7 A] Emissions Slides - Where do our emissions come from? What are potential areas of action?

Image 1 Sample Script: There are many approaches to climate action. In Canada, for example, the oil and gas sector is the largest source of GHG emissions, emitting 27% of the national total. The amount emitted increased 84% from 1990 levels in 2017, totalling 195MT CO2. This increase is mostly due to tar sands development.

The oil and gas sector emits a significant amount, adding to our per capita carbon footprint. If the tar sands continue to be developed as planned, the other sectors of our society will have to take on an unfair burden and Canada will have an incredibly difficult time meeting even the inadequate climate targets we have today. This means that actions like discouraging fossil fuel subsidies and new fossil fuel infrastructure are key.

The second largest source of Canadian emissions is the transportation sector, emitting 24% (174MT CO2) in 2017. This sector's emission grew 43% from 1990 levels in 2017. The increase mainly came from increased purchases of passenger "light trucks" (SUVs, pick-ups etc.) and freight trucks.

Image 2: According to 2014 data from **climatewatchdata.org**, Canada ranks in the top 10 highest polluting countries. Per capita though, it is even worse - we rank number 1. What's more, we are also among the wealthiest countries and have benefited from an extractive economy that harms the most vulnerable globally.

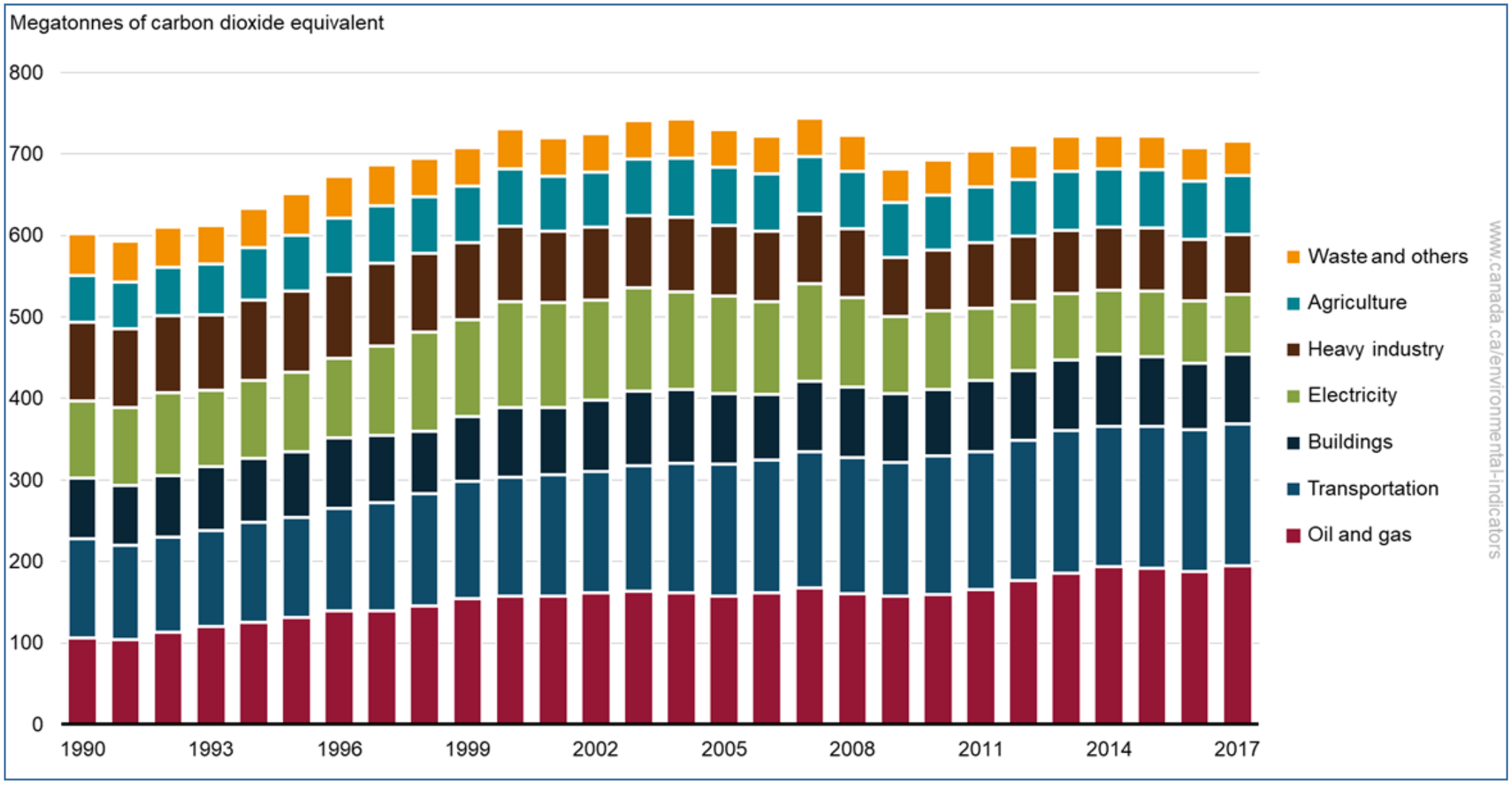
According to Eddy Pérez, international policy analyst at Climate Action Network Canada, as detailed in an April 2019 CBC article, 5 significant things Canada can do to reduce emissions are:

- End the use of coal and diesel
- create Canada-wide plan for net-zero transport that goes beyond buying individual vehicles
- reduce oil and gas methane emissions
- stop subsidizing fossil fuels and be honest about the future of this industry
- have cross-canada building codes (include energy-efficiency & no-carbon heating/cooling sources).

Image 3: Perhaps try to find out whether your town or region has a climate plan or an assessment of where local GHGs come from.

At a community level, retrofitting of multi-unit buildings, increasing density, and building better public transit are important.

Image 4: On a personal level, three of the biggest changes we can make are moving toward a plant-based diet (especially avoiding beef), not driving a car (especially biking, walking or taking transit) and avoiding flying.

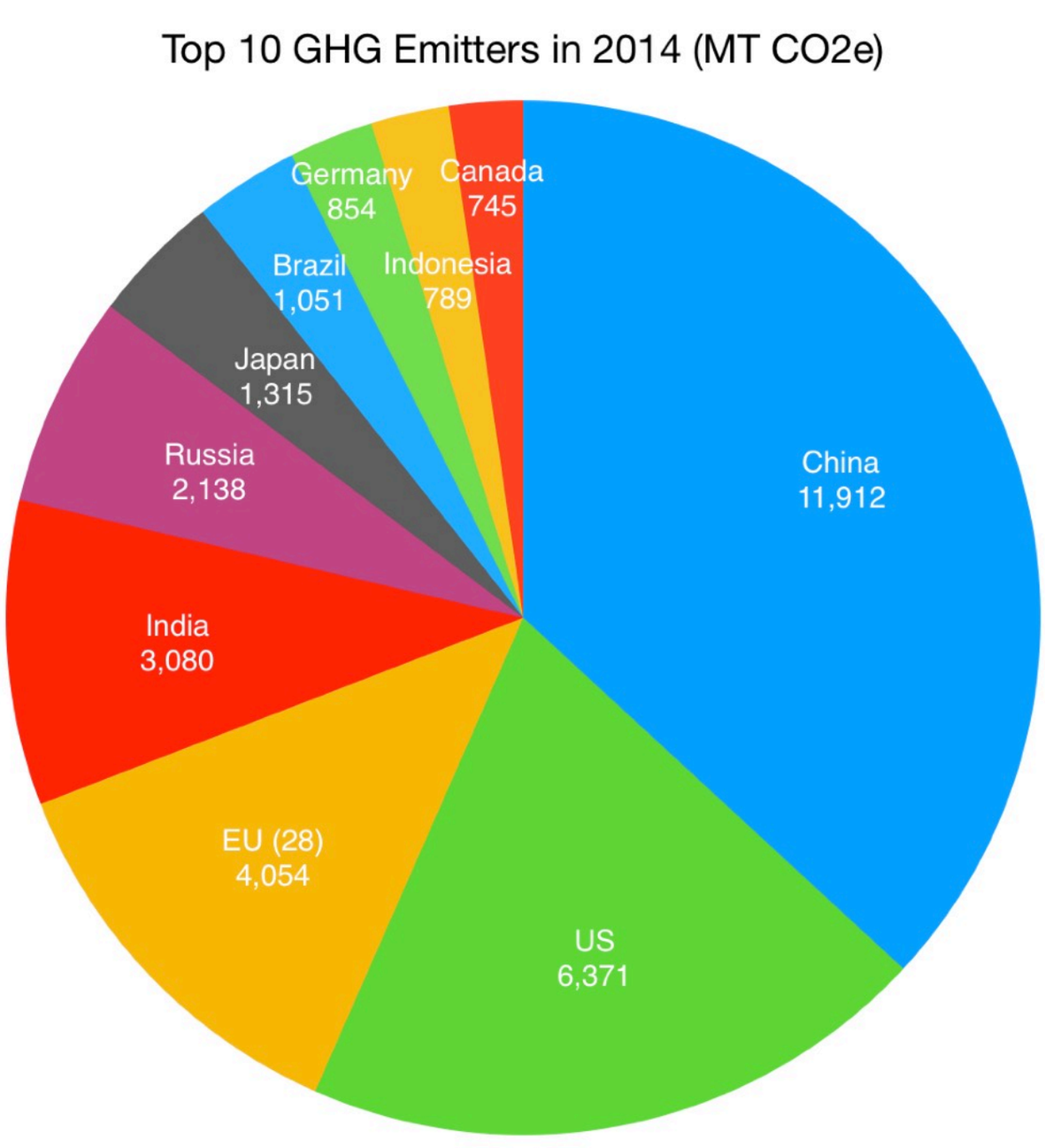


National:

1. **Oil and Gas**
2. **Transportation**
3. **Buildings**

[Greenhouse gas emissions by economic sector, Canada](), 1990 to 2017, Government of Canada

Image 1: National Emissions Sources - Areas for Action



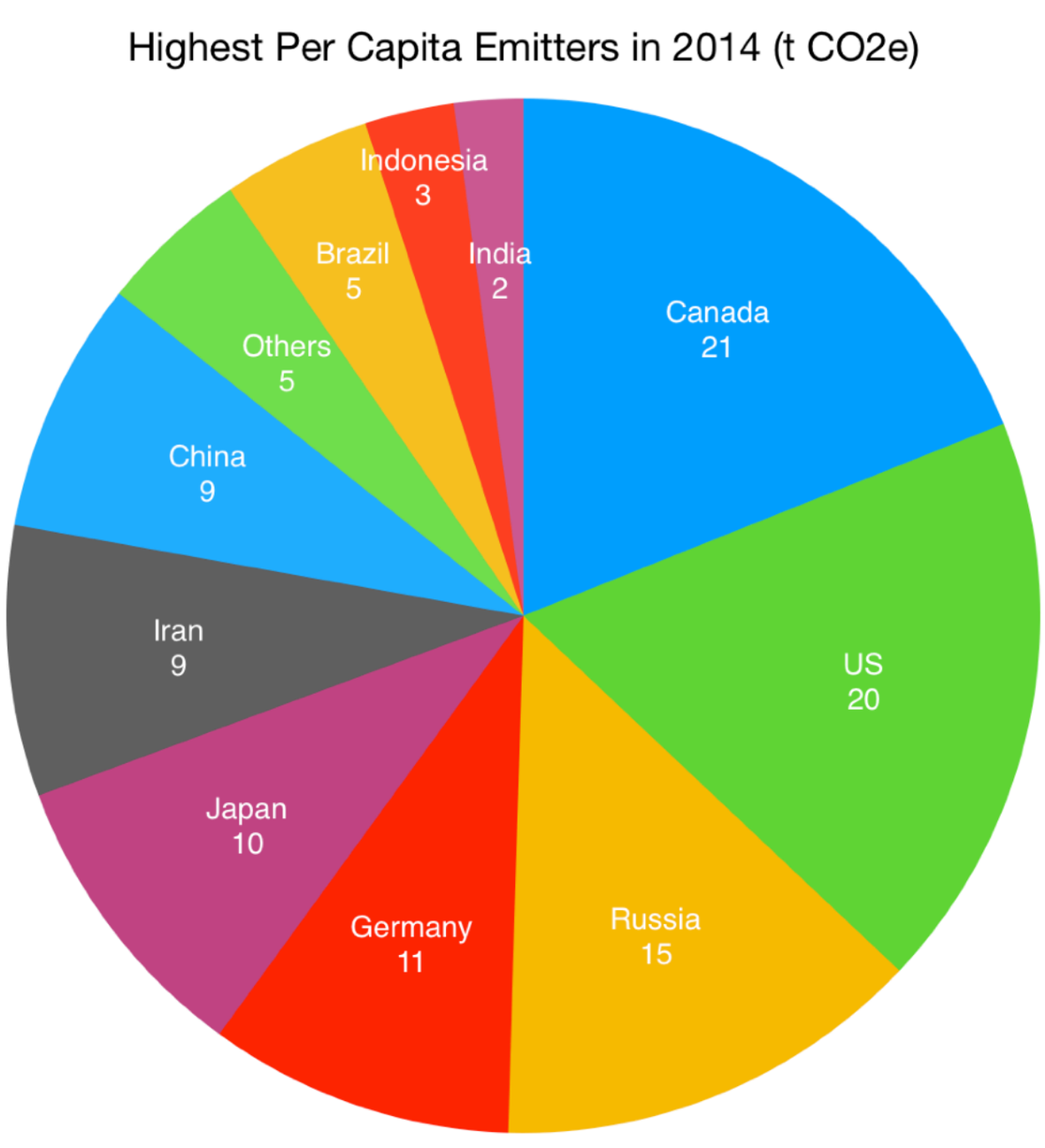
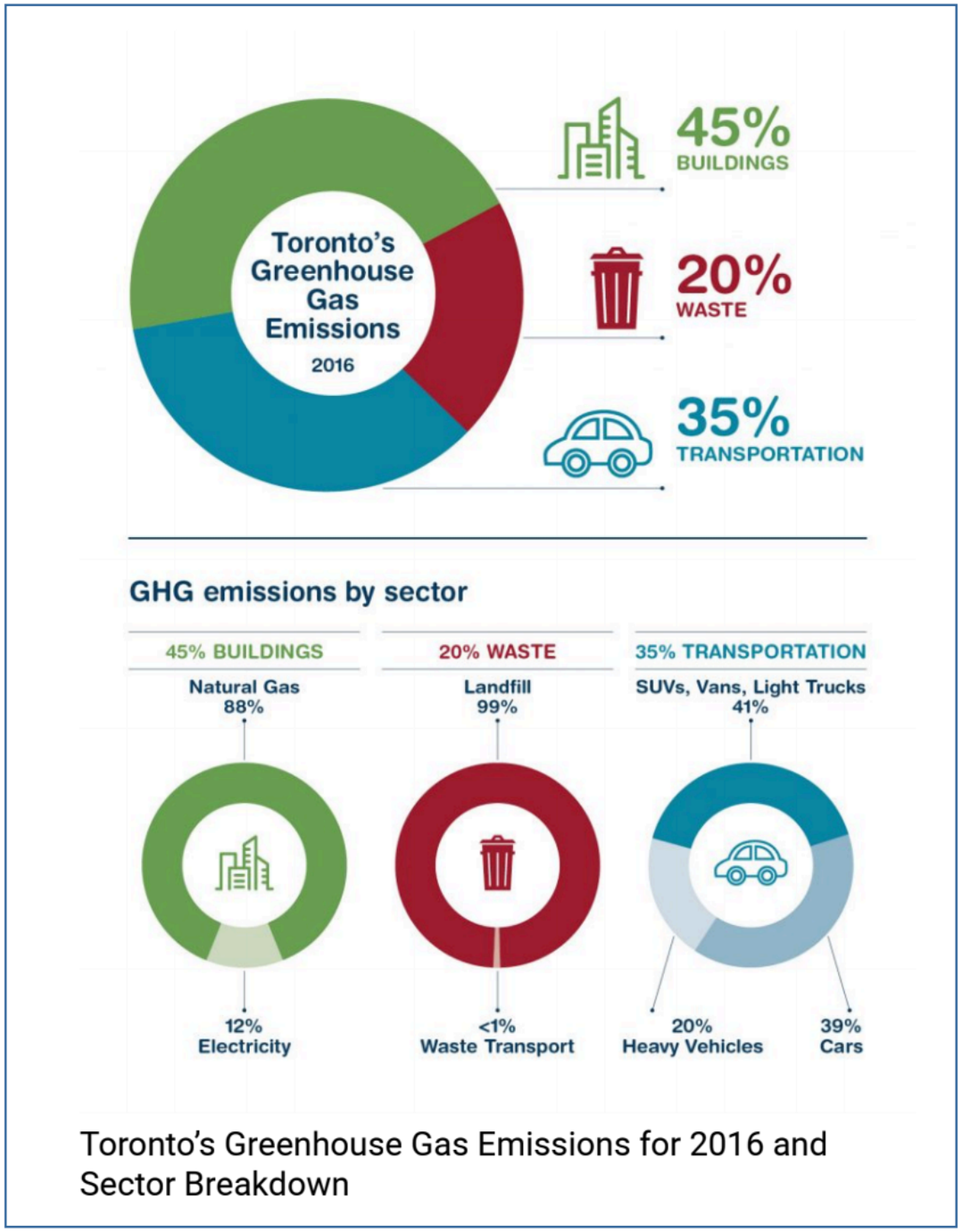


Image 2: Canada's Overall and Per Capita Emissions - **Source: Climate Watch. 2018. Washington, DC: World Resources Institute. Available online at: https://www.climatewatchdata.org Note: Data Excludes Land Use Change and Forestry (LUCF)**

[Toronto’s 2016 Greenhouse Gas Emissions Inventory](), TransformTO - Toronto.ca



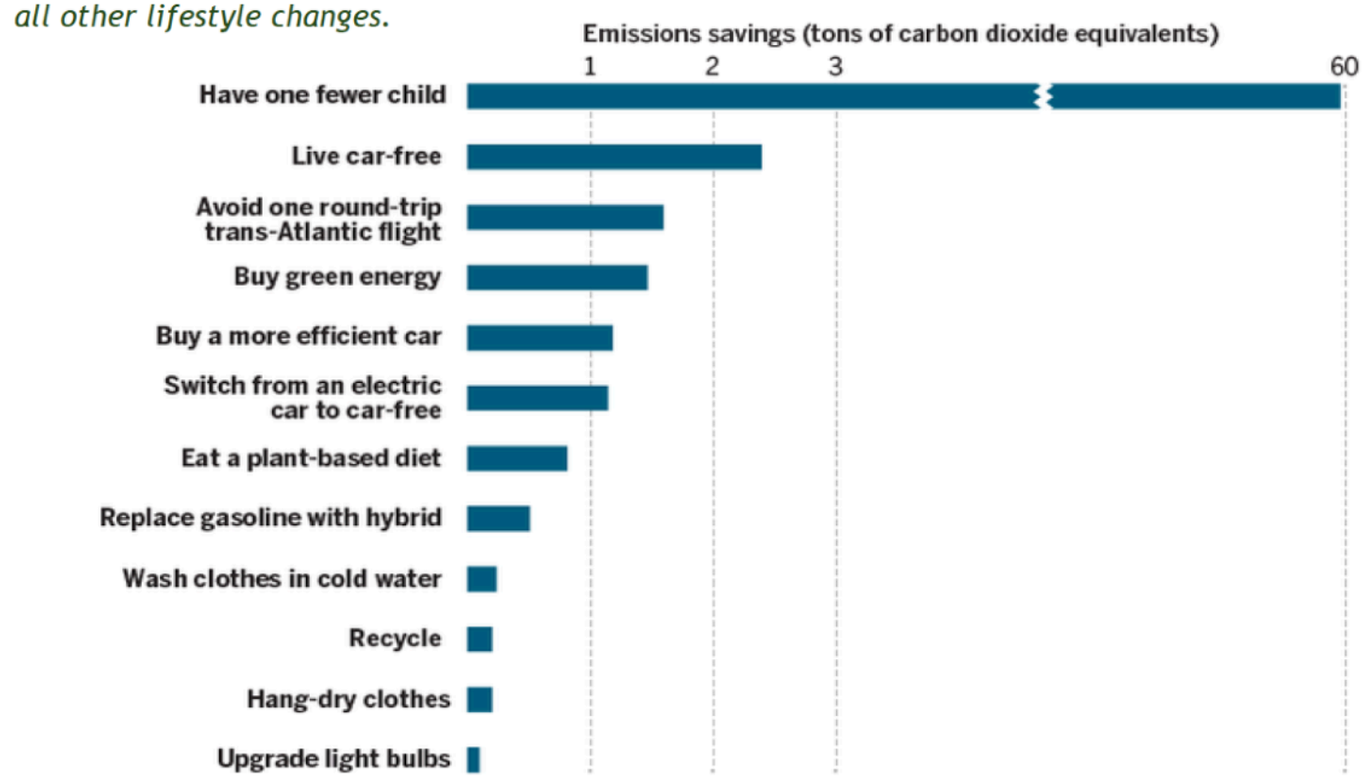
Toronto’s Greenhouse Gas Emissions for 2016 and Sector Breakdown

Image 3: Local Emissions Sources - Areas for Action

Individual:

1. **One fewer child**
2. **Car-free living**
3. **Avoiding Flying**

**With the inclusion of future emissions of descendants, having one fewer child will reduce an individual's emissions by 58.6t of CO2e per year. This is a substantially higher reduction in emissions than a combination of all other lifestyle changes.*



The information in this handout is compiled from the following research: 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

https://www.kairoscanada.org/earth-day-2019-carbon-footprint).

Image 4: Individual Emissions Sources - Areas for Action