



CLIMATE CHANGE FOR ONTARIO

January 2020

What is an atmospheric greenhouse gas?

It's "any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, **greenhouse gases** are responsible for the **greenhouse effect**, which ultimately leads to global warming." ¹

Why does that create climate change?

"Certain gases in the atmosphere block heat from escaping. Long-lived gases that remain semi-permanently in the atmosphere and do not respond physically or chemically to changes in temperature are described as "forcing" climate change." ²

World-wide, **2019 was the second hottest year after 2016.** ³

The Paris Agreement 2015. Governments committed to reduce emissions by 30 per cent below their 2005 levels by 2030.

ONTARIO & GREENHOUSE GASES (GHGs)

1990 180 kilotonnes (kt.) of greenhouse gases (GHGs)

2005 204 kt. of GHGs ⁴

2016 166 kt. of GHGs ⁵

Drop due to the closing of all the coal-fired generating plants between 2005-2014

2017 159 kt. of GHGs, a drop of 22% from 2005 ⁶

For Ontario, this will mean a reduction in emissions from the current 159 kt. to 143 kt.

BUT

While Ontario's utilities have dropped 48% since 2009 (due to the coal plant closings), Ontario's 2016 household GHG is 0.2% higher. Per capita, Ontarians produce 3.7 tonnes, which is currently below the national average of 3.9 tonnes. ⁷

WHAT CAN GOVERNMENTS DO ABOUT CLIMATE CHANGE? Policies and regulation, and adaptation
Policies and regulation: with the aim of removing carbon dioxide and other GHGs from the atmosphere by setting standards and limits; protecting ecosystems; diversifying the energy mix; stop subsidizing fossil fuels among others.

Adaptation: Climate change adaptation refers to actions that reduce the negative impact of **climate change**, while taking advantage of potential new opportunities. It involves adjusting policies and actions because of observed or expected **changes in climate**. This affects local

WHAT TO DO:

Public Awareness – have study groups, public forums, websites, social media campaigns

Study – the reports, UK's Climate Change Act 2008; think about personal action – "small but mighty"

Write the MPPs and municipal councils – tell them what you support, what we in CFUW support (do follow our Guidelines)

Create partnerships -check out the groups listed and follow their actions.

Make noise!

municipalities mainly as they are the ones who protect communities from these extreme weather events of heat waves, ice storms, flooding, etc. Other levels of government will deal with the effects of droughts, permafrost thawing, forest fires, etc.⁸

HOW ABOUT INDIVIDUALS?

While the main focus must be corporate and industrial, there are many things that individuals can do. Major is a change in what we buy and use⁹; use energy wisely; eat with the planet in mind; reduce food waste and buy local.

THE CURRENT SITUATION IN ONTARIO:

Four major actions:

- Cancellations
- Federal Carbon Tax
- Made-in-Ontario Environment Plan
- Environment reports

Cancellations:

- 2017 Ontario cap-and-trade system (affecting heating and transportation), cancellation announced July 2018, officially adopted by legislation Oct.31, 2018.
 - Includes cancelling Green Energy Fund which had clean energy home rebates.
 - Created a shortfall of \$3 billion (\$500 million to support programs kept that were to be financially supported by cap-and-trade, and the wind-down costs of the program).¹⁰
- Electric car rebate, and incentive program for electric charging stations at home or office
- Some solar and wind projects¹¹ - final cost \$231 million.
- *50 Million Tree Program* tree planting program in 2019, (annual budget \$4.7 million), ultimately saved for 2020; now supported by federal government.

Federal Carbon Tax:

- April 1, 2018: The Federal Carbon Tax came into effect in Ontario. Critics have pointed out that the Carbon Tax is too low to make a difference¹²
- Federal Carbon tax has been appealed to the Supreme Court as “an issue of provincial jurisdiction”. It has been upheld in the Ontario Court of Appeal.

Made-in-Ontario Environment plan:¹³

- November 2018: This included \$400 million over four years for the Ontario Carbon Trust, to partner with the private sector on green technologies.
- February 2019: Industrial regulations announced, currently (Jan 2020) waiting for federal government approvals. Critics say that it is not stringent enough.
- November 2019: Ontario will conduct a multi-sectoral multi-year study to assess the impacts of climate change, due 2022¹⁴; and established an Advisory Panel on Climate Change, as part of the 2018 Made-in-Ontario Environment Plan. From the press release, their work will mainly be on adaptation¹⁵; Ontario, New Brunswick and Saskatchewan announce deal on development of small nuclear reactors

Environment Reports:

- **December 2019: Auditor General in releasing her 1st Report on the Environment**, commented that the government is unlikely to meet 2030 emissions target under current climate change plan in the

Made-in-Ontario Environment Plan, that the plan was not supported by sound evidence, predicated on some (environmental) programmes that are cancelled while being counted.

- Also Ontario is heating up faster than the global average.
- The report included 19 recommendations.
- The Minister agreed that the province needs to do more work. ¹⁶

- **March 2019: The Environmental Commissioner of Ontario releases her final reports: Energy Conservation Progress Report, A Health, Happy, Prosperous Ontario and Climate Pollution, Reducing My Footprint ¹⁷**
 - Highlights: showing that Ontario can achieve its emissions target by switching from fossil fuels to clean energy, by improving utility conservation programs, helping homeowners renovate their homes for energy efficiency, and directing municipal growth to existing urban areas with jobs and transit.
 - The transition will be difficult. The economy uses fossil fuels for 75% of its energy - natural gas for heating, and gasoline and diesel for transportation. Individually most of the personal impact comes from: driving, flying, home heating and eating beef.

- **September 2018: Environmental Commission of Ontario, Climate Action in Ontario: What's Next? ¹⁸**
 - Suggests the UK's *Climate Change Act 2008* as a good guideline for new legislation; 2020 UK still committed to it – now reduces emissions to 'net zero' by 2050.

CFUW POLICIES SUPPORT:

- "... utiliz(ing) every power defined in the Canadian Constitution, including policy and program development, legislation and regulations, taxation mechanisms, legal enforcement, market incentives and inter-governmental agreements to support the achievement of this goal, and provide ongoing support for research and education concerning all aspects of climate change." (**2009 Addressing Climate Change**);
- The **Sustainable Development Goals, 2016**. Goal 13 aims to "take urgent action to combat climate change and its impact"
- The **Kyoto Protocol 2002**;
- "... stringent standards ... (for automobile) fuel efficiency and emissions" (**1992 Greening the Automobile**)
- **Reducing Climate Change through the use of Carbon Taxes 2015**
- "... create and enforce standard limits ...to control the idling of motorized vehicles..." (**Reducing Idling of all Motorized Vehicles, 2011**)
- "...fostering conservation by ... the gradual reduction of subsidies and tax concession for fossil fuel, hydroelectric and nuclear power producers..." (**Renewable Energy Conservation, 1992**)
- The International Law on the Atmosphere. (**Global Warming 1990**)
- *Our Common Future*, the report of the World Commission on Environment and Development, known as the Brundtland Report. (**Nurturing Global Co-operation and Mutual Trust 1989**)

RESOURCES:

Check out the reports footnoted below for more information.

Cheryl Ambrose, Climate Change, CFUW Ontario Council, October 5, 2019 <https://cfuwontcouncil.org/wp-content/uploads/2019/10/2019-10-05-CFUW-Ontario-Council-climate-change-plenary-2.pdf>

Mark Jaccard, *The Citizen's Guide to Climate Success: Overcoming Myths that Hinder Progress*, Cambridge University Press, 2020

Auditor General of Ontario	http://www.auditor.on.ca/
Environmental Commissioner of Ontario – now closed	https://eco.auditor.on.ca/
Government of Ontario	https://www.ontario.ca/page/climate-change
CELA Canadian Environmental Law Association	https://cela.ca/
Clean Air Alliance	https://www.cleanairalliance.org/
Climate Action Network	https://climateactionnetwork.ca/
Conservation Ontario	https://conservationontario.ca/
David Suzuki Foundation	https://david Suzuki.org/
Ecojustice	https://www.ecojustice.ca/
Environmental Defence	https://environmentaldefence.ca/
GASP Grandmothers Act to Save the Planet	https://www.facebook.com/GASP4Change/
Sierra Club Canada	https://www.sierraclub.ca/

¹ <https://www.livescience.com/37821-greenhouse-gases.html>

² <https://climate.nasa.gov/causes/>

³ <https://www.noaa.gov/news/2019-was-2nd-hottest-year-on-record-for-earth-say-noaa-nasa>

⁴ <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/sources-sinks-executive-summary-2019.html#toc6>

⁵ <https://www150.statcan.gc.ca/n1/daily-quotidien/190123/t001d-eng.htm>

⁶ <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/sources-sinks-executive-summary-2019.html#toc6>

⁷ <https://www150.statcan.gc.ca/n1/daily-quotidien/190123/t001d-eng.htm>

⁸ <https://www.nrcan.gc.ca/environment/resources/publications/impacts-adaptation/reports/municipalities/10081>

⁹ <https://david Suzuki.org/what-you-can-do/top-10-ways-can-stop-climate-change/>

¹⁰ <https://fao-on.org/en/Blog/Publications/cap-and-trade-ending>

¹¹ <http://www.energyregulationquarterly.ca/articles/ontario-cancels-wind-and-solar-contracts#sthash.SOnf4jXF.dpbs>

¹² <https://ecofiscal.ca/reports/bridging-gap-real-options-meeting-canadas-2030-ghg-target/>

¹³ <https://prod-environmental-registry.s3.amazonaws.com/2018-11/EnvironmentPlan.pdf>

¹⁴ <https://news.ontario.ca/ene/en/2019/11/ontario-taking-action-to-help-communities-fight-the-effects-of-climate-change.html>

¹⁵ <https://news.ontario.ca/ene/en/2019/11/ontario-appoints-advisory-panel-on-climate-change.html>

¹⁶ http://www.auditor.on.ca/en/content/annualreports/arreports/en19/2019AR_v2_en_web.pdf

¹⁷ <https://eco.auditor.on.ca/our-reports/>

¹⁸ <https://eco.auditor.on.ca/our-reports/>