

# The Climate Action and Energy Plan Update: Strategy and Policy



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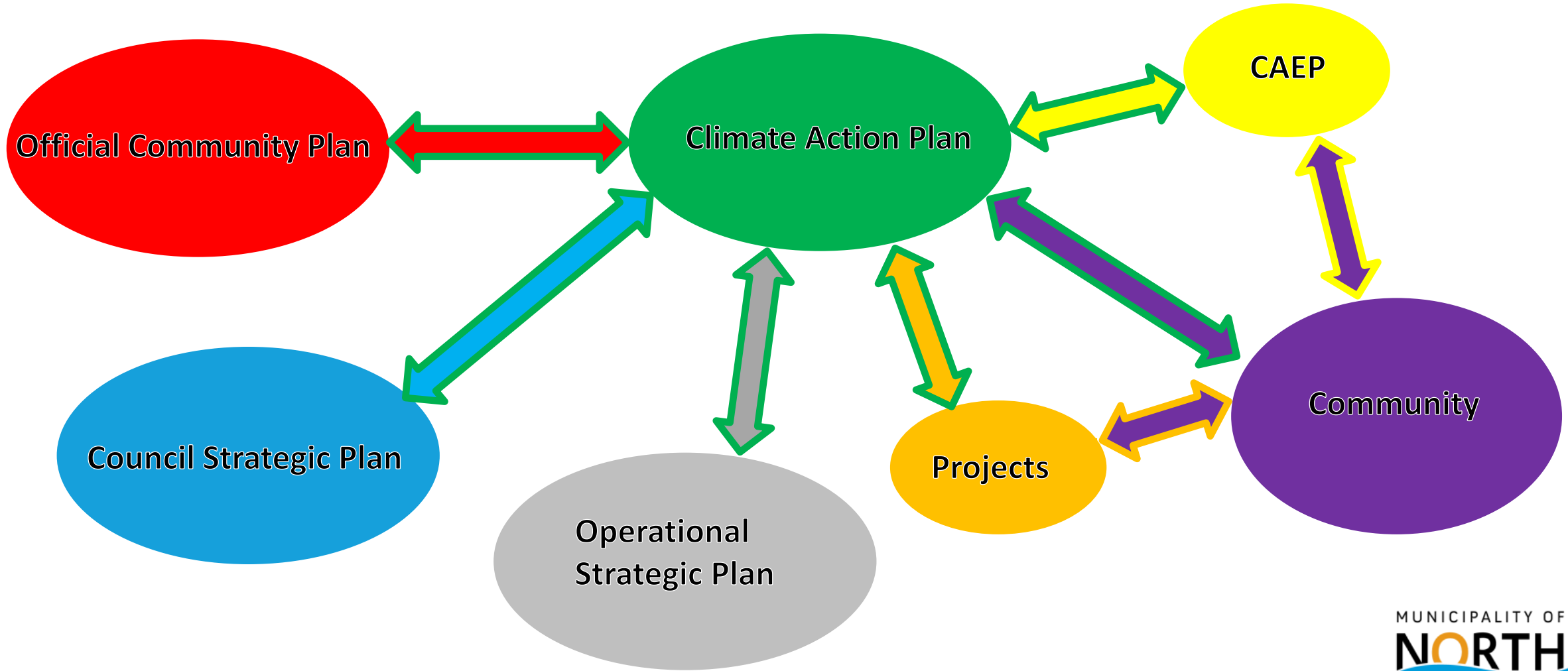
# Why are we here today?

- This is part of an iterative process that will help ensure we achieve emissions reduction and make our community more resilient to climate change
- Goal for today's engagement meeting:
  - Presentations from DNC Staff and SSG
  - Answer questions about the new CAEP model and take on board suggestions for changes to modelling assumptions and suggestions for future modelling work.
  - Discuss emissions reduction policies and actions that could be implemented in North Cowichan which can include policies and actions that may not be directly related to strategies identified in the CAEP update.
- Steps for the future
  - Continue engagement with whole community on Place Speak
  - Report back to council with lessons learned from engagement group and Place Speak discussions
  - Finalise CAEP modelling update
  - Reconvene annually with engagement group to track emission progress and assess policy performance

# CAEP Update and the Climate Action Plan (CAP)

- The CAEP Update is a program funded by the Federation of Canadian Municipalities in order to:
  - Update the assumptions used in the current GHG model in consideration of technological changes (e.g. renewable energy, electric vehicles etc.)
  - Develop a new GHG emissions model.
  - Remodel existing scenarios and resultant implementation plan actions to assess efficacy of actions, assess any new potential actions, and revise the implementation as required.
  - Using the new model assess the District's progress towards its' current GHG reduction target. Re-assess the District's current target and if necessary recommend an alternate target(s).
  - Develop a more functional and user-friendly tool for ongoing modelling of GHG reduction strategies and monitoring of greenhouse gas emissions.
- The CAP is a strategic approach adopted by North Cowichan Council to guide policy to combat climate change and adapt to new climate norms.
  - Emissions target is 80% below baseline by 2050
- CAP has six strategy areas:
  - transportation/electric vehicles
  - corporate leadership
  - natural assets and carbon sequestration
  - building efficiency
  - Lowering waste
  - climate adaptation

# Relation of CAEP to Existing North Cowichan Climate Action Plan



What should we do? Global options:

Things we would LIKE to do

Things we CAN do

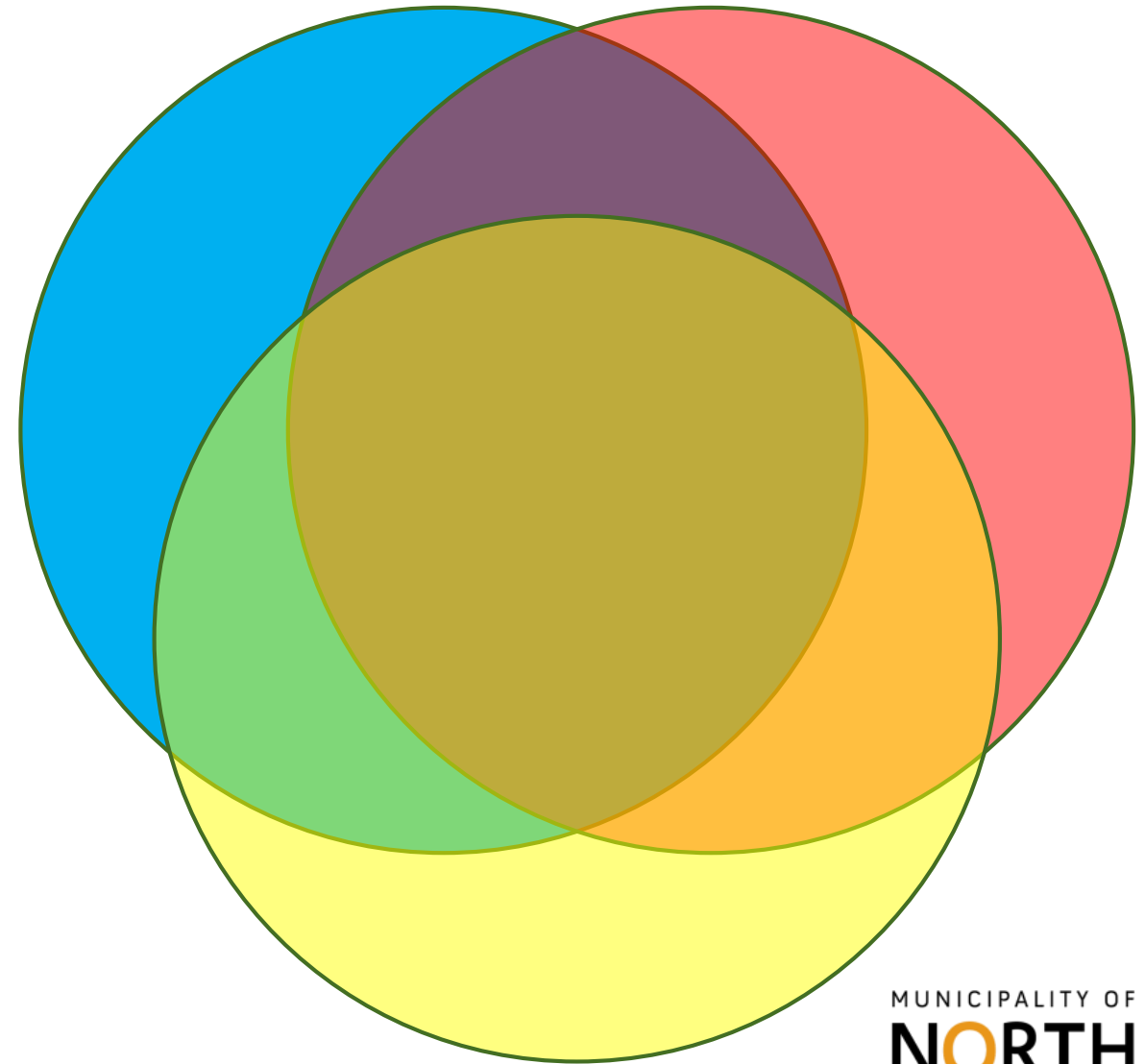
Things that work HERE

Like to do and can do, but: does not work here

Can do and works here, but: do not want to do

Like to and works here, but: we can't do it

Like to do, can do, and it works here



## Environmentalist View

Things we would LIKE to do

Things we CAN do

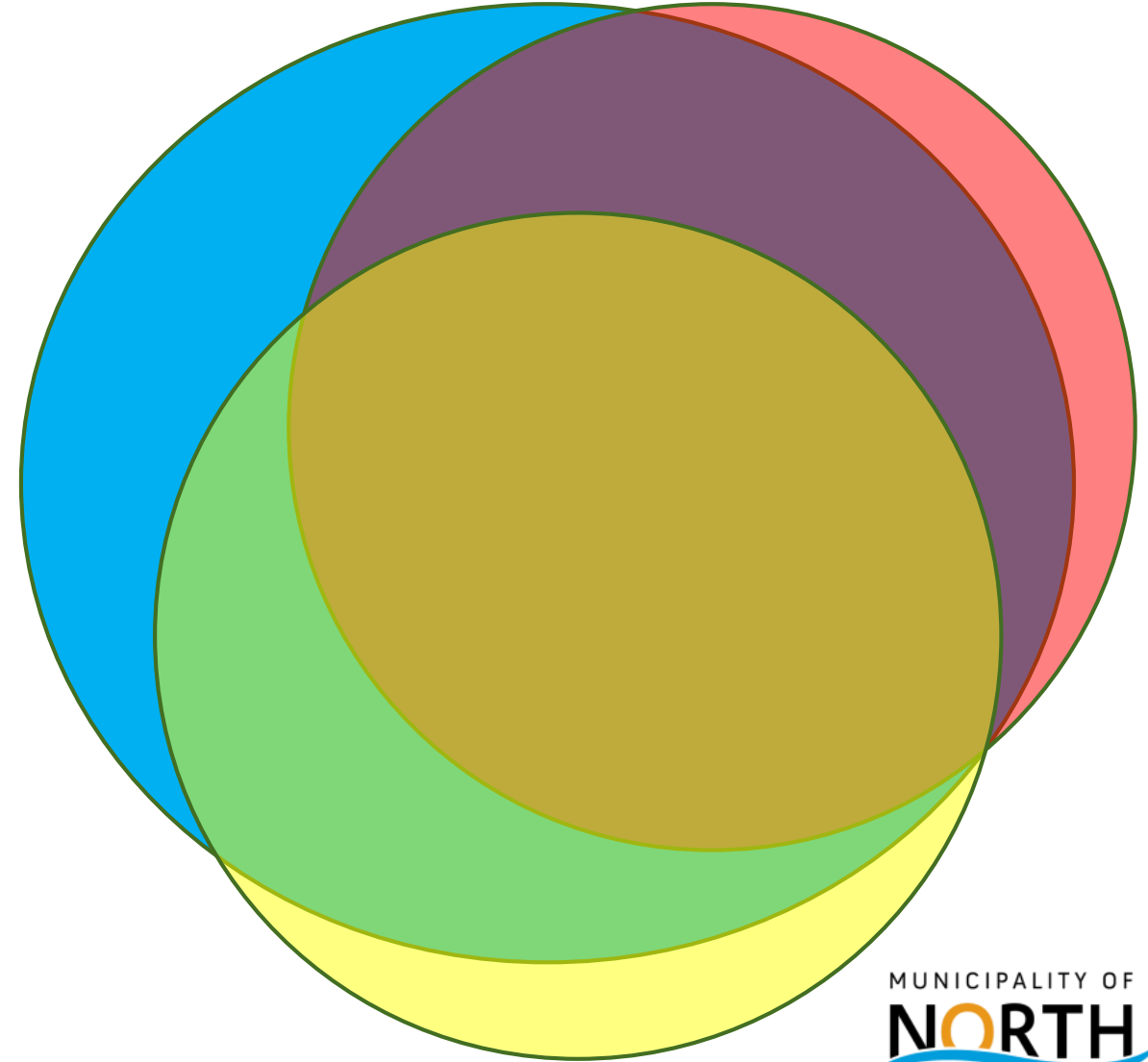
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## Climate Skeptic View

Things we would LIKE to do

Things we CAN do

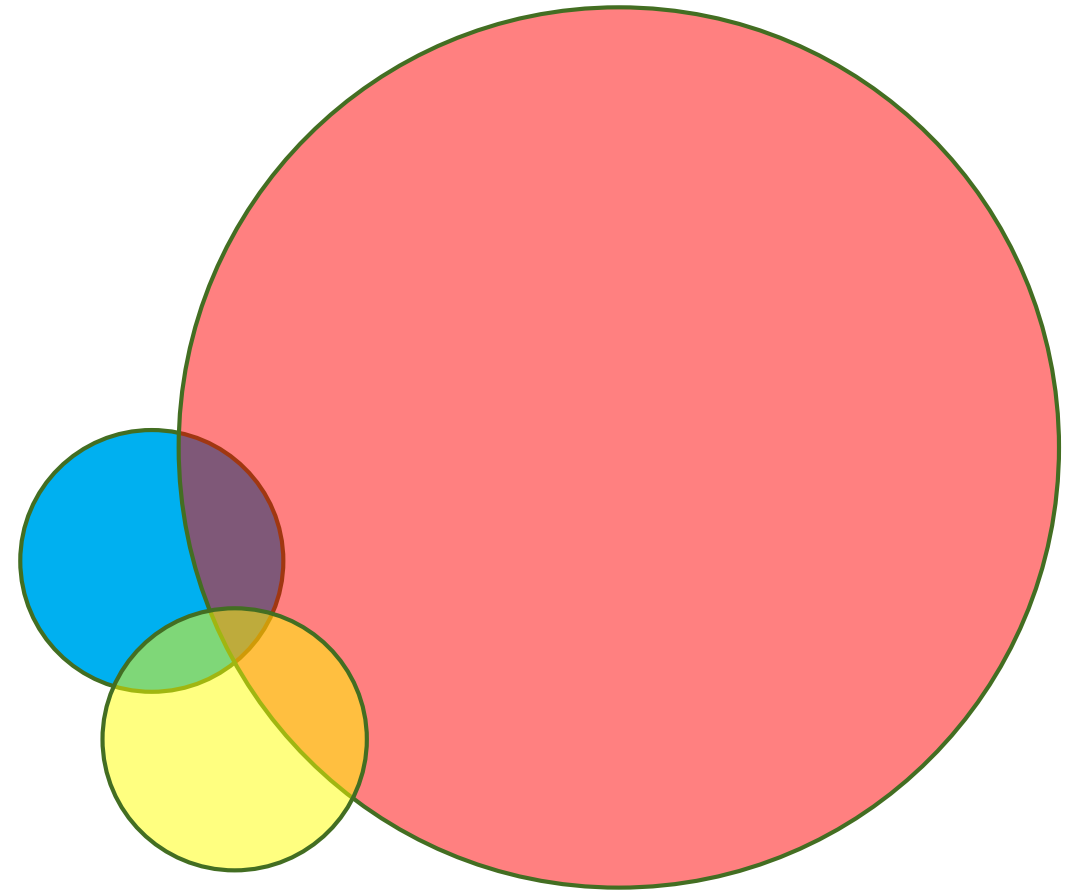
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# North Cowichan Situation

Things we would LIKE to do

Things we CAN do

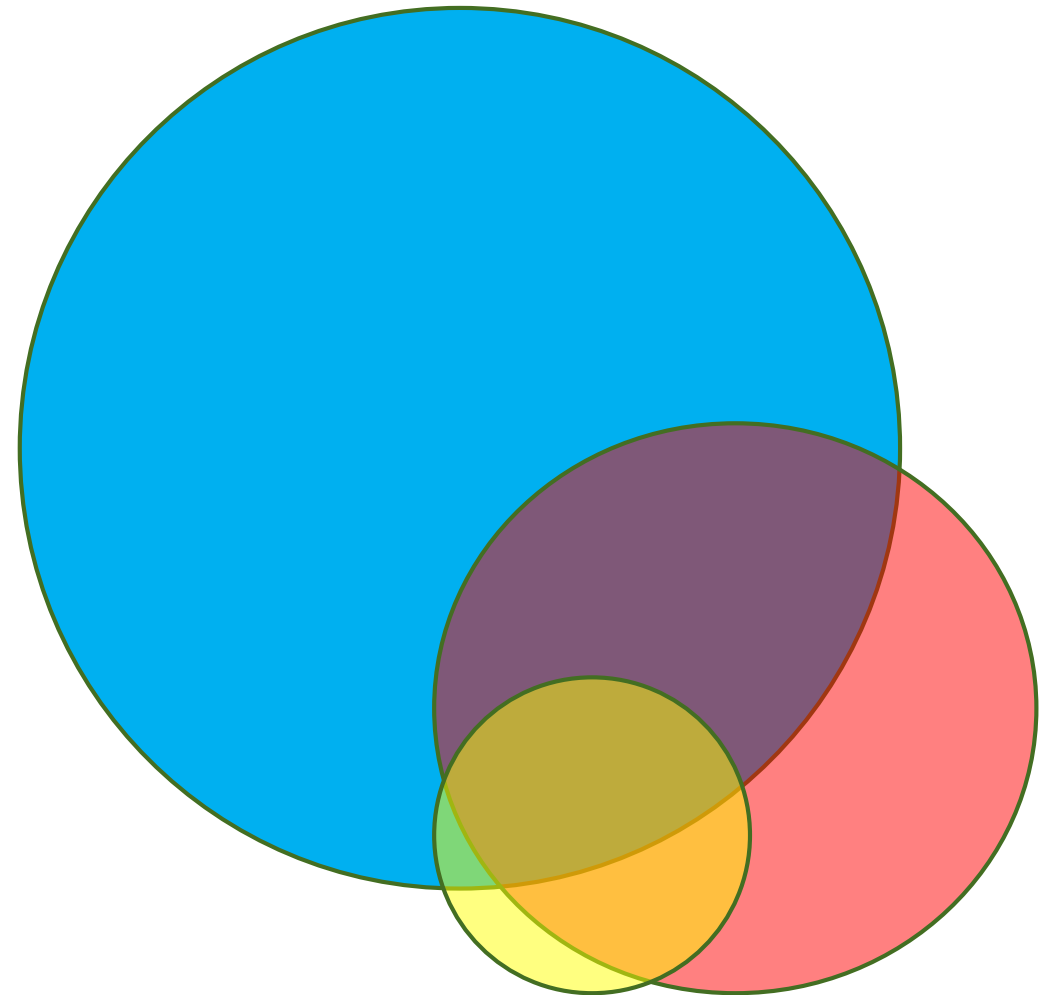
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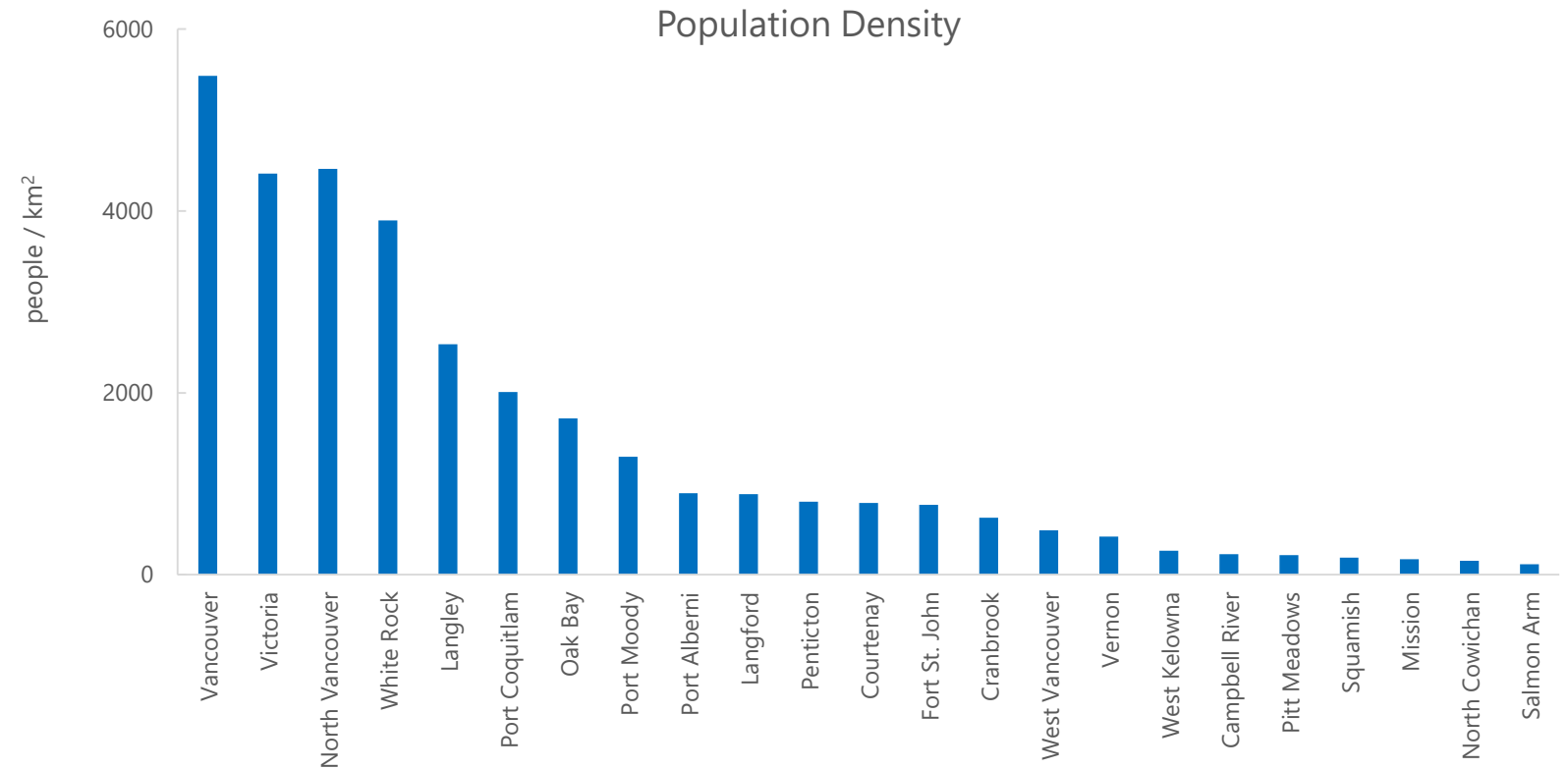
Like to do, can do, and it works here



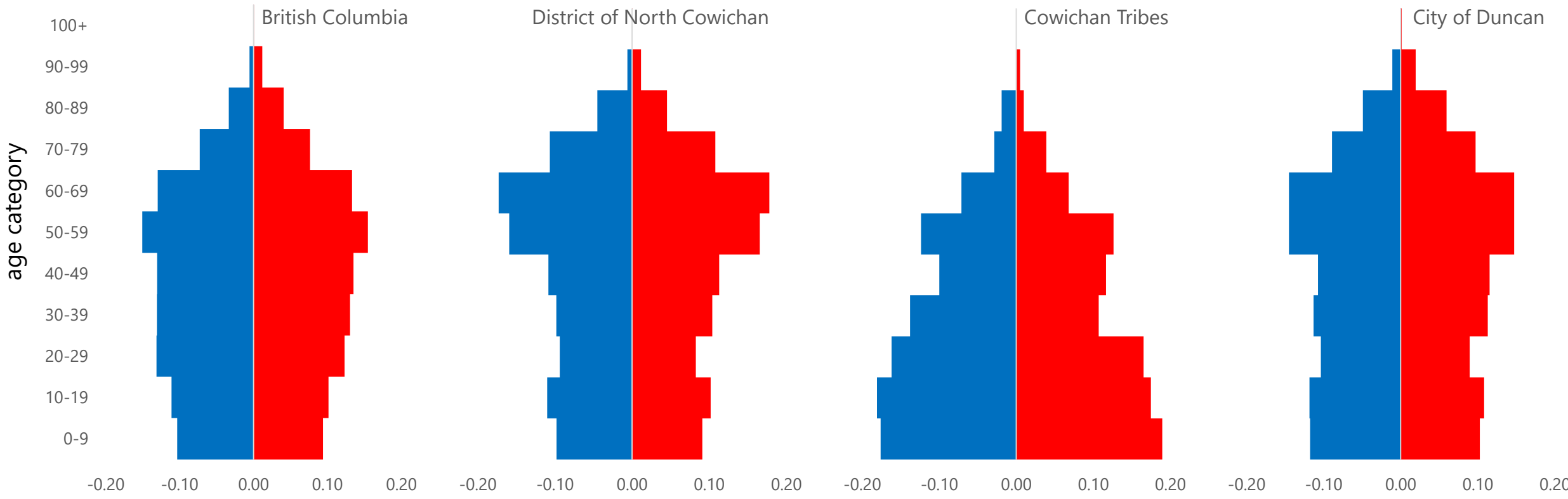


## North Cowichan has a very low population density among BC communities of similar size

- The graph shows population density of BC municipalities with populations between 18-60 thousand (+ Vancouver and Victoria)
- DNC has the 2<sup>nd</sup> lowest density of similarly sized municipalities
- This level of density will still apply to 90% of North Cowichan's housing stock in 2050.

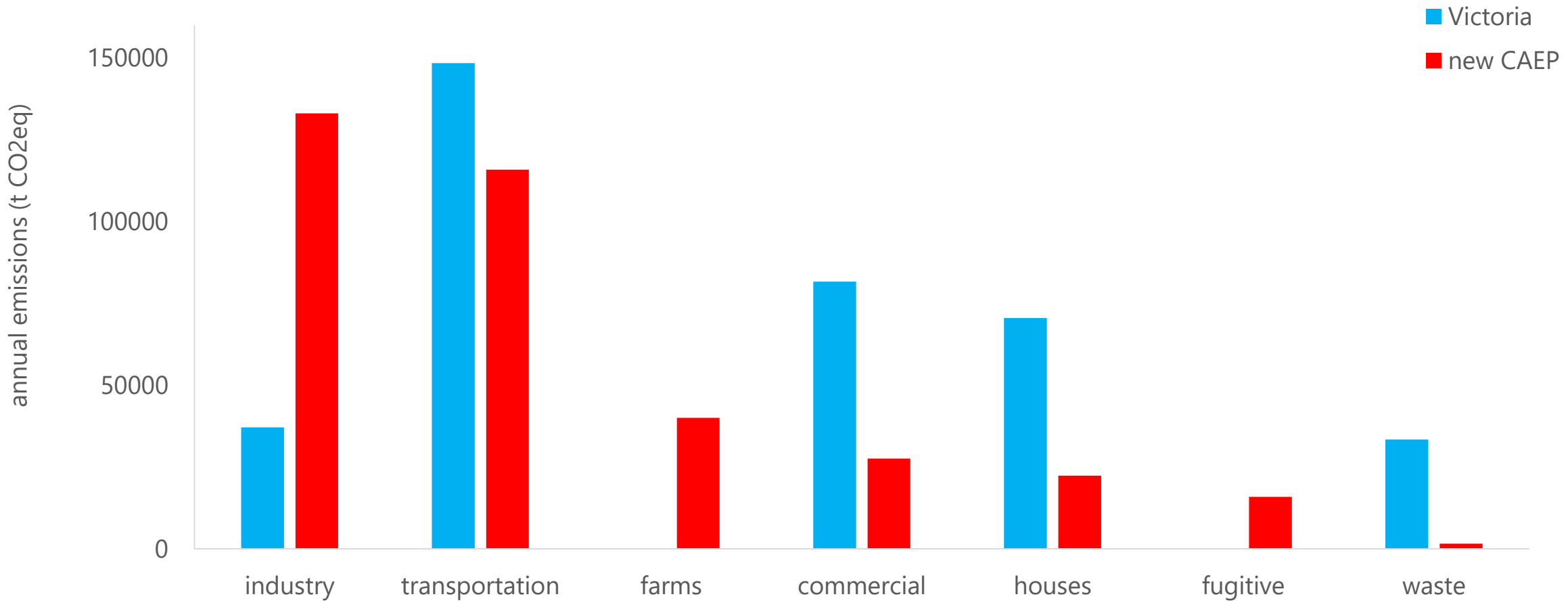


North Cowichan has a very different age distribution compared to the rest of BC and nearby communities (**male** and **female** age category % of total population). Most common age category in BC: 50-59, DNC 65-69, Cowichan Tribes IR#1: 5-9, City of Duncan 50-59. DNC has fewer young adults age 20-35 overall.



proportion of total population in each age category (**MALE(-)** or **FEMALE**)

# Difference in GHG Emissions: Victoria vs North Cowichan

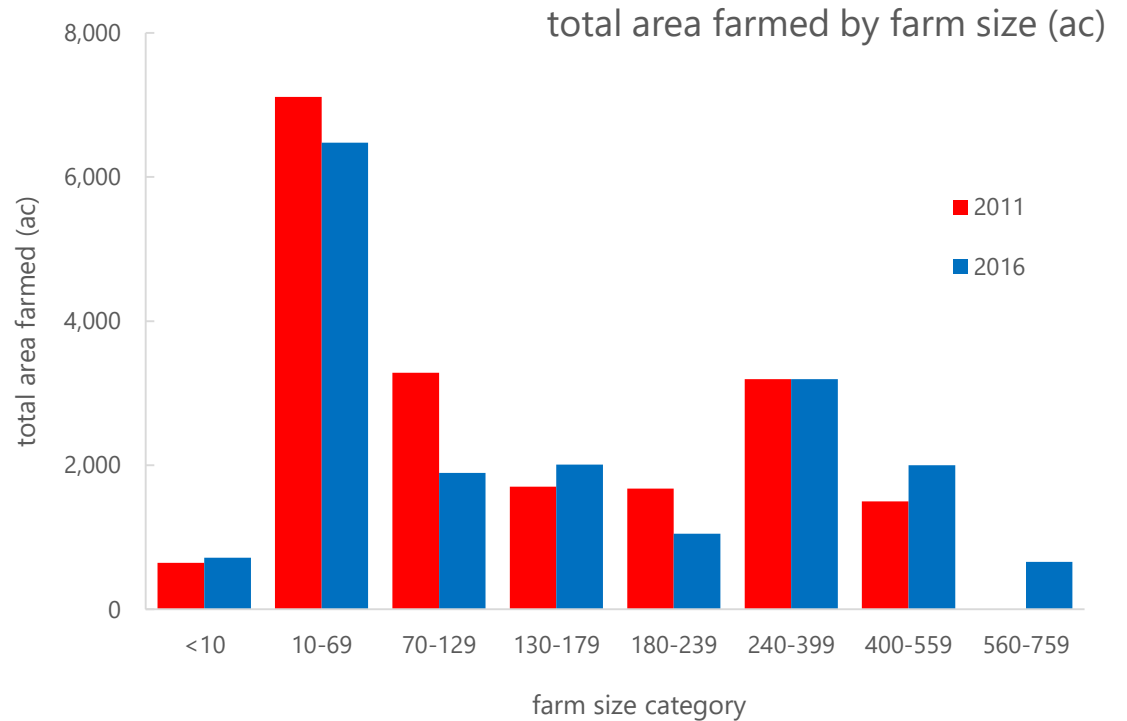
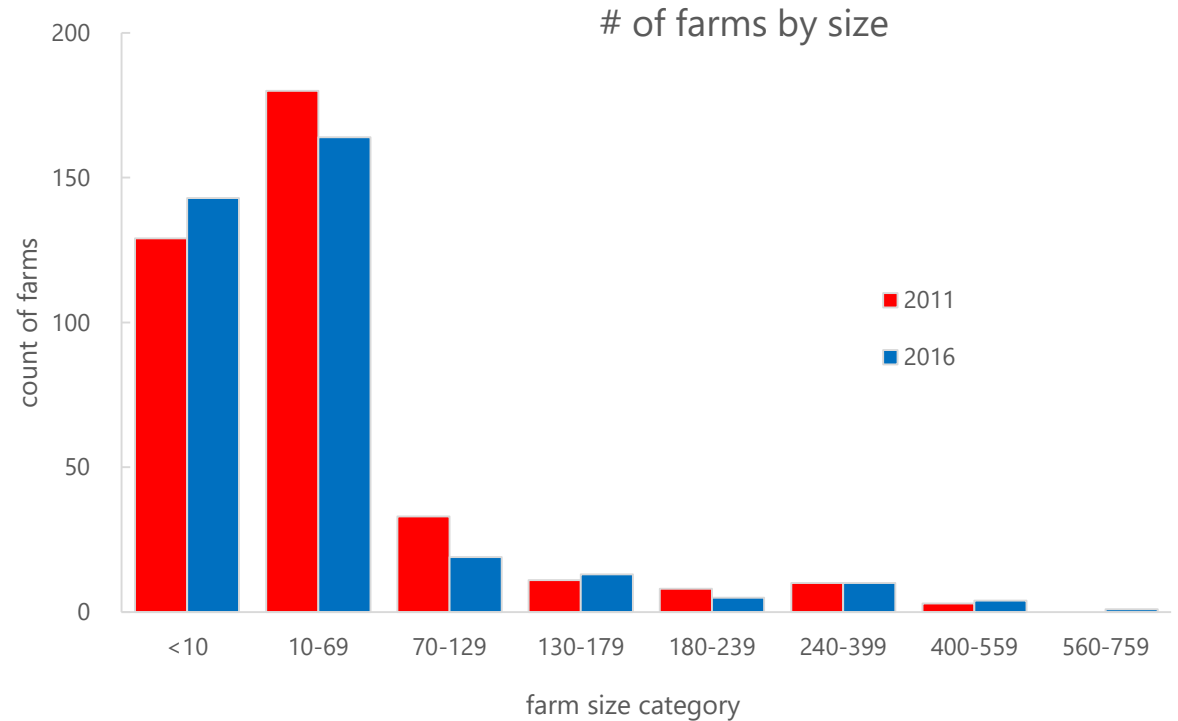


## Several Assumptions of the Original CAEP Have Changed, e.g., Emissions and Sinks

- Agricultural and industrial emissions are much greater than original estimates
- Carbon sequestration in Municipal Forest may be much larger than previously thought

Most (>80%) of our farms are SMALLER than 70 acres.... BUT

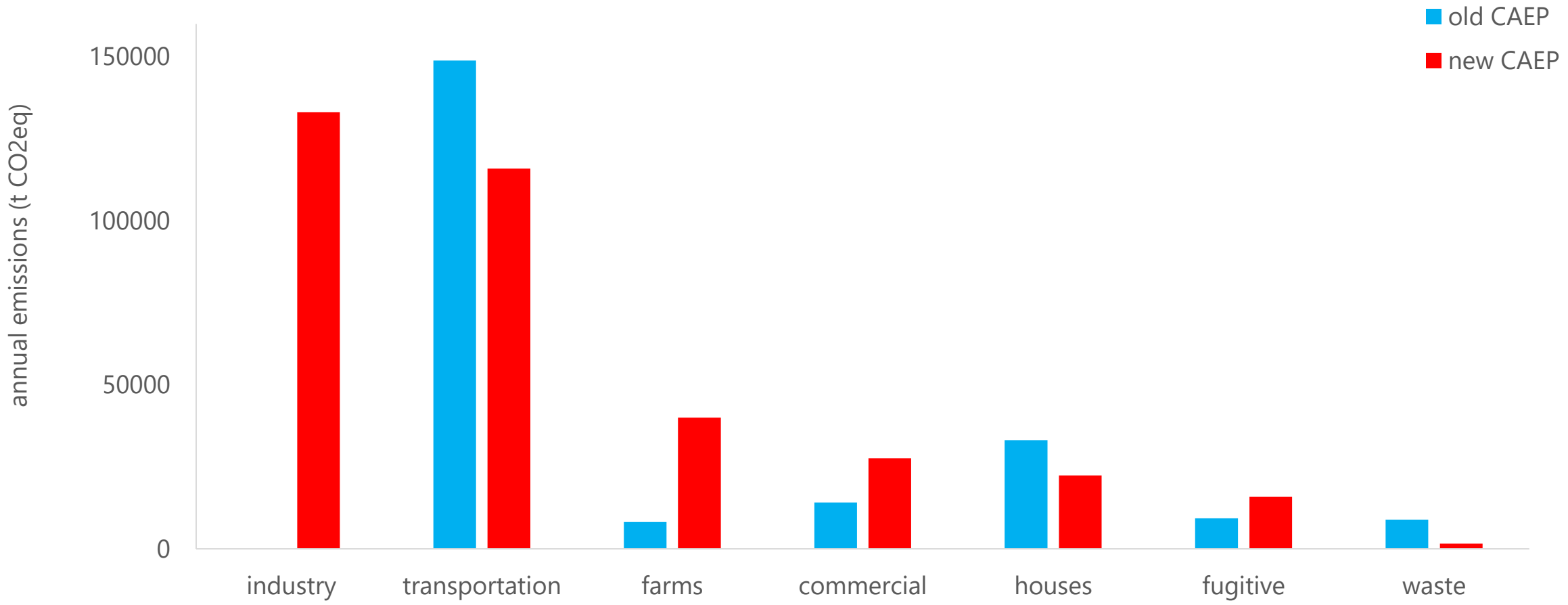
Most of the **LAND** (~60%) is on farms LARGER than 70 acres.



## Several Assumptions of the Original CAEP Have Changed, e.g., Electric Vehicles

- Transport Canada policy on Zero Emission Vehicles:
- We are setting the following ambitious Canada-wide targets, to be achieved at a national level and encompassing battery electric vehicles, hydrogen fuel cell electric vehicles and plug-in hybrid electric vehicles:
  - *By 2025, 10% of new light-duty vehicles sold in Canada will be zero-emission*
  - *By 2030, 30% will be zero-emission*
  - *By 2040, 100% will be zero-emission*

# GHG Emissions: North Cowichan OLD CAEP vs NEW CAEP



# Thinking about abatement curves

- What policies can we leverage
- What policies have potential economic benefits for MNC
- What policies will significantly reduce GHG emissions
- How do costs in different sectors influence policy options
- How is the North Cowichan curve different from others, e.g., US curve shown here

