## REDUCING YOUR CARBON FOOTPRINT

A GUIDE TO REDUCING INDIVIDUAL CARBON EMISSIONS DAY-BY-DAY

### WHAT IS CARBON?

When we hear the word carbon in relation to climate change, we are talking about carbon dioxide (CO<sub>2</sub>), which is emitted when fossil fuels are burned, and carbon dioxide equivalents (CO<sub>2</sub>e) such as methane and nitrous oxide. CO<sub>2</sub>e was developed as a standard unit to measure these other emissions in terms of CO<sub>2</sub>. These are also referred to as greenhouse gases (GHG) because of the warming effect they create for the planet.

#### WHAT IS A CARBON FOOTPRINT?



A carbon footprint is the amount of carbon emitted due to the consumption of fossil fuels by a particular person or group.

# WHY IS IT IMPORTANT TO REDUCE CARBON EMISSIONS?

In order to make a fair-share contribution to global efforts to maintain temperature rise below 1.5 degrees, Canada must reduce its GHG emissions by 60 percent below 2005 levels by 2030. For individual Canadians, some estimates say this means getting accustomed to a lifestyle where we each only consume 2.1 tonnes of  $CO_2e.^1$  In 2018, GHG emissions per capita in Canada were 22 tonnes  $CO_2e.^2$ 

Actions by government, industry and other large emitters will have the most impact in reducing emissions but individual actions are just as important. Our actions signal to leaders that we are ready to adopt and advocate for a low-carbon lifestyle and will favour political leaders who align with our priorities.

#### WHAT ARE THE 3 MOST IMPACTFUL LIFESTYLE CHANGES TO REDUCE EMISSIONS?

#### **EAT A PLANT-BASED DIET**

By reducing consumption of all meat and most dairy, an individual can reduce their annual emissions by 0.8t CO<sub>2</sub>e per year.



EAT VEGETARIAN OR VEGAN MEALS WHENEVER POSSIBLE. AVOID BEEF PRODUCTS.

#### **LIVE CAR FREE**

Having no car reduces annual emissions by 2.4t CO<sub>2</sub>e. Switching to an electric car or a more efficient car provides substantial emissions relief, but any driving at all contributes to infrastructure emissions, such as road maintenance.



BIKE, WALK, OR USE PUBLIC TRANSIT INSTEAD OF DRIVING.

#### **AVOID AIR TRAVEL**

By avoiding a single roundtrip trans-Atlantic flight, an individual reduces their annual emissions by 1.6t CO<sub>2</sub>e.



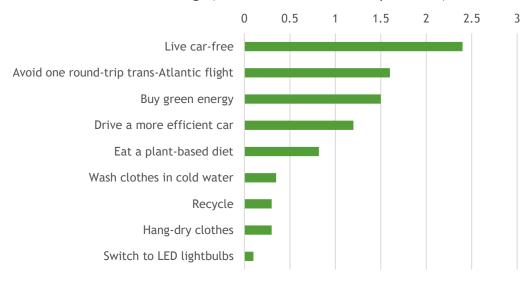
VACATION CLOSER TO HOME AND USE ALTERNATE TRAVEL MODES LIKE TRAINS.

## WHAT OTHER LIFESTYLE CHANGES CAN HAVE AN IMPACT?

High impact changes can reduce individual emissions while simultaneously influencing systemic change. It is more efficient to make a few high impact changes than to implement many low impact emissions reduction strategies, **But any change is better than no change!** 

HIGH IMPACT CHANGES	MEDIUM IMPACT CHANGES	LOW IMPACT CHANGES
Purchase green energy (including solar panels)	<ul> <li>Improve home energy efficiency</li> <li>Buy energy efficient products</li> <li>Conserve energy</li> <li>Reduce consumption</li> <li>Recycle</li> <li>Eat local</li> </ul>	<ul> <li>Conserve water</li> <li>Minimize waste</li> <li>Compost</li> <li>Plant a tree</li> <li>Purchase carbon offsets</li> <li>Avoid unnecessary travel</li> <li>Buy organic food</li> </ul>

Emissions Savings (tons of carbon dioxide equivalents)





<sup>&</sup>lt;sup>1</sup> Wynes S., Nicholas K.A., *The climate mitigation gap: education and government recommendations miss the most effective individual actions*, Environmental Research Letters 12 (2017) 074024

#### **KAIROS: CANADIAN ECUMENICAL JUSTICE INITIATIVES**

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<sup>&</sup>lt;sup>2</sup> Climate Transparency. (2018). <u>Brown to Green – The G20 Transition to a Low-Carbon Economy</u>, Climate Transparency, c/o Humboldt-Viadrina Governance Platform, Berlin, Germany. Icons by: Flatart and Kelcey Hurst from the Noun Project.