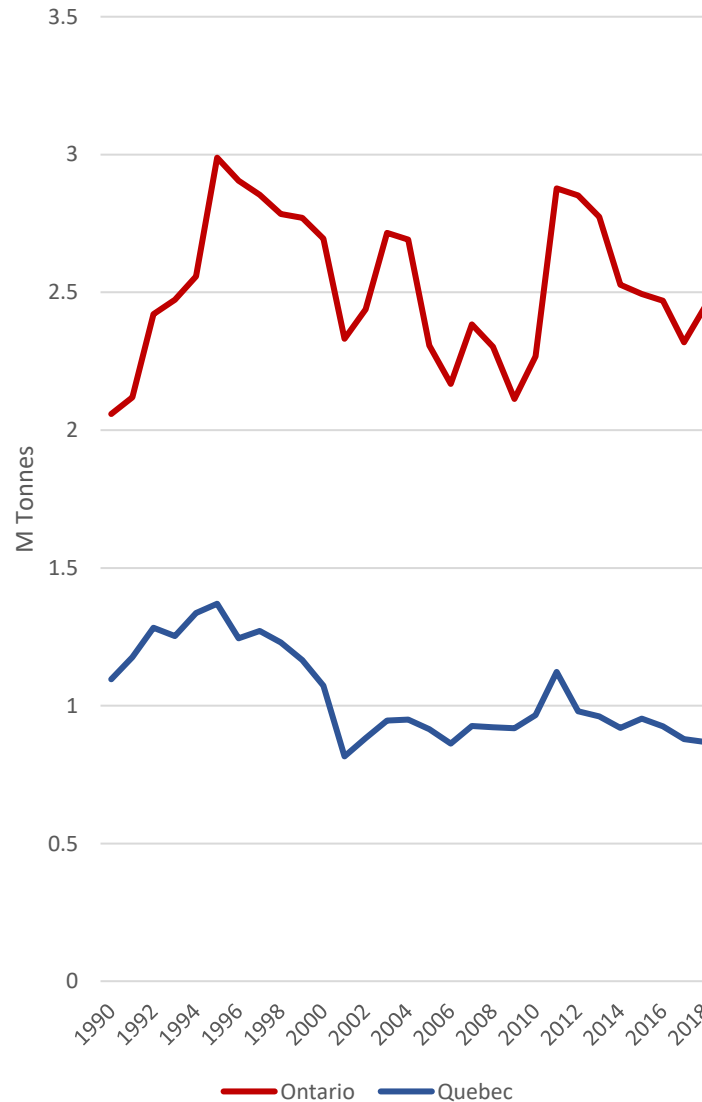
On Farm Stationary Fuel USE



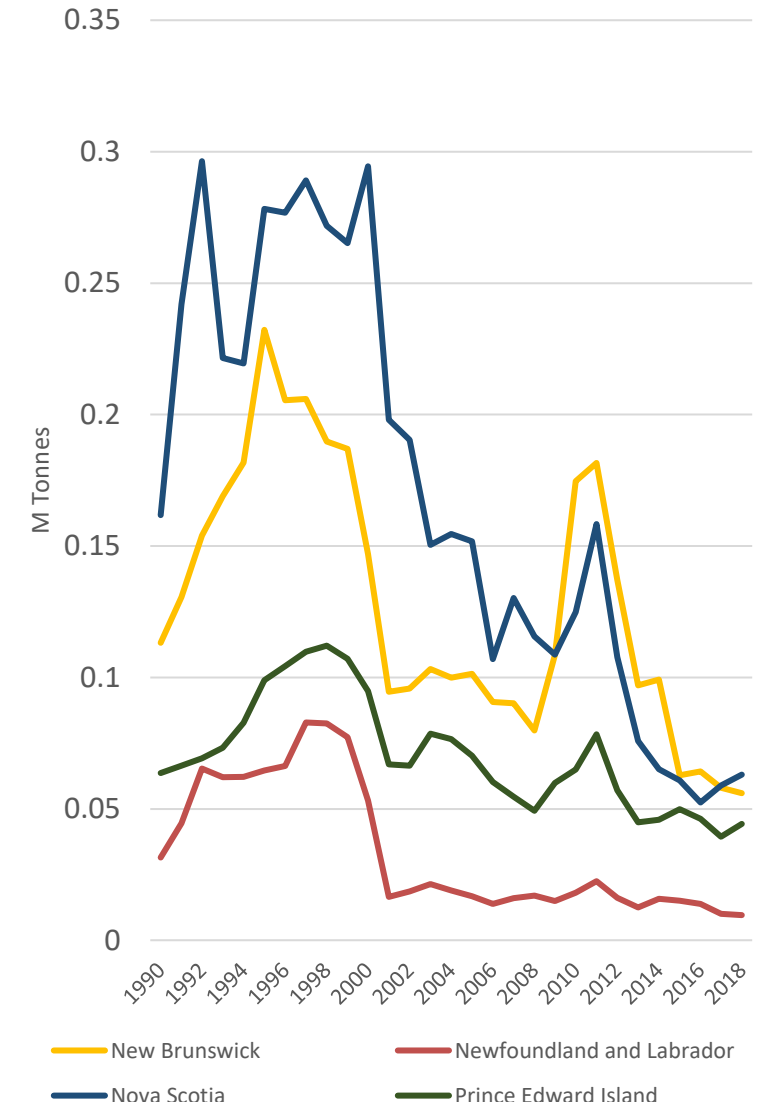
Western Canada On Farm Fuel Emissions



Middle Canada On Farm Fuel Emissions



Maritimes On Farm Fuel Emissions

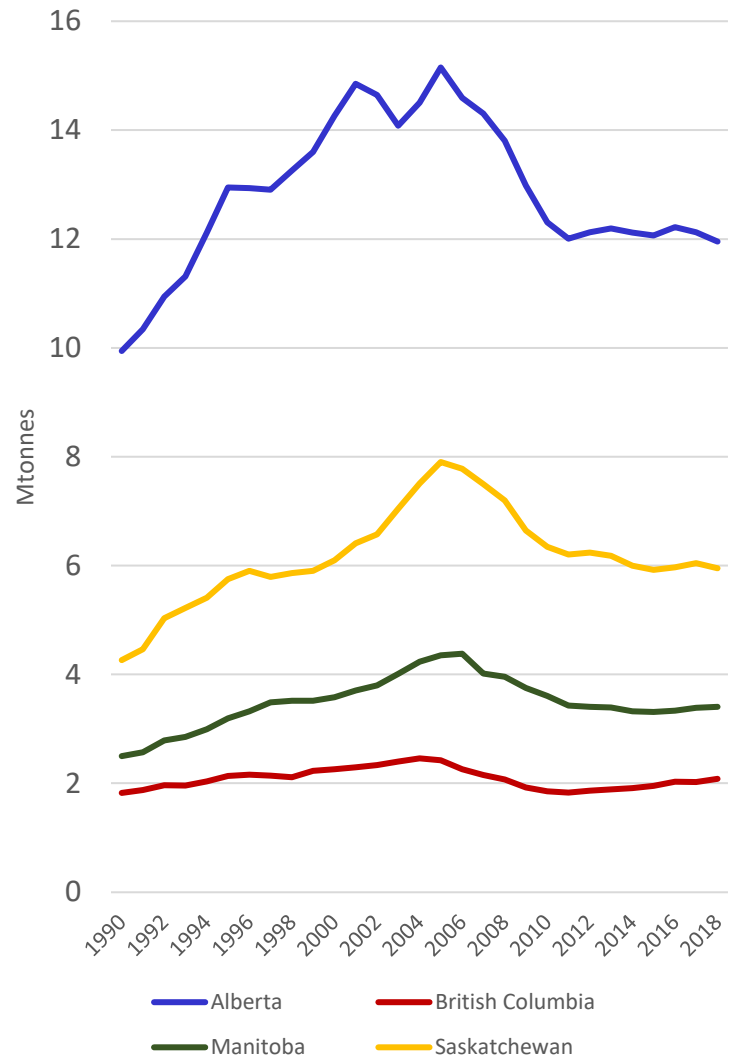


Farm Animals



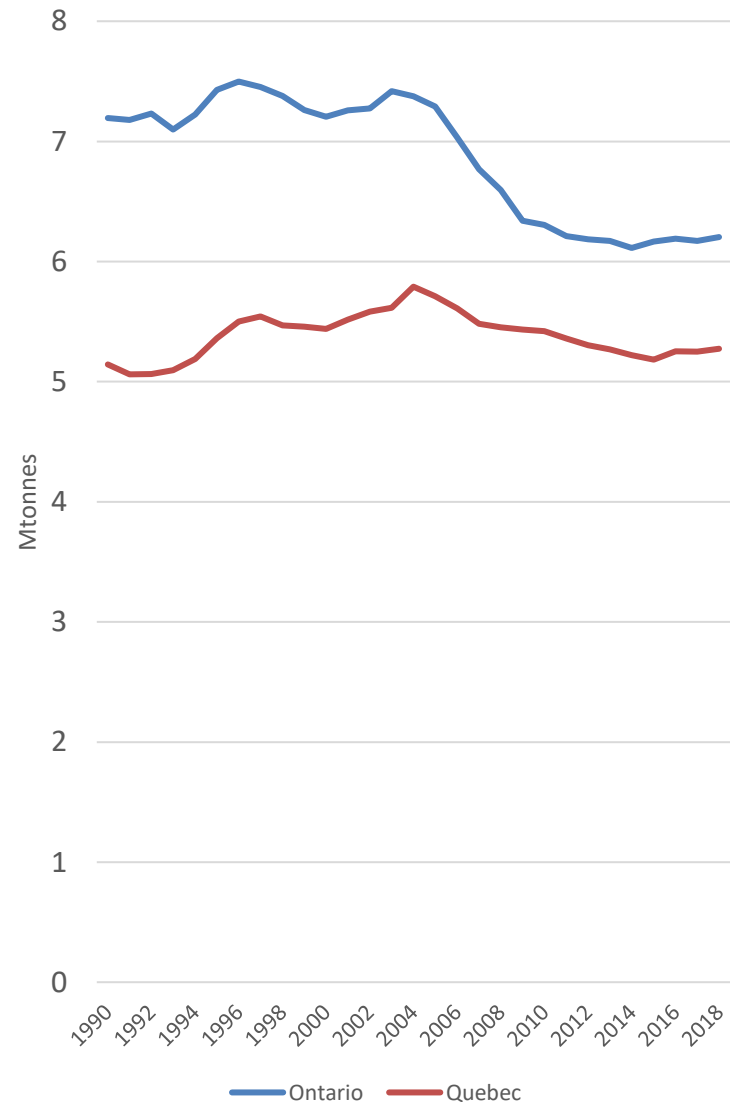
Western Canada

Emissions from Animal Production



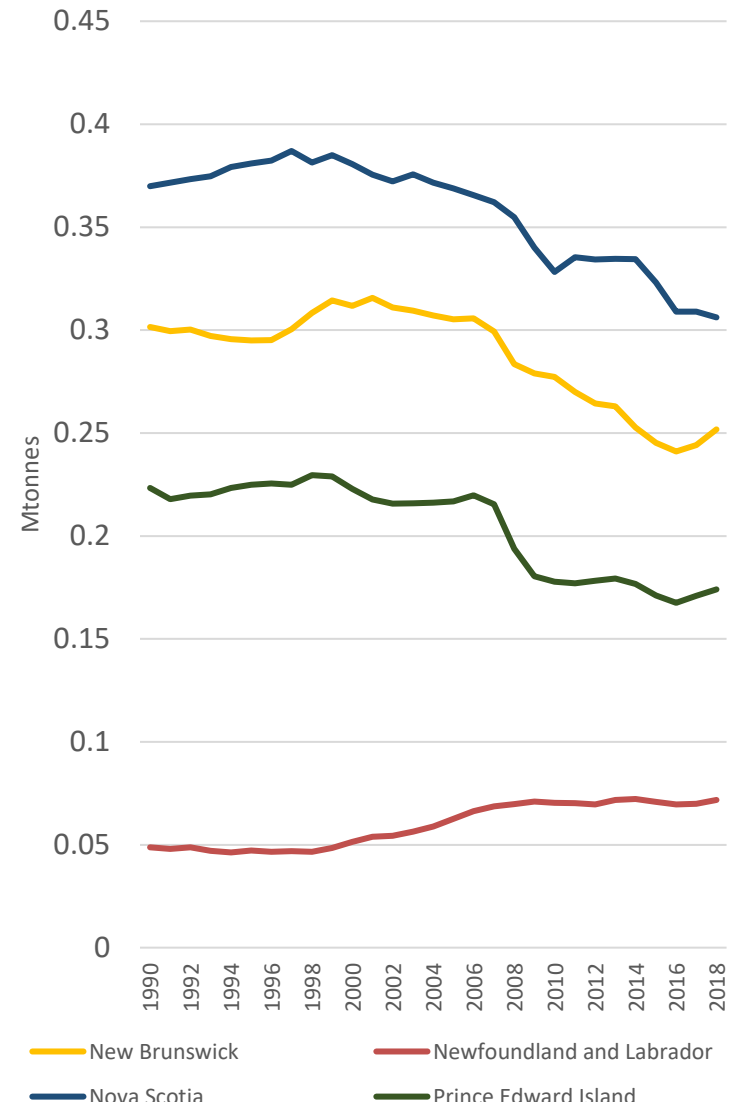
Middle Canada

Emissions from Animal Production

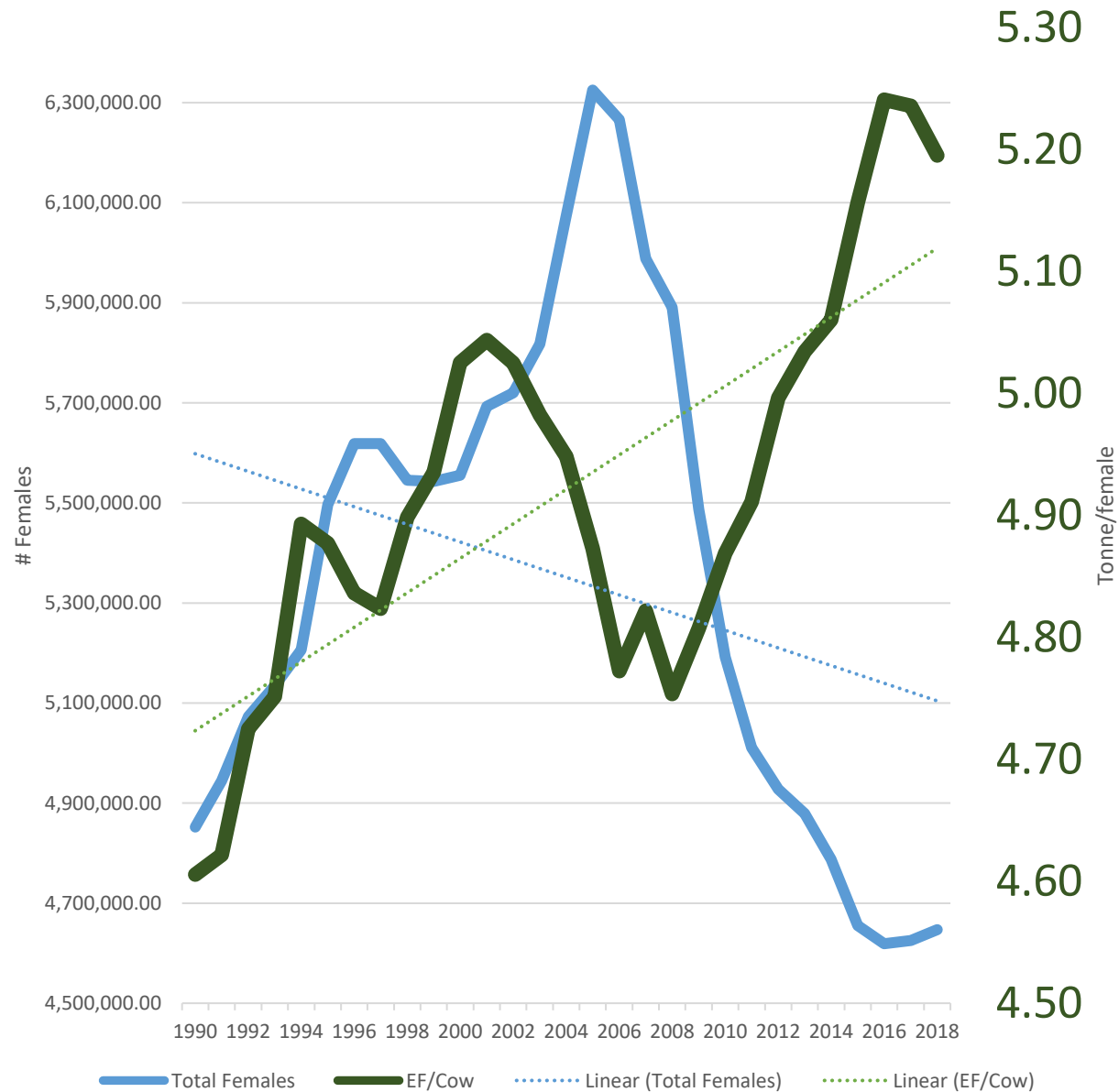


Maritimes

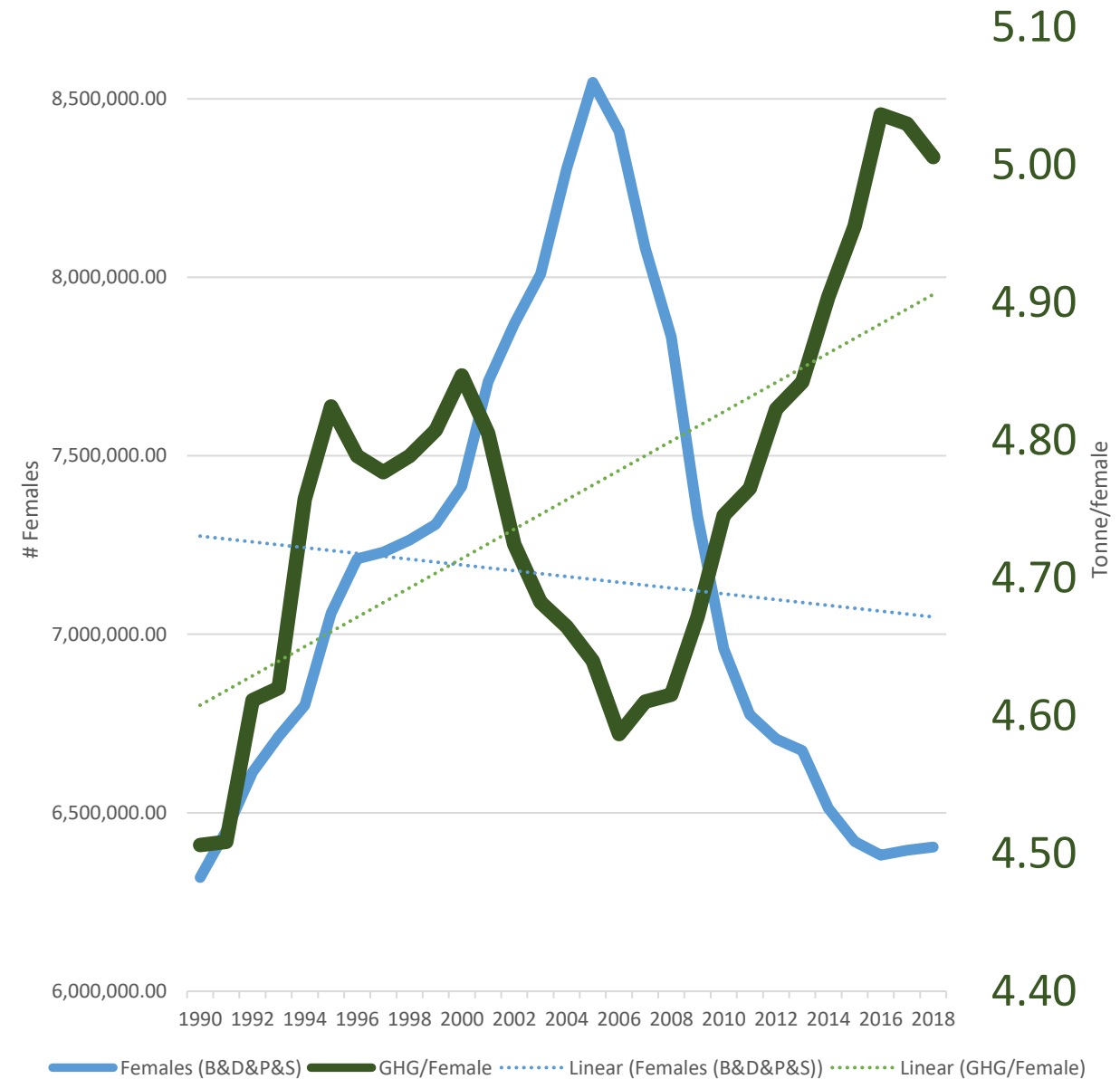
Emissions from Animal Production



GHG Enteric Emissions and Breeding Cows in Canada



GHG Emissions and Breeding Females in Canada



We are, more but not less,
7% of the problem...

Exemptions mean status quo or higher.

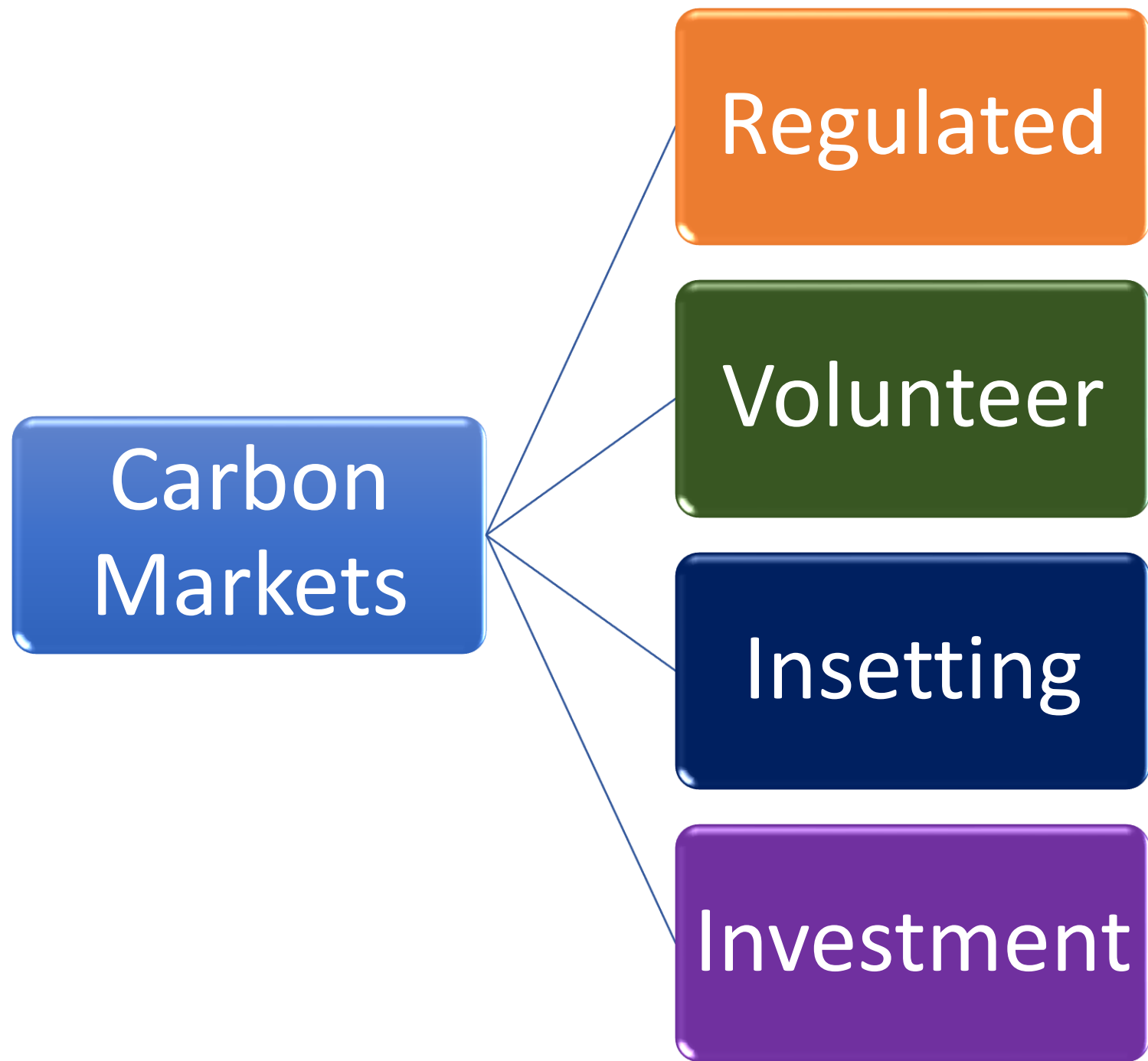
Do you want to be part of the solution?

Bend the
IPCC Report
curve?

Bend the
Farm curve?

Markets





Regulated

Volunteer

Insetting

Investment

Serialized Compliance Certificate

Trades under the Levy

Various Markets

96 MT @ \$1.4 to \$4.3/Tonne (2019)

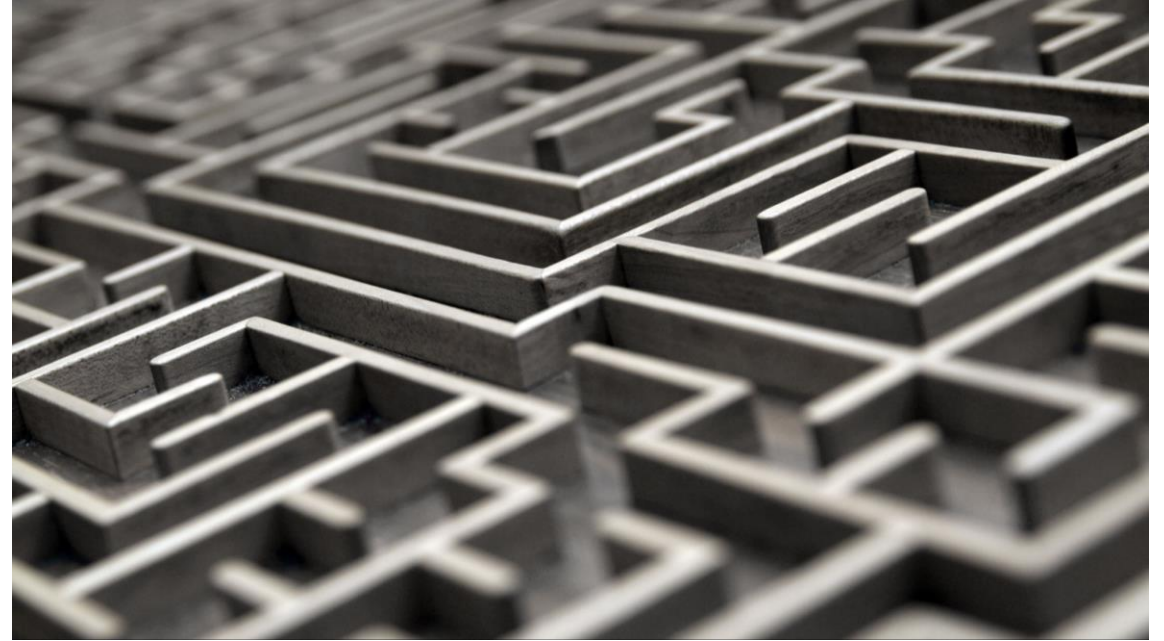
GHG Foot Printing

of a consumer product

Direct Buying or Charity Spending



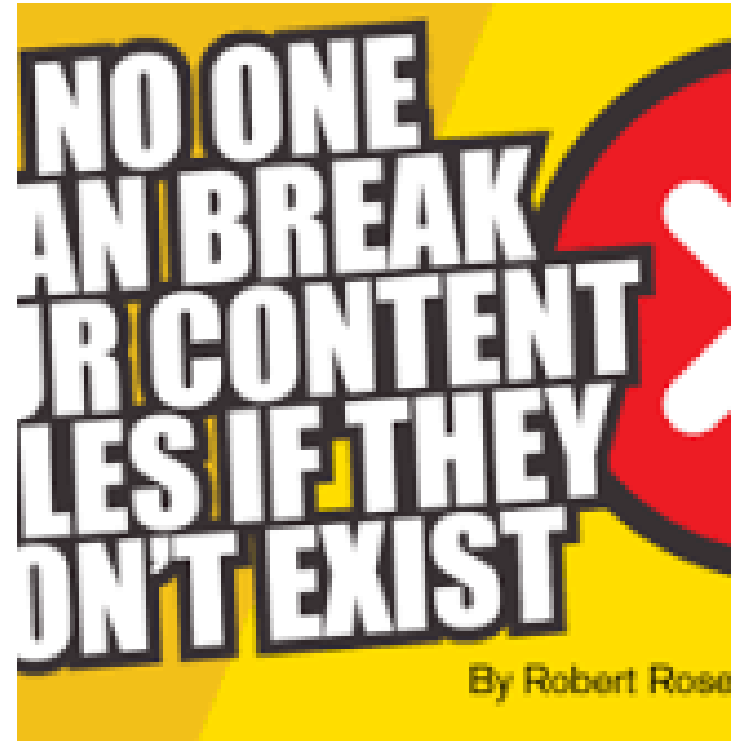
CHALLENGES



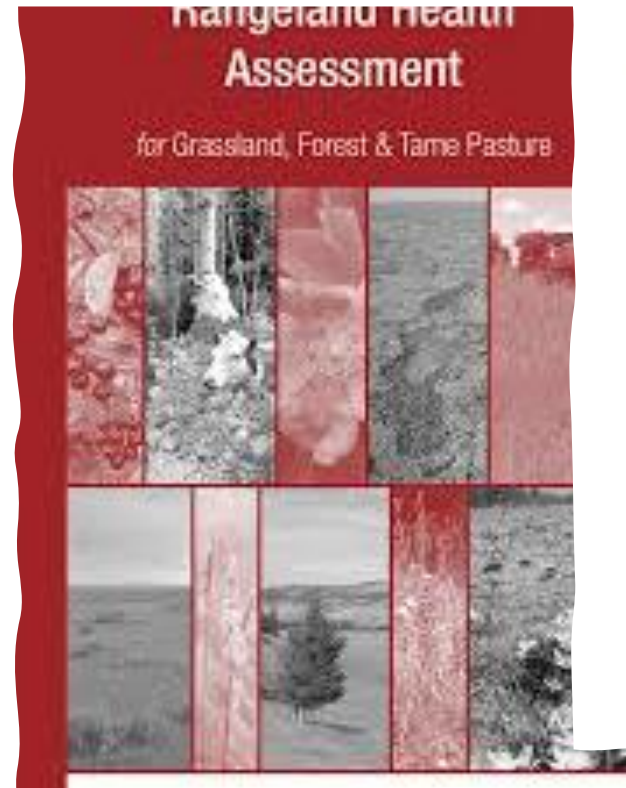
The Science Gaps



Market Rules



Protocols



Grassland Project Protocol v1

Public Overview Webinar

August 6, 2015



CLIMATE
ACTION
RESERVE



Farmers Edge NERP Project #2



Haircuts





Revenue Potential

Farm Commodity Revenue

Regulated

Volunteer

Insetting

Investment

Serialized Offset

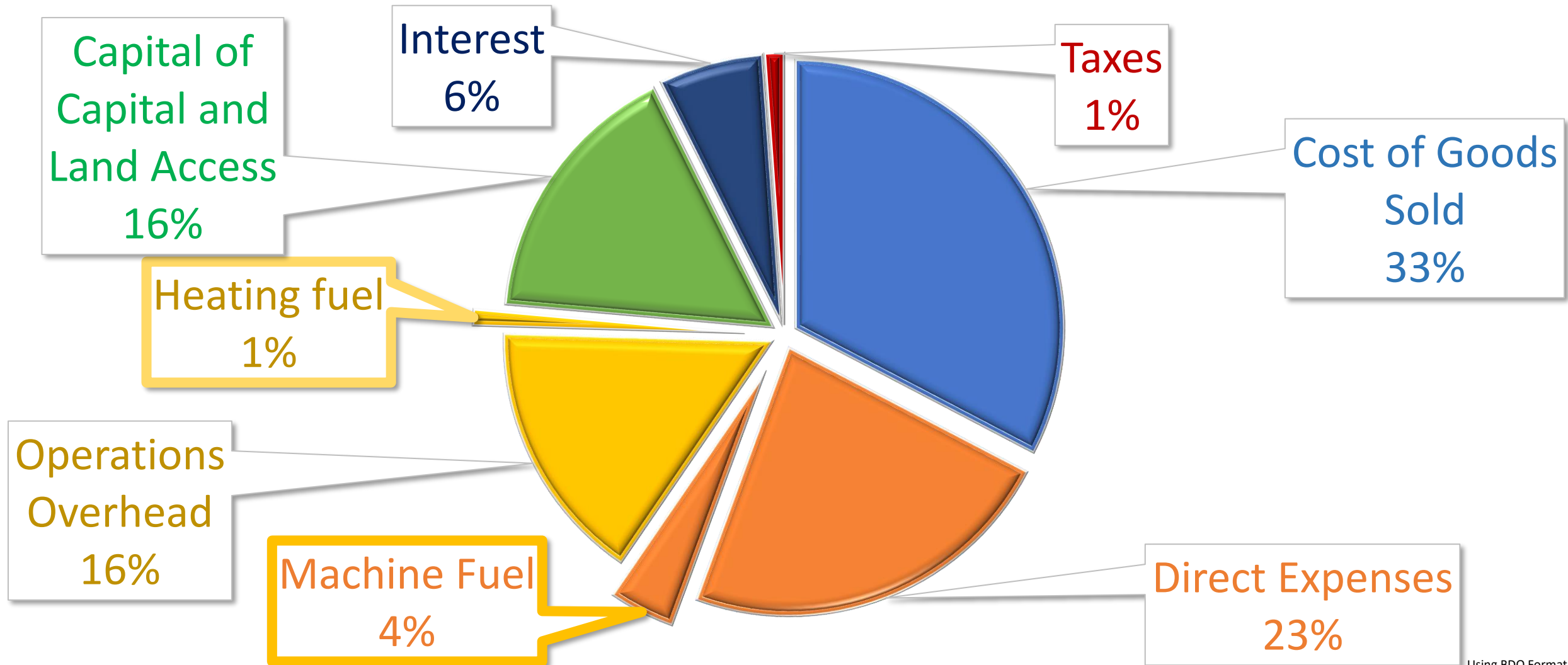
Livestock Feeding **
Soil Organic Carbon **
Grasslands **
NERP **

Grasslands Protocol

Bix and Verified Beef
General Mills Canada
CRSC ***

Charity Spending
ALUS

2019 Canada's Farm Expenses (\$67.4 Billion)



Full Potential

194 Million
Tonnes

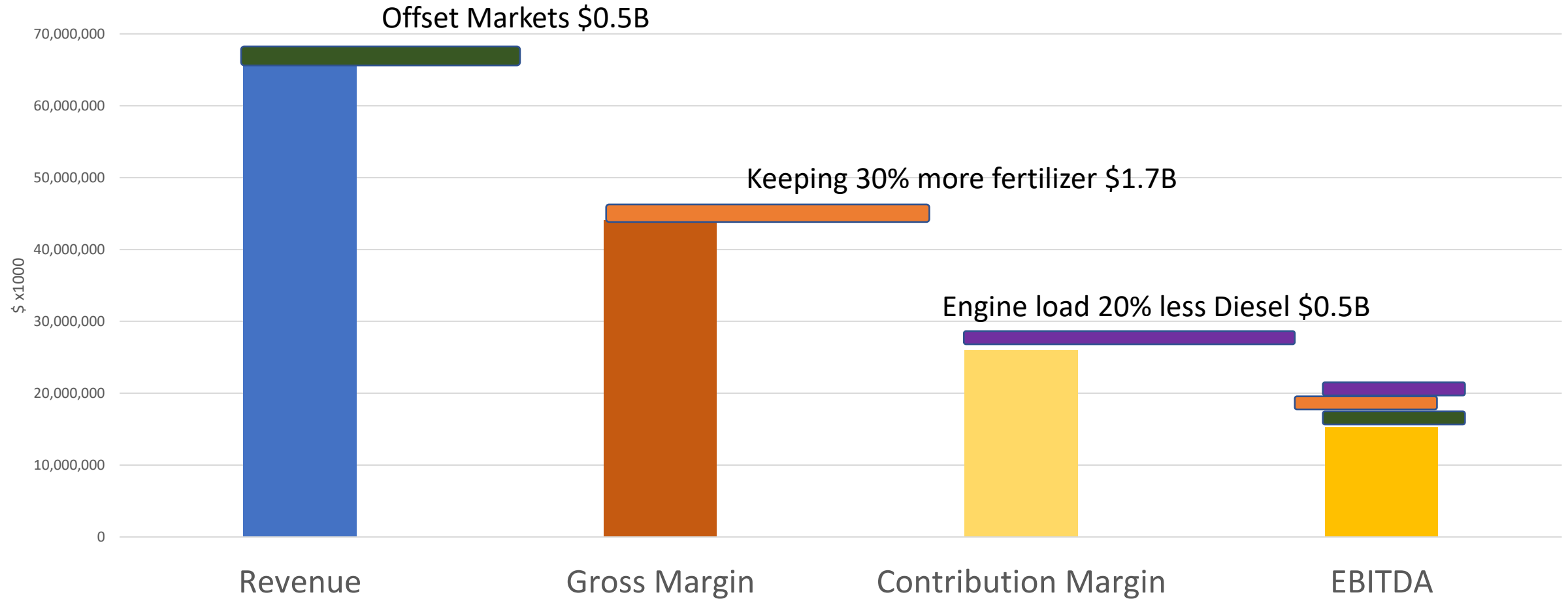
Farm Potential

\$516 Million
NPV (50%*)

* - 50% represents the risk in capturing all the potential tonnes and assumes straight line basis as a % of the Levy.



2019 Farm Management Statement



\$35.30

Per Tonne CO₂e



The Truth does not belong to
those who shout the loudest.

They bring receipts!

Thank you



BIOLOGICAL
CARBON
CANADA

