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Carbon Footprint – Simple Ways to
Improve

Source: Muskoka 70.3 Ironman race website

Muskoka Watershed Council

November 23, 2018

About this Presentation

- IPCC Report Summary
- Carbon Footprint: Where Canadians stand
- Simple ways to reduce your personal carbon emissions

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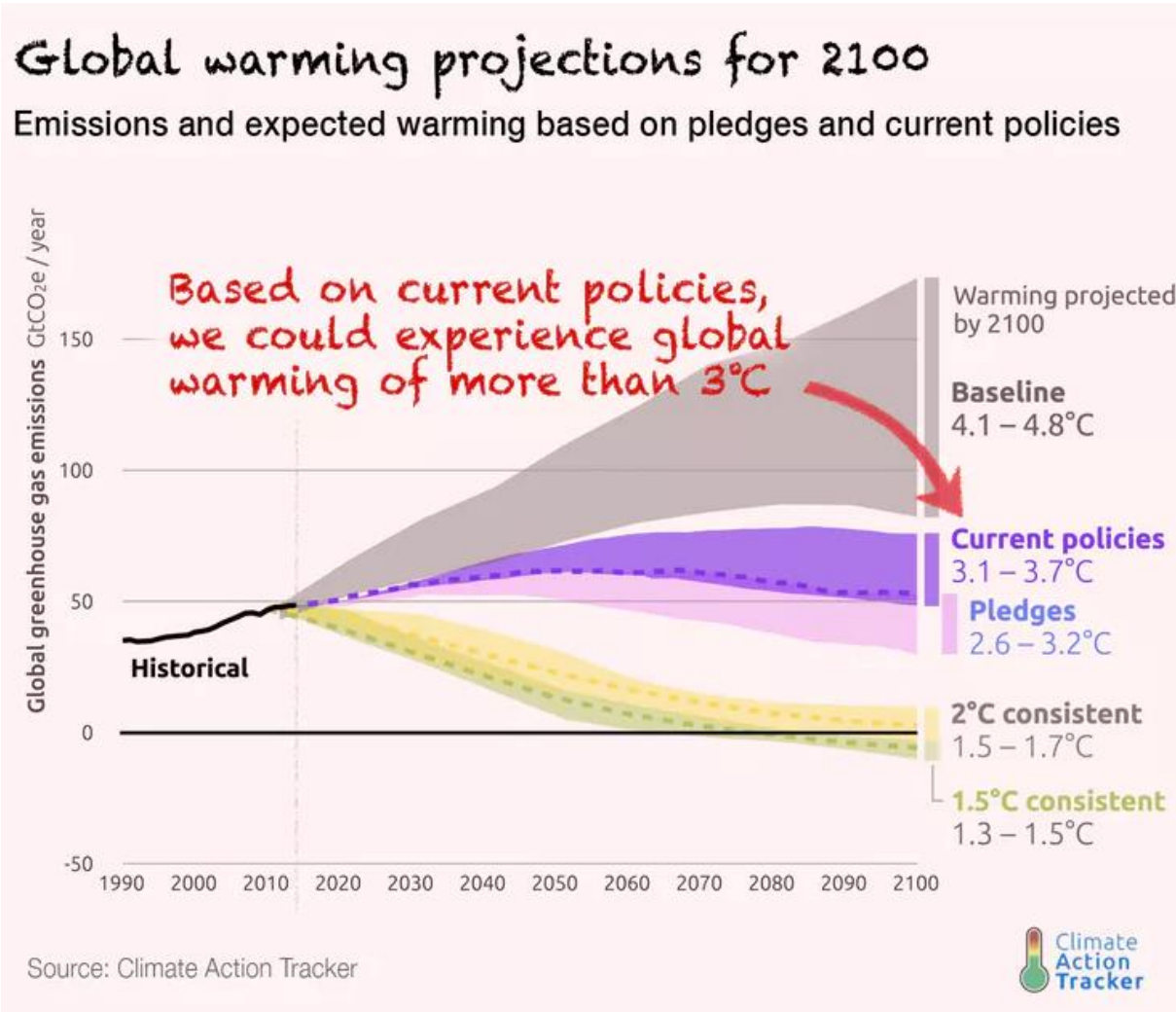


Why is a reducing our Carbon Footprint Important?

- Climate change is already happening around us
- IPCC's 2018 climate change report
- Environmental Commissioner of Ontario's 2018 climate change report
- Global and local impacts
- Environmental, social & economic costs



Global Warming Projections




“The benefits of addressing climate change include reduced pollution, improved public health, fewer disasters, cleaner, cheaper, more efficient energy, better managed forests, more livable cities, increased food security and less poverty.”

past UN Secretary General Ban Ki-Moon



Plan Now, Save Later...



“The good news is that so long as we plan ahead and take adaptive action, the climatic changes likely to come to Muskoka by mid-century are manageable. Our experience will be better, and the expense we will incur in adapting to the new climate will be less, if we begin that planning and those actions now.”

- Muskoka Watershed Council: 2016 Planning for Climate Change in Muskoka



Progress Doesn't Mean Sacrificing the Economy

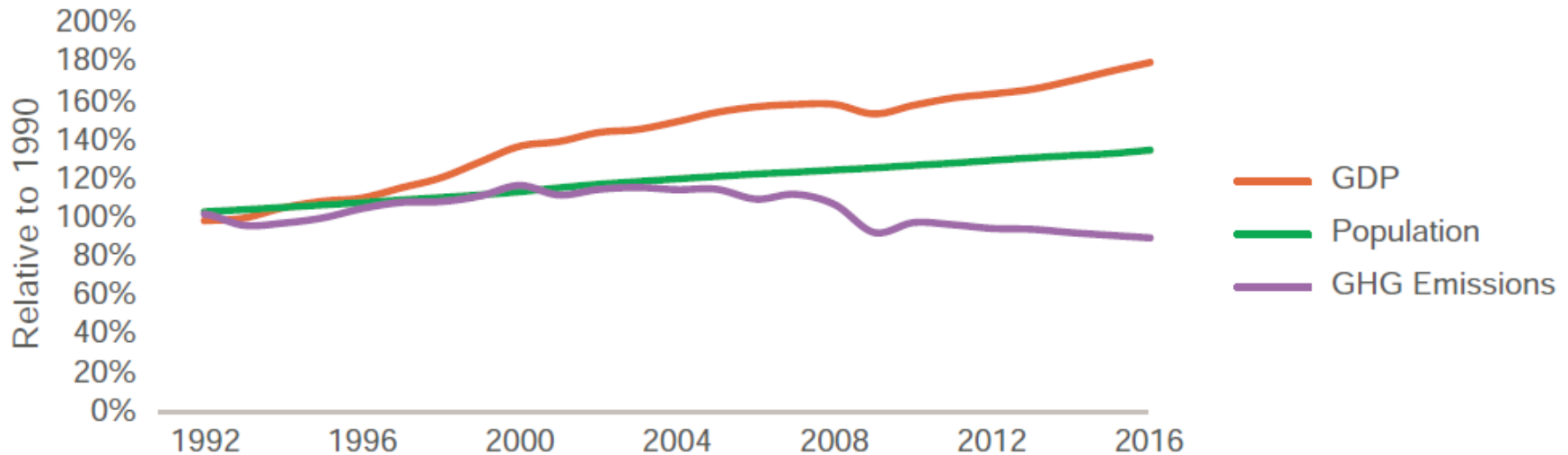


Figure 1.16. Ontario's historical greenhouse gas (GHG) emissions relative to gross domestic product (GDP) and population.

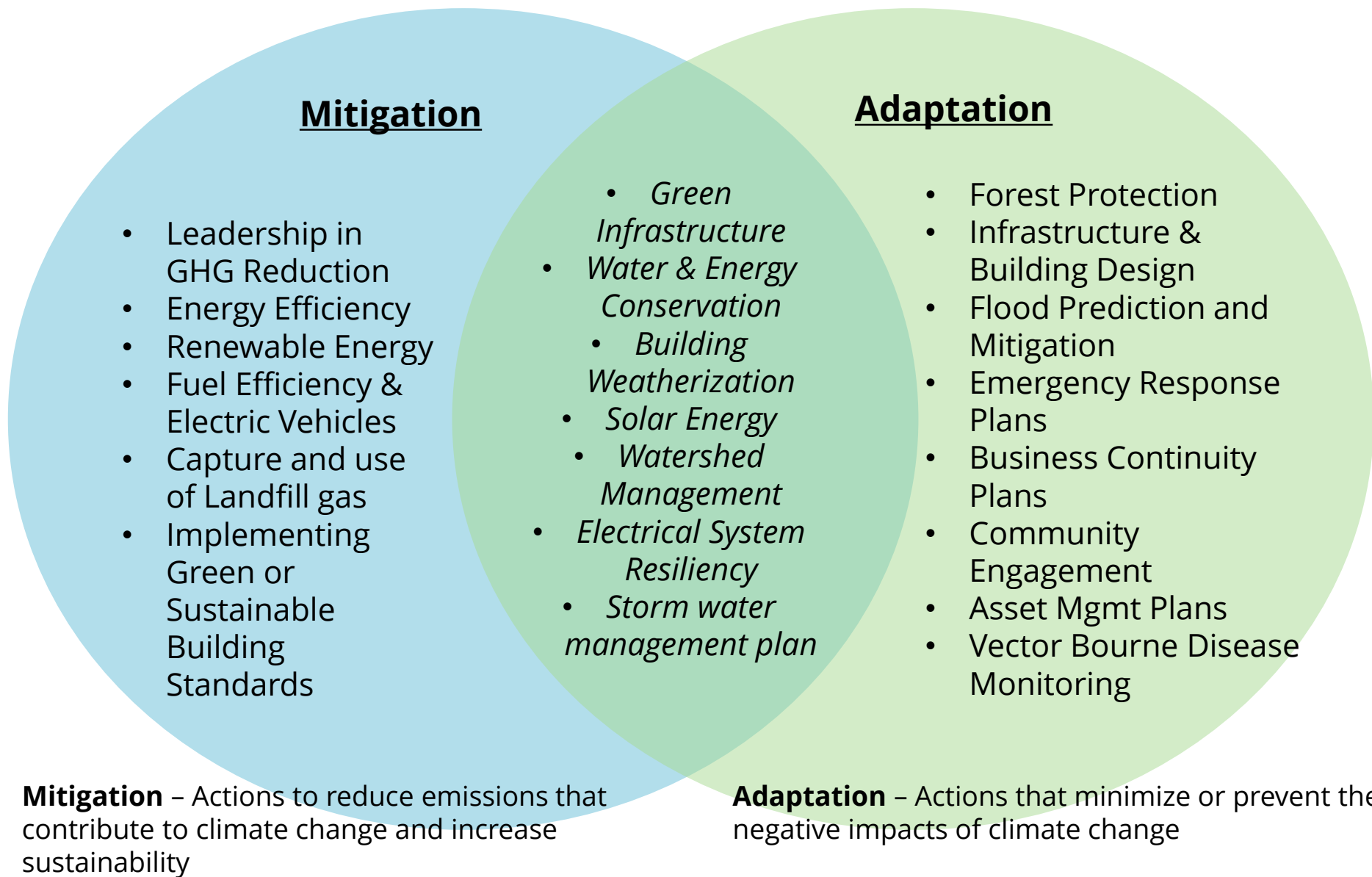
Source: Statistics Canada, *Gross domestic product, expenditure-based, provincial and territorial* (2018), CANSIM Table 384-0038; Statistics Canada, *Population by year, by province and territory* (2018), CANSIM Table 051-0001.

There are good news stories!!

- Globally the amount of protected area is >15% with a target of 17% by 2020
 - Canada on track to meet land target and 10% of oceans and coast
- NASA has found evidence that the hole in the ozone layer is recovering
- The World Bank announced it will no longer finance Oil and Gas Exploration
- Honey bee populations are on the rise
- U.S. has more trees now than it did 10 years ago

Elements of an Effective Climate Action Plan

Some District Actions



A Carbon Footprint is Two Parts:

Primary Footprint

Secondary Footprint

- **The primary footprint is a measure of our direct emissions of CO₂**
- **The secondary footprint is a measure of our indirect CO₂ emissions**



Ontario has one of the highest per capita GHG emission footprints in the world...



Figure 6: Ontario's per capita GHG emission footprint (12.6 tonnes), compared to Sweden (5.8 tonnes), the U.K. (9.1 tonnes), Norway (10.6 tonnes) and worldwide (4.9 tonnes).

Source: Figure created by the ECO using information from the Conference Board of Canada, *How Canada Performs Provincial and Territorial Ranking: Greenhouse Gas (GHG) Emissions*, 2016.



Canada's carbon emission were ranked 10th in the world in 2018 by the Global Carbon Atlas despite being ranked 38th in population.

November 14th, 2018 – Globe and Mail article published that Canadians produce three times more greenhouse gas emissions than the G20 average.



A variety of free calculators of differing complexity and for all ages

FOOTPRINT CALCULATOR

HOW BIG IS YOUR ENVIRONMENTAL FOOTPRINT?

THE planet is in crisis - from climate change to the pollution of our oceans and destruction of our forests, it's up to all of us to fix it. Take your first step with our environmental footprint calculator.

COMPLETE YOUR QUESTIONNAIRE

YOUR LIVING HABITS MAKE UP YOUR FOOTPRINT

We calculate your footprint score using the answers you provide in our 5-minute questionnaire.

FOOD	24%
HOME	3%
TRANSPORT	4%
SPORT	2%

FIND OUT HOW TO REDUCE YOUR FOOTPRINT

Our site can help you get started on reducing your carbon footprint. We know! You might think it's changing too easy for you too.

YOUR CARBON FOOTPRINT? 157%

<https://footprint.wwf.org.uk/>

carbon footprint

Call us on +44 (0)1256 345645
You are not logged in
Log In / Create Account

Language: English (United States)

CALCULATE OFFSETTING BUSINESSES INFORMATION ABOUT US CONTACT MY ACCOUNT

CARBON CALCULATOR

Carbon Footprint Calculator For Individuals And Households

This carbon calculator is provided free to use

Show you care for the environment and communities across the World by Carbon Offsetting.

You can support Carbon Offsetting Projects that both tackle climate change and support impoverished communities across the world. Just click the 'Offset' button after you have finished your calculation. It takes only a few easy clicks and costs only a few Pounds/Dollars/Euros per tonne CO₂. You also get a personalised Certificate recognising your offsetting - makes an ideal gift tool.

Household carbon footprint calculator

Enter your consumption of each type of energy, and press the Calculate button.

Your individual footprint is calculated by dividing the amount of energy by the number of people in your household. To calculate your full household footprint, select "1".

How many people are in your household?

Electricity: kWh at a factor of 0.0400 kgCO₂e/kWh [what's this?](#)

Natural gas: litres

Heating oil: metric tons

Coal: metric tons

LPG: litres

Propane: litres

Wooden pellets: metric tons

Calculate Household Footprint

Total House Footprint = 0.00 metric tons of CO₂e **Offset Now**

<https://www.carbonfootprint.com/calculator.aspx>

zerofootprint Youth Calculator

TEARN CONNECTING YOUTH Today's Challenge is the World!

Total registered users: **645068**

Get Started!

Teacher's Guide
The Results So Far

<https://calc.zerofootprint.net/>

I2Sea International Student Carbon Footprint Challenge
An "Inquiry to Student Environmental Action" project

HOME ACTIVITIES RESOURCES ABOUT CONTACT

ISCFC Participate Calculate Compare Discuss

How big is your carbon footprint?

Before thinking about efficient ways to reduce our impact on the planet, we need to know exactly how much our different behaviors impact our carbon footprint.

Our International Student Footprint Calculator will allow you to do just that! The questionnaire is divided into four parts: **home energy and appliances, food, personal purchases and transportation.**

Answer the questions as honestly as possible and keep an eye on your amount of CO₂ release per year at the bottom of the screen as you continue. You may be alarmed at times by the results!

English Español

When you are ready to start your footprint calculation, choose one of the options below:

Advanced Calculator
designed for secondary school and beyond

Basic Calculator
designed for middle school (ages -10-13)

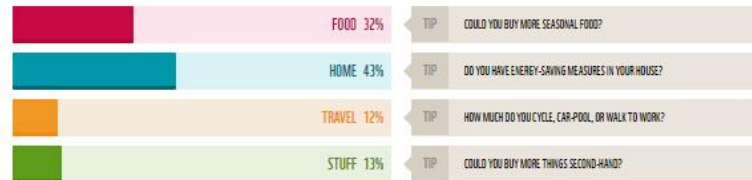
<http://web.stanford.edu/group/inquiry2insight/cgi-bin/i2sear3b/i2s.php?page=calculate>

My carbon footprint... Not Ideal...



YOUR CARBON BREAKDOWN

See which areas are making the biggest contribution to your footprint.



+ 3.06 TONNES GOVERNMENT EXPENDITURE PER PERSON

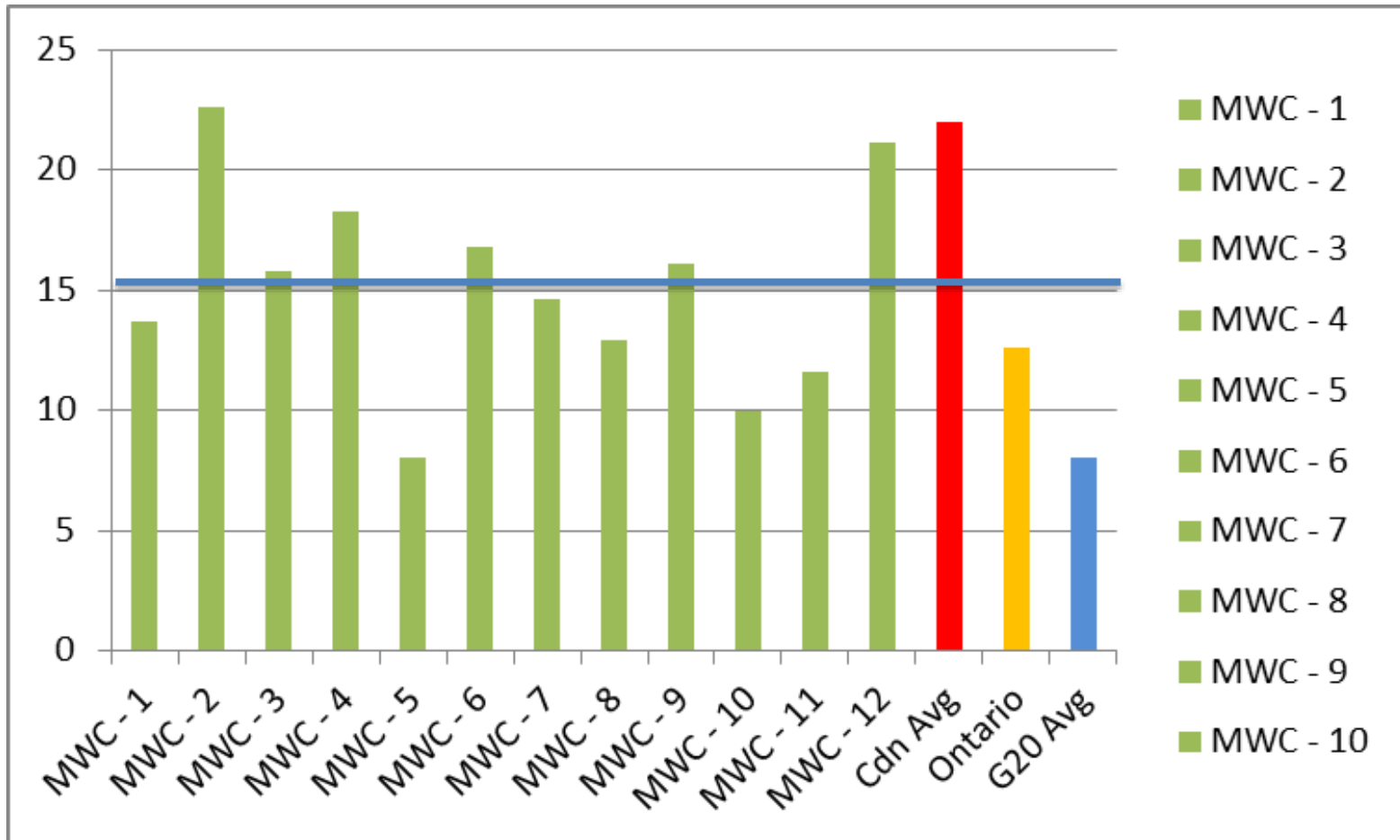
WHAT CAN I DO?

[VIEW OUR TOP TIPS TO SHRINK YOUR FOOTPRINT](#)

YOUR TOTAL ANNUAL CARBON EMISSIONS

13.3
TONNES

MWC's Carbon Footprint



MWC's Average is 15.1
Can we reduce this 10% in a year?



Three Major Impact Areas

1) **Personal travel:** what you drive, how much you drive and how much you fly.

2) **Home energy use:** electricity, oil and gas, insulation, location of trees, LEDs, efficiency of appliances, etc.

3) **Your diet:** How much meat, how far it travels, seasonal, sustainable seafood, composting and recycling etc.

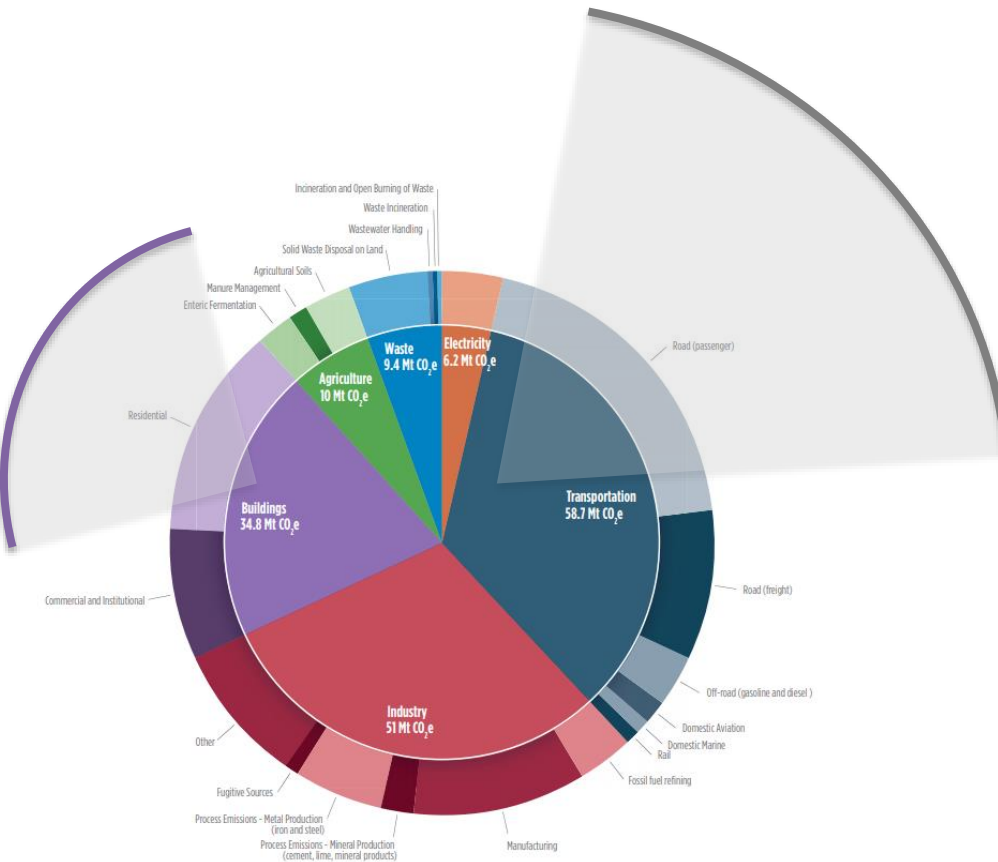


Figure 2: Ontario's 2014 Greenhouse Gas Emissions by Sector

Source: Environment and Climate Change Canada, National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada, Part 3, Table A11-12, (2016), p.55.



What can you do at home? Life

Personal choices to reduce your contribution to climate change

* Cumulative emissions from developed countries decrease substantially if national emissions decrease.

- Drawdown – great website that lists 100 options to meet our targets
- Increased Educational awareness for kids starting young

Average values for developed countries, based on current emissions.

Upgrade light bulbs

Hang dry clothes

Recycle

Wash clothes in cold water

Replace typical car with hybrid

Eat a plant based diet

Switch electric car to car free

Buy green energy

Avoid one transatlantic flight

Live car free

Have one fewer child

Annual climate savings (tCO₂e)

Low Impact

< 0.2 tCO₂e

Moderate Impact

0.8-0.2 tCO₂e

High Impact

> 0.8 tCO₂e



What can you do at home? Travel

- Living car-free = ~2.4 tonnes of carbon per year
- Buying an Electric car = ~1.2 tonnes of carbon per year
- Avoiding Air travel = ~1.6 tonnes of carbon per year per transatlantic flight



What can you do at home? Diet

- Go Vegetarian = ~0.8 tonnes of carbon per year
- Or eat better meat less often = ~0.4 tonnes per year



What can you do at home? House

- Use cold water in your washing machine = ~0.25 tonnes of carbon per year
- Hang dry clothes = ~0.21 tonnes of carbon per year (0.053 tonnes of carbon in Canada based on outdoor temperature)
- Apply for the AffordAbilityFund.org (free energy-saving kit-everyone qualifies)



Let's Track our Carbon Footprint and Reduce

*Challenge everyone to try
their carbon footprint*

*Let's See who can reduce their
footprint the most over the next
year*

*Start by signing up for the
AffordAblitFund*



Thank You!!

Questions?

