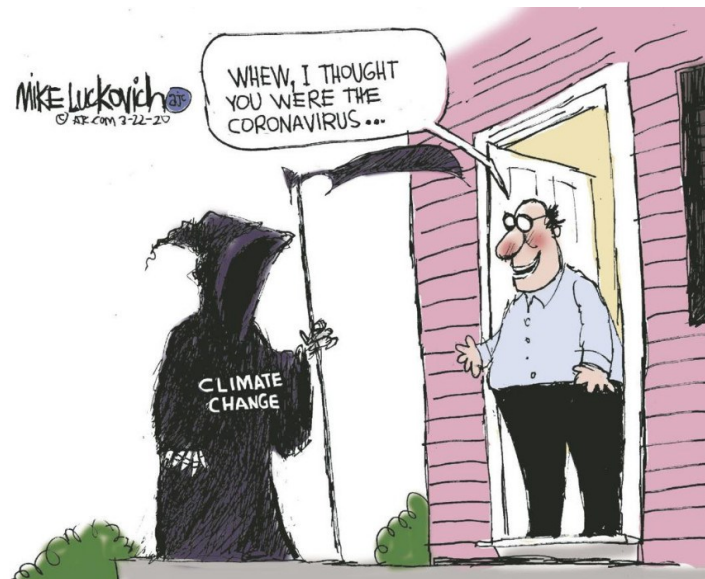
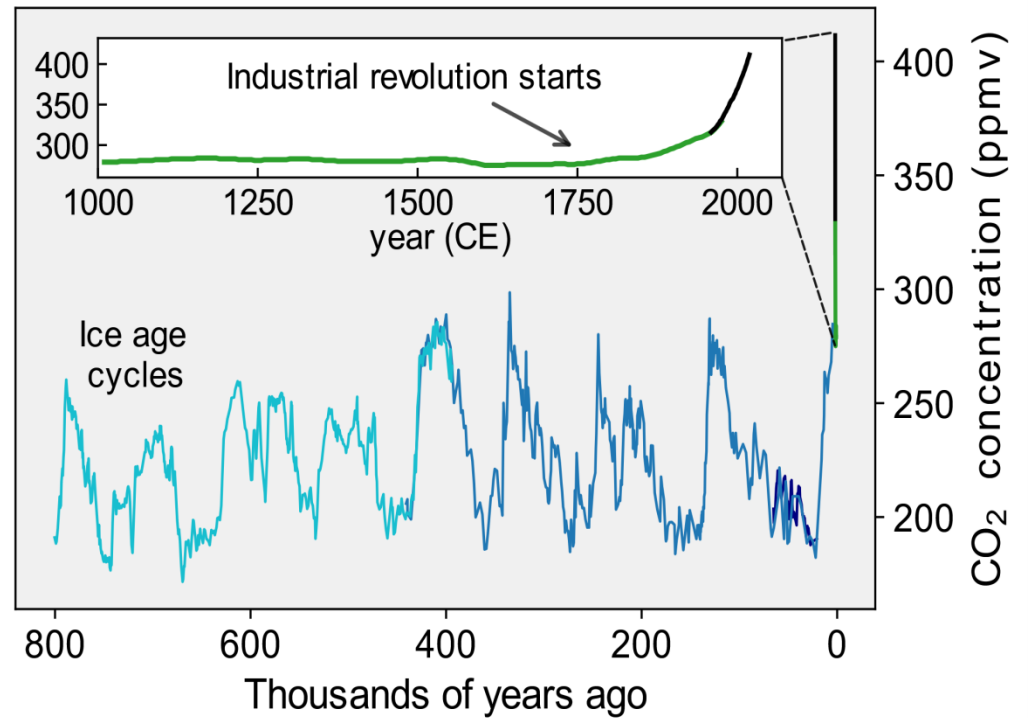


Presentation to the
Transportation Advisory Committee (TAC)

By the
Sustainability & Climate Change Advisory Committee (SCCAC)

Purpose
**To highlight the urgency of Climate Change,
and encourage the TAC
to apply a Climate Emergency Lens in its work.**





Temperature

- Earth's average temperature has risen about 2.12 degrees F. since the late 19th century.
- Most of the warming occurred in the past 40 years; the seven most recent years being the warmest.
- 2016 and 2020 are tied for the warmest years on record.

Sea Level

- Global sea level rose about 8 inches in the last century.
- The rate in the last 20 years is nearly double that, and accelerating.

Ocean Acidity

- Since the beginning of the Industrial Revolution, thanks to human activities emitting more carbon dioxide, the acidity of surface ocean waters has increased by about 30%.

<https://climate.nasa.gov/evidence/> See 'Addendum' for more detail.

Dec. 2019 - **Council declared a Climate Emergency**, conveying its recognition that we are facing an unprecedented crisis, requiring unprecedented climate mitigation measures.

Feb. 2020 - **Council approved a Motion**, to request other Advisory Committees to work with the SCCAC to discuss the Climate Emergency we are facing, and to develop guidance on measures the Advisory Committees can consider in fulfilling their mandates.

Critical Years Now!

Council & Advisory Committees are carrying out their mandates in a short period that is critical to the future.



2018 report:

10 years to retool society to not increase more than 1.5 degree C. (Now 7 years!)

Implications if we fail: human misery; even survival?

Canada Among The Highest CO2 Emitters

Canada:

- 9th highest CO2 emissions of 190 countries;
- 4th highest in per capita emissions;
- 14.9 T per person compared to:
 - 1.6 T for India,
 - 8.9 T for Germany.

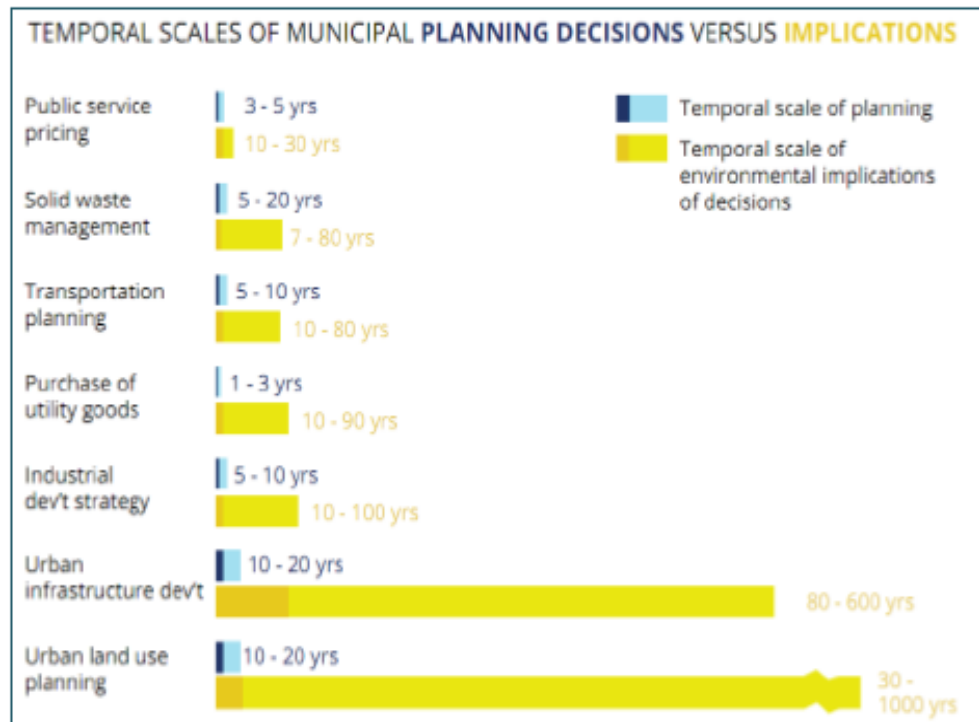
Ontario is the 2nd highest CO2 emitter of Canadian provinces.

Federation of Canadian Municipalities (FCM)

Local gov'ts have influence over approx. 50% of GHG emissions in Canada.

Land use – Buildings – Transportation – Water/Wastewater

“Local government planning/spending decisions made today have consequences, including GHG emissions, that last for decades, even centuries” - Judy Smith Presentation to Council



Development:

Compact development/higher density/mixed use:

- Reduces the need for energy related to roads construction, vehicle travel, infrastructure for water and sewage.
- Supports active transportation – walking/biking/transit.
- Reduces encroachment on green space needed for ecological health and CO2 absorption.
- Supports the use of district heating systems where applicable.

“Local government investment in public transit and infrastructure for walking and cycling can go a long way to reducing automobile dependence and the associated energy use and greenhouse gas emissions.” Judy Smith, September 2019

TAC Climate Lens Possibilities

- Encourage PDAC to support higher density development
= less car trips, more walking & biking & less roads & infrastructure.
- Work with SCCAC on quality cost/benefit analysis of Electric & Hybrid Town vehicles, and different types/sizes of vehicles.
- Provide credible evidence/proof of the health & financial benefits of walking, biking and public-transit.



Market the benefits to all Cobourg Stakeholders.

- ?
- ?

Questions/Comments?

- What TAC projects & priorities may be receptive/fertile for applying a Climate Emergency lens?
- How can SCCAC help?

Next Steps?

Thank You TAC

Working together
we can improve and save Cobourg's
environment and future!

Addendum

<https://climate.nasa.gov/evidence/>

Temperature Level - The planet's average surface temperature has risen about 2.12 degrees Fahrenheit (1.18 degrees Celsius) since the late 19th century, a change driven largely by increased carbon dioxide emissions into the atmosphere and other human activities.⁴ Most of the warming occurred in the past 40 years, with the seven most recent years being the warmest. The years 2016 and 2020 are tied for the warmest year on record. ⁵

Sea Level - Global sea level rose about 8 inches (20 centimeters) in the last century. The rate in the last two decades, however, is nearly double that of the last century and accelerating slightly every year.¹⁰

Ocean Acid Level - Since the beginning of the Industrial Revolution, the acidity of surface ocean waters has increased by about 30%.^{13,14} This increase is the result of humans emitting more carbon dioxide into the atmosphere and hence more being absorbed into the ocean. The ocean has absorbed between 20% and 30% of total anthropogenic carbon dioxide emissions in recent decades (7.2 to 10.8 billion metric tons per year).^{15,16}

